

Louvain School of Management

Rethinking higher education in management:

How to create 21st century leaders using a symbiosis between European and developing countries? - CEMS application

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Abstract

This paper analyses the skills needed in the 21st century, and studies if those skills are included in current higher education in management. The focus is made on top universities and emerging markets. The goal is to identify room for improvement and to fill the gap with a concrete solution.

The preliminary analysis identified nine important skills classified in three different categories: Successful (1. International, 2. Diversity of formation), Successful but room for improvement (3. Digital environment, 4. Responsible leaders able to cooperate with social and political actors, 5. Soft skills) and Missing (6. Entrepreneurship as the most advanced form of experiential education, 7. Transmit of knowledge, 8. Interdisciplinarity, 9. Emerging markets knowledge).

This initial finding has been completed by a survey conducted to 113 CEMS stakeholders (Students and alumni) representing 32 countries. The needs have then been prioritised for top universities: 1. Digitalisation, 2. Experiential education, 3. Entrepreneurship, 4. Responsible leaders, 5. Emotional intelligence, 6. Knowledge transfer, 7. Knowledge about emerging markets, 8. Hard skills, 9. Soft skills, 10. International experience.

A similar analysis has been made for emerging market education needs. The priority is put on 1. Scale quality education, 2. Entrepreneurship, 3. Responsible leaders, 4. Client orientation, 5. Digital leaders, 6. Cooperate with social and political actors, 7. International experience.

To work simultaneously on those areas for improvement, a solution in collaboration between top European universities and emerging market universities has been suggested. The solution is applied to the CEMS program. One part of the solution consists of a new program structure for one semester including teaching in a tier 2 university of emerging markets, working in a local start-up, and following courses at CEMS emerging partner universities. Students in emerging markets would have the same opportunities in developed countries. The other part of the solution includes new activities, new skills seminars, or new events. CEMS students and alumni shared their opinion on the solutions through a second survey and the large majority agrees with it.

It is important to be aware of and overcoming resistance to change. Some suggestions have been made on how to create a dynamic approach for curriculum renewal.

COVID-19

This is important to mention that this thesis was mostly written before the COVID-19 pandemic. However, the crisis has an impact on a lot of industries, including education. In many countries, universities had to adapt and go online. This can be seen as a limitation to the change we recommend, as the focus is currently somewhere else. Nevertheless, this forced adaptation due to COVID-19 will raise questions, and instead of going back to an old status quo, this is a good opportunity to take learnings, get stronger from the situation, and see how the system can be improved moving forward. Some sections have been adapted to include learnings from the current crisis.

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List of abbreviations

Abbreviation	Explanation
AALTO	Aalto University School of Business
AUC	The American University in Cairo School of Business
C-BERT	Cross-Border Education Research Team
CBS	Copenhagen Business School
COR	Cornell SC Johnson College of Business
CUB	Corvinus University of Budapest
EAESP	Escola de Administração de Empresas de São Paulo-FGV
EM	Emerging market
ESADE	ESADE Business School
GSOM	Graduate School of Management, St. Petersburg University
HE	Higher Education
HEC	HEC Paris
HKUST	HKUST Business School
HSG	University of St.Gallen
IBC	International Branch Campuses
ICT	Information and communication technologies
IIMC	Indian Institute of Management Calcutta
IRS	Interactive Response System
Ivey	Ivey Business School
KEIO	Keio University
KOC	Koç University Graduate School of Business
KUBS	Korea University Business School

LMS	Learning Management Systems
LSE	The London School of Economics and Political Science
LSM	Louvain School of Management
MBA	Master's in business administration
MiM	Master's in management
MIM	Master's in International management
MOOC	Massive Open Online Course
MSc	Master's of science
NHH	Norwegian School of Economics
NOVA	Nova School of Business and Economics
NUS	National University of Singapore
OBHE	Observatory on Borderless Higher Education
OECD	Organisation for Economic Co-operation and Development
RSM	Rotterdam School of Management, Erasmus University
PLE&N	Personal learning environment and network
SGH	SGH Warsaw School of Economics
SSE	Stockholm School of Economics
SDGs	Sustainable Development Goals
TSEM	Tsinghua University School of Economics and Management
UAI	Universidad Adolfo Ibáñez
UB	Bocconi University
UCD	UCD Michael Smurfit Graduate Business School
UCT	University of Cape Town Graduate School of Business
UoC	University of Cologne
USYD	The University of Sydney Business School
VSE	University of Economics, Prague
VUCA	Volatility, Uncertainty, Complexity and Ambiguity
WU	WU (Vienna University of Economics & Business)

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Introduction

Talent, responsibility and leadership are the capstones of modern management. Talent gap ranks as the main concern of world chief executives as it constrains local and global business to grow (The Conference Board, 2020). The gap between position requirements and the skills of the average graduate is growing (Leslie, 2015). Higher education (HE) institutions in management play a central role in closing the leadership gap during student's development cycle. Top management institutions have worked hard to answer emerging needs coming from students and the professional world. They create the leaders of tomorrow and are used as benchmark for the best teaching practices.

There is abundant literature on why the educative system should change, why it is not adapted to the 21st century. Those studies criticise and underline the limit of the actual education system in business schools and universities. Certain papers are coming up with theoretical solutions on many subjects. However, this literature is disparate and not necessarily up to date. Finally, there is a lack of applied research on solutions to improve the actual model of management education.

This thesis is aiming at filling the aforementioned gaps. It intends to rethink management education from a 21st century perspective and to create a new collaborative model filling the needs of both top European Master's in International Management (MIM) and tier 2 management education in developing countries. After defining the essential background of higher education (HE) and management education (Chapter 1), the work provides a summary of what education looks like and how it could be improved (Chapters 2 and 3). The next step consists in analysing if management education succeeded in answering the needs of the 21st century (Chapter 4). Answering this question has brought an intense focus on the missing skills of HE in management and the needs of students, educators, companies, governments and society as a whole. This chapter also presents the evolution of management education environment, what are the dynamics of change and the needs that have already been answered. The same research is done for tier 2 universities in EM (Chapter 5). Comparing the missing needs of top MIM with tier 2 universities in EM is the main focus of Chapter 6. The purpose is to find a symbiosis between these two parties and how needs can offset one another. The aim is to propose a collaborative approach that answers to the needs of many stakeholders in a global society.

Chapter 7 is the core of our solution. The needs of both parties are matched together in order to create a new CEMS program structure that could benefit both top MIM universities and tier 2 business schools in EM. The solution is highly practical as it is merged with an already existing program, the CEMS. The new initiatives are in line with the CEMS values and they respect the academic criteria needed for graduation.

The solution consists of a semester abroad in a CEMS partner university. These semesters are already organised in a classical cursus. The only changes made concern the structure and activities during the semester abroad. Instead of having four courses, skill seminars and a business project with a corporate partner, students have two courses, teach in a tier 2 university and do their business project with a CEMS social partner. In addition, little adjustments are made to the actual program in order to fill some educational gaps.

The solution is intended to be as simple and realistic as possible. This means that a focus is made on the resistance to change in the HE environment, taking into account that any attempt to modify the actual state of things will be faced with significant barriers coming from people and organisational structure (Chapter 8).

In addition, the implementation of any novel solution will take time. Many trials and errors, adaptation, complexity and time spent dealing with change. Furthermore, one of the fundamental assumptions of this thesis is that we live in a fast-moving environment. Change implies that the new program structure should accommodate change. Therefore, Chapter 9 focuses on a dynamic and collaborative approach for curriculum development. This will allow continuous improvement for an up-to-date program taking into account change for many stakeholders.

The main insights of this thesis consist of identifying the areas in higher education in management that require improvement and providing a new solution for an existing program. Top MIM and tier 2 universities in EM serve as a basis for our work. The solution tries to find a symbiosis between the needs of both parties. Although being a focused solution, the logic, learnings and the conclusion can serve for other branches and disciplines in higher education.

Finally, the deeper this thesis goes into understanding what are the missing skills of management education and what different solutions can be taken to face these needs, the more readers and researchers are aware of the vast ocean of possibilities. One of the limits of this thesis is that it is too short to cover all that can be done in management education. Instead, it focused on a qualitative study centred on the CEMS program. The last chapter mentions

numerous limits that were encountered during the research and elaboration of the solution. It also covers how this thesis could have been done differently, and finally, what are the next steps to be taken to bring the solution forward. In other words, what more can be done to build the talented responsible leaders of the 21st century?

Problematic and research question

This thesis started with the belief that education is the main factor determining the success of tomorrow's world. Indeed, *“Future leaders are going to come from the school that we have now and if we better equip the students now for what the future will look like, our world will be better”* (Sinek, 2019). Improving education is, therefore, something that can impact a large community, not to say, the entire society.

The world is constantly changing, and this paper primary goal is to analyse if higher education (HE) is up to date. The study is made for master's in management as it is the academic background of the two writers.

Some areas of improvement have been identified, therefore, the paper focused on creating a solution to create talented and responsible leaders. Having identified common lacks that could offset each other's in the top universities and developing countries, the solution-focused on finding a solution that can improve both situations.

To make our solution more concrete, the solution has been applied to the CEMS in Louvain-La-Neuve, a program that the writers are both familiar with.

Our final research question is:

“Rethinking higher education in management: How to create 21st century leaders using a symbiosis between European and developing countries? – CEMS application”

Methodology

Our thesis is based on scientific literature, deductions from theory and observation, surveying students and academics director as well as personal experience.

To answer the research question, the first step was to fully understand the environment surrounding the topic. It consisted of a deep analysis of the existing literature around management education. The first goals were to understand (1) what management education

consisted in, (2) What were the issues mentioned by past research, and (3) how HE in management is dealing with these issues. This analysis was based on academic scientific papers, articles, books and completed by non-academic papers, giving us insights on what the students, teachers, and newspapers were thinking. Another source used was the universities' websites, to see the different existing projects and initiatives, see the values they were defending, and what goals they wanted to achieve.

Based on what the literature assessed being essential to creating future leaders, and the current situation of the top universities, a preliminary conclusion has been made on the skills and competences that should be tackled through a new solution.

The focus was made on top MIM universities illustrated by the CEMS program and tier 2 management education in EM. First, the CEMS alliance was chosen to illustrate top MIM universities for two reasons. The first one being that the two writers of this thesis studied in the CEMS program at the Louvain School of Management (LSM). The second reason and the most relevant one is that the CEMS program aims at regrouping the top MIM universities and business schools in the world including top EM universities. The rationale is that top institutions in management are the ones that have the leading teaching technique, curriculum, and mission. Other institutions can then use these top MIM as a benchmark to improve. The second focus was on EM as the 21st century is characterised by high growth in emerging countries, the need for quality business education is growing. At the same time, a new middle-class has emerged. This new middle class is not only characterised by a higher income but also by new needs, aspirations and hope that they will be the factor for sustainable growth in their country. Analysing if the needs of tier 2 management education in emerging markets is, therefore, an order of global importance at least at an educational level.

After identifying the gaps and areas for improvement, a survey has been made to check the veracity of the initial insights. Indeed, to answer our problematic, we had to collect some data on the field.

A survey to CEMS stakeholders has been created to rank the skills, categorise areas for improvement, and identify patterns. Through sixteen questions answered by 113 participants, insights from CEMS students and CEMS alumni worldwide have been gathered. The survey consisted of multiple-choice, rating scale, Likert scale, and comments boxes. Gathering the results on Excel, the insights were put into different graphs to analyse them visually. Questions and graphs can be found in Appendix 4.

Concerning the analysis of the verbatim, we used two different methods to analyse the comments of the participants. First, as the survey consisted of 113 answers and that not everyone answered qualitative questions, we read all of them. Based on the first reading we created some categories to which we allocated the different comments. It helped us to have an overview of the opinions and see how many students were feeling the same frustration. Secondly, we made a semantic analysis. Through Nuagedemots.com, we identified the terms most frequently used by the participants. It helped us to analyse the occurrence of specific words and identify the keywords that we should look into. To make it more visual we used a word cloud, where the size of the words represents the rate of occurrence.

Then, using both the insights of the survey and the previous areas identified in the literature, the solution has been drafted. To confirm the usefulness and feasibility of the solution additional steps have been made. A second survey gathered 56 CEMS student opinion on the new solution. The solution being student-oriented, it was important to check if they were favourable for its implementation and adapt the solution if needed. For each element of the solution, students were asked to say if they would like to have those elements in the program using a Likert-scale and comment boxes. As for the first survey, the results were gathered on Excel, the insights were put into different graphs to analyse them visually. Questions and graphs can be found in Appendix 5.

1. What is Education?

1.1. General definition

Craft (1984) identifies two Latin roots in the English word Education. They are “Educare”, meaning to train or to shape, and “Educere”, which means to lead forth. Whilst they both have a different meaning, they are present in the word education. On the one hand, education means the preservation and passing down of knowledge. On the other hand, education means preparing a new generation for the unknown changes and challenges that are to come. As the first one refers to memorisation and transferring knowledge from a brain to another, the second one calls for thinking and using creativity to go about trying to answer their questions (Hammond, 2019).

1.2. Higher education (HE)

Drilling further in the educational path, tertiary education leading to an academic degree is called higher education. Degrees are mostly given by universities but also by further education colleges and schools. Most of the universities are designed on the basis of the 19th century German model of the modern university also called the Humboldtian model of higher education. The Humboldt’s ideal is the holistic combination of research and studies, and it is still followed in today’s higher education. Humboldt conceptualised a model that would not only allow students to prepare for the professional world, with a fixed path but also, provide them with an environment conducive to building an individual character (Anderson, 2004). This means opening students to new horizons and allowing them to choose their own path.

This vision of the modern university emerged at a time when the power of the state was still significant. Some scholars have argued that the state’s interest in controlling the educational system could have led to the creation of the Humboldtian university. Hence, it should be perceived as a stage of development in the bureaucratic state of the 19th century. Clark (2008) conceives that state administration used the modern model of the university to limit the old academic freedom and increase their political control. However, these critiques did not prevent the modern university to develop into one of the most successful models of the 19th century. Until the 1960s’ the Humboldtian model attracted renewed interest and “*in the light of history, there is no doubt that this institutional innovation was one of the most successful institutional reforms in the history of research and higher learning*” (Nybom, 2003, p. 145).

The Humboldt University of Berlin is seen in the 19th century as the base model of modern universities. This is partly reflected in the outbreak of innovation and the productivity of German academics and scientists. In no more than half a century, the model of the Berlin

university developed into the “*undisputed model institution for practically all university systems of the world*” (Nybom, 2003, p. 145).

When reforming the German higher education system, Wilhelm and Alexander Von Humboldt and many others faced one particular problem. How could they construct and secure this autonomous institution, devoted to the free pursuit of knowledge, from the influence of politics, corruption, economic institution, religion and other mighty and legitimate forces in society? An autonomy guaranteed by the state was, therefore, for the conceivers of this model, the only plausible solution for this fundamental problem (Ernst, 1990). This was until the 1960-70s when, as presented by Rohstock (2012), the OECD and other similar economic institutions encouraged universities to partner with the business sector. This was followed by an accelerated separation of research and teaching (JØRGENSEN, 2013).

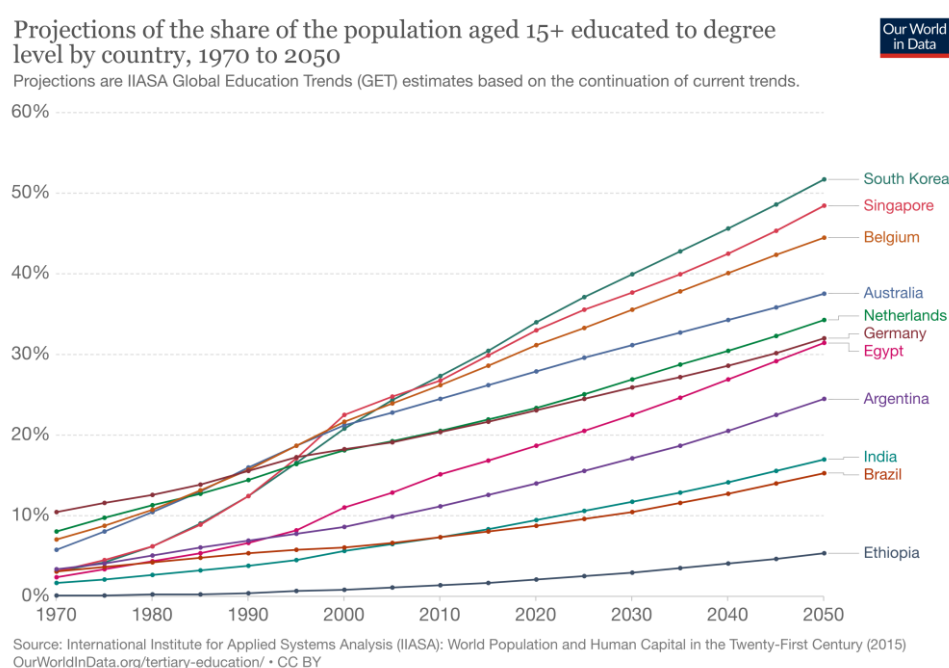
Regarding teaching, many European universities kept their state-owned and almost tuition-free model, while in the US, the combination of high tuition fees and charitable donations have raised private universities funding to a level that exceeds by far the budget of German universities. For research, to a different extent, universities across the world began cooperating with businesses and entered a stage of market adaptation of higher education (Wright, 2014). In the beginning of the 21st century, the global trend has been a decrease in government financial support to give more decision making and independence to higher education institutions (GFME, 2008, p. 35).

Nowadays, more than 200 years after the creation of the Berlin university, Humboldtian universities are still emerging all across the world. They aim to provide education, knowledge and learning for today and the future generation. To attract young talents, give birth to new ideas and innovation that will be the source of regional and national competitiveness, the creation of new jobs and even serve as critical authorities (Östling, 2018). Moreover, some will agree that it is the best long-term investment for governments and for an individual. According to World Bank development indicators (2019, October), over the past decade, three-fourth of the countries included in the study have increased their education spending as a share of GDP. In absolute terms, the amount of resources invested in education is growing.

The number of students awarded tertiary education academic degrees is continuously growing and as shown in Figure 1, this number is forecasted to grow significantly in the next three decades. In addition, during the past fifteen years, Ethiopia, the country accounting for the largest GDP growth in Africa, saw its number of universities go up from two to thirty (The Economist, 2019). All in all, the rise in educational spending shows an increasing interest in

what graduates can provide to today's society. Considering the increasing involvement of both the public and the private sector in tertiary education, it is noticeable that the wealth of nations, individual welfare and business are dependent on universities in a way that was not the case a few decades ago (Hertig, 2016). Looking from a different standpoint, it is possible to argue that the correlation between tertiary education and its social and economic outcome is more evident nowadays, which leads to an increasing interest.

Figure 1: Projection of the share of the population aged 15+ educated to tertiary academic degree level by country (IIASA, 2015)



1.3. Higher education in management

The concept of “management” is a modern construct that gained most of its importance during the development of European markets starting from the renaissance, reforms of the industrial revolution and mercantilism. Management education is not older than 200 years. The Lyon chamber of commerce and industry opened in 1819 what is now called EM Lyon, is known to be the first business school. The Pest academy of commerce, founded in 1857, was the first public business school in central Europe, now called the Budapest Business school. Joseph Wharton, an American entrepreneur, and industrialist opened the first business school in the U.S. in 1881. The latter is now called the Wharton School and is part of the University of Pennsylvania. In the United Kingdom, it was in 1989 that the University of Manchester opened the first business school in the country. Progressively, other universities in Europe, the U.K., the U.S. and the rest of the world started to catch up by opening their own business schools and

departments. Some examples include the Gordon Institute of business science (South Africa, 1949), Indian Institute of Management Ahmedabad (India, 1961) and the National University of Singapore School of Business (Singapore, 1965) (Jha & Kumar, 2012).

The field of management emerged gradually using essentially knowledge from other disciplines such as economics, sociology, accounting, psychology, mathematics, law, and statistics. Therefore, when higher education in management began in the 20th century, there was already an existing corpus of literature, training, and research encompassing the management discipline (Kozminski, 2010).

1.3.1. Classifying degree program framework

This section will be looking at what higher education in management looks like in most modern institutions and what are the requirements to study management in higher education.

First, this section will start with an overview of the degree structure in management education. This serves as a review of the terminology and as context to understand this paper. Most of the business degrees can be classified into these three levels: undergraduate/bachelor level, master's level, and doctoral level (Figure 2). Although this represents the classical path, there are many exceptions to this progression. Some master's degrees are not made to enter a doctoral program and undergraduate studies do not necessarily lead to a master's degree. Students can decide to stop their academic path at any time to join the job market or even study a different subject to enlarge their field of study. Secondly, some institutions do not require specialised undergraduate education in business and management to enter a graduate program in management. Finally, the lines between different degrees are not always very clear. Some institutions include undergraduate and master's degrees in one single program (GFME, 2008, pp. 23-25).

Figure 2: Degree structure for management education (GFME, 2008).

Doctoral 3–5 years*	Research Orientation		Practice Orientation	
	General Business and Management		Specialized Business or Management	Research
	General Education with specialization in Business and Management		Specialized Business or Management	
Undergraduate 3–5 years*			General Business or Management	

*Full-time equivalent years of study.

Furthermore, it is important to mention that the term “business” and “management” can have different meanings depending on the context and the country. Some programs focus on business to exclude the management of not-for-profit organisations and the public sector. Some take management to exclude marketing, market finance and information technology (GFME, 2008). In this paper, business and management are used interchangeably.

Finally, this paper focuses on the master’s level of education in management. Master-level educations have even more variance than undergraduate programs (GFME, 2008, p. 25). According to Ortmans (2018), “*Masters in management programs have a core of general management education in common but otherwise, they vary widely*”. Their programs last from 8 to 36 months long. They are both taught in universities and business schools, some of them are tuition-free while the most expensive one goes until about £40,000. They also have different missions which translate into different attributes. Some favour entrepreneurship and other information technology, finance or managerial soft skills.

General master’s in business or management include master’s in business administration (MBA) and Master’s of Science (MSc) in management or master’s in management (MiM). The latter will be elaborated in the next section. Specialised master’s can include MSc in accountancy, finance and marketing, and other specialisations. This paper considers both general master’s, which includes master’s such as Business Administration and Master’s of Science in Management (MSc); excluding research master that usually leads to doctoral studies. General and specialised master’s in management can as well lead to doctoral studies, however, they are more subject to following a non-academic professional path.

Before shifting the attention to master’s degrees, it is worth making a halt at the undergraduate level to mention what a student needs in terms of background in order to begin management or business studies. Quantitative methods are fundamental requirements and can be divided into two areas, namely mathematics and economics. Mathematics are enabling students to understand fields such as accounting and finance. Mathematics should also include business statistics, aiming at analysing and interpreting data (interest rates, economic growth, and investments). The last requirement is economics which can be divided into 50 different fields such as micro and macro-economics and labour economics (Petrov, 2011).

Looking deeper into the management field, business studies encompass four main subjects which are accounting, marketing, finance, and management. **Accounting** helps translate business activities into numbers. There are two areas of accounting, financial and managerial accounting. Financial accounting is the process of making the accounts of an organisation and

reporting them (financial statements). This is made so people outside the company can understand how the organisation is doing financially. The reports give relevant information to the management to make informed decisions (Berland & De Rongé, 2013, p. 23)

Finance is about managing the financial wealth of the company known as assets and liability. Its role is to deal with sources of funding (such as borrowing money, selling bonds or shares) and actions taken by managers to increase the value of the company (investments). **Marketing** is about the customers, what they are willing to pay, for what product, with which characteristics. Marketing team is building a relationship between the client and the company. At the very heart of business, **management** covers how companies make decisions. It is mainly about planning, organising and how to lead, control and motivate people. Once the core of education is acquired, the capstone is **strategic management**. The latter is about how a company builds and maintains its competitive advantage. This is the study of organisations and other market parties in terms of strategic behaviour, how they function, and how they build their competitive heterogeneity (Nag, Hambrick, & Chen, 2007).

While many of those subjects are introduced during a bachelor's degree, they are all covered in a master's degree with a larger emphasis on what the student wants to specialise in. Therefore, many sub-fields exist in each of these areas. They can also be studied with an international focus: international accounting, finance, marketing, and management.

On top of the core studies and specialisation, business schools and universities usually leave some time for extensions. Students can take another specialisation or decide to take another set of courses on many different subjects (informatics, big data, engineering, law, green economy).

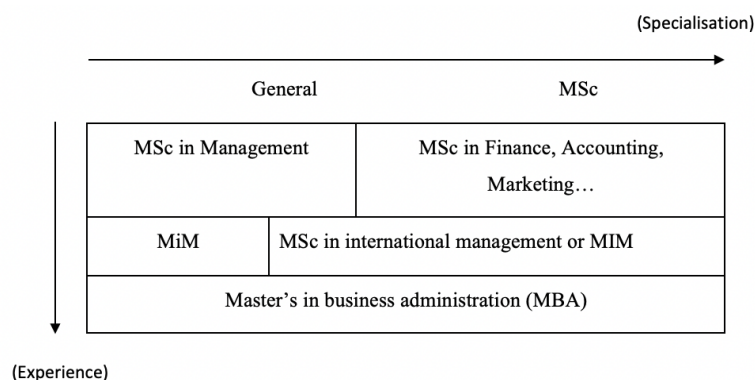
1.3.2. What are the different kinds of master's in management today?

Section 1.3.1 has looked at the basic requirements to enter a master's in management. A differentiation was made between the following masters: General Business and management, Specialised business and management, and Research. The focus was made on the first two. This section will segment further the master typology and focus on the different type of master's in management (MiM) existing today. It will further elaborate on the design of new curriculum, as well as the way of delivery, their advantages, and drawbacks.

When going further in the General master's in management typology, the line between different type of masters becomes blurred (GFME, 2008, p. 25). Another variable entering into account is the work experience (Figure 3). Unlike an MBA which usually requires previous work experience, the MSc in management and MiM are designed for recent graduates. Some

programs are only accessible to students that graduated in the past few years (“The Masters in Management”, 2019). MiM and MSc in international management or MIM are somewhere in the middle. They sometimes require previous internships or one-year work experience but the importance of their experience is not as valued in their courses as in an MBA (Graf, 2016).

Figure 3: General and specialised master structure for management education (Based on GFME, (2008), “The Masters in Management”, (2019) & Graf, (2016))



Master's in International Management (MIM) which are usually MSc as well, are particularly interesting. They require moderate work experience, are specialised in International business but still keep a large focus on management. Because of these many advantages, going further, this paper will mainly focus on MIMs.

After a specialisation and experience segmentation, a third variable is the format of delivery (in-house, online or modular). An in-house master's is given entirely on the campus of the university. It can include guest lecturers, exchange programs in other countries or internships in other organisations. However, the major source of learning is on-campus. On the opposite side, an online master is given via internet platforms. Most of them are characterised as MOOC or Massive Open Online Course provider (Alder, 2020). For example, Udemy is an online learning platform for professionals, adults, and students which offers a variety of courses in different fields, made by different education institutions or enterprises and taught by 50,000 instructors in more than 60 different languages. In the beginning of 2020, there were more than 130,000 online courses and 240 million course enrolment (Udemy, 2020). Finally, modular or hybrid programs are everything between in-house and online. It is a large spectrum; it can be, for example, a course where the theory is given online and the practical exercises are done in-house or a mix of online and on-site courses, discussions, webinars, research projects, assignments and group works (Masters Degrees, 2020).

In-house master's degrees are the most common format of delivery. However, over the years it has seen many critiques. Less flexibility makes it hard to combine a master with a full or even

a part-time professional activity (Masters Degrees, 2020). The flexibility is also reduced for university professors that have to repeat a large part of the content of the courses over and over again to different classes. In online programs, the scalability of good-quality courses is much higher as a student from almost anywhere in the world can attend an online course from the most prestigious universities (Schroeder, 2018).

Concerning online master's edX is a notable example. It is a MOOC platform, founded in May 2012 by a partnership between Massachusetts Institute of Technology and Harvard University. Unlike Udemy, edX only offers university courses mostly from top-ranked educational institutions (Tiernan, 2018). By January 2020, they offered 2950 courses in subjects such as humanities, math, computer science; in 16 languages and had a total enrolment of 70 million students representing all the countries in the world. In edX, some online courses can even grant you credits in the partner school offering the course (edX, 2020). Finally, edX, Udemy, as well as, The Open University, Iversity, Alison, Open learning and many other MOOCs offer entire programs. For example, at the Open University, students can take undergraduate or graduate programs in a variety of fields such as computer science or anthropology (Open University, 2020).

Online degrees are a growing trend; however, several studies showed a list of drawbacks. One of the first critiques is the poorer social interactions. Online programs offer fewer networking opportunities (Alder, 2020). Some studies highlight the lack of support and structure of online education (Bawa, 2016, p. 7). Concerning the quality of education, papers studying the ability of online students to achieve learning outcomes show conflicting results. Many studies show no difference in students' performance (Utts, Sommer, Acredolo, Maher, & Matthews, 2003; Ward, 2004). Other studies show that online and traditional studies differ in applied learning and knowledge transfer which are more effective in the in-house environment (Hansen, 2008).

Modular programs that combine online and on-site activities show many advantages (Wagner, Garippo, & Lovaas, 2011, p. 69). There is a scalability of courses given by high-ranked institutions and professors. Time management is more flexible than traditional in-house programs. Students are able to maintain important interaction with other students and professors. Acceptance of online education was found higher when given in a Hybrid environment (Padilla-Meléndez, Del Aguila-Obra, & Garrido-Moreno, 2013). Some studies have found that students' grades were significantly improved in a hybrid format instead of a traditional in-house format. Hence, thanks to its capacity to combine some advantages of both online and traditional education, hybrid degrees are gaining in popularity (Potter, 2015).

One of edX specificity is offering its platform to universities in order to create modular courses or programs. UCLouvain, for example, has applied a modular system for its corporate strategy course. The theory is given through Open edX software platform. This includes courses, guest lecturer and basic understanding questions (Quiz). In the classroom, students interact through presentations, questions, case studies and class discussions with the professor or the teaching assistant.

This section's main attributes were to segment further master's in management to focus only on a specific degree which is the Master's in International Management (MIM). After looking at the advantages and drawbacks of the online, in-house and hybrid format of delivery, it seems like the hybrid model unites many positive aspects and offsets the negative sides. This paper is, therefore, focusing on MIMs hybrid degrees.

2. Does the education system need to change and why?

This section will analyse if the education system has to change and why. The goal of this chapter is to identify the areas where education can be improved. The purpose is not to say that everything is bad in education; this section just highlights the aspects where there is room for improvement. Therefore, the view is partial on purpose. Nevertheless, when an argument explaining why education should change is controversial, the debate will be presented. Moreover, the chapter does not include an opinion about recent pedagogical improvement. Innovations that have been implemented in business schools over the last decades will be presented at the end of Chapter 4.

Four main reasons explaining why the educational system needs to change will be presented. The first argument lies around the idea that if the world around business school is changing, by common sense, the education system should change as well. Then, an argument is made that the current system is focusing too much on remembering instead of thinking and being critical. Thirdly, a bigger emphasis on soft skills should be made. Finally, the testing method could be improved.

2.1. The world is changing, so the educational system needs to adapt

The world surrounding Business School students is "VUCA". The concept was introduced in 1987 by students at the U.S Army War College and used to describe the post-Cold War world. The letters stand for Volatility, Uncertainty, Complexity, and Ambiguity (Giles, 2018).

Nowadays, this concept summarizes well the current environment around Business School. Students are evolving in a complex and fast-changing world where jobs are not assured (Boyes, 2018).

Societies are changing quickly and deeply. The world is facing new environmental, social and economic challenges. The environmental challenge requires, for example, urgent action and adaptation that are necessary to face global warming and the faster consumption of resources than the planet can produce. Then, the second challenge is social, for example, countries and communities are changing too, through population growth, migration, cultural diversity... Finally, concerning economic challenges, for example, innovation such as artificial intelligence, brings the question of what needs to be human. As the OECD mentioned: *“It is time to create new economic, social and institutional models that pursue better lives for all”* (OECD, 2018). Another example is tech, the workforce is continually progressing which means skills needed are also transforming, so the education system has to adjust (Derrington, 2018).

So, it is reasonable to say that if the world is changing fast, the education system needs to adapt too. However, some arguments can be made that education is currently not evolving fast enough.

Firstly, Abigail Cox in 2018 made an argument that schools are using out-of-date textbooks, which leads to an old-fashioned curriculum (Cox, 2018). This argument is strong, and its opposite can be defended. Therefore, the following question needs to be analysed: Does a changing world imply that the methods and frameworks to analyse it are outdated?

Regarding what makes past theory useful, Gulson et al. (2015), said: *“the task of scholarship is to begin to get a sense of one’s own presuppositions, one’s values and one’s habituated ways of explaining things and of making sense, and, importantly, to get a sense of other possible presuppositions”* (Gulson, Clarke, & Petersen, 2015). Based on Gulson et al. justification, Mary Lou Rasmussen (2017) added that *“theory is not just about getting to know what others think, it is also, inevitably, about developing an understanding of how we have come to know, what we know, and to better understand our own prejudices, attachments and affiliations to particular ways of seeing and disciplinary approaches”*. Moreover, previous strong theory can help to develop a deeper understanding of concepts, by understanding the reasoning behind and putting them in a bigger context (Chareonwongsak, 2018). Theory provides a frame to explain how other visualize and experience the world, to help people to understand the way they work and the way the world works (Rasmussen, 2017). Biest et al. (2011), discussed that the notion of theory and practice are inseparable. Theory is not different than practice; theory educates

practice and practice educates theory (Biesta, Allan, & Edwards, 2011). Lastly, theory is not static. Indeed, as perfectly explained by Mary Lou Rasmussen: *“Educators utilize existing theories, but they also depend on research to build theory”* (Rasmussen, 2017). Research is a core function of universities, and always strive for new knowledge and follow the evolution of the world around them (This is further developed in Chapter 3).

The belief of this paper is that theory serves as a background for going further and it provides a framework for helping to solve problems more effectively. Adaptation to the new environment must be made, but theory, the root of education is needed to do it. The past and the present, theory and practice is needed to complement each other. So, this paper relies on the fact that the first argument that education might offer an old-fashioned curriculum is true to a certain extent. The root of education and theory need to stay, but there is room for adaptation and improvement.

Secondly, Abigail Cox also argues that most schools keep teaching without the help of technology. Students can easily have access to an abundance of information, but still, schools promote discipline and restrain creativity, out-of-the-box thinking. There is often little room for innovation or technological training methods, which raises the following concern: How can students be prepared for future jobs if the education is not at the cutting-edge? Some skills taught today were the skills needed during the industrial era but are not focusing on today's history that will shape the current students' future career (Cox, 2018). Nevertheless, this point of view needs to be nuanced. Very few researches have been made on whether business school should perform at the cutting-edge or not. Our work assumes that the world will continuously change so it is difficult, for education institutions to always be exactly up-to-date. Academic researchers are continuously studying new trends. What really matters is that education provides a structured environment to develop the skill needed to operate in a constantly changing environment. This paper relies on the hypothesis that an improvement can be done in the development of certain specific skills. Indeed, as mentioned by Wallner & Gerold Wagner in 2016, *“students will have to succeed in a working environment which is increasingly globalized, automatized, virtualized, networked and flexible”*, therefore, *“new skills and competencies will become more important such as non-linear thinking, social and intercultural skills, self-management and self-competence”*. This is further developed in Section 3.1.

As explained by Steve Denning in Forbes (2018), business schools today are teaching 20th century management fundamentals. The world entered the fourth Industrial Revolution in which *“organizations are connecting everyone and everything, everywhere, all the time.”* The

incremental value they create is delivered instantly on a large scale. Those connecting firms are creating a world where people, ideas, and money connect easily, quickly and in a cheap way. Some organisations guiding the revolution are being managed differently than the corporate giants of the 20th century. They are driven by continuous innovation for end-users and are arranged to be agile and able to adapt quickly to the fast-changing needs and desires of customers. Today for those organisations, profits can be seen as the result, not the goal. As Denning pointed out, those companies are driven by the future and innovation; therefore, profit maximisation is not the only central matter anymore for every company. A lot of companies still managed by the 20th century rules have missed transformation in their industries (e.g., computers, telephony, photography...). The good practices of yesterday's management are becoming incomplete. The world has changed, and those methods need to adapt to the fast-changing and complex marketplace driven by end-users (Denning, 2018).

However, for the most part, this “‘good’ management of yesterday” is what is taught currently in business schools. There is a disconnection between the business world and what is taught at school. Nevertheless, this is complex to discuss because the new management is not just a new course, method or process. It implies a new mindset that sometimes could go against 20th century management standards (Denning, 2018).

To provide students the education system they need for the future, learning must become a strong relationship, a partnership between workers, employers, business schools and customers (Derrington, 2018). In May 2006, in the European Commission Communication "*Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation*", several actions were introduced to answer the need for change in European education. A key element was that universities should further develop partnerships with companies to “*become significant players in the economy, able to respond better and faster to the demands of the market and to develop partnerships which harness scientific and technological knowledge*” (Commision of the European communities, 2009).

We believe that those existing cooperation activities such as conferences, internships and project work, help students to be aware of what is happening outside the academic world, of what is the current situation in the business world, and therefore, should be further developed.

2.2. The education system focuses more on remembering instead of thinking and being critical

As aforementioned, the world's future can't be predicted so education must prepare students to react to unknown situations. As Wiliam stated during the Cambridge Assessment Network Conference: *"the purpose of education is to prepare students for a world we cannot envisage, so when they are stuck, they choose to think, instead of remember."* (Wiliam, 2006). This idea was also supported by Karen Boyes, indeed, reasoning and reflexing need to be the main point of education, and not pure memorisation that will be forgotten as soon as the examination is over. Based on that, Karen Boyes added that a lot of topics currently taught in school are either irrelevant in today's context or can easily be searched on the internet (Boyes, 2018). It means that teachers are not the only ones to hold the knowledge anymore. As information is so easily accessible, the role of teachers must change to critical coach, to teach students how to use this information in significant ways (ECE). According to the OECD learning framework (2018), the education system has to prepare students to think and behave in a "more integrated way". Indeed, the OECD introduced the following concept: *"the mobilization of knowledge, skills, attitudes, and values through a process of reflection, anticipation and action, in order to develop the inter-related competencies needed to engage with the world."* Business Schools need to help students to become critical and creative thinkers to face the upcoming challenges in this fast-changing environment (Tschimmel & Santos, 2018). This idea is also supported by the European Commission. Indeed, during the EU Forum for University Business Dialogue, it was argued that the education system should change and help students to become agents of change. The Commission mentioned that *"the challenge for higher education is to provide learning environments that stimulate independence, creativity and an entrepreneurial approach to harnessing knowledge"* (Commision of the European communities, 2009). We believe that the main skill universities should teach is problem-solving, to be able to face those constant new situations in a critical way (This is further developed in Section 3.1).

2.3. Universities do not focus enough on soft skills

As defined in Investopedia (2019), soft skills are *"character traits and interpersonal skills that characterize a person's relationships with other people(...).Soft skills have more to do with who people are, rather than what they know"* (Kenton, 2019).

In 2015, Garvey in his Business Education article pointed out the importance to complete 'technical' skills by the improvement of 'personal' skills (Garvey, 2015). Based on Garvey's

definition and Karen Boyes' interpretation, soft skills include, among others, perseverance, communication skills, empathy, project management and coaching, critical and creative thinking, self-management and ethical awareness (Boyes, 2018).

Moreover, in his book “The next Generation” (2017), Tony Ryan emphasizes the importance of developing empathy in young people, especially in the context of robots and artificial intelligence (Ryan, 2017).

Çeviker-Cinar et al. (2017) also indicate a continuous lack of multidisciplinary integration, experiential learning, and soft skills development. Business education fails to take into account innovation, fast changes, and versatility to future challenges and different situations. The education system needs to help students to become agents of change, prepare them to have a positive impact locally and globally on their organisation (Tschimmel & Santos, 2018). Business students need to be ready to face economic, social and environmental challenges. As mentioned by the OECD, future education should focus on the “*sustainability of people, profit, planet and peace, through partnership*” (OECD, 2018).

According to Petriglieri (2012), business schools do not provide good tools to encourage job success responsibly and sustainably. There should be a better balance between shareholder value maximisation on the one hand, and equality and involvement for the planet on the other hand (Tschimmel & Santos, 2018).

Karen Boyes also points out that in order to create a forward-looking education system, it should be built around essential skills needed to be a good world citizen, be thinking-oriented, and should include “*practical applications of knowledge and understanding*” (Boyes, 2018).

2.4. Testing method can be improved

Education system mainly measures success through standardised tests, hand in paperwork and take exams, but it does not prove that students know how to apply the knowledge in the business world (Boyes, 2018). Plus, it often guarantees that students are able to memorise but not that they actually understand.

The education system teaches students how to pass a test. Tests rule the curriculum and what is considered important at each level of education. Therefore, they limit creativity and out-of-the-box thinking, but they also ignore the students’ dissimilarities, like personal qualities, abilities, and passions. Everyone is different and forcing students to pass prearranged pass-or-fail exams does not boost students’ strengths and interest. This testing method prevents creativity and

personality. Consequently, it does not encourage learning, innovation and does not prepare for the constantly changing business environment. The technology could be used as a personalised learning tool to make students learn differently, which will lead students to satisfaction and productivity (Cox, 2018).

In short, this section highlighted the areas the literature spotted where the education system could improve. The first argument consisted in saying that the education is currently not evolving fast enough to answer the new environmental, social and economic challenges the world is facing. The world is changing, and the good practices of yesterday are becoming incomplete. The second argument relied on the importance of thinking and being critical rather than remembering. The future can't be predicted so education should prepare students to react to unknown situations, but there is still room for improvement in this area. The third discussion was about universities not focusing enough on soft skills. Finally, the testing methods could be improved to promote more creativity, passion and personal qualities and prepare students for constant business environment change. Chapter 4 will analyse what is the current situation in the best master's in management, and what can still be improved. Chapter 7 will present how it can be achieved.

3. What should be the role of education?

The previous section identified four main areas where the education system could improve. This new section will gather universities' main role in the 21st century, as well as the main teaching pillars around universities. The goal thereafter will be to compare this ideal state to the current position of different master's in management.

Traditionally, the two functions of universities were teaching and research. Teaching is about providing the right professional training, but also the essential education needed to develop an adequate personality. Researches reinforce the body of theoretical knowledge and may apply it to practical problems (Kuhnen, 1978). Teaching and research have always been the core functions (Altbach, 2008). Since the beginning, universities make students think. They do so, by teaching the students to seek for understanding and meaning. They are encouraged to challenge information that is given to them, but also to be analytical and select only what is relevant to solve a problem. They learn how to identify and solve problems rationally backed with evidence, and not be discouraged by complexity, in the opposite be excited to unravel it (Boulton, 2009). There are different kinds of researches: Pure research, applied research,

historical research... Some researches focus on finding new knowledge while others try to apply theoretical findings to real-life situations, problems (Altbach, 2008).

Nowadays, the roles of universities need to go beyond those two key functions. First, the criteria used to provide universities worldwide rankings, and more specifically the indicators used by the “Times Higher Education World University Rankings” have been investigated. In order to build a balanced comparison, the ranking uses 13 criteria centred around 4 main university missions: *“Teaching, research and citation, knowledge transfer, and international outlook”*. The first criteria looks into the learning environment. Researches’ score depends on the volume, income, reputation and influence. The knowledge transfer is about industry income. Indeed, helping industry with innovation or consulting has emerged as the main objective of modern international high education. Concerning the international outlook, the ranking looks at three different ratios: International-to-domestic-student, international-to-domestic-staff and international collaboration (The world university rankings, 2017).

Therefore, teaching and research are not the only goals of universities anymore. Philip Altbach, in his article “The complex roles of universities in the period of globalization” (2008), and Geoffrey Boulton in the article “GLOBAL: What are universities for?” (2009), presented new different roles.

In addition to teaching and research, Altbach (2008) identified the conservation and diffusion of knowledge as another role of universities. Even in the context of technology and the internet, universities remain warehouses, organisers, and coordinators of knowledge; they conserve knowledge for future generations. Indeed, academic libraries, since the beginning, have been responsible for the cultural and intellectual legacy of society, keeping and organising it (Baker, 2001). However, universities are also resources for an unpredictable future. One of their roles is to prepare students and the knowledge for what the unknown future will need. It is not easy to predict what ideas, thoughts, skills, technologies the future will be made of, but universities are essential resources for that tomorrow, they should develop students in a creative and open-minded mode (Boulton, 2009).

Then, according to Altbach (2008), universities can also be seen as intellectual centres. Universities are in the best position to offer independence to individuals and groups to create debates and reasoning. They encourage student activism and social involvement by providing an environment stimulating students to share ideas and dialogue. Moreover, many professors, next to their classes and research, participate as specialists, commentators or analysts in the intellectual life of society (Altbach, 2008). Besides, students are encouraged to take part in

intellectual, social and political life on the campus through students' associations. Universities form friendships and networks that will be useful for students' personal and professional life. Universities are also a place to develop emotional intelligence (further developed in Section 3.1).

In addition to participating in social and cultural vitality, universities are a source of new knowledge and encourage innovative thinking. So, universities play an important role in innovation, not as their drivers, but provide the environment that will encourage innovation. For example, by bringing together outstanding students and internationally-competitive research (Boulton, 2009). West and Farr (1990) defined innovation as the intentional introduction and implementation of new concepts, products, processes to create significant benefits. It is a process having a series of activities that may impact individuals in private, professional and economic environments. Those activities include the discovery of innovation opportunities, the assessment of these new ideas, and finally, the implementation of the best idea (West & Farr, 1990). Therefore, innovative workers need to have the abilities required to succeed in one or more of these activities. It means to be able to recognize new opportunities, raise new ideas and solutions, be open-minded to challenge own and other's ideas, organise the resources to make the change happen (Vila, 2019).

In 2012, Vila et al. analysed how HE (Higher Education) contributes to the development of the competencies needed to innovate later in their jobs. The study analysed the link between the learning and teaching methods used at universities and the acquisition of specific competencies associated with an innovative attitude (Vila, Perez, & Morillas, 2012). Proactive teaching and learning methods seem to be more effective to develop the four innovation competencies. Indeed, group work, projects and problem-based assignments look like the most effective methods, hinting that solving new problems in a group, is the exercise that promotes the learning of innovation-related competencies. The four innovation competencies are developed at universities through different activities. Firstly, the ability to recognize new opportunities is encouraged through participation in research projects. Then, the capability to propose new ideas is promoted with problem-based training. Thirdly, the intelligence to challenge new ideas is supported by the importance made on theories and concepts. Finally, the skill to organise the strengths of others to create the change is enhanced with group works (Vila, 2019).

Moreover, Universities are considered as international institutions. They act as a central link with international communities. They perform in a worldwide environment and bring

knowledge from around the world to local societies (Altbach, 2008). Plus, they attract international talents (Boulton, 2009). This topic will be further developed in Section 3.3.

Then, universities should promote access and equity. For a long time, universities are used as a tool for social mobility, helping people to get the competencies they need to raise their incomes and status. The system is not perfect yet, but many universities and institutions try to improve access for unprivileged individuals through scholarships, bursaries, and loan programs. Admission to HE is considered as a critical societal goal (Altbach, 2008). Universities are considered as promoters of social justice and mobility (Boulton, 2009).

Furthermore, universities will increase individual productivity. At least four reasons are explaining the link between university education investment and individual productivity. First, through academic education, students develop their inborn skills and acquire abilities and professional skills, which will help them to create a more valuable output. The second reason is explained by Schultz in 1975 in the theory of disequilibrium. Within the educational system, graduates have had the opportunity to develop a certain sensitivity to recognize earlier any disequilibria, for example, in markets. Graduates having the ability to detect the disequilibria earlier will anticipate the changes, identify emerging opportunities and take advantage of the situation by applying the right resources. The ability to manage market disequilibria is a key element to assess meticulously economic environments changes both locally and globally, create equivalent advantages in local economies, and consequently improve productive efficiency every time resources are reassigned to attain new equilibria (Lundvall, 2008).

The third explanation lies in the learning the students will take out from interactions at university. The behaviour universities require in the classroom to successfully prepare the students to interact properly in the entrepreneurial environment. Universities help the student to develop personal values and norms of behaviour in line with those shaping economies and societies, making educated people more productive in their economic activities (Vila, 2019).

Fourthly, the link between university and productivity is explained by the acquisition of a particular essential skill, the ability to keep learning. Throughout their academic path, students who succeeded at university have proven through numerous assessment their abilities on an ongoing basis to adapt, learn, and deal with new tasks. Universities increase individual productivity because education encourages students to develop their ability to learn how to deal with new challenges by taking on new responsibilities, making the right choices and taking the appropriate decisions (Vila, 2019).

In addition, universities play a role in economic development. Universities attract business investments. Michael Porter also once pointed out that: “*Skilled human resources and knowledge resources are two of the most important factors for upgrading national competitive advantage*” (Boulton, 2009). Those two elements being at the centre of universities.

Economists have largely discussed the effect of universities' investment on economic development and have identified two main reasons that explain the impact of HE on regional and national prosperity. Firstly, universities, by teaching to students, are a source of human capital. Secondly, universities participate in technological improvement through academic researches, creation discussion and assessment of new ideas and knowledge. Both promote future productivity wins for the economy and its representatives. Universities create skilful workforce available to local firms and service sectors, and in addition, prepare students to promote innovative knowledge in local companies and organisations. Indeed, universities provide explicit and tacit knowledge. The explicit or technological knowledge arises mainly from researches and is assembled in the economy as physical capital. The tacit or organisational knowledge lies in the population's brains, ideas, skills, competence, developed personally through formal education in communication with work, business and common life experience and is accumulated in the society as human capital (Vila, 2019).

In addition, graduates also participate in local economic growth by playing the role of local innovators. For instance, they intentionally create local economy disequilibria by introducing new ideas and knowledge in local market activities (Vila, Perez, & Coll-Serrano, 2014). Universities gather students that will spend their whole careers participating in meetings, sharing ideas, dealing with work-related dilemmas, developing new knowledge, and finding a way to apply this new knowledge to face new problems and challenges. In this context, local productivity development is linked to a continuous cooperative intellectual accomplishment, a constant stream of new concepts to solve work-related problems, and its sharing to satisfy local human needs (Lucas Jr, 2009).

A key element is then to understand the transition from students to graduates and from universities to professional lives (Vila, 2019). Figure 4 depicts this transition from students before university to graduates at work.

Figure 4 Transition of an individual from university education to work performance (Vila, 2019)



The first step concerns all the choices the student did before enrolling in university. The economic and social background of the student will have an impact on the student's preferences along with the choice of applying to a specific program at a particular university. The second step involves the university education experience as such that will create graduates ready to enter the job markets. This third step consists of a matching process between what the graduates are looking for and what is available on the market. The fourth step begins when the graduates find the appropriate job and start to acquire experience, learn by doing and through specific job-related training. This step is a loop, as it occurs every time the individuals change jobs during their career. The last step is the real graduates' performance at work in a specific business role with different objectives that will affect the graduates' outcomes (Vila, 2019).

The step "University education" is at the centre of the topic and includes two different agents: the students and the universities. Higher education can be seen as a production process regrouping educational resources from universities and personal resources from students made up of their effort and motivation to study, their skills acquired previously and their innate talents (Todd & Wolpin, 2003).

The output of this production process is mainly the learnings acquired by university graduates. It can be measured in different ways but the most common method to assess academic achievement is to look at marks obtained by the student through its academic progress (Vila, 2019). But those grades represent poorly the ulterior graduates' economic performance. Therefore, another way to look at the output of education production progress is to pay attention to the competencies developed by the individual graduates at the end of their academic background. In 2001, Hartog defined competencies as those specific individual skills, talents, and abilities that participate to increase individual and global productivity leading to sustainable economic development and growth in the globalised society (Hartog, 2001). Therefore, when students reach their graduation, their competency profile represents all the human capital individually acquired during their whole education journey. Having individuals with strong competency profiles results in favourable cooperation in economic operations, political systems, and social activities (Heijke, Meng, & Ramaekers, 2003). But also leads to relevant social relations, higher employment, and life satisfaction (Allen & Van der Velden, 2001).

Finally, universities are also good places for general education and to foster entrepreneurship. It supports the learning of basic knowledge needed in the society, including critical thinking, writing, as well as, logical skills (Altbach, 2008). Universities are responsible for what the students know, understand and can do. Universities help the student to acquire the

appropriate skills to be fully qualified for good jobs and develop their potential to become engaged and self-assured citizens. Those skills will also increase their employability and prosperity and determine their competitiveness and creativity (Yuste, 2019).

In short, this section presented the main universities' roles in the 21st century. Traditionally, the two primary functions were teaching and research. But it goes beyond those two aspects. Indeed, universities also play a role in the conservation and diffusion of knowledge. Plus, it considered intellectual centres. It creates an environment promoting debates and reasoning. Moreover, on top of the social and cultural vitality, universities promote access and equity. Furthermore, universities are considered as international institutions. Finally, they are also responsible for encouraging innovative thinking, entrepreneurship and play a role in economic development.

3.1. Skills and values universities should teach

The previous section introduced some skills universities should teach. Next to hard skills, what are the key competencies, values and attitudes universities should promote?

As mentioned earlier, we live in a VUCA world, which makes it difficult to predict the future. As Andreas Schleicher said, director for Education and Skills, OECD (2018), we are surrounded by social, economic and environmental challenges that are driven by globalisation and technology, but those challenges also simultaneously create a lot of new opportunities. The future can't be predicted so it is challenging for schools to make students ready for tasks that have not yet been discovered, for technologies not yet imagined, or to teach students how to solve problems that are not expected yet. But students still need to be open and prepared for it. In order to overcome this ambiguity about the future, students will have to develop their eagerness to learn, creativity, flexibility, and be motivated and open-minded.

The OECD has introduced a project called "The future of Education and Skill 2030". The goal of the project is to help the education system in different countries to find solutions about what skills, knowledge, values, and attitudes the current students will need in the future in order to succeed, and how schools can develop them. The OECD Learning Framework 2030 is only about orientation and not instruction. This framework has been co-developed by "*government representatives and a growing community of partners, including thought leaders, experts, school networks, school leaders, teachers, students and youth groups, parents, universities, local organisations, and social partners*" (OECD, 2018).

According to this framework, education should promote a shared vision. New students will have to forget the idea that resources are unlimited and that they are on earth to be used. Instead, they will need to focus on the notion of common prosperity, sustainability, and well-being. Decisions will need to be different; collaboration needs to win over distribution and sustainability needs to be placed above short-term prosperity. Education systems should develop students as individuals, help them to reach their potential but also encourage students to create a common future based on the well-being of people, communities and the planet as a whole. Education has the duty to prepare students for the workforce, but it should also provide students with the skills needed to become active, accountable and committed world citizens.

The OECD is devoted to the UN 2030 SDGs (Sustainable Development Goals), that strive to provide through partnership: sustainability of people, profit, planet, and peace.

A central concept around the framework is “co-agency”. Learning is influenced by students’ interactions with their surroundings as teachers, colleagues, families or communities. Those relationships play an important role in their progress and should, therefore, be a focus.

In addition, education should help students to become change agents, that is how students will be the best prepared for the future. Students must know how to have a positive impact on the future, influence positively others around them, understand others’ purpose, behaviour, and feelings, and be aware of the consequences of their actions in the short- and long-term.

The OECD Education 2030 project introduced three categories of ‘Transformative Competencies’, respectively: creating new value, reconciling tensions and dilemmas, taking responsibility. Creating new value consists in achieving sustainable development through new sources of growth. As mentioned by the OECD education 2030: “*Innovative economies are more productive, more resilient, more adaptable and better able to support higher living standards*”. Students will have to use their creativity to offer new products and services, provide new jobs, use new practices, create new companies, industries, and build new business models. It is through cooperation and collaboration and with the knowledge of yesterday, that new knowledge will be created. This process implies flexibility, imagination, curiosity and being open-minded.

Reconciling tensions and dilemmas: students will need to be able to handle tensions dilemmas and be ready to do trade-offs. There will always be a question of equity against freedom, autonomy or community, innovation over continuity, students will have to find a certain

balance. To do so, they will have to think in an integrated way, be careful about interconnections to avoid incomplete conclusions. It is essential that students learn to be system thinkers.

Taking responsibilities is important for the two other transformative competencies to succeed. Indeed, the two previous competencies imply that students are able to think by themselves, work effectively with others, look at the consequences of the decisions they take, evaluate the risks and balance them with the reward. This involves a sense of responsibility, morality, and maturity. Self-regulation is a central concept around taking responsibility. As defined by the OECD education 2030, it implies “*self-control, self-efficacy, responsibility, problem solving and adaptability*”.

In the OECD Learning Framework 2030, the importance of a combination of skills is highlighted. Earlier in this paper, we mentioned that schools do not focus enough on soft skills even if there are important in the students’ development. Soft skills have an important impact on shaping students’ personalities. Students must develop skills in addition to academic and technical knowledge. Team working, communication skills and project management are crucial (Schulz, 2008).

In addition to those skills, Goleman added the importance of emotional intelligence and concentration. As Goleman defines it, emotional intelligence has 5 main components: self-awareness, managing emotions, motivation, showing empathy and staying connected. We believe that they are all relevant in creating future leaders and should be developed in education.

The first element, self-awareness, consists of being able to understand own thoughts, emotions, motivations, abilities and how it can impact others. Secondly, managing emotions refers to the ability to control own impulses and taking responsibility for own actions. Thirdly, internal motivation and motivating others consist on the one hand of being interested in learning and self-development, and on the other hand motivating the others to move and do the same. Fourthly, showing empathy, is about reading and understanding others’ moods, emotions, and reactions (Goleman, 1998). More precisely, empathy can be divided into three parts: cognitive empathy, emotional empathy, and empathic concern. Cognitive empathy is being able to understand others’ perspective, it helps leaders to explain their opinions in meaningful ways. Emotional empathy consists of feeling how others feel. It is crucial when mentoring employees or dealing with clients. Empathic concern is about understanding what others might need from the leader. Fifthly, staying connected is important as emotions are contagious and will spread so it is key to pay attention to social skills as well (Goleman, 1998).

In addition to emotional intelligence, Goleman (2013) also added the importance of attention and focus. As he explained, leaders always need to direct attention and get rid of distractions. As universities create future leaders, students must learn how to focus. Attention can be divided into three parts: focusing on yourself, focusing on others and focusing on the wider world. The two first buckets, help to build emotional intelligence as presented above and the last element help to build strategy, innovate and lead organisations. The three buckets are all crucial, as Goleman (2013) summarized: *“a failure to focus inward leaves you rudderless, a failure to focus on others renders you clueless, and a failure to focus outward may leave you blindsided”*.

Focusing on yourself, is about self-awareness and self-control, the first pillar of emotional intelligence. Focusing on others, consists of increasing empathy and building social relationships, the second part of emotional intelligence. Finally, focusing on the wider world, leaders need to be good listeners and good questioners (Goleman, 2013). As Goleman said, *“attention is the basis of the most essential of leadership skills”*, therefore, we believe it should be included in education (Goleman, 2013).

The last skill that will be highlighted is design thinking skills. As Razzouk and Shute (2012) defined it, design thinking is *“an analytic and creative process that engages a person in opportunities to experiment, create and prototype models, gather feedback, and redesign”*. As mentioned, several times before, students are living in a VUCA environment and design thinking is used *“to facilitate absorptive capacity and organizational learning in VUCA environments”* (Cousins, 2018). Design thinking is more and more applied to solve complex and ambiguous problems. This learning method is applied in the business world and universities are trying to include it in their programs and promote multidisciplinary ways to solve problems (Wrigley & Straker, 2017). Wrigley and Straker (2017) presented a model to teach students how to apply design thinking to different situations (represented in Appendix 1).

This section gathered the skills and values universities should teach. First, as the future is unpredictable, is it important that students develop their curiosity, creativity, flexibility, critical mindset and become open-minded. In the same context, students need to learn how to deal with failure or rejection and move forward. To face all the future challenges that leaders will encounter; students must become active, accountable and committed world citizens. Indeed, students need to know how to positively impact their surroundings, understand the purpose, feelings, behaviours of other people and understand the consequences of their actions in the short- and long-term. Moreover, social and emotional skills are also essential such as self-

awareness, management emotions, motivation, empathy, and collaboration. Finally, the ability to pay attention and focus is crucial in leadership.

3.2. Skills needed in management education

The skills and values aforementioned could apply to HE across the board. Now, looking closer to management education, Zsolnai, Junghagen, and Tencati, in their article “*Redefining the roles and duties of management*” (2012), explained how management education can have a role in challenging and inspiring business management. Responsibility should be integrated into the educational program. Indeed, the master’s in management should develop reflective and responsible managers.

The responsible manager requires the ability to take diverse perspectives into account and balance the value of various dimensions. The focus is not only on maximising the financial return on investment but also on increasing the value of all the assets of the company. Master programs in management need to prepare students for this new profile of future managers. For example, based on the CEMS MIM, Zsolnai and Tencati (2009) developed a new sketch of the future managers. The CEMS MIM program is an alliance in management education of leading business schools, universities and multinational organisations. It is conceived by academic and business leaders, therefore, creating a bridge between university and business best practices (CEMS, s.d.).

As Zsolnai, Junghagen, and Tencati defined it (2012):

The future manager is “*a reflexive practitioner who is committed to environmental sustainability, exercises social responsibility, works with sensitivity toward gender and diversity issues, harmonizes information and communications technologies with processes and organizational culture, applies holistic perspective in problem solving, cooperates with social and political actors, and is engaged in progressive entrepreneurship.*”

In order to prepare correctly the students to become good future managers, universities and business schools need to promote these values.

First, based on Zsolnai, Junghagen and Tencati work (2012), the future manager needs to deeply understand environmental sustainability. It includes taking into consideration the ecological limits and always analysing the different perspectives during the decision-making process. The main concept here is that business is an ecosystem that needs to be incorporated into the whole

biosphere. Then, it is important to have a cooperative approach within the company but also among organisations, civil society, and governments. Moreover, when assessing the performance of the company, the global sustainability of the company should be taken into consideration. Finally, companies have an important role in creating and spreading sustainability-directed innovation. As the Commission of the European Communities mentioned (2001), dominant companies and leaders should spontaneously participate in improving the society and protecting the environment via their innovations.

Second, the future manager needs to exert social responsibility. In order to develop corporate social responsibility (CSR), there are four main requirements: choice, values, communication, and innovation (Zsolnai, Junghagen, & Tencati, 2012). Indeed, managers must have the opportunity to choose, prioritise and decide a certain direction. Then, values also have a key role; managers need to strive for more than profits. If the hidden goal behind the CSR strategy is to increase profits, the strategy won't create real inspiration in employees and stakeholders. The next important step is to communicate the CSR commitment to employees and stakeholders. Managers need to explain their CSR engagement explicitly, drive employee engagement, and document it for external stakeholders. Finally, instead of seeing CSR as a required element, CSR could be framed as innovation and development. As Zsolnai, Junghagen, & Tencati explained it (2012), it can *“challenge managers' traditional ways of thinking about business and may stimulate new and unexplored ways of developing business that is sustainable as well as profitable”*.

Third, the future manager needs to work carefully with gender and diversity challenges. In order to support gender and diversity management, the future manager needs to fully understand what it is (Zsolnai, Junghagen, & Tencati, 2012).

Forth, the future manager needs to *“harmonize information and communications technologies with processes and organizational culture”* (Zsolnai, Junghagen, & Tencati, 2012). Information and communication technologies (ICT) should strengthen flexibility, speed, and focus (Zsolnai, Junghagen, & Tencati, 2012).

Fifth, when the future manager needs to solve a problem, he should have a holistic perspective. It is crucial to take all the relevant stakeholders into account when solving an issue, have always in mind the impact it may have on the ecosystem and the next generations (Zsolnai, Junghagen, & Tencati, 2012).

Sixth, the future manager needs to collaborate with social and political players. It necessitates an important ability to manage cross-cultural differences, including countries, sectors, and functions. According to Zsolnai, Junghagen and Tencati (2012), working with the government involves that self-interests need to be weakened to give place to basic political principles and values.

Finally, the future manager needs to engage in progressive entrepreneurship. As Zsolnai, Junghagen and Tencati explained (2012), it means that managers must aim *“to build long-term, mutually beneficial relationships with all stakeholders and want to produce sustainable values for their whole business ecosystem”*. To become entrepreneurial, future managers need to have a desire for achievement, seek opportunities and be vision-driven. They need to be able to combine knowledge from different sources with new knowledge based on new experiences. Indeed, this is a key element *“to handling the growing knowledge and unanswered questions in the awaiting ecological, social and economic challenges”* (Zsolnai, Junghagen, & Tencati, 2012).

As Zsolnai, Junghagen and Tencati (2012) concluded: *“If we want to see managers in the future who not only can do well, but also do good, we cannot only focus on what is well and what is good, but must focus even more on the reflection process of how to do well and how to do good”*.

This section presented the main skills students in management should acquire throughout their studies. Master's in management should develop reflective and responsible managers. Students need to understand environmental sustainability and exercise social responsibility. Plus, having a sense of diversity and inclusion is essential. Moreover, students need to learn how to take diverse perspectives into account to build long-term beneficial relationships with all stakeholders. Future leaders will have to operate cooperatively within the organisation but also among organisations, civil society, and governments. Finally, on top of problem-solving skills, future managers need to drive for achievement, seek opportunities and be vision-driven.

3.3. The importance of international studies

In addition to the skills and values, universities should promote and encourage international studies. There has been an increasing demand to develop the ability of students to think and act globally. One proven method to encourage global citizenship is studying abroad (Tarrant, 2010).

More and more universities strongly promote internationalisation as a leading strategy and commit to developing global citizens as part of their educational mission. It is universities

responsibility to foster international academic background either as a result of their mission (Schattle, 2010), to provide more employment opportunities for their students (National Leadership Council for Liberal Education and America's Promise, 2007), or to take the public increasing interest in developing global awareness among next generations (Norris & Gillespie, 2009).

Studying abroad leads to four commonly accepted advantages: discover or improve a new language, develop a global world view (Burn, 1980), improve engagement with other cultures (Abrams, 1979) and acquire a global understanding (Kauffmann, Martin, & Weaver, 1992).

Study abroad is often linked to the concept of social transformation. As Kauffman et al. said study abroad is often “*generally purported to endow students with an international perspective—knowledge, attitudes and skills which presumably lead to a better educated citizenry and ultimately to improved international relations and global understanding*” (Kauffmann, Martin, & Weaver, 1992).

Global citizenship commonly regroups three dimensions: social responsibility, global competence and global civic engagement (Morais & Ogden, 2011).

The first dimension, social responsibility, relates to the concern for others, for the society as a whole and the environment. Global competence or global awareness include self-awareness, intercultural communication, and global knowledge. Students need to be aware of their limitations to engage in intercultural contexts. They also need to develop intercultural communication skills and demonstrate concern and expertise in international issues and situations (Tarrant, 2010). The last dimension, civic engagement, relates to students' ability to understand local, national and global issues and students' engagement to react through actions including volunteering and community participation (Lagos, 2002).

New technologies have strengthened links between universities, societies, cultures and human beings. Therefore, current university students live and work in an increasingly globalised and accessible environment (OSteen & Perry, 2012). Students who have the opportunity to study in a global environment will develop a broader understanding of cultural differences to balance and compare their individual beliefs with those of others. If programs are based on experiential education, action-oriented experiences encouraging, critical analysis, reflection and synthesis, studies abroad can indeed make students ready as responsible world citizens (Lutterman-Aguilar & Gingerich, 2002). Studying abroad and experiencing a new social environment can influence the student's worldview and put into question their personal beliefs (Tarrant, 2010).

The student will see some established notions and beliefs tested, which could lead to a transformative experience through critical reflection and discussion. Students, being out of their comfort zones, will develop a need to obtain new perspectives to acquire more complete and complex understanding. By combining international experiences with critical reasoning, reflection, and a conceptual approach, students will develop a deeper and more straightforward understanding of reality (Kolb, 1984).

In short, we live in an increasingly globalised and accessible environment and studying abroad helps to develop global awareness and encourages global citizenship. International studies develop a global world view, improve social responsibility and engagement with other cultures and encourage a global understanding. Students must understand local, national and global issues. On a more personal level, on top of improving a new language, it also improves self-awareness and intercultural communication. International experiences associated with critical reflection and discussion can help students to become responsible world citizens.

3.4. The importance of experiential education

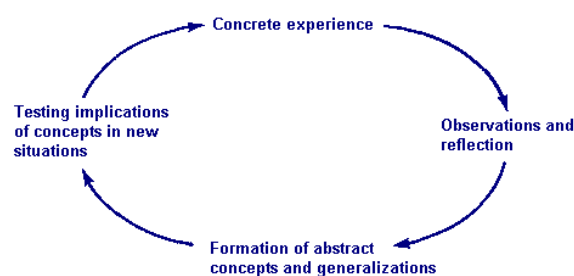
If opportunities to study abroad include deep reflection and critical analysis it can become an experiential education. Both experiential education and study abroad share a mutual goal to empower students and encouraging them to evolve into responsible global citizens (Lutterman-Aguilar & Gingerich, 2002).

Experiential learning integrates experience, perception, cognition, and behaviour. Its process is based on three models: Lewin, Dewey, and Piaget models (Kolb, 1984).

The first model used to explain experiential learning is “The Lewinian model of Action research and Laboratory Training” (Kolb, 1984).

According to Lewin, learning is a cycle of four stages, as represented in Figure 5.

Figure 5 The Lewinian Experiential Learning Model (Kolb, 1984)

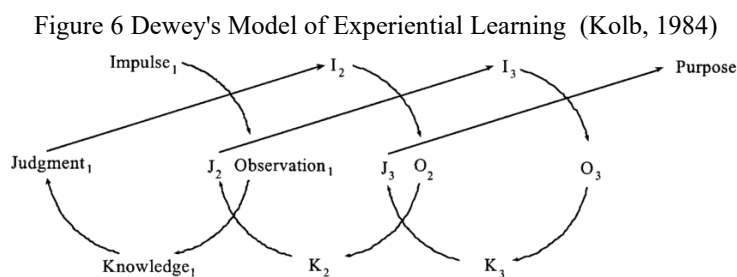


Concrete experience serves as a starting point for observations to collect data and reflection. From those observations, concepts and generalisations can be extracted creating a provisional

theory from which new implications can be tested. These implications can then serve as guidance to create new concrete experiences. These experiences are used to confirm and verify abstract concepts. This loop, that can be seen as a problem-solving process, is based on feedback processes. Every process validates the information and assesses deviations between reality and concepts previously built (Kolb, 1984).

The second model is the “Dewey’s Model of learning”.

The Dewey’s model is quite similar to the Lewinian model but emphasize more on the feedback process by explaining “*how learning transforms the impulses, feelings, and desires of concrete experience into higher-order purposeful action*”. His model is described in Figure 6. The process starts with an observation of the surrounding environment, then awareness of what happened in the past in alike conditions. Finally, the judgment occurs, putting together the observation and what is known to see what the difference means. The final purpose differs from the initial impulse because it is translated into a plan of action based on the consequences of the previous observations (Kolb, 1984).



Like Lewin, Dewey includes, in his learning model, experiences and concepts, observations and actions. Delaying instantaneous action is important to have enough time for observation and judgment, and action is crucial to achieving the purpose (Kolb, 1984).

The third model used is Piaget’s model of learning and cognitive development.

The learning process is also based on the dimensions of experience and concept, reflection and action. The development consists of a cycle of interactions between the person and his environment. As Piaget explained: “*The key to learning lies in the mutual interaction of the process of accommodation of concepts or schemas to experience in the world and the process of assimilation of events and experiences from the world into existing concepts and schemas*”. Learning consists of a balance between those two processes: accommodation and assimilation. It means that learning happens when individuals test concepts and theories with their own experience and when they create new concepts and theories based on their experiences (Kolb, 1984).

The definition made by Itin in 1999, summarizes well the philosophy:

“Experiential education is a holistic philosophy, where carefully chosen experiences supported by reflection, critical analysis, and synthesis, are structured to require the learner to take initiative, make decisions, and be accountable for the results, through actively posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, constructing meaning, and integrating previously developed knowledge.”

Experiential education is linked to constructivist theories. The theory indicates that knowledge is built when people meditate individually or collectively on their experiences. Indeed, it is through this process that experience is transformed into knowledge (Geary, 1995). In other words, knowledge is collectively created in the process of observing and interpreting experience (McNamee & Faulkner, 2001). Already in 1995, Joplin articulates that *“experience alone is insufficient to be called experiential education, and it is the reflection process which turns experience into experiential education.”* (Joplin, 1995)

Ann Lutterman-Aguilar and Orval Gingerich identified common characteristics of experiential learning and study abroad.

First, they both play a role in “Process and Personal Integration/Development” (Lutterman-Aguilar & Gingerich, 2002). A key takeaway of studying abroad is the adaptability *“to a process of change, both within oneself and in the world”* (Lutterman-Aguilar & Gingerich, 2002). Therefore, the student’s individual development and capacity to incorporate the educational experience in his/her own life is at the centre of experiential education (Wallace, 1993).

Moreover, experiential learning brings an effective nature; emotional connections with the topic studied and people making the content a reality, help students learn best (Lutterman-Aguilar & Gingerich, 2002). Besides, this kind of education abroad has to include personal challenges to override classic papers, reports, and exams. As Wallace mentioned, those challenges lead to more self-confidence, better self-awareness (including own strengths and weaknesses), and a better understanding of others, other environments, and cultures (Wallace, 1993). As one goal of experiential education is to empower students, another aspect of self-awareness is the student’s discovery of his/her role in his/her learning process. Students are stimulated to analyse their best way of learning and to decide their learning objectives (Wallace, 1993).

Second, they both focus on problem-based content (Lutterman-Aguilar & Gingerich, 2002). Both experiential education and studying abroad should tackle real-life problems. As Dewey mentioned, problems are the incentives for thinking. Course content can be built on experiences to allow students to establish and test theories based on their own experiences while theories will help students to understand their experiences (Dewey, 1997). An education system based on “problem-posing” goes further than “problem-solving”, it is a “critical analysis of a problematic reality” (Lutterman-Aguilar & Gingerich, 2002).

Educators should create a link between the student’s interests and the lecture content. When the teacher introduces the class with problems or concerns interesting to the students, the teacher will engage the students emotionally. In an international context, the teacher will even be able to use the students' experience in their own country as the analysis starting point (Lutterman-Aguilar & Gingerich, 2002).

As Shor (1993) summarized, *“Through problem-posing, students learn to question answers rather than merely to answer questions. In this pedagogy, students experience education as something they do, not as something done to them”*.

Third, they both emphasize the importance of collaboration and dialogue (Lutterman-Aguilar & Gingerich, 2002). To have an honest critical analysis and reflection, collaboration and dialogue are key elements. It will allow students to see all the aspects of the problems (Dewey, 1997). Those collaborations and dialogues with others will allow the students to discover new understandings by going further than their own perspectives (Lutterman-Aguilar & Gingerich, 2002). It is important to be self-aware and open-minded in those collaborations. As Sparrow wrote: *“Self-awareness is crucial to intercultural learning. Our predispositions, expectations, and reactions affect our perceptions. Our perceptions affect our judgments, how we solve problems and make decisions, and ultimately how we are perceived and trusted by others”* (Sparrow, 1993).

Moreover, dare to speak up in a group of international students is part of the student’s development. Students will develop competencies useful in cross-cultural contexts: listen to others, interact with others respecting the differences of everyone, manage conflicts in respectful ways... It is through those dialogues that students will develop global awareness and intercultural skills (Lutterman-Aguilar & Gingerich, 2002).

Fourth, they encourage action and social transformation (Lutterman-Aguilar & Gingerich, 2002). Experiential education tries to encourage students to become agents of change (Wallace,

1993). This is supported by Gingerich and Lutterman-Aguilar as critical analysis and reflection lead to conscientization and new actions. It is normal that students want to take action as their education is built around problems requiring solving (Lutterman-Aguilar & Gingerich, 2002).

This concept is perfectly explained by Gingerich and Lutterman-Aguilar (2002):

“By critically reflecting upon and analyzing problem-based content together with diverse community members in the international setting, engaging in dialogue and collaborating with others, students can become empowered and develop the skills they need in order to take action that makes a difference in the world, because some of the skills needed are precisely an awareness of cultural differences and the ability to listen to others, to engage in respectful dialogue, and to analyze problems critically from multiple angles and perspectives, and to collaborate.”

Fifth, they both require an evaluation and assessment (Lutterman-Aguilar & Gingerich, 2002). To be sure that students achieve their objectives and to improve the quality of the program, ongoing evaluation and assessment are needed (Lutterman-Aguilar & Gingerich, 2002).

This subsection presented the importance of experiential education and learning by doing. However, it is important to nuance it with a different view, which mentions that strategy teaching should be theory-based. There is an important debate between experience- versus theory-based teaching. But as explained earlier, theory and research remain the core function of universities. According to Grant (2008), strategic management teaching should be based on theory and findings from strategy researches. He explains that theories help to build a deep comprehension and provide insights about highly complex situations. Theories provide a frame to analyse a situation. In other words, it allows decreasing the complexity by determining the key component of a situation. But it also plays a role in synthesizing the situation by understanding how the components are linked between one and another (Grant, 2008).

In short, experiential learning consists of experience, perception, cognition, and behaviour. It is not the experience itself that matters but the reflection process, turning experience into experiential education. The philosophy is based on three modes: Lewin, Dewey, and Piaget models. Lewin's experiential learning model is made of 4 steps: concrete experience, observations and reflection, formation of abstract concepts and generalisations, and finally testing implications of concepts in new situations. Dewey's model of learning is similar but emphasis more on the feedback. It also consists of four steps: impulse, observation, knowledge

and judgement. The last model, Piaget's model of learning and cognitive development is also based on experience and concept, reflection and action. Learning is developed through reiterated interactions between the person and his/her environment. It consists of a balance between accommodation and assimilation. In link with the previous section, experiential learning and studying abroad share common characteristics; they promote adaptability, create emotional connections, focus on problem-based content, emphasize the importance of collaboration and dialogue, encourage action and social transformation and finally require evaluations and assessments.

3.5. The need for entrepreneurial education

As mentioned briefly earlier, business schools should foster entrepreneurship. This section will first analyse how and when entrepreneurship education started. Second, some different views on the concept of entrepreneurship will be presented. Third, entrepreneurial education will be defined and an analysis of how it is integrated into higher education studies will be made. Finally, a link will be made with the triple propeller model and experiential learning.

3.5.1. Entrepreneurial education introduction and some initiatives

There are still some discussions as to when the first entrepreneurship courses started. However, Carlsson et al. (2013) claim that the first professor to introduce a course on entrepreneurship in HE, was Myles Mace in 1947, at Harvard University. For many years, several initiatives have been created around the topic, such as the OECD promoting that “*Entrepreneurship can be learned and should be promoted at all levels of education*”. The project is called Entrepreneurship360 and is a collaboration between the OECD and the European Commission. The goal is to instruct and educate entrepreneurship as a main skill in schools and universities (OECD, 2014). According to the European Commission (2014), developing entrepreneurship ideas and competences to young people could be one solution to overcome unemployment.

3.5.2. Concept of entrepreneurship

Before analysing how entrepreneurship is and should be included in HE, it is relevant to define what entrepreneurship means. Even if the concept of entrepreneurship is old and commonly used, it does not have a general definition officially accepted. According to Yuste (2019), Richard Cantillon was the first economist to use the word “Entrepreneur” in 1755 in his paper

“Essai sur la nature du commerce en general”¹. He used the word to define someone working in the business world that have known expenses, but his/her income can't be predicted due to a high uncertainty in demand. The main insight of this definition is that an entrepreneur takes risks in an uncertain environment (Yuste, 2019). Kuratko (2005), added the nuance of seeking opportunities, and the ability to turn inspirations into actions. The Commission of the European Communities (2006), has a similar definition where entrepreneurship is linked to making ideas come true:

“Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs establishing a social or commercial activity”.

As Yuste M.A explains, there is a clear expansion in the range of nurturing entrepreneurship in universities. However, efforts still need to be achieved regarding the attitudes, competences and knowledge, students would need to develop to become a good entrepreneur (Yuste, 2019).

3.5.3. Entrepreneurship education

The previous sub-section gathered definition on what is entrepreneurship, now the question is: How to develop entrepreneurship spirits at universities? As Raposo and Do Paço (2011) explain, people are not born as entrepreneurs, they become one with experiences. Education can teach the skills and knowledge required.

According to Lackéus (2015), entrepreneurship education can be viewed through a narrow or a broad perspective. The narrow view is about becoming an entrepreneur, while the second is about becoming entrepreneurial. In the narrow perspective, students are encouraged to identify opportunities, create their own business and be self-employed. From a broader standpoint, entrepreneurship education includes activities to allow students to become more creative, proactive and innovative (Lackéus, 2015). Another distinction can be made depending on the objectives of implementing entrepreneurship education: education for, about and through entrepreneurship (Lackéus, 2015). Education for entrepreneurship is linked to the narrow view, which consists of creating future entrepreneurs and providing them with the right knowledge

¹ “Essay on the nature of trade in general” translated by the others

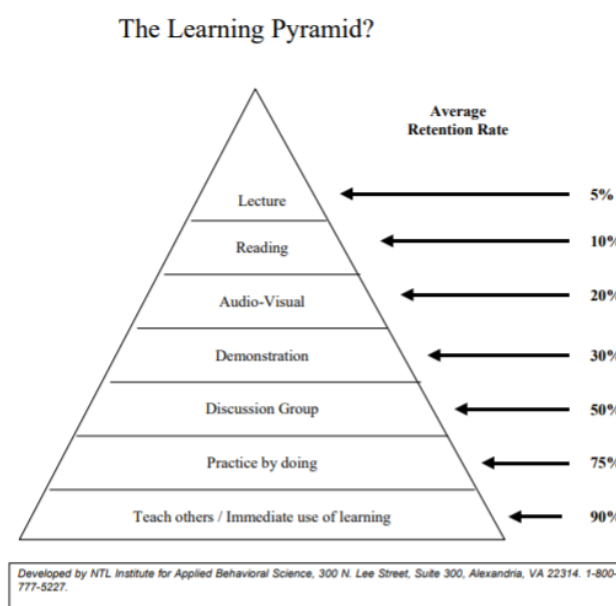
and skills required to create their own business for example (Moberg, 2014). Educating about entrepreneurship is more theoretical and consists of understanding the concept of entrepreneurship and its importance in society (Moberg, 2014). Educating through entrepreneurship is linked to the broader perspective, which focuses on the student's overall development leading him through an entrepreneurial learning process (Kirby 2004, Middleton et al 2014). It is the broader definition of entrepreneurship through education that will be used in this paper.

As developed in the previous section about experiential education, practice is important in entrepreneurship education. Indeed, like Higgins, Galloway, Jones, and McGowan (2018) explained: *“Pedagogical approaches must place more emphasis towards practice, experiential and reflective methods to enhance and develop innovative/critical way of thinking, to fully embrace the complexities of the entrepreneurial learning through experience”*.

On top of experiential and entrepreneurship education, the question of knowledge transfer can be raised. The endpoint of education is not the grades, but what the students understand and its retention rate. There are a lot of different activities to use in teaching, but experience is essential. Kolitch & Dean, (1999), introduced the concept of the engaged critical model of teaching. They describe teaching as a dialogue, where students and teaching bring their unique life experience to create a mutual and creative dialogue (Magennis & Farrell, 2005), which is essential in master's education.

Even if it is controversial, we would like to mention the learning pyramid (Figure 7). The pyramid pictures different kinds of teaching methods and learning activities, with their effectiveness in terms of retention rates. The original source of the pyramid is not findable, so we only would like to use it to generate reflection and questions. Different versions of the pyramid can be found. Activities are divided into two parts: passive and participatory teaching methods. Going from the lower to the higher retention rates, activities included in the pyramids are; lecture, reading, audio/visual, demonstration, discussion group, practice by doing and teach other/immediate use of learning (Magennis & Farrell, 2005). Even if the source can't be verified, we believe it is important to have a variety of activities that makes learning achievable for students. And based on the two previous sections, we consider teaching to others and knowledge transfer as good sources of learning.

Figure 7: What people generally remember -The Learning Pyramid (Magennis & Farrell, 2005 adapted from NTL Institute for Applied Behavioral Science)



In short, entrepreneurship should be promoted through education. Several initiatives exist such as the Entrepreneurship360 project led by the OECD and the European Commission. People are not born as entrepreneurs, but students can become one if education teaches the required skills and knowledge. Entrepreneurship in education includes two aspects: becoming an entrepreneur and becoming entrepreneurial. The first one focuses on encouraging students to identify opportunities, create their own business and become self-employed. On the other hand, becoming entrepreneurial, HE needs to encourage students to become more creative, pro-active and innovative. A last argument was made on the retention rate and the understanding of the topic. The final goal of HE is to make learning achievable for students no matter how, and we believe a variety of entrepreneurial and experiential activities are needed, including teaching to others and transfer knowledge.

3.6. Digital education

According to Van Laar, Van Deursen, Van Dijk, and de Haan (2017), 21st century skills can be summarized in seven core skills and five contextual skills. The centre skills are: “*technical, information management, communication, collaboration, creativity, critical thinking, and problem-solving*”. On the other hand, the contextual skills are: “*ethical awareness, cultural awareness, flexibility, self-direction, and life-long learning*” (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017). These skills were mentioned in previous sections, but an interesting aspect that Van Laar, Van Deursen, Van Dijk, and de Haan (2017) raised is that ICT is central

to the development of all those skills (Appendix 2 explains how those specific skills are connected to ICT).

The fast-changing environment and economy that surround students, the very quick assimilation of ICT, strongly encourage students to develop digital skills. However, these skills do not only include technical knowledge. Indeed, as Van Laar et al. (2017) said: *“How someone thinks, solves problems, and learns, has a greater impact on a person's ability to function in a technologically rich society than just being knowledgeable about specific software”* (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017). We agree with this thought, we believe that technical knowledge on digital skills is not the key aspect, students should instead learn how to keep working, innovating and finding solutions in a digital environment. Based on our knowledge of the topic, we think it is by providing a digital environment to students, that they will get used to it. We believe in the learning by doing rather than technical training on how to use those digital tools, that keep evolving constantly anyway.

3.6.1. Evolution

As Ghemawat (2017) mentioned, digitalisation is currently a prevalent theme in many areas, and education is not left out. As Akbar pointed out (2016), technologies are continuously progressing, therefore, *“educators should carefully use, evaluate, and adopt the changes to utilize the technologies and track their impacts”* (Akbar, 2016). Digital technologies in education is a current topic across Europe. As mentioned by the European Commission (2017), *“it is important for EU Member States to learn from each other, and from other countries' efforts, successes and failures, to understand better how digital education policies can be designed to trigger innovation and change in education”* (Conrads, Rasmussen, Winters, Geniet, & Langer, 2017).

Traditionally, teachers and students needed to be in the same room at the same time to be able to teach. However, learning could happen in different locations, such as libraries that offered access to knowledge (Conrads, Rasmussen, Winters, Geniet, & Langer, 2017). As Nasseh (2009) mentioned, evolution has been observed in HE from physical lectures to distance learning (Nasseh, 2009). Kaplan and Haenlein (2016), defined distance education by teaching students separated by a distance *“in which the pedagogical material is planned and prepared by educational institutions”* (Kaplan & Haenlein, 2016). It is also known as correspondence study, which offers more flexibility and reaches a bigger audience (Akbar, 2016). In addition to the concept of separation by distance, students can also be separated by time. One of the

downsides of broadcasting was the one-way communication. There was no interaction or real-time conversation, so it was difficult to assess if the message was correctly understood by students (Akbar, 2016). Kaplan and Haenlein (2016) mentioned education separated by time as ‘asynchronous distance learning’ compared to ‘synchronous distance’. As depicted in Figure 8, Kaplan and Haenlein (2016) classified the different types of online distance education based on two criteria: the time distance and the number of participants.

Figure 8: Classification of online distance learning applications (Kaplan & Haenlein, 2016)

Table 1. Classification of online distance learning applications

			Number of Participants	
			Unlimited	Limited
Time Dependency	Asynchronous	Distance Learning	MOOC (Massive Open Online Course)	SPOC (Small Private Online Course)
		Traditional Learning	e.g., community college offering several time slots for the same fundamentals course, which gives quasi-asynchronous choice to a student	e.g., individual / small-group language tutorials with a private teacher scheduled according to student availability
	Synchronous	Distance Learning	SMOC (Synchronous Massive Online Course)	SSOC (Synchronous Small Online Course)
		Traditional Learning	e.g., undergraduate lecture in amphitheater with stadium seating	e.g., PhD course on a specific method or research topic

Digital education policies evolved. The first policies focused on infrastructure development and the success was measured using the computer per student ratio or internet access. Then, the focus deviated to more strategic objectives such as fostering innovation and competitiveness through digital technologies integration in education. The latest policies try to enhance digital competences in students and teachers, associated with infrastructure measures (Conrads, Rasmussen, Winters, Geniet, & Langer, 2017).

3.6.2. Main aspects of the latest digital education policies

The European Commission, in its article “Digital education policies in Europe and beyond”, identified 8 main characteristics of the latest digital education and four key features (Conrads, Rasmussen, Winters, Geniet, & Langer, 2017).

Concerning the main characteristics:

1. *“Strategic and operational policy levels are combined*
2. *Improved infrastructure and teaching capacity are primary objectives*
3. *Multiple pathways for supporting teachers*
4. *Focus on innovative teaching and learning*

5. *Stakeholder involvement in policy design, implementation and monitoring*
6. *Using pilots to get ready for mainstreaming*
7. *Evaluation and monitoring integrated into the policy design*
8. *Different focus areas in primary, secondary and tertiary education”*

(Conrads, Rasmussen, Winters, Geniet, & Langer, 2017, pp. 26-27)

Concerning the key features:

1. *Funding and business model:* Based on the case studies made by the European Commission, public funding seems to be the main driver to integrate digital technologies in education. In some cases, indirect participation could be observed from the private sector, but it was not the main financing.
2. *Teacher training and professional development:* In every case, teacher training and support were a central element. It encompasses both face-to-face training and online aid solutions.
3. *Multiple strategies for teacher training:* Depending on the program, some teachers “equipped with training courses, online support materials and e-learning courses, providing a full support package” while in other cases “teacher training is combined with the provision of online teaching resources, e-learning opportunities and expert advice”.
4. *Lack of evidence on the effectiveness of teacher support activities:* When trainings are evaluated, the focus is on quantitative output, such as the number of trainings rather than the actual quality of the training.

(Conrads, Rasmussen, Winters, Geniet, & Langer, 2017, pp. 35-39)

When implementing digital education policies, some enabling and impeding factors need to be considered.

3.6.3. Success factors in policy implementation

1. ‘Favorable environment’: Policies seem to have a bigger impact when they work together.
2. ‘Specific governance structure’: governance structures allow for better coordination and monitoring. It makes sure to have a team responsible for designing the initiative, implementing the plan and delivering the outcomes.

3. 'Customized technological solutions': there is no one size fits all solution, a deep analysis makes the policy more effective.
4. 'Cost saving'
5. 'Teacher motivation and support': policies can't work without strong teachers' commitment. The priority should be to have teachers on board.

(Conrads, Rasmussen, Winters, Geniet, & Langer, 2017, pp. 39-40)

Besides, Kampylis and his colleagues (2013) identified three main drivers enabling ICT to have a relevant impact on student learnings. First, pedagogy remains the central goal. Teachers should decide on their course objective, then think about how technology can support its success. Second, teachers should receive support and keep their autonomy. Third, better definitions and assessment of 21st century competencies and skills should be developed (Kampylis, et al., 2013). Schleider (2015) as part of the OECD Schools for 21st century learners study also identified three main facilitators: teachers' confidence in using technologies, teachers' willingness to innovate and strong school leaders to allow the two first elements to grow (Schleicher, 2015).

However, it is also important to consider potential barriers.

3.6.4. Key obstacles in policy implementation

1. 'Inadequate technological infrastructure': from a basic perspective, internet speed quality can be a limit.
2. 'Inappropriate governance structures': the multitude of stakeholders makes the governance structure important.
3. 'Market competition': competition with or between stakeholders can be an obstacle to policy success.
4. 'Lack of pedagogical digital competences': if teachers have a lack of digital competences or a lack of confidence, it can be a threat to policy success.
5. 'Lack of long-term perspective': Teachers will be unenthusiastic to collaborate if they don't believe in the long-term success of the project.

(Conrads, Rasmussen, Winters, Geniet, & Langer, 2017, pp. 41-42)

3.6.5. Reasons and benefits of implementing digital education

A university can decide to implement online lectures for several objectives. Kaplan and Haenlein (2016), presented 5 main benefits.

First, online distance learning can improve the university's cost-revenue ratio. Producing a MOOC can be quite expensive, but it can still lead to considerable cost savings in several situations. For example, focusing on INSEAD or the CEMS that have universities at different locations, they have courses running at the same time at different locations, therefore, implementing a MOOC could decrease the running cost. Introducing a MOOC can also lead to new revenue, such as a tuition fee to have the certificate at the end, or enable other universities to use it in return for a fee (Kaplan & Haenlein, 2016).

Second, it can build brand equity and awareness. Branding is important in sales, even when selling education. Universities operate in a competitive environment, where they have to fight to be appealing to the best students and teachers. A MOOC can help differentiate a university and be part of a marketing campaign (Kaplan & Haenlein, 2016).

Third, it can create flexibility. From the university perspective, they can include in their offer a MOOC from another institution if they don't have that expertise at home. For students, it allows them to take the course when it best suits them in their schedule (Kaplan & Haenlein, 2016).

Forth, it promotes pedagogical innovation. Online distance learning promotes more up-to-date ways of teaching. It offers an adaptive learning curriculum and a personalised study experience (Kaplan & Haenlein, 2016).

Fifth, it broadens education and democratises knowledge. A MOOC makes education available to everyone worldwide. However, only certain student profiles have the ability to complete the course and a certain infrastructure is needed to have access to it. MOOCs are attractive for places with an important gap between infrastructure development and the quality or availability of the local education system (Kaplan & Haenlein, 2016).

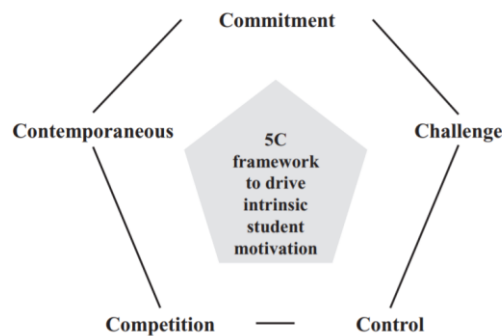
Moreover, according to a study made by McEwan (2015), integrating digital technologies in education leads to positive results on students' learning outcomes. He found out that information and communications technology implementation was a more effective initiative than teachers' training or smaller students' groups during lectures. Another study run by Kremer (2009), arrived at a similar conclusion; using digital technologies can improve pedagogy, management, and accountability (Kremer, Miguel, & Thornton, 2009).

3.6.6. Target audience

Students

Online distance learning won't work for every student. As Kaplan and Haenlein explained, to complete a distance learning program, students need a high intrinsic motivation and self-discipline. Usually, students tend to be a bit older and already have a first diploma acquired traditionally. To increase student intrinsic motivation, Kaplan and Haenlein developed the 5C framework (Figure 9).

Figure 9 Intrinsic student motivation - 5C framework (Kaplan & Haenlein, 2016)

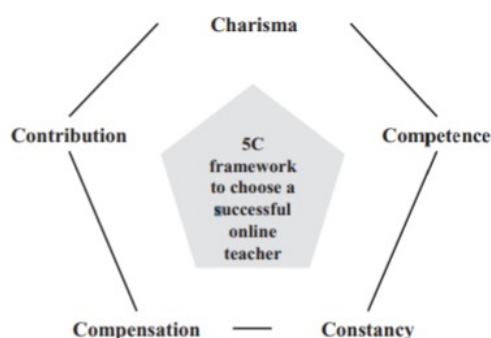


- **Commitment:** developing a sensation of inclusion into a bigger group can increase intrinsic motivation. This can be put in place by introducing interactions between students and teachers, with live chats or virtual working teams.
- **Challenge:** The program needs to be achievable by a large number of students but still challenging. Adaptive learning can be a solution.
- **Control:** when students have control of when and where to learn, the intrinsic motivation of students tends to be higher.
- **Competition:** cooperation is important, but competition often increases motivation as well.
- **Contemporaneous:** staying up-to-date is important to keep students' intrinsic motivation high.

Teachers

As for students, not every teacher is fit for distance teaching. To identify, select or improve teachers that could be successful online teachers, Kaplan and Haenlein adapted the 5C framework to teachers (Figure 10).

Figure 10 Selecting a successful online teacher - 5C framework (Kaplan & Haenlein, 2016)



- **Charisma:** to have a successful online course, the teacher needs to be charismatic and photogenic. One could look at the teachers having already excellent evaluations in traditional classes, however, it is not because a teacher is charismatic that he would want to give online classes, some persuasion might be needed.
- **Competence:** the selected teacher should be an expert in the field because he will promote the university at the same time.
- **Constancy:** it is important to select teachers that have a high chance to stay in the university. It takes time and money to build a successful online teacher, so if their online course becomes a success, you want to keep it for your institution, not for the competition. Senior teachers have a higher chance to stay loyal.
- **Compensation:** Kaplan and Haenlein recommend having several sources of income. First, it should include a one-time fee, to remunerate the effort made to build the online course. Then, some repeating compensations over the years that the course still runs, but this allowance should decrease over the years. Finally, it could include a fee per student participating in the lecture.
- **Contribution:** teachers should not have to do it alone. It is important to have assistants or other teachers that can hold other tutorials and interact online with the students.

Quality is important for every kind of teaching-related activity, but it is even more relevant in MOOC's context, as it has a larger scale. Only the best MOOC will be able to stand out (Kaplan & Haenlein, 2016).

3.6.7. Implementation

The environment around online learning is always evolving and there is a wide range of different strategic options. Therefore, it is impossible to come up with THE best implementation

strategy. However, Ghemawat (2017), presented some clear guidelines to follow during the implementation. These guidelines advise some do's and don'ts.

First, Ghemawat suggested initiating the process with an inventory of existing work. The institution probably has a lot of different projects already that can be relevant to its online strategy. Then, he also recommends working on a portfolio of initiatives instead of one megaproject. Thirdly, it is important to analyse where to initiate the project. Choosing the right program to start with can have a huge impact on the project's success. But even if selecting promising areas is important, it is also relevant to work on the cheap one, to try out. Ghemawat pointed out the importance to not only focus on digital content but also focus on developing the capabilities and skills that allow teachers and the university to accept the change and support new initiatives. His next advice consists of monitoring the activities. Review, feedback and adjusting rapidly and not being afraid of abandoning the project are key to the implementation's success (Ghemawat, 2017).

3.6.8. Examples of online teaching activities

To make it more concrete the following subsection will present some examples of relatively easily implementable online activities. The following list is based on the article "From the anonymous mass to personalised and individual learning relationships" written by Manfred Meyer, Thomas Müller and Andrea Niemann (Meyer, Müller, & Niemann, 2018).

1) Inverted classroom model

The knowledge transfer happens outside the classroom, potentially online. And the onsite sessions are run to go deeper into the knowledge and the topic. This presents a shift from teaching to learning.

2) Just in Time teaching

Similarly to inverted classrooms, just in time teaching encourages more active learning during class time. It is a mix of online learning materials and classroom. Students prepare some readings before the lecture and complete some online assignments, which prepare them for more challenging tasks in class. The students' answers are given to the teacher before his/her class so that he/she can adapt his course based on students' knowledge and understanding of the topic.

3) Audience feedback and participation with the IRS (Interactive Response System)

IRS allows a better interaction between teachers and students in real-time. Teachers can ask multiple-choice, T/F and numerical questions during the lecture, and show the results directly in class. It can demonstrate the level of student understanding without major time or financial investment. It makes the lecture more active and can lead to a better understanding of the subject. This way of teaching promotes an interactive classroom environment and encourages active learning and collaborative problem-solving.

4) E-learning linked with electronic assessments

As Meyer and al. presented, open-source Learning Management Systems (LMS) as Moodle and ILIAS are already provided with “*onboard tools to create complete e-learning suites with tutorials, videos, exercises, e-assessments with badges and so on*” (Meyer, Müller, & Niemann, 2018).

This chapter gathered 12 skills for the 21st century: technical, information management, communication, collaboration, creativity, critical thinking, problem-solving, ethical awareness, cultural awareness, flexibility, self-direction, and life-long learning. All those skills were previously mentioned but this section taught us that ICT is central to the development of all those skills. The fast-changing environment and the very quick assimilation of ICT make digital skills important. However, it does not only include technical knowledge. The way students think, solve problems, learn, have a bigger impact on their ability to succeed in a technological environment than acquiring knowledge on specific software. Students must learn how to keep working, innovating and finding solutions in a digital environment. Implementing digital education has several benefits; it can ameliorate the university’s cost-revenue ratio, it builds brand equity and awareness, it creates flexibility, it broadens education and democratises knowledge, it has positive results on students’ learning outcomes, and finally, it can improve pedagogy, management, and accountability. The chapter also presented the main students and teachers targets, but also characteristics, success factors and key obstacles in implementing digital education policies. Finally, it also suggested some guidelines to follow when implementing the policy as well as provided examples of online teaching activities.

4. Master’s in management since the beginning of the 21st century

The previous section studied what were all the roles a university should fulfil nowadays and why the system should change. The goal is not to draw an exhaustive list but rather enumerate the roles that seem relevant for the chosen thematic “leaders of the 21st century”. As expected,

the roles and responsibilities of universities have evolved, and some improvements already have been implemented.

As explained earlier, the focus of this paper is on management and more specifically international management. This includes the management of large multinational organisations as well as small and medium companies that can have a significant impact on their environment. These companies can build new businesses in foreign countries, partner with locals, delocalise their production or use a mix of these strategies.

This section will begin by highlighting the pressure driving change in HE institutions in management. It will then focus on the change itself and its impact on students, businesses, HE institutions, management programs and the environment as a whole. This fourth chapter will show how business institutions became more international, more competitive. Internationalisation was followed by a standardisation of management degrees and other aspects of management studies; at the same time, an opposite tendency to diversification was needed to answer a growing demand for various changing needs. The core of this section evaluates if these changes in top management institutions succeeded in answering the needs of the 21st century. This is done by gauging the various skills presented in the previous part “what should be the role of education”.

When trying to answer the question: “what needs are already being tackled and which are not?”, the focus is made on top management institutions. The rationale is that top institutions in management are the ones that have the leading teaching technique, curriculum, and mission. These top institutions are chosen thanks to the rankings of these universities for their Master’s in Management (MiM) program (Financial Times, 2019). A limit of this approach is explained later. Until now, this paper kept a focus on western countries with mostly a European perspective. Furthermore, the aim of this chapter is not to draw a list of which university did succeed and which did not. The goal is rather to find if the solution exists and can then be used as a benchmark for other institutions. In the following chapter, the needs of top management institutions in developing economies will be evaluated in view of finding commonalities, differences, and potential synergies.

The CEMS MIM program will be taken as an example to illustrate if top master’s in management succeeded in answering the needs of the 21st century. CEMS is representative of top MIM universities as it includes many top-ranked management institutions. However, improvements done in other programs can also be considered. CEMS was briefly introduced in Section 3.2. At this step, it seems relevant to give the reader a better understanding of the

program. The CEMS is a global alliance in management education made possible through a partnership between 32 universities, 69 corporate partners and 7 non-profits spread all across the world (CEMS, 2020c). The CEMS is one of the leading programs delivering Master's in International Management. The 32 partner universities are considered as the best HE institution in management in every 32 countries. They are chosen according to their ranking, their values and their mission (Financial Times, 2019).

Studying the CEMS program at the Louvain School of Management seems appropriate as the motivation to write this thesis arises from two students enrolled in the program. In contrary to the one-year program offered by some CEMS schools, the two-year program at LSM allows for more flexibility. Therefore, this thesis can suggest new initiatives. A good understanding of the actual program, practical experience and motivation to improve it are as well determining factors in this choice.

Figure 11 gives an overview of the CEMS programs at the Louvain School of Management. A two-year master of 120 ECTS, with a different set of courses and milestones that will be the subject of the following sections. CEMS students must satisfy the requirements of both their home university, in this case, LSM and CEMS to finally graduate with a double degree.

Figure 11: CEMS Master in International Management program (UCLouvain, 2020)

CEMS-MASTER in Management					
GEST2MS/GE – ANNUAL BLOCK 1				GEST2MS/GE – ANNUAL BLOCK 2	
TERM 1 @ LSM		TERM 2 @ LSM		TERM 3	TERM 4
PART 1	PART 2	PART 1	PART 2	@ LSM or Partner University	@ LSM or Partner University
3 CORE COURSES Corporate Finance (5) Advanced Strategic Marketing (5) Corporate Social Responsibility (4)	CEMS OPTION International Business (5) International Financial Mngt (5) International Marketing Mngt (5)	3 CORE COURSES Seminar on Relational and Managerial Competences (3) Advanced HR and Organisation Mngt (5) Management Accounting OR Performance Management (5)	12-week INTERNSHIP (10)	3 CEMS Mandatory Elements Block Seminar (3) CEMS Strategy Course (min. 5) Business Communication Skills Seminar (1) + 2 CORE COURSES (LSM) International Strategic Management (5) Regenerative Economy (5) + 1 OPTION of 3 COURSES (LSM) (15)	3 CEMS Mandatory Elements Responsible Global Leadership Seminar (1) CEMS GMP Course (min. 5) Business Project (15) + 1 CORE COURSE (LSM) Supply chain and Sourcing (5)
SEMINAR ON CURRENT MANAGERIAL ISSUES (3)					
32 ECTS		23 ECTS		34 ECTS	26 ECTS
CEMS LANGUAGES AND SOFT SKILLS SEMINARS					
MASTER'S THESIS (20 ECTS)					

4.1. Overview of management education environment

The pressure driving change in HE institutions comes from many interrelated factors. On one side, more mature students perceive education as a long-term learning investment. On the other side, businesses require critical thinker, creative problem solver and practical skilled workers able to operate in an increasingly competitive environment. Finally, from within the industry, HE institutions are also in competition amongst themselves to recruit more students. These three parts follow the same overall objective of education. However, their objectives can vary

from slightly to significantly different (McRoy & Gibbs, 2009; Warner & Palfreyman, 1996, pp. 16-32).

The 19th century industrial revolution marked a turning point in the world, leaving more space to the business environment. Later, the globalisation of the world's economy also affected the business environment in many ways. Professions and professionals needed a different set of skills to prosper in the global environment. The future of wealthy economies became dependent on both their "*ability to innovate and on their capacity to adjust to change*" (Vikas, 2018). These new requirements put more pressure on the role and responsibilities of management education.

In the early 20th century, management education was still conceived as an elite educational choice, dedicated essentially to big corporations. It is in the last decade of the 20th century that management education gained momentum. Liberalisation and globalisation of the economy lead to a rapid rise in the number of goods and services sold all around the world. Companies began operating in multiple markets and extending their supply chain to benefit from arbitrage opportunities. International labour markets, capital, and commodity markets raised the quality of life and aspiration by offering new choices of products at a competitive price, developing the service sector and offering new employment opportunities (Jha & Kumar, 2012). Finally, transnational corporations began integrating information and communication technologies and revolutionised how businesses work (GFME, 2008, p. 16). This led to a democratisation of management studies as well as a need from corporation requiring a new pool of talents.

Moving on to the 21st century, HE management institutes found themselves confronted with an increasing demand coming from millions of individuals pursuing their dream of a better future or forced by the market to become entrepreneurs and managers (Kozminski, 2010). The number of HE management institutions have experienced substantial growth in the past two decades. Furthermore, over the same period, the whole HE ecosystem has seen a sizable growth. The HE environment has been complemented by new institutions. From how to deliver academic degrees to new certifications done through partnerships with these institutions or by partnering with new professional associations (Altbach & Knight, 2007).

Management education has additionally been seen as a diagnostic tool for understanding many problems of a globalised world. Therefore, HE management education is seen as a field that would not only prepare the young generation to face challenges of a changing time but also providing them with valuable insights to help them choose a suitable career in line with their knowledge, skills, and ambitions (Jha & Kumar, 2012; Oza & Parab, 2012, pp. 5-14). How did

HE institutions change to answer these new emerging needs will always come back in the development of this chapter.

4.2. International qualification requirement

As shown in Section 3.3, studying abroad leads to four commonly accepted advantages: discover or improve a new language, develop a global world view (Burn, 1980), improve engagement with other cultures (Abrams, 1979) and acquire a global understanding (Kauffmann, Martin, & Weaver, 1992). Indeed, the developments of the 20th century business environment implied a growing demand for skilled professionals able to manage international organisations.

As the business environment became more globalised, internationalisation became a major strategy and a competitive factor for HE institutions all over the world (Altbach & Knight, 2007). This section aims at understanding if top master's in management succeeded in providing students with an international qualification.

J Knight and DE (1995) defined four basic strategies for HE internationalisation. It can be done through activities, competencies, ethos, and process. In Europe as well as in the U.S., activity-based internationalisation has been the most commonly used strategy (De Wit, 2010, p. 10; Marginson & Wende, 2007). The latter strategy consists of increasing cross-border activities. Therefore “*international students are quite simply what makes it possible for the academic enterprise to continue*”(Research & Innovation, 2008, p. 47). However, for Jane Knight (2008, pp. 19-32), process is the most important strategy where “*Internationalization is considered to be a process in which an international dimension is integrated in a sustainable way into the three primary functions of an institution: teaching/learning, research, and service to society*” (Jane Knight, 2008, p. 32). The four approaches are important to succeed in the internationalisation strategy of HE, but the activity and process are the most relevant from a management perspective (Stafford & Taylor, 2016).

Hence, the activity-based approach, which includes students studying abroad in programs like Erasmus or Mercator; and the internationalisation process of teaching, learning, and research have been the most used strategies for business schools and management universities. Such strategies include oversea branch campuses or global management alliance allowing students to study in a partner university. HE institutions in management work on ensuring that students, staff, courses, research, and curricula are adapted with the internationalisation strategy and the respective needs of their partner universities (Stafford & Taylor, 2016).

Overseas activities created a new challenge for governance and management of universities. This arises in consequence of the bigger scale and the complexity of campuses' international operations. HE in management institutions must answer the needs of students, local employers, and government demand, as well as, the partner university's restriction in terms of what their local students, local companies and government requests. Therefore, management universities have to assess and find partners that fit into their overall strategy, ensuring that it will bring a contribution to the university's international strategy (Koehn & Obamba, 2014, p. 198; Stafford & Taylor, 2016, p. 198).

Despite this increased complexity, Jane Knight (2008) tells that internationalisation has to be seen as a process of continual effort. The concept is a simple three-phase development: input, process, and benefit. Hence, institutions having a functioning accountability governance will create positive outcomes out of their international strategy. Furthermore, the activity-based approach shows that internationalisation has been a success. In 1990, 1.3 million students studied outside their home country. This number rose to 2.1 million in 2000 and more than doubled to reach 5.0 million in 2014 (Li, MacIntosh, & Bravo, 2012, p. 27). It has been estimated that by 2020, 7.0 million students will be studying abroad (Baker, Danylchuk, Gillentine, & Jonson, 2016). Many factors accounting for this growth can be attributed to an increase in HE education enrolment, rising income level, globalisation of business and an increasing effort to harmonise the structure of the degrees such as the Bologna Accord (2006) (GFME, 2008, p. 31).

The CEMS program that is taken extensively as an example, started as a partnership between four universities: ESADE, HEC Paris, Bocconi and the University of Cologne. Now it counts 32 partner universities present in all continents. Creating a global leader and international orientation has been one of their major strategies. To give an overview of the international outcome, the program is structured in one- or two-years dependent on the home university. The students are required to do one exchange in one of the partner universities as well as an internship outside their home country. Some of the universities such as Louvain School of Management allow their students to do two exchanges abroad and NUS requires two exchanges. This implies that home students spend more time abroad than in their home country's university. This is also the case for other universities such as UCL Michael Smurfit or wherein a one-year Master's, students are required to do one internship and spend one semester abroad (CEMS, 2020d).

Indeed, top institutions have embraced internationalisation at a large extent. They have created cross country campuses, partnerships all over the world, attracted international students and require their home students to do internships abroad. This internationalisation came with its challenges, the adaptation to be global and more flexible.

4.3. Globalisation and standardisation of management education

Going further, the globalisation of professions and professionals created an increasing pressure on HE institutions. They implied the need to deliver degrees recognized in international markets and raised the compatibility of educational standards (GFME, 2008). Two interrelated solutions emerged as a consequence of this growing challenge. First is the rising importance of quality assessment and business schools ranking. The second is more standardisation within the program in reaction to more standardised certifications.

Ranking (e.g., Financial Times, QS, Business Week), accreditation (e.g., EQUIS, AACSB) and other types of quality assurance have had a positive impact on the quality of many management education programs. Rankings help business schools build and maintain a reputation. They also claim to hold management education institutions accountable for meeting student learning expectations as well as professional outcomes for the employer (Espeland, Sauder, & Espeland, 2016, p. 19). Students can make better choices as they have quality information. Ranking motivates them to become successful students. Universities are able to refer themselves to a benchmark, learn from best practices from their main competitors' programs (Howard, Cornuel, & Noorda, 2011, p. 521).

Nonetheless, many academics question the rankings' accuracy and methodology. Therefore, misleading students and employers who use rankings, to respectively, choose their academic path and select students from best institutions. Furthermore, rankings methodology and metrics have promoted homogeneity between university's programs; limiting diversity and producing short-term incentives instead of a long-term vision (GFME, 2008, p. 49). Noorda (2011) argues that past performance should not be the unique indicator of future success. As he said, "*ranking and accreditation are petrifying existing standards rather than promoting and rewarding dynamic development*". According to the researcher, high-ranked programs are not easy to change, thereby slowing down the creation of new schools and degrees.

The globalisation of the economy pushed management institutions to update their curriculum and include standardised courses. For example, the European Credit Transfer System (ECTS) made it easier for international students to study abroad and credit their courses equivalent to

their home university. This meant that partner universities should have a set of common courses. Courses that should be equivalent in many programs across many universities. Management institutions partnering with a significant amount of universities promoted more uniformity and conformity (Gleeson, 2013), slowing down the incentive to change, for business school wanting to answer to more diverse emerging needs.

Other organisations played and are still playing an important role in the HE in management ecosystem. For example, according to its mission statement, TOEFL wants “*to help advance quality and equity in education by providing fair and valid assessments, research and related services*”. Other organisations present in the management field, such as the Graduate Management Admission Council (GMAC), want “*To be the premier provider of assessments and information that create and promote access to graduate and professional management education around the world*”. GMAC is mostly known for its Graduate Management Admission Test (GMAT), which is used as a certified requirement to enter many Business schools and HE in management (Bhartiya, 2019).

It does not seem possible to list all the organisations that are involved in the HE in management ecosystem. Many of them act as enablers between two or more entities, allowing partnership and synergies between HE institutions. Amongst this category, standardised exams and certifying organisation such as GMAC and TOEFL are of great use for students and the business environment. These organisations help students endorse their skills and help them move either from an HE institution to another or from the academic to the professional world.

However, in some cases, these standardised tests limit the educational goal to a too narrow learning. Tests such as GMAT, SAT and ACT have been criticised for being too much attentive to analytical competences, leaving aside emotional maturity, wisdom, people’s skill, creativity and other leadership skills (Sternberg, 2010, pp. 93-95). As they play an important role in management education such as bringing complementarity and linking HE institutions, the effectiveness of these tests has been highly controversial (Kass, Grandzol, & Bommer, 2012; Mendoza, 2014). For example, it has been found that GMAT favour certain national cultural traits. As the test is used by international students to access management universities all over the world, the latter can cause a significant bias (Aggarwal, Goodell, & Goodell, 2014, p. 4). Furthermore, as culture and leadership are intrinsically related, these tests can influence the type of business promoted by business schools using these tests as selection criteria.

Gradually, management education began to consider other factors in their decision making (Interviews, soft skills, CV, cultural diversity). Standardised test such as GMAT also started to

make their tests more fit for people from different cultural backgrounds. A considerable fragmentation and competition amongst these other organisations are factors that push them to better integrate emerging needs (GFME, 2008, p. 3). On the one hand, it seems like other organisations have learned how to adapt to the requirement of management education. On the other hand, management institutions have learned how to make use of other organisations as a valuable contribution to the management education sphere.

To conclude, it is important to bear in mind that any attempt to modify a program should consider what drives these institutions to behave in a certain way. Rankings and other external organisations have a big influence on HE institution, they can either limit change or promote change. The growing public attention toward rankings and other organisations allows these new institutions to influence the direction of change. Therefore, attempting to change management programs should also imply modifying the metrics used to rank and select students and HE institutions.

4.4. Diversification of management education

The inverse trend to standardisation has been the diversification of management education. The market is in need of quality graduates who are able to fill up many different types of functions in modern organisations. *“Both talent and variety in job market require variety in higher education, in each branch and sector, also in business schools”* (Howard et al., 2011, p. 522). This new trend tries to answer divergent needs going from the education of recent graduate to the formation of working professionals who are looking to update their knowledge and skills (GFME, 2008, p. 33). In addition, while specialisation increases, HE institutions have to develop new programs answering those needs (Mohammad & Quoquab, 2017). The rise of independent private institutions is one of the developments that leads to the diversification trend. In 2006, more than 50% of all enrolled students in Chile, Brazil, Paraguay, and Colombia were in private institutions. A similar trend is observed in Asia with more than 60% in Korea, Japan, Indonesia, the Philippines and sub-Saharan Africa (UNESCO Institute for Statistics, 2006, p. 30).

The second development is the creation of new institutional forms. Technical institutes, community colleges and other types of institutions mentioned earlier have expanded in number and in form, offering new degrees online and offline (GFME, 2008, p. 34). It is seen that business schools have been a significant driver of new organisational changes in the educational environment (Goldring & Schuermann, 2009). These new forms vary from virtual universities,

publishers and libraries becoming degree providers, franchise universities, cross-border campuses, partnerships, and joint ventures to deliver a new set of qualifications and degrees.

Diversity can also be seen as the diversity of markets covered. Nowadays, many students and business constituent in developed economies have expressed their wish to learn more about the opportunities and threats of the Emerging Markets (EM) (De Wit, 2020). Some HE institutions offer exchanges in these EM. However, this remains marginal in comparison to the exchanges between developed economies.

With the growing importance of creating a diverse pool of talents, HE institutions stand at the cornerstone of the process. Students engaging in a master's degree can choose a speciality and during their exchange, they can benefit from a diverse set of courses proposed by other universities. For a program such as CEMS where the exchange is mandatory, students have the choice to diversify their skills. However, some restrictions are made and choosing to engage in an interdisciplinary curriculum can be harder. In this case, they can do a complementary master's degree. In addition, for less than a decade, students can acquire additional formation thanks to online trainings such as MOOCs. These other organisations have also contributed to creating diversity of available knowledge. Two questions remain; are management students looking for interdisciplinary experience such as working in a diverse team or having courses that merge with other domains? Does program such as CEMS offer enough knowledge on developing markets and the skills required to thrive in this emerging environment?

4.5. Ability to adapt to change and the need for experiential education

As mentioned earlier in this paper, the world evolves faster with more uncertainties. To deal with this more complex environment, HE institutions have developed tools, courses, and strategies to deal with the issue. Some of them are new frameworks, scenario methods, long-term strategic planning, more qualitative than quantitative courses and case studies. They aim to prepare students to deal with the new environment. Until now, it seems like there is still room for improvement in this area. According to Costa and Kallick (2018), "*one of the greatest dilemmas for educators today is how to prepare students for VUCA lives*". They argue that the only stable need is to teach students to be agile thinkers to help them be more efficacious and better decision-makers.

Some modern universities are using experiential education to cater their student to the fast-moving environment. Section 3.4 has stretched the importance of experiential learning. It empowers students, encourages them to become agents of change (Wallace, 1993), provides

them with self-awareness, problem-solving skills and provides them with deep learning loops (Kolb, 1984). Another notable point was that experience is not the only requisite, it requires critical mindset (Lutterman-Aguilar & Gingerich, 2002), open-minded collaboration (Sparrow, 1993) and continuous reflection to transform experiences into experiential education (Joplin, 1995).

Preparing students to a VUCA environment has mainly been done through experiential education because of the reasons mentioned above. These strategies include international education, courses, practice in the real world and entrepreneurship. This section will cover these four strategies and study their success in top management institutions.

It has been seen in section 3.3, that international experience such as education and internships abroad are already a step forward in experiential education. Students are put out of their comfort zone, confronted with a new social environment, they discover new places, cultures and learning environments. All of this allows students to question their initial assumptions and personal beliefs which can lead to a transformative experience through critical reflection and discussion (Tarrant, 2010). Hence, students will develop a deeper and more acute understanding of reality (Kolb, 1984). This is good news since internationalisation has been one of the top priorities of many management institutions. As seen earlier, top HE institutions have succeeded in preparing students with an international education.

For courses, they have been updated and complemented in the theoretical side to include new emerging theories about the VUCA world. The most common theory begins by explaining what is a VUCA world and the importance of learning about new tools to deal with this new complex environment. One of the most common tools is scenario planning which is aiming to imagine multiple plausible futures and developing possible strategies suited to different situations. They can help leaders to be more confident when making decisions in times of uncertainty (Lawrence, 2013, p. 9). Another approach is PESTEL and SWOT analyses which aim to identify many plausible risks and opportunities in relation to the leader's business (Perera, 2017). These three theoretical frameworks can be put into practice in case studies, projects, and other class initiatives. They are present in strategy courses of most management programs. Nonetheless, this can't be considered as experiential learning. Although the cases and examples emerge from the market environment, the reflection and feedback loop are still theoretical.

Some universities have implemented experiential learning as part of their courses. In Singapore for example, a close collaboration with external partners leads to a course based on experiential learning. The feedback loop comes from companies and other market actors such as clients

allowing students to directly confront their project to the practical world. This course was the subject of a study to gauge the effectiveness of experiential education. People taking the course conveyed that they developed better cognitive, interpersonal and intrapersonal skills. However, although hard to evaluate, insignificant proof of problem-solving skills was found (Seow, Pan, & Koh, 2019).

The CEMS program has a similar initiative aiming at preparing students through experiential education. This is done through CEMS' 69 corporate partners and 7 non-profits. The exercise is to develop a consultancy-like project in close collaboration with one or two of these partner companies. During this part-time real-life activity, students form internationally diverse group to solve the company's project. During the entire assignment, they are closely followed by academic and corporate supervisors which provide them with an assessment of their work and continuous feedback. This experience allows students to train their theoretical knowledge, research methods as well as their analytical and problem-solving skills in the business environment (Figure 12). Some universities take the reflection process even further by asking their students to complete their master's thesis entirely on the subject of the business project (CEMS, 2020d).

Figure 12: Rules, Roles, and Relations concerning Business Projects (CEMS, 2020d)

Organiser at University	Tightening Links Between Universities and Companies Cooperation in the Educational Process	Company
Providing an International and Practical Curriculum Element The Challenge of Intercultural and Inter-organisational Learning	Business Project	Joint Project Tutoring The Marriage of Theory and Practice
Student Team	Solving Real-Life Management Problems The Bridge Between Research and Consulting	Academic Advisor

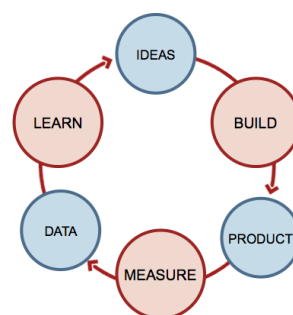
Practical experiences such as Internships are also a good example of experiential learning. They are required for most management education programs and specialities. The internship aims for students to have a first experience in the practical world (Wong, 2011, pp. 23-24). Even when not required, many students decide to do one. Internships develop both soft and hard skills and are a positive consideration for finding a job (UoPeople, 2020).

In France, work-study contract is an available option for students enrolled in various degrees and fields. The system is based on rotating phases of practical and theoretical learning. Hence, students are working part-time while passing their master's degree (Portail de l'Alternance, 2020). It is important to stress that all these practical experiences such as exchange programs,

internships, business project or work-study contracts only qualify as experiential education if they follow the pre-established conditions. It means that these experiences have to include critical thinking, open collaboration and most importantly continuous reflection to be considered as experiential education. In order to do this, HE can require reports, a work agenda tracking progression of the student. Universities can also assign an internship supervisor that will engage with students on a continuous basis during the whole phase of the experience. It is by engaging students with a feedback loop of reflection and critical thinking that will strengthen their ability to adapt to change.

Moreover, entrepreneurship is one of the most extreme forms of experiential education. In this thesis, a broad definition of entrepreneurship implied taking risks in an uncertain environment (Yuste, 2019). Similarly, an entrepreneur can be seen as “*anyone who works to create a product or a service under conditions of extreme uncertainty*” (Ries, 2011, p. 8). Due to the high uncertainty environment, entrepreneurs have to put in practice their problem-solving skills, make use of creativity, innovation, their ability to plan and achieve objectives (Commission of the European Communities, 2006). Due to the context of high volatility, entrepreneurs must learn fast and be flexible. The latter implies deep learning loops, reflect on the actions, on the outcome and adapt for the next stage. In his book “The Lean Start-up”, Ries (2011) illustrates the deep learning loop by the scientific approach of validated learning. It consists of first putting in place a hypothesis (e.g., what does the customer want?). Secondly, building a prototype to test the hypothesis. Thirdly, analyse the outcome and ask for feedback that can be used to validate or contradict the hypothesis. Finally, reflection on the feedback leads to a new hypothesis to be validated and the loop continues (Figure 13).

Figure 13: The Build – Measure – Learn feedback loop (Ries, 2011).



This loop is an iterative process that resembles a lot the experiential learning loop. It is increasingly used in start-up, lean manufacturing, and agile organisations.

HE institutions have long ago introduced minors in entrepreneurship, courses on creativity and innovation. However, practice and experiential education are an essential part of the puzzle (Higgins et al., 2018). Some masters have as major specialisation entrepreneurship. This is the case of the CPME masters in LSM where students are put in interdisciplinary team to create their own entrepreneurial project. The team is studying and working on their project at the same time, supervised by university professors through their learning loop (CPME., 2020).

On the other side, many master's programs do not include entrepreneurial learning. The point here is that entrepreneurial education should be an integral part of many programs, not only in management but also in other disciplines. As mentioned in Section 3.5, entrepreneurship is seen as a solution to overcome unemployment and it satisfies many leaning objectives mentioned in earlier sections.

To conclude, top HE institutions have worked a lot on how to prepare their students for a VUCA environment and the answer seems to be experiential education. This has been done through multiple channels, starting with international education. Secondly, new courses with new theories and courses including practice and case studies have been added. Thirdly, universities require students to engage in experiences on the job market with deep learning loops such as business project, work-study contracts, and internships. However, entrepreneurship is still not present enough in management education. Finding a way to integrate entrepreneurial education in management masters seems like a relevant problematic.

4.6. Information and communication technologies

Information and communication technologies (ICT) has changed how organisations function from within: fragmentation of the value chain, global sourcing of goods, services and knowledge, origin of competitive advantage and entire business models that rely entirely on the use of ICT (GFME, 2008, p. 15; Petrovic, Kittl, & Teksten, 2001, p. 3).

This fast-moving environment is reshaping ICT in a volatile way. The technological skills required today will probably be completely different from those of tomorrow. This is why in earlier sections; it was mentioned that being knowledgeable in some specific software won't be the way to create digital leaders (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017). It is rather a continuous adaptation to the actual trends that will lead to tech-savvy leaders able to include the last technologies in their business model. This is done by building leaders at an edge of ICT environment.

The student's environment is made of software, hardware, and professors. Some HE institutions continuously update their software and hardware to the latest available technologies. For example, as a way to deliver their courses, in 2018 alone, 190 universities launched more than 600 online courses through MOOCs, Coursera and other online learning platforms (Shah, 2018). Other Management institutions such as Imperial College London have used hologram for lecturers and external speakers to appear in three-dimension real size entities in the classroom. According to EdTech Lab's director David Lefevre, management students found the technology to provide an enjoyable learning experience and highly engaging. Some universities provide their students with the latest software such as Office 365 and Google suite, allowing the use of updated technology and collaborative learning. Some HE institutions have the latest hardware, sometimes technology laboratories (Times Higher Education, 2019).

Professors are an important factor in creating a technological environment. First, some professors are talking about digitizing their research agenda to be able to integrate cutting edge technologies into their papers and their courses. Digitization could serve to give examples, link their subject with current trends and advise the best technologies to deal with contemporary issues. Secondly, leveraging technologies such as learning platforms and social media is not done with the only purpose to attract more students but also to attract more experiences in the classroom (e.g., industry professionals, journalists, and donors). Finally, through technology, professors can allow for more interactivity and engagement, inside and outside the academic environment. *“Fully fledged digital professors are not only good researchers and teachers. They are also fundraisers, student recruiters, career consultants and social media influencers — all in one body”* (Giesler, 2018, p. 2).

In the CEMS universities, Bocconi Professor Marco Sampietro gives the project management course in which he integrates current project management trends such as the lean start-up methodology. Sampietro also trains students to work on the latest open source project management software (Sampietro, 2020). In the Indian Institute of Management Calcutta, a second-year master course in Social Media, Identity and Culture illustrates how companies strive or die in the current technological environment. This covers how to leverage social media, crisis communication in a digital age, social media marketing, and other trendy subjects. Pr. Mishra (2019), managing the course, uses social media to communicate with students to create a more engaging and attractive learning environment and she acts as an influencer in her subject. Digital HE institutions should make sure to have the right digital environment; software, hardware, and professors to create future digital leaders. Although many examples of courses

and professors being on the edge of technology could be found, it is unclear if universities consider this as a requirement and if it is mainstream in most of the CEMS universities.

4.7. Steps taken to create “responsible” leaders

When talking about management education, it seems like the industry has learned how to cope with the changing environment. Business schools helped students to develop a long-term perspective in strategic planning and decision making, objective thinking, standards of excellence across the organisation, a corporate culture, team spirit and leadership, and finally the standardisation of process and systems (Sravani, 2017, p. 86). Before the 2008-2009 financial crisis, it would have been natural to think positively about the future of the HE in management environment. However, the financial crisis was a shocking example of organisation’s frailness and rendered many business models obsolete (Lawrence, 2013). Mitroff (2004) claims that business schools are at guilt of having provided the necessary environment for the Enrons and the Andersens of the world to take roots and flourish (More information in Appendix 3). For the former professor in business policies, business faculties are active accomplices if not even co-conspirators in these criminal behaviours. In addition, the academic community is being more alert of these issues and from 2000 to 2013, 39 books were written on the demise of the model of the North American university (Helfand, 2013).

Therefrom, began a major shift in some of the most prestigious universities and business schools in the world. Some academics argue that, as responsibility is usually proportional with power, the larger is the impact of business on social and environmental stakeholders, the greater its responsibility toward their well-being (Jonas, 1984; Zsolnai, 2003). This was followed by an increasing demand from students to include newer practices. Therefore, programs have evolved to leave more space to new economic management theories. **Has HE in management succeeded in developing and transmitting new standards of responsible management?**

As mentioned already, the number of master’s in management programs has increased sharply during the past few years. So did their interest in international rankings. In 2005, there were 25 schools listed in the Financial Times ranking. In 2018, this number has increased to 104 schools, which shows a growing importance of how they are perceived in the international arena. As a matter of fact, in their mission statement, most of these universities show a change in their approach to management. The Financial Times has ranked the ten best business schools and universities offering a global master’s in management. Amongst those ten, five are part of

CEMS. Here is the mission and the aim of the CEMS along with the 4 other best-ranked programs in international management according to the Financial Times (2018):

CEMS's mission is to “*Educating and preparing future generations of international business leaders*”, “*develop knowledge and provide education that is essential in the multilingual, multicultural and interconnected business world*”, and “*promoting global citizenship*” (CEMS).

London Business School aims to “*equip their student with the critical understanding of business, the adaptive mind-set and the business-ready practical skills to truly stand out in today’s fiercely competitive marketplace*” (London Business School).

The mission of **ESSEC Business School** is to “*create and disseminate cutting-edge knowledge, to train and develop bold pioneers and influential leaders for both the business world and society as a whole*” (ESSEC Business School).

ESCP Europe's mission is to “*inspire and educate tomorrow's business leaders. Our conviction is that tomorrow's business leaders will need to be international, digital, and inter-culturally effective*” (ESCP Business School).

IE Business school offers a “*dynamic, transformational learning environment that shapes the people who will go on to shape the world*” (IE University).

Reading the above mission statements certain keywords appear: “*global citizenship*”, “*adaptive mind-set*”, “*influential leaders for both the business world and society as a whole*”, “*shape the world*”. Going deeper into the goals of those schools and universities, statements as follow can be found: “*eligible candidates are not only academically successful but also display a high standard of ethical conduct, who are able to draw upon cultural diversity with respect and empathy, and who show professional responsibility and accountability in relation to society as a whole. All these criteria are necessary to become successful international managers.*” (CEMS); “*meet the economic, managerial, social, environmental and ethical challenges of an increasingly uncertain world*” (ESSEC). These suggest that modern HE institutions in management are trying to be more ethical and build responsible leaders. They now need to develop new programs taking into account new management theories and integrating a new set of values and skills.

To establish such programs, many studies were made to evaluate what are the most essential skills for a future manager in the 21st century. As mentioned in Section 3.3, Laszlo Zsolnai &

Antonio Tencati redefined a new profile for business students:

“the future international manager is a reflexive practitioner who is committed to environmental sustainability, exercises social responsibility, work with sensitivity in the context of gender and diversity issues, harmonizes information and communication technologies with processes and organizational culture, applies a holistic perspective in problem solving, cooperates with social and political actors, and is engaged in progressive entrepreneurship” (Zsolnai & Tencati, 2009, p. 6).

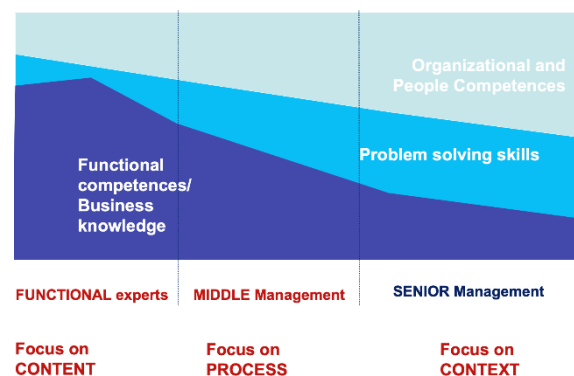
Many of these skills were covered in earlier sections, these include, international orientation, ICT, entrepreneurship and problem-solving skills. Concerning social responsibility, gender diversity and sustainability, in addition to the new vision of many top management universities, many initiatives were put in place to cope with these aspects. First, corporate social responsibility courses are integrated into all CEMS partner universities. Secondly, a mandatory “Global Citizenship Seminar” was put in place to actively engage and familiarise students with the United Nation’s Sustainable Development Goals (SDGs) (CEMS, 2020b). To finish with, many partner universities offer courses such as “Social Innovation” aiming at creating business models for the bottom of the socio-economic pyramid. On top of this, CEMS social partners organise skills seminar raising social and environmental issues. However, it is still unclear if top management institutions have worked hard enough to create leaders able to cooperate with social and political actors. This aspect will be further analysed in the CEMS survey of 6.1.1.

4.8. Soft skills

Section 2.3. has stressed the importance of completing technical knowledge with soft skills. These skills include empathy, perseverance, self-management, communication skills, critical and creative thinking, and many other skills required to be a good world citizen (Boyes, 2018). Team working, communication and project management were more specific to management (Schulz, 2008). However, over the years, as the role of leaders changed, the list got bigger: including skills such as inspirational leadership, empathy, motivating others, design thinking and transmitting knowledge.

It is expected that once an individual start transitioning from an individual contributor to a team leader of a management position, soft skills such as problem-solving or organisational and people competences become more important (Figure 14) (Kouzes & Posner, 2017). This is well illustrated by Marchall Goldsmith’s quote (2011) *“What brought you here, won’t take you there”* (Devos, De Wit, & Lubberding, 2018).

Figure 14: Becoming a Leader: the challenge of the transition (Kouzes & Posner, 2017)



It is clear that soft skills play a critical role in creating the leaders of the 21st century, especially because most of the skills attributed to these leaders are soft skills (e.g., *Cf. Section 3.2: Zsolnai & Tencati's definition*). Hence, top management institutions such as CEMS have taken a step forward to promote soft skills. This was done by offering four things: A Global Leadership course, a one week “Block seminar”, a large variety of one-day “Skill Seminars” and finally many on- and off-campus events where students can interact with professionals of many industries.

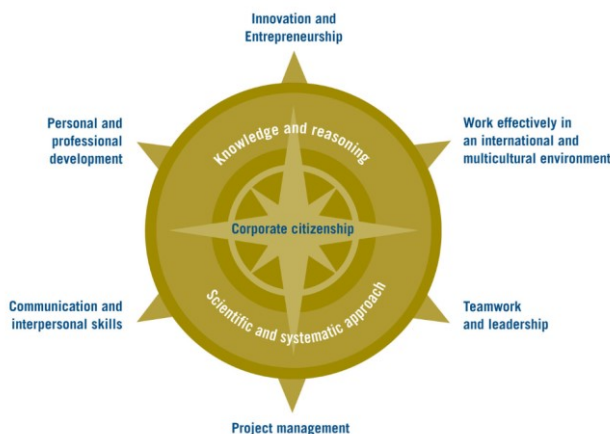
Global leadership is a 6 ECTS course that aims at gaining understanding of key leadership concepts. It raises leadership skills relevant to contemporary issues and puts a large emphasis on soft skills. A large part of the course focus on knowing yourself better in order to manage yourself better (CEMS, 2020a). The Block Seminar allows CEMS students to come together to talk, exchange ideas and debate about one innovative management topic. The Skill Seminar allows students to choose amongst the skills they want to develop and attend a one-day training intending to develop this particular skill. Finally, many events such as career forums allow students to practice and train their presentation and business communication skills (CEMS, 2020e).

The Louvain School of Management (LSM), one of the CEMS partner universities, has opted for a similar approach. Soft skills are developed through a one-year “Seminar on Relational and Managerial Competences” and satellite activities (e.g., corporate events, mock interviews and smaller seminars). Its goal is to create self-awareness, so students know what aspects of their personality they should improve. An anonymous Korn Ferry survey answered by classmates and friends allows each student to see how others perceive his/her strengths and weaknesses in terms of soft skills. The students are given the choice of what skill to work on and how to work on it. Everyone is put in a team and must choose a mentor from outside the academic sphere. These two actors serve as feedback loop for the student, therefore applying an experiential

model of education at the core of the seminar. Students are asked to meet with their learning group and their mentor to get continuous feedback and report on the outcome. In addition, students have to submit an individual monthly report explaining what skill they are focusing on, what concrete steps they are taking, what were the feedback received and how did they react to this feedback. Finally, many events are organised on campus (job-fair, discovery days, interview session, skill seminars) allowing students to pick relevant activities to develop their skills (LSM, 2017).

Soft skills are central in LSM values. In 2009, LSM introduced a new competency framework containing nine “*transversal personal skills and attitudes*” (Figure 15). This framework serves as core values, intended learning outcomes and “compass” of the faculty and it helps stakeholders and the school in their strategic direction (Louvain School of Management).

Figure 15: The LSM Compass (Louvain School of Management)



Looking at the importance of soft skills for a leader’s development, it seems essential to integrate it into the management education agenda. As a matter of fact, they are part of many new HE initiatives. The CEMS program has decided that soft skills should be a common mandatory set of activities. LSM has once again taken a step further integrating experiential learning concepts into its soft skill seminar to make them even more effective. This is done by integrating the soft skill seminars in a reflection course. It remains to be seen how students benefit from these efforts.

4.9. What is still missing? - conclusion

To conclude with this chapter, top HE institutions in management did put considerable effort to stay at the edge of the learning curve. On the first hand, some initiatives have proven to be successful. (1) International studies have been one of them. Although many forces are pushing to standardisation, master’s students are still offering a large (2) diversity in terms of learning

opportunities. On the other hand, some skills were significantly improved but literature is failing to tell how successful they were at the implementation level. Answers to questions such as “Did the skill receive student validation?”, “Should these skills be given more importance?” are sometimes left uncomplete. This applies to (3) creating the right digital environment for the development of digital leaders, (4) creating responsible leaders able to cooperate with social and political actors, and (5) investing in developing relevant soft skills for future managers. Finally, some skills seem to be missing. Experiential education was agreed to be the key skill to create leaders able to cope with a fast-changing environment. Although experiential learning was the subject of many recent initiatives (courses, seminars, internships), (6) entrepreneurship, as one of the most advanced forms of experiential learning, is still missing. This is also the case for: (7) the ability to transmit knowledge, interdisciplinary learning & activities and finally (9) knowledge about emerging markets which were already surveyed to be missing.

Successful initiatives:

- 1- Internationalisation
- 2- Diversity of formation

Successful but room for improvement:

- 3- Digital environment
- 4- Responsible leaders able to cooperate with Social and political actors
- 5- Soft skills

Missing features:

- 6- Entrepreneurship as the most advanced form of experiential education
- 7- Transmit of knowledge
- 8- Interdisciplinarity
- 9- EM knowledge

This is a preliminary analysis and conclusion based on the literature, and what we could observe in the different top HE institutions in management. These results will be further discussed in section 6.1, where it will be completed by a survey of CEMS students and alumni.

5. Higher education in management — Developing economies

In her speech directed to students of Maryland University, 2016, Christine Lagarde mentioned: *“Emerging and developing economies are home to 85 percent of the world’s population—6 billion people. These 85 percent matter to the global economy more than ever, and they matter*

to you more than ever — because of strong linkages through trade, finance, economics, geopolitics, and personal connections that you experience every day” (Lagarde, 2016, p. 2). By 2034, the population of emerging economies could rise up to 95% of the world’s population (Euromonitor, 2017). In 2018, these emerging markets (EM) accounted for 60% of global GDP, a number that doubled in a mere decade (Muller, 2018). EM are a part of the world that is difficult to ignore as a global citizen.

While looking at global welfare, this economic prosperity in developing economies has been one of the main drivers behind the reduction of extreme poverty (less than \$1.90 a day). Since the 2008 financial crises, China’s contribution lifted 600 million individuals out of poverty (Asian Development Bank, 2017). However, in 2020, more than 700 million people still live under extreme poverty. The promising trend to alleviate living standards made possible by high growth in emerging economies does not seem to stand anymore. Indeed, growth in emerging economies is declining since 2015, this has been correlated to falling foreign investment and risk aversion toward emerging markets. These variables such as growth, investment and risk are interrelated (OECD, 2019; The Institute of International Finance, 2016). One variable that has a positive impact on the three is education. Therefore, this chapter will first have a quick look at the main challenges facing emerging economies, what is the link with developed economies. And in a second time, this section will cover what can be done and what has been done to support a partnership for growth - leveraging institutions such as HE institutions and HE in management.

5.1. Developing economies: Common trends and challenges for management education

This paper uses the terms developing market/economy, emerging market/economy (EM) interchangeably. EM is broadly defined as a group of 30 to 50 countries that are converging toward developed economies. They are growing at a significant pace and take part in international trade. EM are scattered all around the world and are very different in terms of culture, economic trends and can have different economic and political cycles. While talking about EM, this paper does not consider them as a homogeneous block and any project or course of action should imply more acute study, to look at the vernacular environment of each of these countries. The same logic should stand for developed economies.

While this paper will not focus on the specificities of each country, it will try to draw some commonalities that could provide useful insight on how to improve the management education

environment and draw its impact on other variables. In the case of emerging economies, one of the commonalities is how they are eager to move toward their peers in developed economies. A second common concern mentioned earlier is the declining growth rate since 2015. Growth is important because it allows millions of people to get ahead, it creates employment and allows people to pass the poverty line, middle class are finding their expectations unfulfilled (Panagariya, 2019, pp. 76-80). According to Lagarde (2016), some of the abovementioned effects could lead to more inequality, protectionism and populism. Furthermore, this growth reversal is not only affecting EM, but also developed economies that have come to rely on emerging economies for investments or customer goods and services. This is why the president of the International Monetary Fund calls for a partnership for growth where “*both emerging and advanced economies need to play their part to promote faster and more sustainable convergence*” (Lagarde, 2016).

Many researches focus on the main challenges of emerging economies. This paper will mainly focus on the challenges linked to management education in EM. While many factors affect growth outcomes in EM, education seems to have a positive impact on many variables. However, it can be harder to assess the impact of HE in management considering the intangible and long-term investment that it represents. Many empirical studies show a robust relationship between quality education and economic growth, the studies call for investment in HE as an essential factor in the development of growth strategies. However, literature mentions that the inputs are large, many barriers exist, and that the investment requires patience (Cebula et al., 2019; Hanushek & Woessmann, 2020). Furthermore, there are two mentioned conditions for the relationship between education and economic growth to be valid: quality education and a set of talents adapted to the local market. The latter makes it essential to look at the challenges facing EM at the moment and to understanding their economic needs, therefore, understand which talents are required on the market.

Challenges

First, some emerging economies are transitioning from industry to service which means they require different types of talents and experience. Second, as climate change becomes one of the most critical challenges of the 21st century, research is suggesting that EM should not follow the same path of developed economies. Emerging markets should rather jump a step forward to developing sustainable growth (Wang, 2020). This comes with the challenge of preparing environmentally conscious managers that have the knowledge and skills to promote sustainable growth. For example, EM investments, related to urbanisation infrastructure, are estimated to

remain over three trillion U.S. dollars per year for the next ten years. If these investments are not well done nor planned with a sustainable perspective, they could lock these countries with carbon-intensive activities for years or decades (La Rovere, 2020; Stern, 2014). These investments can have a significant impact on the whole planet.

Third, it is also expected that EM business model will be significantly different. As for taking the environment into account, there is also a large amount of new way to deliver product and services that were not here a few decades ago. It is, therefore, expected that emerging economies will jump to the 21st century business model, empowered through big data and other technologies. This only stands if their educational system is able to give birth to tech-savvy entrepreneurs and managers. Many countries are addressing the issue. However, as of 2019, EM still lack digital skills and infrastructure that weigh down many investment opportunities. For example, digital payment and online privacy are essential online infrastructure for E-commerce, which is one of the emerging business of the 21st century (OCDE, 2019, p. 12).

Staying on the subject of technology, it is expected that ICT will create new job opportunities and contribute positively to the sectors such as healthcare, transportation, and education in EM. Nonetheless, these new prospects can also place low skilled workers at risk (ADB, 2018). A 2018 study indicates that 14% of jobs in some 32 EM are qualified as “highly automatable”. This accounts for more than 66 million workers (Nedelkoska & Quintini, 2018, p. 7). This does not only bring the challenge of digital literacy mentioned earlier, but it also implies that HE institution will face an increasing demand from students and adults to reskill themselves (ADB, 2018).

As a fifth point, there are some political challenges at a governmental level. Some EM are transitioning from investment and exporting production to consumption in domestic markets. Recommendations found in the International Monetary Fund challenge for EM are “*upgrading the efficiency of spending, strengthening fiscal institutions, fiscal policies, and increasing non-commodity revenues*” (Lipton, 2016, p. 3). Business leaders or business representative in EM must be aware of institutional challenges facing their country and work together to leverage their local strengths while considering their weaknesses. This requires politically conscious leaders, having a broad understanding of global issues and international trade.

For a long time now, some EM have been transitioning from mostly public to mostly private economies. Although this can be seen as a good thing, it also implies relying on private companies and individuals to create new businesses and jobs. This brings a sixth challenge

which is creating entrepreneurs: people able to see opportunities and benefit from it, involve others and create employment.

International studies are a must to develop a global leader. However, it is important not to forget about local constraints. These EM entrepreneurs need to be trained and prepared with local education, cases and concrete experiences to fully grasp the challenges facing them. *“To be effective, pedagogy must have a connection with local culture, values and norms”* (Alon & McIntyre, 2006, p. 142).

Rising aspirations are creating a seventh challenge. A fast increase in the middle-class citizen can be seen in most EM. These people are eager to provide their children with quality education. This last point comes to complement the fourth point on the increase in demand for education. The middle class is also expecting better products and services with higher standards (OCDE, 2019, p. 66). This means that businesspeople and entrepreneurs have to innovate to meet these new demands, get inspired on other markets, import ideas, technologies, and services as well as adapting them to the local market's needs. Opportunely, this need is also coming from the other side of the rope. As consumers demand more, students are also expressing their discontent about the educational system. On average, for EM, the dissatisfaction rate for the quality of the public educational system is about 47% compared to 30% for countries of the OECD (Cohen, Lupu, & Zechmeister, 2017).

Hence, on top of the need for scaling education implied by rising demand, HE institutions also have to find a way to do so in a qualitative way. Limited resources won't allow expanding the traditional system to a larger number of students. EM are usually confronted with a shortage of teaching professionals mainly due to poorer incentive for PhD and teaching jobs. According to Darley and Luethge (2016), even though some HE institutions have invested in expanding rapidly on the African continent, they have not invested enough in the training of new professors and researchers. Improving the quantity and quality of HE at the same time is a big challenge. In the short-term, it is hard to train and hire new professors. The remaining option could be to rethink the educative model. Some universities have tried to address the shortage by creating more visiting faculty positions. Even though it has had a positive impact it might not be sufficient to address the shortage (Ashraf et al., 2019).

It is hard to find literature mentioning a direct link between HE in management and growth that would be specific to emerging economies. However, from a historical perspective, in Europe as well as in other continents, it has been seen that management education was somehow correlated with the emergence of trade commerce and economic growth (See Section 1.3). As

mentioned earlier in this section, many empirical studies show a robust relationship between quality education and economic growth. Furthermore, an aggregate of studies found that every dollar spent on education generates economic growth of ten to fifteen dollars (Detonnac, 2017). This investment in education does not only help with unemployment but also balancing high added-value jobs with manufacturing and labour-intensive jobs. This addresses directly one of EM challenges, which is the high proportion of unstable jobs (Marinescu, 2018).

Who is the EM leader of the 21st century?

The EM leader of the 21st century is a manager prepared through local and international education, cases and experiences with a deep understanding of the local market and its intrinsic constraints. He/she is environmentally conscious and aware of the many challenges facing the globalised world of the 21st century. He/She is tech-savvy and aware of the impact of technology on many business models and industries. The EM leader has high standards of excellence and is able to provide the future generation with services and products that meet global aspiration. He takes into account the bottom of the socio-economic pyramid and the need to scale new business models. He/She has a clear understanding of global economics and politics. He/She is engaged in promoting free trade and multilateral agreements that benefit his/her country. The EM leader is innovative and creative, he uses the above-mentioned challenges as an entrepreneur, transforming them into opportunities and coming up with new business models, involving many stakeholders. He/She creates meaningful employment.

5.2. What has been done to support a HE partnership for growth?

As mentioned previously, universities play an important role in society in general, economic growth and entrepreneurial innovation processes (Audretsch, 2014). Particularly in emerging economies, where governments, to foster local economic development, create subsidies to encourage enterprise innovation by forcing universities partnerships. It also helps to move towards an innovation economy rather than an efficiency economy (Cohen, Nelson, & Walsh, 2002). Therefore, in both developed and developing economies, a partnership between companies and universities is essential. As McAdam & McAdam (2008) said, university partnerships with enterprises are greatly effective in the creation and continuation of knowledge-based companies. Enterprise-university partnerships open the opportunity to access R&D public funding, skilful and specialised personnel as well as technological knowledge. As Guerrero, Urbano, & Herrera (2017) summarized: *“the strategic purposes behind university–enterprise partnerships are learning/acquiring new external knowledge, technological*

regeneration, absorption of new skills, and development of radical or long-term innovations, through, for example, networking or outsourcing”.

Another kind of partnership that we deem interesting to look at is the partnerships between EM universities and top management institutions. Some initiatives and cooperation already exist. We would like to present 3 examples: the international branch campuses across emerging markets, Mundo and AIESEC volunteer internships. Firstly, the number of international branch campuses (IBCs) is growing (Jhingan, Betts, R., Jain, & Bohara, 2019). Based on the definition of the Observatory on Borderless Higher Education (OBHE) and the Cross-Border Education Research Team (C-BERT), Wilkins and Rumbley (2018), presented a revised definition of international branch campus:

“An international branch campus is an entity that is owned, at least in part, by a specific foreign higher education institution, which has some degree of responsibility for the overall strategy and quality assurance of the branch campus. The branch campus operates under the name of the foreign institution and offers programming and/or credentials that bear the name of the foreign institution. The branch has basic infrastructure such as a library, an open access computer lab and dining facilities, and, overall, students at the branch have a similar student experience to students at the home campus.”

IBCs increased from 170 in 2007 to 260 in 2017, from which 65% of the added IBCs were created in emerging markets. The destination countries were mainly China, United Arab Emirates, Malaysia, Qatar, and Singapore. The two main reasons for expansion developed-emerging in the EY report were: *“Leverage strong brand to gain share from poor quality local provision or to tap unmet demand”* and *“Tap internationally mobile local students by supplying a foreign branded education and degree”* (Jhingan, Betts, R., Jain, & Bohara, 2019). For the home campus, IBCs helps in their internationalisation, by building a global presence and a better brand recognition in the host country. Plus, it improves the rankings and allows access to a larger pool of students. Finally, it increases the research opportunities through research collaborations or funding from the host country (Jhingan, Betts, R., Jain, & Bohara, 2019).

A second interesting initiative is MUNDO. It is the Maastricht University Centre for International Cooperation in Academic Development (Maastricht University, n.d.). As it is explained on their website, *“MUNDO facilitates international partnerships between Maastricht University and institutions in low- and medium-income countries around the world”*. Through these collaborations, the main goal is to enhance the educational and research capacity of their

partners, but at the same time, it has a positive impact on the international image and internationalisation of Maastricht University (Maastricht University, n.d.).

The last example is about the student association called AIESEC. AIESEC is present in more than 2400 universities in more than 120 countries. It consists of a collaboration between universities all around the world. One of their goals is to find students in one of the universities in one country and send them to another country to volunteer or do an internship where another university will take care of them (AIESEC, n.d.). For example, an LSM student could go to Indonesia to teach English in unprivileged schools. He/She would be welcomed by the local university in Indonesia. Through this organisation, he/she would have the opportunity to discover an emerging market, a new culture and work with local students.

So, some initiatives already exist all over the world, but it could be further developed.

6. What is missing to both parties?

To begin with, Chapter 6 will start by synthesizing all the needs for both top European MIM and management education in EM. Secondly, a prioritisation of those needs will be made thanks to (1) the research of Chapters 3 and 4 and (2) the CEMS survey. The third part will focus on the difference and commonalities in terms of needs. It will be the basis for the next chapter, where we will try to match the needs of both parties to conclude with a new program as the solution to all the needs and challenges facing both EM and top master's in management.

6.1. Synthesize all the needs for top institution and developing countries

It is hard to prioritise the needs, as they have already been selected as the most important missing skills a student should have. Therefore, prioritisation will not always be possible; the most important goal is to find what are the prerequisites of each skill and to understand the interlinkages between these needs. This will be useful to find one solution fitting many needs.

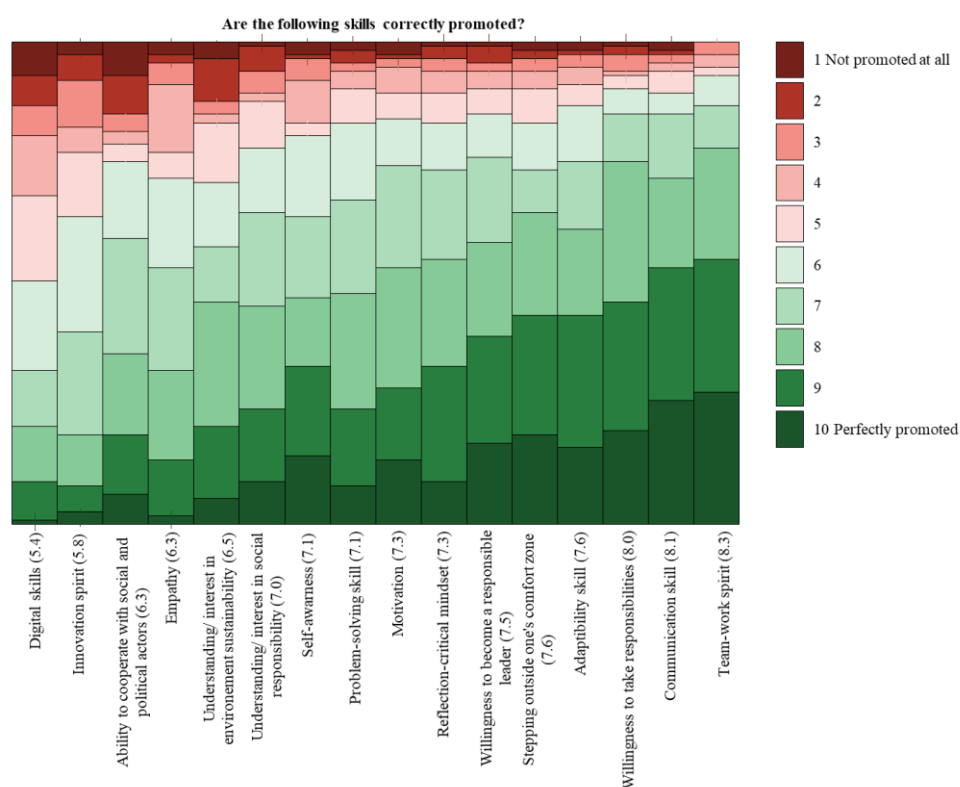
6.1.1. Missing needs for top institutions

In Section 4.9, nine preliminary needs were classified from successful to missing: international, diversity of formation, digital environment, responsible leaders able to cooperate with social and political actors, soft skills, entrepreneurship, interdisciplinarity, and EM knowledge. With the aid of a specially designed survey, we analysed what was the CEMS students' perspective on those needs and verified if we did not miss any other important needs. Based on the survey

and the literature review, this subsection will rank the skills by importance. The survey and the results can be found in Appendix 4.

One of the most relevant questions asked to CEMS students and alumni, was if they believed the skills listed were correctly promoted in the CEMS program (from a scale from 1 to 10). Results are depicted in Figure 16. Visually, some skills are more neglected than others. The skills that require the most urgent solution are shown on the left: Digital skills, innovation, empathy and ability to cooperate with social and political actors. Some other skills are promoted but would still need improvement: interest in environmental sustainability and social responsibility. All the other skills are the most correctly promoted in the CEMS but there is still room for improvement. The weighted averages are indicated in brackets.

Figure 16: Students' perspective on skills present in CEMS (based on the survey)



In the survey, participants were also asked to share their willingness to have several new aspects in the CEMS program. As it can be seen in Figure 17, the aspect CEMS students are the most interested in are: Up-to-date digital environment, entrepreneurship, and experiential education. Most students would also see the possibility to transfer knowledge, interdisciplinary courses, start-ups involvement and knowledge about emerging markets as new positive program aspects.

would like to improve their self-awareness, self-confidence, and empathy, this includes learning humbleness, trust and, receive and give constructive feedback.

Based on the literature and the insights from the survey we prioritised and divided the missing skills into ten categories (Table 1).

Table 1: Needs prioritisation for top institutions

Priority	Category	Explanation- What it includes
1.	Digitalization	Digital skills, up-to-date digital environment
2.	Experiential education	Learning by doing, real-world case-solving, practice, stepping outside one's comfort zone
3.	Entrepreneurship	Creativity, innovation, turn ideas into action, how to launch a start-up
4.	Responsible leaders	Willingness to take responsibilities, interest in social responsibility and environmental sustainability, ability to cooperate with social and political actors, stakeholder management
5.	Emotional intelligence	Self-awareness, empathy, motivation, reflection-critical mindset, career organisation, trust, constructive feedback
6.	Knowledge transfer	The possibility to transfer knowledge, teach to others
7.	Knowledge about emerging market	Awareness about other environments, business culture
8.	Hard skills	Hard skills (economics, finance, data analysis, programming), interdisciplinary courses, diversity of formation
9.	Soft skills	Communication skills, problem-solving, teamwork, adaptability
10.	International experience	Exchange, internships, culture

6.1.2. Missing needs for developing countries

For EM, the top priority is to find a way to scale quality education, taking local constraints into account. If this is not done, there is no point in developing quality education alone, which will not be subject to implementation. Secondly, entrepreneurship should be very high on the list (Table 2). With the emergence of the private sector, the responsibility is shifting from the government to private individuals, entrepreneurs whose role is to create meaningful employment and involve many stakeholders in their society.

Thirdly, there is no incentive to have more entrepreneurs if the work they are doing is adding value somewhere and destroying value somewhere else. Entrepreneurs and EM leaders need to create value responsibly without ignoring the externalities of their actions. Responsible entrepreneurs must be aware of local constraints as well as the many available business models to deal with these modern issues. This brings up the concept of “leapfrogging”. EM can be encouraged by customers to skip the path of developed countries and come up with the latest answers to the clients’ needs. This is what many Indian and African customers have been doing,

“as they move directly from mobile phones to printers, bypassing computers” (Vandermerwe, 2012, p. 7). The issues must be tackled with a creative and innovative mindset, using the edge of innovation. To come up with these business models and novel solutions, EM need digital leaders brought up and educated in a digital environment.

Finding relevant business models is key and to do so optimally, customer focus is crucial. EM customers have complained that many products and services offered in the local market are not fitting their needs (OCDE, 2019, p. 66). EM leaders need to develop high standards for their products and services. International experience can help with the latter point. In the West, a large part of long-term corporate success has been attributed to customer- and market-oriented management (Fritz, 1996). Having experience with this part of the world can open-up EM leaders to a new perspective on how to value client and provide them with better suited products and services.

International experience is important because, in a globalised world, many different cultures interact and work together. Members of a team have to work well together and optimally to benefit from diversity. In EM, many *“local talents ignore cross-cultural expertise”* (Conference Board's 2015 CEO, 2015, p. 11). Therefore, international education can provide them with the relevant experience to thrive in multicultural environments.

Last but not least, 21st century leaders need the skills to cooperate with social and political actors (Zsolnai & Tencati, 2009). First, companies have long worked with social and political actors to strengthen their market position (Hadjikhani, Leite, & Pahlberg, 2019). Secondly, as CSR policies try to incentivise private organisations to work for the common good, cooperation becomes essential. In a third point, it is possible to argue that as many institutions deliver public services and use public money, they should be given the same importance as governmental institutions in the legal sense (Zsolnai & Tencati, 2009, p. 146). Cooperation with social and political actors requires cross-cultural competences (Zsolnai & Tencati, 2009). Hence, this skill can be improved by international experience. It is also linked to responsible leadership as the aim of cooperation is not only to increase its market but also to have an ethical say in the social and political environment (Hadjikhani et al., 2019).

To conclude, it is hard to prioritise these educational needs. What is understandable is that the skills are interlinked. Therefore, improvements in one skill can positively impact many others. This also means that some solutions can cover many aspects and that solutions must be reflected efficiently and consider possible economies of scale.

Table 2: Needs prioritisation for EM management education

Priority	Category	Explanation- What it includes
1.	Scale quality education	Quality management education access to more people
2.	Entrepreneurship	Create meaningful employment and involve many stakeholders in their society. Creativity, innovation and turn local challenges into opportunities
3.	Responsible leaders	Willingness to take responsibilities, interest in social responsibility and environmental sustainability
4.	Client orientation	High standards for product and services
5.	Digital leaders	Leverage ICT to find and scale relevant local business models
6.	Cooperate with social and political actors	Skill to cooperate with social and political actors. Push their ideas forward with local and international organisations
7.	International experience	Awareness about other environments, business culture. Exchange, internships, culture

6.2. Differences and commonalities

What are the differences and commonalities when comparing the EM leader of the 21st century to the needs still to be fulfilled in top European management schools? The answer is that they have a lot in common. However, the way skills are prioritised and emphasized is different. The second difference concerns the challenge of HE institutions to deal with these needs. These are summarized in Table 3.

Table 3: Differences and commonalities in missing skills

Skills	Commonalities	Differences
Create Digital leaders	Leaders should study and use the edge of technology allowing them to develop their digital flexibility for the future	Tier 2 EM: could benefit more from technology by scaling
Entrepreneurial education	Creativity, innovation, turn ideas into action, how to launch a start-up	Top MIM: the emphasis is made on experiential education and the ability to adapt to change. Tier 2 in EM: the focus is made on creating meaningful employment and involving many stakeholders
Developing responsible leaders	Role of education to communicate, inform and give the tools for the student to freely come up with their own set of values	The challenges will be dependent on the culture aspect since ethics, values, moral and priorities are all idiosyncratic
International education	Discover or improve a new language, develop a global world view, improve engagement with other cultures and acquire a global understanding	Top MIM: Still a limited knowledge about EM. Tier 2 in EM: need to increase cross-cultural expertise and acquire higher standards for products and services

As expected, the common needs of top MIMs and EM management institutions are very similar. Some differences exist in how the need emerged or what challenges it implies. Taking this into account in the development of any foreseeable solution is a must as different challenges come with different approaches.

7. Solution through a new program structure

The previous chapter focused on identifying, prioritising and comparing management education needs in both top masters and EM. This chapter aims to map the needs of these two parties (European masters vs. developing countries) in order to identify complementarities and come up with concrete solutions. The needs and their subsequent solutions will be addressed in two different ways. The first solution will constitute the proposal of a new CEMS semester. The second part will address additional solutions that can be applied throughout the entire program.

The first part of the solution focuses on building a new program structure for the CEMS program. CEMS students who choose this option would spend a semester abroad in one of CEMS top partner universities in EM. During this semester, CEMS student will have to (1) Teach in a tier 2 university of the EM supervised by a university professor and PhD Teaching Assistants, (2) work in a local start-up in a role with responsibilities and (3) attend both the CEMS elective courses and activities as well as the mandatory course, skill and block seminar in order to satisfy CEMS requirements.

The previous literature review makes it possible to identify complementarities between the needs in top master's in management and those of EM. This allows the identification of various solutions and their impact on these skills.

7.1. Teaching in in a tier 2 university of EM

The ability to scale quality education emerged as the main challenge of EM management education. Hence it is one of the cornerstones of the first solution “elaborating a new CEMS program structure”. The most complementary need seems to be the ability to transmit knowledge for top MIM students. As mentioned in Section 5.2, many initiatives have been focused on a partnership for growth, with the aim to provide EM with foreign teachers. Some students in top MIM have already had the opportunity to transmit knowledge as a teaching assistant or tutor of a university course. Therefore, their top management education combined with their teaching experience could be part of the solution to bring quality education in EM.

However, the scalability and the necessary environment to transfer knowledge are still missing. This is when digital leaders can develop and have an impact.

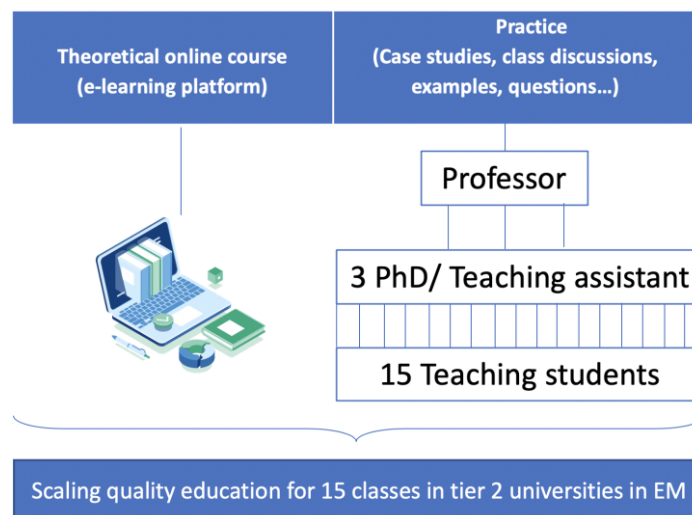
Section 1.3.2 stressed out the many advantages of a hybrid education combining online and offline education. Most of the theory is given online and practice offline. Massive Open Online Courses (MOOC) have provided almost any individual, equipped with an internet connection, access to quality online courses. However, having only an online environment is also problematic. The actual situation with COVID-19, forcing every university in several countries to go online seems quite challenging as well, reinforcing the previous argument. It is too soon to draw any conclusion, but this pandemic will probably provide a lot of learnings on only online environment.

Indeed, with the main theory given online by university professors, top MIM students can complement the online theory with offline practical knowledge through tutoring and teaching assistants roles in EM universities. The model would be as follow:

1. A limited pool of students is selected for each course of a bachelor program in top MIM universities. These students are selected according to the mastery of the course (e.g., grades and presentation skills).
2. Selected students engage in a semester of tutoring for the chosen course in their home university. Tutoring includes answering student questions about the course, preparing material and managing the online teaching platform.
3. The university professor along with his PhD teaching assistants brief the students for additional teaching knowledge. This training allows tutor students to become teaching students.
4. Teaching students are sent a semester abroad in a top management school, part of the CEMS partnership in an emerging market (India: IIMC, Egypt: AUC, Chili: UAI).
5. Alongside their courses in the host university, teaching students act as professors in a 2nd tier university for the course they were selected.
6. Students of 2nd tier universities in EM follow an online course given through a MOOC platform and offline sessions given by the teaching student.
7. The teaching student is supervised directly by the PhD Teaching assistant and by the university professor.
8. Tier 2 EM students have access to scaled quality courses in their home university.

The following Figure 19 is an illustration of how scaling quality education through hybrid courses could look like. One single university professor could lead 3 PhD teaching assistants, who supervise 15 teaching students.

Figure 19: Scaling quality education through hybrid courses



The aforementioned model will probably imply much more organisation and time from both professors and PhD teaching assistants. However, this is to be compared with the growing impact of reaching a larger audience all around the world. This hybrid model also implies much more than answering the essential need for scaling quality education in EM and the transfer of knowledge for top MIM students. On top of this, students of both parties are submerged in an up to date digital environment. Students and professors are leveraging technology to learn, teach, communicate, create learning content and optimally make the program more efficient. As seen in Sections 3.6 and 4.6, it is not learning how to use complex software that will lead the way to create digital leaders (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017). It is rather a continuous adaptation to the actual trends that will lead to tech-savvy leaders able to include the last technologies in their business model. In this hybrid program, all parties will have to make the best out of the technological tools available in order to maximise the quality of their learning as well as their time spent on the job.

Responsible leaders pass the barrier of theory, they go on the field and act, have an impact while they are still learning. Top MIM students would be learning by doing, stepping out of their comfort zone and being responsible leaders. This is the basis of experiential education. It has been seen in Section 3.4 that to fully qualify as experiential education, deep reflection and a feedback loop are needed. As teaching students, top MIM scholars will have to leverage their

soft skills to get feedback from their student and teaching experience, reflect upon it and continuously improve their teaching methods and communication.

It is very important that local students get deep insight into local challenges, local constraints and business models suited to their environment. Therefore, top MIM universities in EM could apply the same model in their program. Send local top MIM teaching students to local tier 2 universities. This would create a more complete learning environment adding relevant local knowledge to tier 2 students of EM. As mentioned in Section 5.2, some similar initiatives exist, however they are not part of CEMS, and they are not structured this way.

As top MIM students teach in tier 2 universities in EM, they also get more knowledge about emerging markets, their peculiar challenges and opportunities. Furthermore, international experience is source of challenge for both parties. These challenges lead to more self-confidence, better self-awareness, and a better understanding of others, other environments, and cultures (Wallace, 1993). Teaching students learn how to leverage emotional intelligence in order to get students feedback and continuously improve. A feedback loop between the university teacher in the home school and the teaching students allows the program to develop and adapt to the idiosyncratic needs of EM students. For example, an emphasis on entrepreneurship should be made.

7.2. Working in a local start-up

As mentioned in Section 4.5, a start-up is defined by the context of extreme uncertainty (Ries, 2011). In Figure 17, when CEMS students were asked about what should be included in the program, experiential education and entrepreneurship ranked as 2nd and 3rd in their view. Entrepreneurs are people who work in an environment of high uncertainty, hence usually in start-up. In Section 4.5, it was also seen that entrepreneurship is a complete form of experiential education, insofar as it involves all the necessary steps and feedback loops. Students' involvement in a start-up would therefore provide them with experiential education through entrepreneurship and solving real-life problems.

Furthermore, start-ups usually work with technological tools to organise their work, leverage technology in their business model or both at the same time (van der Westhuizen & Goyayi, 2017). Indeed, uncertainty is countered with flexibility and speed of action which pushes many start-ups to digitalise or grow as digital enterprises in the first place. This would place CEMS students in the right environment to develop as digital leaders.

On top of this, start-ups usually battle for funding. Being at the edge of technology and innovation also means a large focus on regulations. A young company has to prove itself; it has to face the many challenges linked to the political, economic, social and legal environment it is growing in (Waltonen, 2019). All of these challenges push entrepreneurs to have a full view on all these constraints and communicate with social and political actors to overcome their challenges, which is one of the reported missing skill in the CEMS program.

A less mature organisation still has to test many assumptions pushing them to use innovative and creative skills such as agile working methods and design thinking.

A team composed of EM entrepreneurs and top MIM students brings a new perspective to the project. As seen in Section 5.1, adding this international environment can help businesses in EM to have higher standards for their product and services. It is generally accepted that different ideas coming from diverse background and cultures create a richer environment. Diversity enhances factors such as “*social and political harmony, cohesion and efficiency of organisation*” (Lozano & Escrich, 2017, pp. 6,7,12).

Cultural diversity is a first positive point. On top of this, in a start-up, top MIM student will probably find a diversity of professions and skills. In start-ups, teams are usually quite small and very diverse. Students will therefore learn how to work in an interdisciplinary environment, to deal with different skills, and understand people coming from different academic and professional background.

Students could work in any kind of start-up in any industry. However, in the developing world, a large opportunity lays in the bottom of the pyramid. Indeed, more than 3 billion people live under \$2 a day and another 1 billion under \$8 a day (Kar, Kar, & Kaur, 2017, p. 2). These people face a challenge as most products and services are too expensive for them. Basic needs such as electricity, clean water, access to telecommunication services and many others are not met. What used to be handled by philanthropic organisations is now increasingly the focus of young SME and even some big companies are starting to seize this new market opportunity. On the one hand, new actors create an increasingly competitive environment. On the other hand, the low entry barrier keeps the market attractive (Kar et al., 2017; Singh, Bhowmick, Sindhav, & Eesley, 2019).

Top MIM students can learn a lot in this kind of environments. EM bottom of the pyramid creates a need for a different type of innovation. Only to mention one, grassroot innovations are known as community-based initiatives to create novel solutions for sustainable development.

They are one example of bottom-up approaches to innovation that top MIM students could learn. This could be highly beneficial as, with the help of local entrepreneurs, CEMS students can bring a novelty to the start-up business model. Innovations increasingly come from EM and are then revised for richer countries, it is commonly called “reverse innovation”. Once understood, top MIM students’ learnings can be inverted and they can use this creative innovation process to improve any kind of business.

There are three different ways to connect with these start-ups. The first option is the CEMS student who finds on his/her own a company matching his/her interest and validates the internship with his/her CEMS academic supervisors. The second option could be partnerships pre-established between the host university in an EM and local start-ups. Finally, over the years, CEMS has developed strong partnerships in the social, environmental and non-profit sector. In the case of corporate partnerships, they are used for organising skill seminars, internships and business projects. On the other hand, social partners are only present for skill seminars. This start-up initiative could be a first initiative to take a move forward in the involvement with these social actors.

7.3. Courses at CEMS EM partner universities

As mentioned earlier, CEMS enjoys partnerships with top-ranked business schools and universities in emerging markets. Many students decide to take their exchange in Chili, India, Brazil, Russia, China, Egypt and Turkey. These students can fulfil their CEMS requirement in the host university. CEMS requirements include mandatory courses, block seminars and skill seminars as well as language courses. Courses such as CEMS global leadership in semester 3 and CEMS global leadership in semester 4 will be followed by exchange students in the host university as usual. Additional courses and options will be the subject of Section 7.5.

CEMS students can also choose some courses and activities at the host university. These elective courses can be, language courses, skill seminars and any extracurricular activities offered by the host school. Most activities can enrich CEMS students about emerging markets and provide them with relevant local knowledge. For elective courses, students have a variety of choices. Most courses will include a local perspective. Students can also choose to go further in their social involvement during their semester. By choosing a course such as Social Innovation given in the Indian Institute of Management Calcutta, CEMS students can work along with local students on a social project. These courses will always include a deep local

challenge and deal with creative and innovative solutions to solve problems for the bottom of the pyramid.

7.4. Designing the solution

Putting together all the pieces would give a semester with the following structure (Figure 20). This could come to replace one of the two exchanges some students have the opportunity to do at CEMS in the Louvain School of management (Cf. Term 3 or Term 4, Figure 20).

Figure 20: New design of the CEMS semester in emerging market

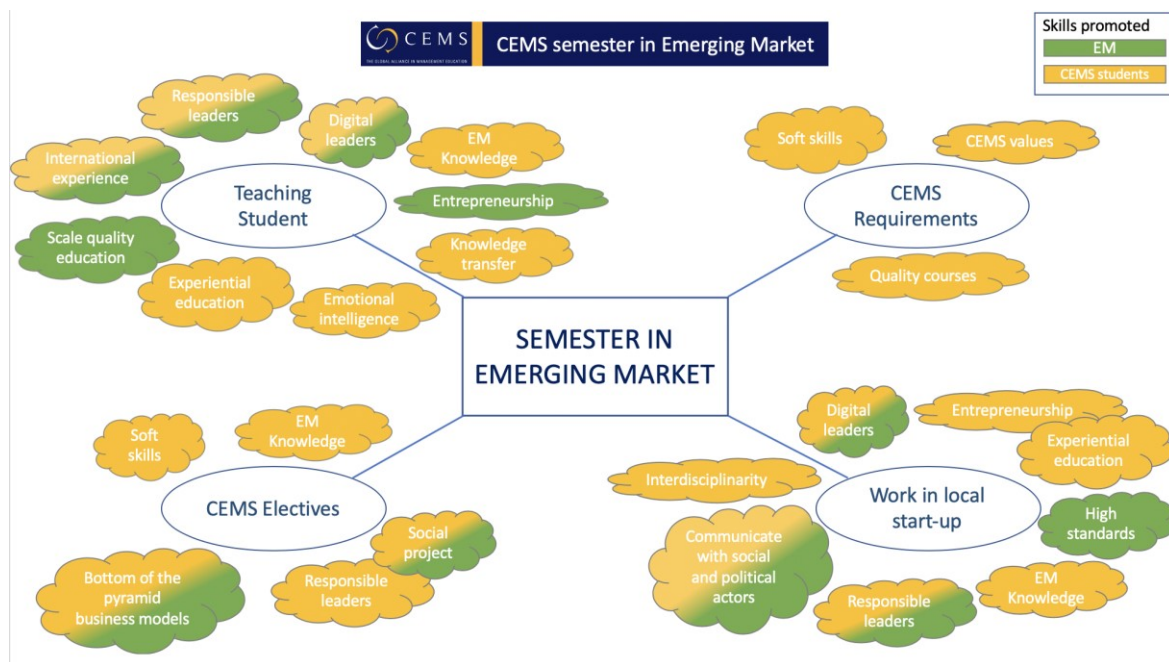
New design of the CEMS term in EM		
Term 4 @ Top MIM CMES partner university in EM		
2 courses at Top MIM university 1 mandatory & 1 elective + Mandatory soft skill seminars	Teach in a tier-2 university in EM Supervised by Professor and PhD teaching assistant from home university	12-weeks part-time work in a start- up in EM Coordination with CEMS social partner
10 ECTS	10 ECTS	12 ECTS
Total 32 ECTS		



CEMS-MASTER in Management					
GEST2MS/GE – ANNUAL BLOCK 1				GEST2MS/GE – ANNUAL BLOCK 2	
TERM 1 @ LSM		TERM 2 @ LSM		TERM 3	TERM 4
PART 1	PART 2	PART 1	PART 2	@ LSM or Partner University	@ LSM or Partner University
3 CORE COURSES Corporate Finance (5) Advanced Strategic Marketing (5) Corporate Social Responsibility (4)	CEMS OPTION International Business (5) International Financial Mngt (5) International Marketing Mngt (5)	3 CORE COURSES Seminar on Relational and Managerial Competences (3) Advanced HR and Organisation Mngt (5) Management Accounting OR Performance Management (5)	12-week INTERNSHIP (10)	3 CEMS Mandatory Elements Block Seminar (3) CEMS Strategy Course (min. 5) Business Communication Skills Seminar (1) + 2 CORE COURSES (LSM) International Strategic Management (5) Regenerative Economy (5) + 1 OPTION of 3 COURSES (LSM) (15)	3 CEMS Mandatory Elements Responsible Global Leadership Seminar (1) CEMS GMP Course (min. 5) Business Project (15) + 1 CORE COURSE (LSM) Supply chain and Sourcing (5)
SEMINAR ON CURRENT MANAGERIAL ISSUES (3)					
32 ECTS		23 ECTS		34 ECTS	26 ECTS
CEMS LANGUAGES AND SOFT SKILLS SEMINARS					
MASTER'S THESIS (20 ECTS)					

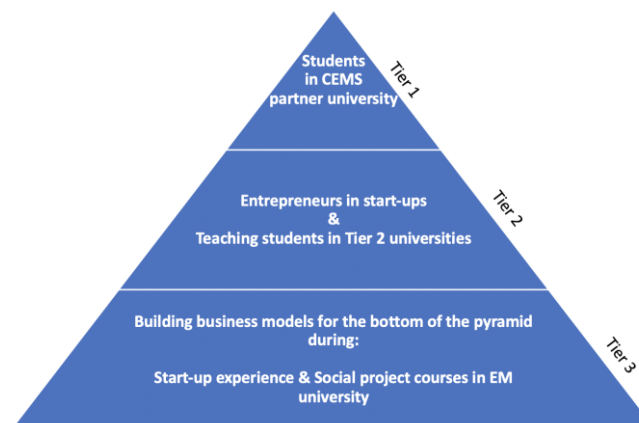
Students who participate in such a program will engage in a variety of learning opportunities that directly involve skills that are missing in the actual program. At the same time, different stakeholder groups in EM will benefit from the involvement of top MIM students. All the major impacts are represented in Figure 21.

Figure 21: Benefit of the solution for top MIM students and EM



In the actual program, CEMS students interact almost exclusively with other CEMS students or other students in the partner university. In the new semester, CEMS students on exchange will interact with many more stakeholders in the EM. They will have an opportunity to interact and impact all levels of society (represented in Figure 22). They will first be interacting with students of CEMS partner schools, who are tier 1 university students in EM. Secondly, they will teach students of tier 2 universities and work with the middle-class during their start-up experience. Thirdly, they will be trying to create business models for the bottom of the pyramid during their courses or their internships at a local start-up. This will put them in relations with the tier 3 society.

Figure 22: Stakeholder mapping - interaction and impact of CEMS students during their exchange with different level of society in EM



7.5. Additional solutions

On top of the main solution, which consists in changing one full semester of the CEMS program, we would like to suggest other solutions that can be implemented. These solutions are based on our interpretation from the literature and from the feedback and comments that students shared in the survey. These solutions were presented to students and academic directors, and their opinions are explained in the next section. Some solutions will be reviewed. Indeed, the semester in an emerging market will allow students to develop a lot of missing skills, but it does not solve everything.

Concerning the digitalisation, first, we would like to add skills seminars on digital tools. Those seminars can be done in collaboration with the most advanced corporate partners on this topic. Plus, to allow students to work more in a digital environment, we would encourage courses given in collaboration with different CEMS schools. Giving online classes and encouraging students to work in virtual teams would develop their digital skills. Such courses already exist in the network but are not yet implemented in the Louvain School of Management (e.g., Current Topics in Digital Transformation: Payments is a course given by SSE and HEC together with the Swedish Central bank). Another idea linked to the globalisation and standardisation of management would be to give the CEMS mandatory courses (e.g., CEMS global leadership & CEMS global strategy) online for every school in the network. This would consist in having the same theoretical part online, while the practice would take place on campus, in each university. Moreover, numerous students are interested in new technologies (e.g., AI), some presentations from guest speakers or introductory classes could start. Finally, as suggested by several students, to improve the digital image of the CEMS, the website should be updated.

Experiential education is already tackled with the main solution, but some other solutions can be introduced. First, courses could be based more on real business case problems, as this would increase students' interest. Second, a lot of students are interested in learning how to solve real business problems; therefore, it could be interesting to teach students how to crack a case, use a consulting issue tree and apply it to real problems. Students want to try and apply what they learn. Another idea would be to organise business games within the CEMS program, internationally or even locally, with real problems corporate or social partners are facing.

Relating to entrepreneurship, working in a start-up in an emerging country will of course develop it, but there are other ways to prepare students. First, talks from start-up owners could inspire a lot of students, and could be more present in the CEMS environment. Then, seminars

or courses about how to start a company could be very valuable to CEMS students. Innovation and creativity could also be developed through business games and solving real business cases. Another idea would be to encourage students to participate in other students' clubs and organisations to expand their interests and curiosity.

Regarding responsible leaders, we believe that by sending students in emerging countries it will open their eyes and will have a positive impact. However, some other solutions can be implemented to strengthen it. First, social partners should be more included in the community. Social responsibility and sustainability are core values of the CEMS, but it is not as present as it should be. To link it with the previous skills, solving real case problems of social partners could increase students' interest. Then, organising events raising awareness about sustainability or give the opportunity to students to give back to the community could be very insightful. CEMS CSR teams could organise more similar events.

Emotional intelligence is also tackled by sending students out of their comfort zone. Indeed, as Wallace (1993) explained, those new challenges build self-confidence, self-awareness, as well as a better understanding of others, environments and cultures. This aspect could be further developed and requires continuous work. Skills seminars, discussions with alumni, group discussions tackling self-awareness empathy and reflection should be implemented. Throughout those organised meetings, students could also work together to prepare interviews, learn how to design their CV and, network, receive career advice from alumni, and learn how to drive their own career path. Another way to increase empathy, be useful and discover a new culture or language would be to implement official buddy program for exchange students.

Regarding knowledge transfer, this will be practised in the emerging market. But this could also be further developed by organising mentoring between master 2 and master 1 students. Master 1 students might need master 2 advice, so organising sharing sessions might be insightful for everyone. An easy example being master 2 students who did an internship in consulting, could help students who are interested in developing their problem-solving skills or who also want to apply in consulting. This can be applied to any kind of internship.

Apropos hard skills, we would recommend introducing new courses and new skills seminars to complete the soft skills. A lot of students mentioned in the survey that CEMS content is too fluffy and lacks deep knowledge. Furthermore, as many students are interested in data analysis, modelling, programming and statistics software, a course could be created on this topic to give the basics to every interested CEMS students. A similar course already exists for students in business engineering at the Louvain School of Management. It could be adapted and offered to

every student. Other basic computer skills also have a huge interest among students, such as Excel and PowerPoint skills. New seminars should be available to students.

Finally, concerning the other soft skills, they will also be put in practice throughout the fourth semester, but again this is a skill that requires constant work. Those skills are easily implementable and often already in place, but it is important to stimulate communication, problem-solving skills, teamwork and adaptability throughout every course. Additional skills seminars can be introduced for the students, not at ease. Encouraging public speaking and storytelling can be done in different lectures.

Two main concerns can arise when presenting these new elements. First, is it really the role of business schools to teach those skills, and should everything be included in the program? Secondly, how can all this fit into a two-year program? First, it is important to know that skills seminars already exist within the CEMS network and is a key factor in its reputation amongst students. As the CEMS says, skills seminars “*are essential to kick-starting an effective professional career and fundamental to adjusting easily to an international management environment*” (CEMS). CEMS already decided to go the extra mile to allow its students to fully develop themselves and give all the tools needed to start an effective professional career. Students must participate in skills seminars for a minimum of 4 ECTS but there is no upper limit. Students have, therefore, the opportunity to develop themselves as much as they want. Offering all the previously mentioned elements, gives students the chance to complete their training. Skills seminars are mainly done in cooperation with corporate partners that are enthusiastic to provide those additional skills difficult to teach in an academic setting. Smaller groups, filled with proactive students, ensure an interactive session (CEMS). Adding new seminars ask additional work to contact the partners, but it does not require a significant amount of time, as it is the partners organising the seminars as such.

7.6. Students’ opinion

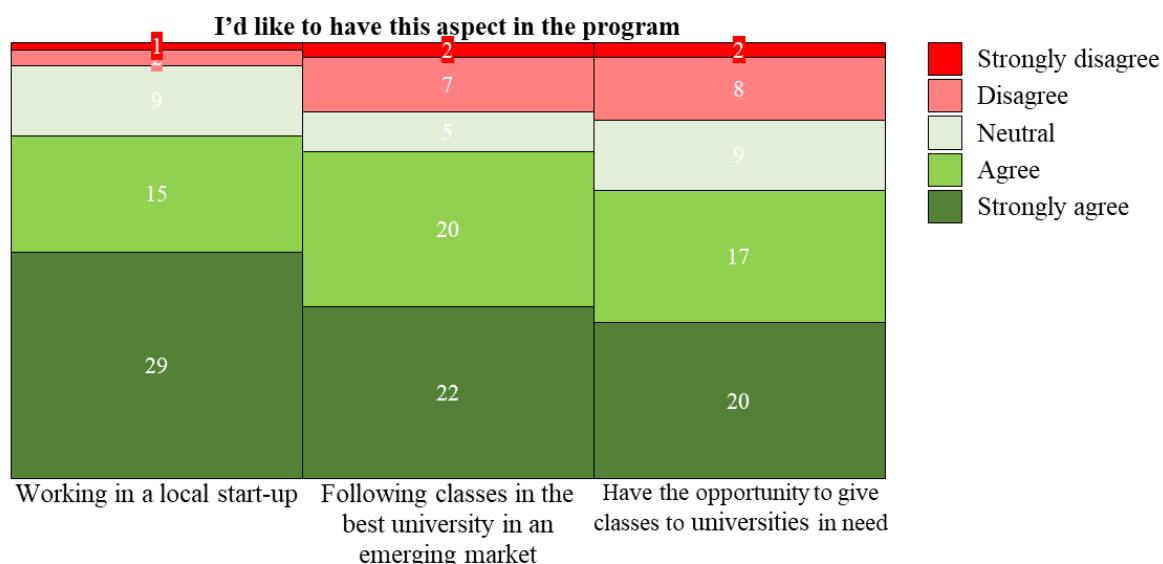
Through a second survey, CEMS students and alumni shared their opinion about the previous solutions. They participated in identifying the missing skills and room for improvement; so, it was relevant to ask them if they would be satisfied with the proposed solutions. The survey questions and results can be found in Appendix 5.

The survey gathered the opinion of 55 participants representing 18 CEMS schools.

7.6.1. The semester in an emerging country

The first section of the survey concerned the new semester in an emerging market. After explaining the solution and its three components, students were asked through a Likert scale to share their opinion. Figure 23 depicts the results.

Figure 23: Participants opinion on the 3 elements forming the semester in EM



As it can be seen in Figure 23 the majority of students agree or strongly agree with the propositions. The part of the solution that has the most success is working in a local start-up in an emerging country.

As this semester would be optional, and limited to a certain number of students, only the most motivated students would have access to it. And we can see through the survey that there are extremely motivated CEMS students.

Some students raised relevant comments and questions. First, there were concerns about the intensity of the semester. The three elements are great but together, it might be intense.

“All three things together seem like a lot to handle on top of studying your own classes... But it sounds awesome if you're ambitious and not scared to spend personal time on extra work/teaching” (LSM, Belgian student)

“I really like the idea of the additional semester. However, from my experience teaching a course, preparing for it etc. takes a lot of time and having courses and an internship next to that seems a bit too packed. Maybe the internship could then be moved to summer or winter break. But otherwise I think it's a really good initiative!” (RSM, Austrian student)

Indeed, a balance will have to be found between the three activities to make it enjoyable and not too intense. The idea is to experience the three elements but not full time. The students would follow classes 1 or 2 days a week, teach one lecture a week, and work 1 or 2 days a week in a start-up. Only extremely motivated students would participate in the semester. For example, at the Louvain School of Management, only around 10 students have access to 2 exchanges abroad. In this case as well only the most ambitious students, who see value in spending a semester in an emerging market, give courses, and work in a local start-up will apply for this semester.

A second concern raised tackles the language skills in emerging markets.

“While I like the idea of the teaching student, coming from an emerging country, not everyone speaks English, even at a Masters level and much less in Bachelors. Maybe in India it’s different, cause I’m sure more people speak English since they we’re under British rule for a while. I don’t know how it’s in Egypt, [...], but at least in Chile this would be super tough, as people mostly only know Spanish, and English only at an elementary level.” (UAI, Chilean student)

Indeed, this question needs to be further studied. However, it is not the case in every country, some countries try to push young students to learn English and having lectures in English would be another way to learn. The anglicization of higher education is a trend happening in a lot of countries. This has advantages and disadvantages, but it is not the topic of our thesis. The participant raised the question of Egypt, but most master’s in management are already in English. Moreover, a lot of CEMS students have several language skills next to English and would be able to teach in another language such as French or Spanish. The solution won’t be the perfect fit for every country or student but can still create a lot of value; this is further developed in Chapter 10.

A third worry was about how it can be perceived by emerging countries.

“Take into consideration what might be considered racist or imperialistic. The Instagram page nowhitesaviors has taught me personally a lot about the whole “I am not a professional but I’ll teach you something because I know better than anyone here” issue.” (WU, German alumni)

This is a concern that we had in mind throughout the entire solution design process because we want to avoid this image. Our solution provides positive outcomes to both markets and should be seen as a collaboration. Moreover, the solution is generalised and can go both ways. To

access the practical aspect of the solution, it was evaluated if top MIM students could go to teach in a tier 2 management university in EM. However, nothing prevents the flow to be inverted and have top MIM students of EM coming to teach in tier 2 universities or high school in the West. We understand that it can be misinterpreted and could, therefore, be a limit to this thesis' solution. This is further explained in Chapter 10.

The last uncertainty concerned the return on investments.

“I believe your analysis should take into account the ROI aspect of a CEMS degree at a given University. While certain public universities cost nothing, the students there would be relatively more willing to do the 'teaching in a developing country' aspect compared to those who have paid hefty fees at private universities and would probably have a focus on getting a job for the ROI aspect.” (ESADE, Portuguese student)

We agree that some students might not see the advantages of this semester, and would prefer to use their investment differently, such as doing a classic exchange in a top university. However, some other students, might see it differently and see the added value of an exchange in an emerging country. It also develops them, but differently, and has a different impact on a CV or personal development. Also, some CEMS schools (e.g., Université Catholique de Louvain) have budgets allocated to encourage academic collaboration with developing countries. Therefore, we could suggest that CEMS students who want to do this semester abroad become eligible for grants that would be financed through these budgets. This should be further studied (Chapter 10).

7.6.2. New courses, skills seminar and activities

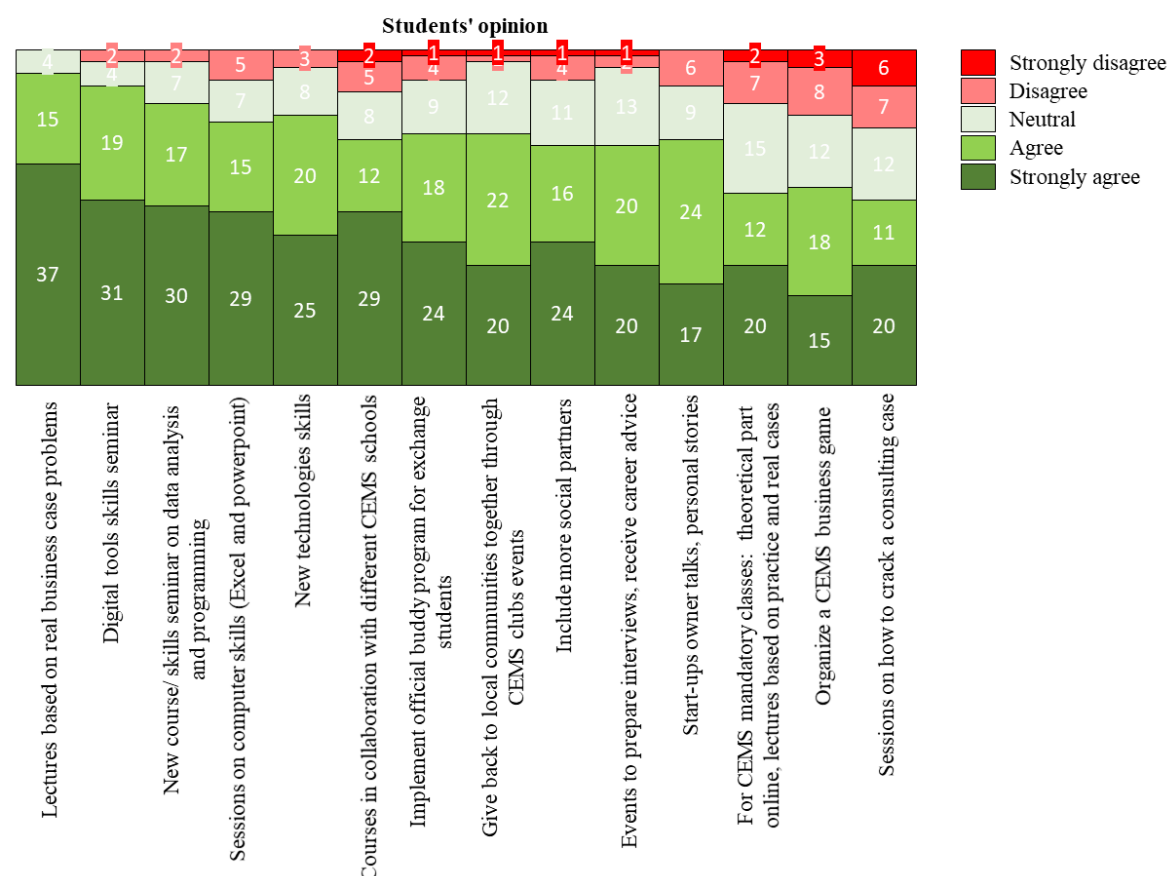
The second part of the survey was about new courses, skills seminars, and other events that could be implemented throughout the entire program. The students shared their opinion on 14 activities:

1. Digital tools skills seminar with the most advanced corporate partners,
2. Skills seminar on new technologies,
3. More courses given in collaboration with different CEMS schools,
4. Lectures based on real business case problems,
5. For CEMS strategy and CEMS leaderships mandatory class, have the theoretical part online, and focus the lectures on practice and real cases only,
6. Sessions on how to crack a consulting case,
7. Organise a CEMS business game,
8. Start-ups owner talks, personal stories,
9. Include more social partners,
10. Events with CEMS club to give back to local communities together,
11. Events to prepare interviews, receive career advice,
12. Implement an official buddy program for exchange students,
13. New

course or skills seminar on data analysis and programming, 14. Sessions on computer skills (Excel and PowerPoint).

The following picture shows on a Likert-scale what students think about the solutions.

Figure 24: Participants' opinion on additional activities



As it can be seen in Figure 24, most solutions have a great success among CEMS students.

We are aware that asking students' opinions on those skills could be biased as it did not take into consideration the cost of adding them. Students always want more for what they pay. Results might have been different if we asked: 'Would you like to have this event instead of the former one?'. The resources to organise these new events will have to come from somewhere, and one could think that it could negatively impact the existing activities. However, most new activities are coming from corporate partners, the CEMS club, or students' initiatives. No harm will be done to activities organised by the university itself. We suggest upgrading some courses, but it is not about creating new content, it is mainly about adapting an existing one.

The idea with the most unanimity was about lectures based on real business case problems. A student brought a relevant nuance, it is not all about bringing real cases in class, but it is important to present the use and relevance of the case:

“The general advices this questionnaire projects are quite significant and beneficial to CEMS student. Indeed we already have “real-case” solving part in the teaching procedure, however most of us are not aware the practicality of the “case” we made. Students tend to grow the tendency “just to finish the task to solve the case” not to “think about the real use of the solution in terms of budget, labor, cost...”” (VSE, Chinese student)

For the other solution, most students are attracted by the propositions. Most of the activities are optional, therefore, only interested people will apply, and the events will be a success as the graph shows. The only activity that would have an impact on all the students, is the CEMS mandatory classes theory moving online, the survey showed that not everyone likes the idea, and it should, therefore, be further studied.

Concerning the hard skills, a lot of students mentioned again their importance, and should, therefore, be more present in the program.

“Programming and statistics would have helped me in my job” (WU, Romanian alumni).

“More hard skills: advanced excel, power point, data analytics software, business modeling, financial modeling” (UB, Italian student).

A student proposed a great idea, concerning those advanced PowerPoint and excel events. Students who already developed those skills, could practice their teaching skills, and help their fellow students. As he or she wrote: *“Brilliant proposal - an alternative idea could be that CEMS students deliver some of these additional classes (e.g. Excel/PowerPoint/PowerBI skills) under the supervision of a professor. So the student gets the experience in teaching and leadership but the quality of the course is validated by having input from a member of the academic faculty”* (VSE, Swedish student).

Concerning the idea about the events for interview preparation and career advice, students strongly approve the idea: *“Also complete events concerning the CV construction, interview process and career consultation would be more beneficial to both corporate partners and CEMS students”* (VSE, Chinese student).

To conclude, overall, the proposed solutions are welcomed with enthusiasm by the students. We believe it is normal that not everyone strongly agrees with it, and we don't see it as a problem, as it is optional. It could still develop a lot of students, as recognized in the answers. *“These are all positive features that would enhance our education”* (SSE, Hungarian student).

7.7. Academic directors' opinion

The initial goal was to interview several CEMS academic directors, but the pandemic made this task difficult. Therefore, we designed a survey instead to make it less time-consuming for them. The objective was to receive their opinion on the feasibility of our ideas. Unfortunately, we only receive one answer, which is not enough to draw any conclusion. Being in the middle of a crisis, the workload of professors has increased substantially, and they shared they did not have time to participate, and that we should contact other stakeholders. The other stakeholders were already contacted, and we believe their opinion was crucial as they would have a major decision in the solution implementation. It would be interesting to know if the pandemic was the only reason, they did not answer the questionnaire or if it is an early sign of resistance to change.

8. Resistance to change in the HE environment

In most countries, higher education began as a public responsibility, but the trend has shifted, giving more independence to HE institutions. Nowadays, these institutions are financed by different stakeholders and must satisfy divergent needs. In addition, managing change in HE is much different than in classical business organisations. Understanding (1) the barriers of change and (2) what strategies to cope with them are at the core of this chapter's objectives.

Funding is the first barrier for change coming from outside the organisation. On the one hand, governments, which have been lowering their investment, face the challenge of pushing HE institutions to comply with the public interest agenda. On the other hand, HE institutions are struggling to generate decent revenues that will sustain their quality education and their complex portfolio of objectives (GFME, 2008, p. 35). In order to answer to escalating costs, in many OECD countries, private spending exceeded the increase in public spending. In some of these countries, government spending has declined in real term (Hahn, 2007, pp. 2-7).

A greater demand coupled with a global offer has intensified competition amongst business schools and universities, giving again more importance to differentiating factors such as rankings and international accreditations standards.

As funding is inherently related to autonomy, many management institutions find it increasingly difficult to balance local funding with their global aspiration. Government or other local public institutions financing usually comes with different constraints that are not necessarily matching with the global mission of management universities (Rousseau, 2005, pp. 64-65). This paper will not enter into further details concerning the financing of universities. The goal here was to highlight the competitive trend on the industry and which institutions impact the financing of universities and higher institutions in management. The underfunding of universities and the switch from public to private funding will have an effect on the governance and strategy of management HE institutions (Jelavic, Vasic, & Matesa, 2013, pp. 35-37).

Limited funding and independence from both the private and public sectors have to be taken seriously into account for any attempt to find new solutions for management education. According to the global management education landscape report (2008), insufficient funding of management institutions is a barrier to innovation and limits school's new product development as they are more risk-averse. An effort to introduce the new solution presented by this thesis will therefore require funding. The budget does not necessarily have to finance the new program's operations but rather to finance change through a fund for new program development.

A second factor to be taken into account when talking about change is organisational culture. Managing change in HE institutions is not an easy process and it is usually done in times of high financial pressure and unclear vision for the organisation (Meister-Scheytt & Scheytt, 2005, p. 1). Moreover, managing change in HE institutions is significantly different than in business organisations. Classical resistance to change found in businesses is usually due to fear of the unknown. Whereas in HE institutions, resistance to change can be due to staff thinking their professionalism is being challenged, questioned, suspected. This means that in educational settings, change management has to be tackled in a totally different manner. Change strategies have to be adapted (Grant, 2003, p. 72).

It is documented that HE institutions can resist important change. University faculties have a lot of autonomy with very little supervision over the confection of curriculum, and pedagogical methodology. They act as entrepreneurs within the organisation (intrapreneurs). This is why change in HE institutions can hardly be seen as a top-down approach; it is rather relying on

voluntary adoption of change (Fairweather, 1996). This shows that in HE, an attempt to change has to be done through the establishment of creative culture and mode of behaviour rather than imposing an outsider structure. A co-creation approach with the main people impacted by the change (professors) to ensure early buy-in.

Grant (2003) study on HE changes draws an interesting metaphor between HE institutions and “preliterate simple societies”. In his case, he uses Lutz (1986) notion of witchcraft, witches and shamans. Grant and Lutz show how the same system at use in “preliterate simple societies” can be found in HE institutions. This system is used to maintain organisational social order, status quo, defeat change, and change agents. The lack of formal leadership control is common enough in both types of organisations to allow comparison and examine certain administrative and organisational behaviours.

In their papers, they analysed many HE institutions. The process of resistance to change of some senior lecturers in HE institutions was found similar to the process of witchcraft. Some senior professors and the heads of the school were compared to the Shaman. The external change agent was compared to the witch who tries to challenge the preconceived beliefs of the tribe. Lutz (1986) shows how the process of “witch-hunting” occurs and how social order is maintained in HE institutions:

- There is a general lack of understanding of empirical causes of the disasters in society.
- Given the misfortune of society, mystical explanations are employed.
- An accepted diviner or shaman is appointed, not to discover, but to proclaim the witches so they can be dealt with.
- The shaman perceives an outsider, who becomes a change agent of the organisation offending many norms of the informal organisation, as being antisocial and likely to be accused in the informal organisation of some sort of witchcraft.
- Once identified, the Shaman seeks consensus through the internal gossip network.
- After obtaining consensus, the Shaman publicly accuses the suspected witch.
- Once identified, the witch is ostracised or driven out and the organisation can come back to normal. Tension is relieved and the status quo is re-established.
- Allegations against witches usually occur during high periods of high organisational conflict and anxiety.

Sources: Grant (2003, p. 77); Lutz (1986, pp. 49-51)

In Grant's study, a small but core group of senior university professors and staff were very critical toward new reforms. They were predominantly academics that had been around for more than twenty years. They found it difficult to find any positive aspect of the new reforms and wanted to come back to the good old days. Anthropological comparison of "simple societies" with complex organisations such as HE institutions is interesting in identifying the barriers to change. It seems like an essential understanding for any attempt to make a change in the HE environment.

Once aware of these mechanisms, a new toolkit can be used. The issue should be faced at the meso level instead of the little individual or wide cultural level. The vernacular environment is to be taken into account as HE institutions are made of many interdependent parts that have to work together. The latter system is different in each institution. In many cases, the leader's perspective or the "big picture" is not understood by everyone as some people have other networks that may be more centred on one department. These people have been found to follow their network tendencies and return to the status quo. On the other side, promoting change with the only purpose to have changes might be a waste of resources. Reflexion before implementing changes is key, and resistance to change can help challenge the new ideas. Finally, a good understanding of the balance of politics, practical vision and educational change is essential for leading change in HE (Grant, 2003; Lutz, 1986).

9. How to create a dynamic approach for curricula renewal

After creating a new program, it is important to find a strategy to always keep its content up to date. As seen earlier, a large part of this paper focused on the role of modern HE in management and how elite MIM reformed their curricula to answer the needs of the 21st century. It was seen that the HE in management environment followed a continuous line of improvement with some disruptions. In this part, the focus will be given on how to design or improve modern-day curricula: What are the methods used? Which ones are the most effective?

This paper has highlighted multiple times the implications of living in a VUCA environment. HE institutions in management are not an exception: they are part of the same environment. However, until now, the approach for curricula development is focusing on static learning outcome instead of a continuous process of relearning and adaptation (Kolb; Tsui & Dragicevic, 2018, p. 849).

Tsui and Dragicevic (2018) attribute part of the issue to HE institutions that “*often fails to give the participatory role to students in construing the knowledge relevant to the subject field and that lacks in mechanisms to continually renew the curriculum by involving students in curriculum design*”. Some studies have suggested switching to more dynamic curricula designing and shortening programmes lifecycle (Albert & Beatty, 2014; O’Keefe, 2013; Oliver, 2013). Furthermore, they have developed many methods for curriculum renewal. However, student participation in curriculum creation stays marginal. Tsui and Dragicevic (2018) have, therefore, tried to build a new method to programme design. The new method takes previous methods into account and adds a layer of student participation. The method focuses on scenario planning and personal learning environment and networks (PLE&N).

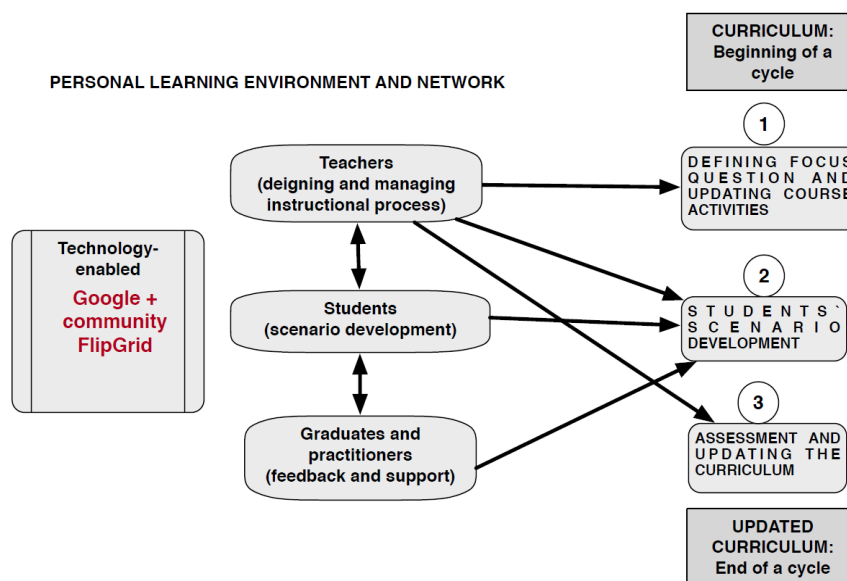
Scenarios are seen as alternative hypothetical futures that can serve as basis for action (van Notten, 2006, p. 71). These scenarios are influenced by a series of forces and actors. This method has been widely used to improve decision making and organisational alignment; help with community dialogue, planning tools, making new policies and environmental scanning (Van der Merwe, 2008). Scenario methods can be used with other tools and technologies. They are also both content and process related which can make them a good tool for educators to imagine what possible future can improve the life of students, and therefore, create a curriculum allowing them to thrive in this future (van Notten, 2006).

Personal learning environment and network (PLE&N) is a collaborative platform allowing students, teachers and graduate practitioners to interact and collaborate beyond the classroom for learning activities (Tsang & Tsui, 2017). It is a peer to peer approach allowing meaningful social interactions which helps many stakeholders participate in the understanding of the subject and share valuable input for curriculum improvement. PLE&N can be done through very basic technologies platforms such as Google +, Facebook or FlipGrid.

PLE&N combined with scenario development create a holistic approach for curriculum co-creation. This can be done through the three steps model created by Tsui and Dragicevic (2018) and illustrated in Figure 25. It is an incremental approach that takes place throughout the academic year. Students are at the centre of the model. The role of professors changes from providing information to designing the overall model for knowledge sharing and learning. The student role shift from passive learning to creating the course content. For example, students can be asked to develop multiple scenarios for the future of a certain field, the variables affecting the scenario, assess their probability, impact and the different stakeholders. When

students do their scenario analysis, professors and graduate practitioners give their feedback and area of improvement.

Figure 25: A model for curriculum co-creation and renewal (Tsui & Dragicevic, 2018).



The cycle curriculum co-creation works in three steps. First, the professor communicates on the focus question, how far should be the scope of scenario thinking; and how it should be incorporated in the course activities. Secondly, students develop scenarios and identify multiple key variables and stakeholders. They create narratives about these uncertainties. Lastly comes the cyclic and iterative phase. In this third step, teachers and graduate practitioners evaluate students' scenario. They assess scenario with quality criteria such as: relevancy in the current context and takes reflection beyond present assumptions. Each scenario has to provide a surprising and challenging story; it has to be plausible, following a certain logic of thinking. Finally, if the scenario missed any main dynamic (Van der Merwe, 2008, pp. 231-232).

After each cycle, professors are able to assess relevant trends and take them into account in their next courses. This combination of scenario and personal learning environment and networks allow to take into account many uncertainties, put students at the centre of the analysis without making abstraction of the valuable input of the practical world. It allows teachers to update curriculum on a regular basis taking creativity and diversity of ideas into account. Students are creating their own knowledge instead of listening passively, giving them a sense of ownership (McBride et al., 2017, p. 17). They learn how to make use of all the surrounding information to improve a given field and predict various outcomes. Hence, having a better understanding of how the future could be which is essential for businesses, entrepreneurs, investors and knowledge workers.

PLE&N combined with scenario planning could be introduced in mandatory courses common to all CEMS students such as Global management practice or International Strategic Management. Using this new strategy in CEMS courses would be valuable as it would be representative, taking the insights of all CEMS students at once. These two core courses usually enlarge their scope to other learning seen during the whole program. Therefore, the collaborative reflection would serve to make new scenarios and continuously update the new solution as well as other initiatives within the CEMS program.

10. Limits and next steps

This chapter mentions the limits this research and solution are encountering as well as the next steps to take to overcome those limits and bring the solution forward. The limits can be divided into four main categories: the solution structure and image, its inclusiveness, its practicability, and the stakeholder's involvement.

Solution structure and image

Concerning the program itself, further research should be made on hybrid programs and the perception of the new program.

This paper brings a hybrid model as a solution and would like to push further research on these new programs. It will not be stressed enough how important ICT is in the management education field. HE institutions became a voracious user of ICT: to coordinate a growing number of students; to support the infrastructure, financing, and staffing of educational institutions, to provide online courses and other teaching material such as research databases and online libraries (GFME, 2008, p. 16; Nyandiere, 2006). ICT has been used to address the growing demand in business education for both university students and working professionals. However, this thesis did not focus enough on blended learning practicability. Little practical researches have been done on hybrid MIM programs that are grouping the best of the online world and the traditional educational system. Further research on the practicability, advantages and disadvantages of blended learning in the MIM program should be done.

The actual Covid-19 pandemic might be a good head start. On the one side, it pushes education to move online and on the other side, it makes people realise what are the limits of the online educational environment. This forced situation will generate a lot of valuable insights that will potentially create new knowledge and give higher relevance to hybrid programs.

Concerning the perception of the new program, it is essential to further study how other stakeholders might interpret it. In the solution, the needs of both EM and top MIM students have been approached to provide a win-win learning environment. One limit could be that the solution might be catalogued as: “imperialist”, “patronizing”, “occidental superiority”, “unequal win-win”. However, the entire design process has been focused on avoiding the imperialistic view. In the current vision of this paper, both parties are working together as equals, in symbiosis, and their only goal is to improve management education. Nevertheless, people could still be facing reticence and without further research, it is difficult to anticipate the reactions. Plus, this would differ from country to country and people to people.

Solution inclusiveness

It is important to stress out that the solution is not a one size fits all. Students valuing different aspects of education and life, having different constraints will coherently choose different learning activities and development paths. Some CEMS students will be more interested in their short-term financial return on investment and choose to get a job as soon as possible. Some other students will value more the impact they have on developing economies at present. There are as many scenarios as there are CEMS students around the world. However, the solution is not designed for the CEMS community as a whole, but it is rather offering more diverse choice within the CEMS program. Students who value more the aspects found in our solution will choose to participate. Our first survey has just been revealing missing needs in the program and the second survey has confirmed students’ engagement and desire to participate in such a new program. However, a limit of this approach is that it is based on stated preferences. Implementation would provide evidence of revealed preferences. These two can differ as people do not always do what they say they would.

Moreover, studies, in general, require an important financial investment, and students may want to use their investment differently. On top of that, for the solution to be complete and more inclusive, it could be further elaborated to include a salary for teaching students or allocating student grants. For example, at the LSM, student assistants already receive a salary, and grants are already in place to foster cooperation between LSM and universities in EM. The solution of this thesis could take these options into account in the design of its solution. On top of this, students could have a special mention on their diploma and would be able to mention their additional experiences on many occasions (e.g., CV, interview).

Solution practicability

Additional steps need to be taken to make the solution practical. Finding a highly practical solution was at the centre of all reflection. Empirical results on the practical implication of such a program are essential for any attempt to have a real impact on the management education environment. The next step should focus on the execution of this new model. This would imply contacting the CEMS global office to establish a task force including professors, academics, and students. Together, they can put in place a project management plan aiming at testing the solution. This would include schedule planning, a list of hypotheses to test, a budget, and assigning roles and responsibilities.

As the thesis looked at how the solution could be matched with the CEMS program at the LSM, a pilot project should be conducted there to test the hypothesis. If successful, the solution could be applied to other CEMS partners or even other education institutions in other fields.

An agile methodology to move forward is strongly recommended as the environment will continue changing quickly and implementing such a novel solution will probably need a lot of testing and consequent adaptation. Although this thesis can be considered as applied research, the next step of our solution will have to take a step further in the application process. Educational and managerial research, theoretical reasoning, and even surveys aiming at understanding stakeholder's preferences will not be enough. The approach will have to engage in a more agile loop of development resembling to Kolb learning loop, experiential education, and lean management.

On top of the suggested solution, it is a great opportunity for the LSM to be aware of what is going well and what could be improved in their institutions. The two surveys outlined criticism about LSM. For example, negative comments were made on the transparency system of decision making at CEMS LSM, another comment mentioned that not everybody speaks English, slowing down internationalisation process, and several comments pointed out a quality gap between LSM and other CEMS schools. Analysing CEMS at LSM was not part of the thesis, and was not a specific question in the survey, therefore, not enough comments were gathered to draw any conclusion. However, it might be interesting to do some research on why some students are criticising the CEMS school. Further research on what can be changed to improve the program's integration in the Louvain school of management and what is LSM doing differently than the other CEMS schools can be of great value.

Involve every stakeholder

On the one hand, the research faced limits in engaging future CEMS students and CEMS academic directors, and on the other hand, as they are numerous stakeholders it was not possible to deeply analyse and please all of them.

First, the opinion of current students and alumni were asked twice during the research to identify the missing skills and sharing opinions on the solution. Future students were not included in the research while they are the students that would apply in the new program. Therefore, it would be important to analyse if their opinions diverge. Additionally, a nuance should be further analysed on: “Is what students want, what they really need?”.

Second, HE institutions usually organise surveys to get feedback on their activities, self-reflect, and improve. This is common practice for both LSM and the CEMS program. However, this approach is not collaborative. During the elaboration of the solution, inquiries were made to have access to the CEMS survey and get feedback from CEMS academic directors. Both were failed attempts. Most of communication resulted in non-answered mails, the rest stated that the content is not sharable. After the two surveys, the solution contained relevant data on how to improve the program, it included feedback on the program and opinion coming directly from CEMS students, however, the interest of CEMS academic directors was still very low. There was no answer and no attempt to consider the work for further reflection to improve the program. This lack of answers does not necessarily imply a lack of effort to improve the system, especially under COVID-19 circumstances. It can also mean that another moment or way to approach academic directors is needed. This could be done through scientific articles that gain notoriety before ending up in the hands of academic directors. Another way to get visibility will be to apply for thesis prizes, if an award is given to our work, it could create more interest for academic director. Lastly, communication in the student community could be increased, showing the advantages of the solution through talks, conferences and eventually inviting external speakers. This latter approach could use the pull-marketing method. Students would express their missing needs and manifest their intent to have a new program filling these needs. In this case, academic directors could be more interested in a novel solution answering the specific needs requested by their students.

Going further, one of the strengths of our work is integrating the interest of many stakeholders but it can also be a limit. The paper has been aggregating the need for change of many institutions, academics and governments, students’ needs in both top MIM universities and tier 2 management schools in EM through thorough literature review and, CEMS students and

alumni through surveys. Missing stakeholders are future CEMS students, and once again academic directors in both top MIM and EM institutions. The limit is illustrated by the compromise of staying general, trying to gain a global perspective that at the same time prevented us to gain deep understanding of one specific stakeholder. Moreover, pleasing many stakeholders always requires compromise.

11. Conclusion

The thesis is an attempt to rethink higher education in management. It focuses on the missing needs and skills of both top MIM and tier 2 management universities in emerging markets. Their needs are analysed, compared and prioritised in order to find common ground and complementary needs that result in a symbiosis between the two parties.

One of the first achievements of this research was to draw a compact and comprehensive outlook of what needs are satisfied and what skills are missing in the management education environment for both top MIM universities and in tier 2 management universities in EM. For top MIM, missing needs include digital skills, experiential and entrepreneurial education, the need to build responsible leaders with emotional intelligence and the ability to transfer knowledge. Leaders should have both hard and soft skills, and a strong international experience. For tier 2 management education, the needs are to scale quality education, develop entrepreneurs, digital and responsible leaders able to cooperate with social and political actors with robust client orientation, and international experience.

The work focuses on defining, understanding these skills and their impact on students, keeping as an aim to create talented responsible leaders of the 21st century. Matching the missing skills of both parties was one of the critical success factors of this work.

Thirdly, the work identifies many similarities and complementarity between the missing needs of top MIM and tier 2 management education in EM. By looking at the main results, we can find the common need to create (1) responsible leaders, (2) entrepreneurs and (3) digital leaders. On the other side, complementary skills include the need for scaling quality education in EM and the need to transmit knowledge for top MIM students. (2) The need for entrepreneurship and experiential education is matched with being an entrepreneur in an EM start-up. And (3) the need for knowledge about EM is matched with EM students needing international exposure.

Fourthly, all these common and complementary goals are put together to create a new CEMS semester. This semester abroad in a CEMS partner university in EM combines four components addressing all the missing needs of both top MIM and tier 2 management education in EM. The exchange semester includes (1) exerting a responsibility role in a start-up, (2) teaching in a tier 2 university in EM, (3) attending courses in a top MIM institutions in EM, and (4) additional skills given through courses, talks, soft and hard skill seminars. All of which is done while satisfying the CEMS academic criteria.

Throughout this work, it was found that variables shaping the fast evolution of the higher education in management environment included the fast-moving global environment and the fast-changing needs of students, companies and governments. It was also seen that some factors are limiting change. The main barriers limiting change in the higher education environment are: competition pushing to standardisation and more risk-averse organisations, politics pushing HE institutions to comply with the public interest agenda, source of funding limiting the independence of some institutions and finally organisational culture.

To deal with this complexity, the comprehensive framework based on the notion of witchcraft, witches and shamans offers a new toolkit. The new budget should finance change and fund new program development. This has to be complemented by appointing an agent for change. The agent should act at the meso level and have a clear understanding of the balance of power in the local institution. In addition, the HE institution has to promote a creative culture for change.

Fifthly, the 21st century is not in look for one change but rather a dynamic approach that allows continuous adaptation to the fast-changing needs. Therefore, for the proposed solution to cope with the fast-moving environment, the thesis suggests using the PLE&N method combined with scenario planning. This new approach is integrated into one of the two CEMS mandatory courses. As such the solution is continuously up to date by means of a dynamic and collaborative approach for curriculum development.

Finally, as identified in the last chapter, next steps include the implementation of the solution through an agile methodology in order to test many hypotheses and evaluate the viability of the solution, make it more inclusive and involve the missing stakeholders.

“Future leaders are going to come from the school that we have now and if we better equip the students now for what the future will look like our world will be better” (Sinek, 2019). Therefrom, assessing the need to reform higher education in management and finding practical solution to answer the missing needs become primordial. The mission is challenging, as it

involves many stakeholders and various interconnected forces. However, by using a symbiotic model, this thesis leverages the needs of different parties and transforms them into new strengths and learning opportunities adapted to the 21st century.

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Appendices

Appendix 1: Teach design thinking to students

Figure 26 : Educational Design Ladder Pedagogy and curriculum (Part 1) (Wrigley & Straker, 2017)

Table 1. Educational Design Ladder pedagogy and curriculum.

Step	1	2	3	4	5
Knowledge D.T level Theme	Factual Foundation level Theories, methods and philosophies	Conceptual Product level Product content design	Conceptual Project level Design management	Procedural Business level Business strategy	Metacognitive Professional level Personal development and leadership Evaluation
SOLO taxonomy Description	Knowledge comprehension Recall or recognise information. Understand meaning, re-state data in one's own words, interpret, extrapolate, translate	Application Use or apply knowledge, put theory into practice, use knowledge in response to real circumstances	Analysis Interpret elements, organisational principles, structure, construction, internal relationships; quality, reliability of individual components	Synthesis Develop new unique structures, systems, models, approaches, ideas; creative thinking, operations	Assess effectiveness of whole concepts, in relation to values, outputs, efficacy, viability; critical thinking, strategic comparison and review
Activity	Multiple-choice test, recount facts or statistics, recall a process, rules, definitions; quote law or procedure. Explain or interpret meaning from a given scenario or statement, suggest treatment, reaction or solution to given problem, create examples or metaphors	Place theory into practice. Demonstrate, solve and manage a design project/s	Identify constituent parts and functions of a process or concept, or de-construct a methodology or process, making qualitative assessment of elements, relationships, values and effects; measure requirements or needs	Develop plans or procedures, design solutions, integrate methods, resources, ideas, parts; create teams or new approaches, write protocols or contingencies. Review strategic options or plans in terms of efficacy, return on investment or cost-effectiveness	Develop personal and professional skills. Demonstrate the importance of developing the correct skills to recognise opportunities and nurture the process of bringing innovative ideas to fruition
Verbs	Arrange, define, describe, label, list, memories, recognise, relate, reproduce, select, explain, reiterate, reword, critique, classify, summaries, illustrate, translate	Use, apply, discover, manage, execute, solve, produce, implement, construct, change, prepare, conduct, perform, react, respond, role-play	Analyse, break down, catalogue, compare, quantify, measure, test, examine, experiment, relate, graph, diagram, plot, extrapolate, value, divide	Develop, plan, build, create, design, organise, revise, formulate, propose, establish, assemble, integrate, re-arrange, modify	Review, justify, assess, present a case for, defend, report on, investigate, direct, appraise, argue, project-manage
Topics	Reflection, ideation, design process, design history, defining design, creative thinking (idea generation), group dynamics, wicker problems, design contexts, visualisation, experimentation, prototyping	Idea generation, user focus, concepts, aesthetics, communicating visually, iterate and evolve design theoretical and practical aspects of design, sketching, form and function	New product design and development, project management, marketing research, market identification and requirements, opportunity mapping, scenario planning, capital and variable costs, environmental requirements	Strategic design, business frameworks, service design, comparative analyses of business opportunities, branding strategies, brand management, business plans, budgets and financial management	Integrate principles of client service provision, advertising, marketing, leadership, competitive threats, innovative concepts, change management, innovation, entrepreneurship, reflective practice, and professional development

(Continued)

Figure 27 : Educational Design Ladder Pedagogy and curriculum (Part 2) (Wrigley & Straker, 2017)

Table 1. (Continued).

Step	1	2	3	4	5
Learning modes	Lectures, tutorials, design charrette, group work, lectures, tutorials, online modules, discussions, panel discussion, case studies	Short collaborative design projects, workshops, lectures, tutorials, field study, individual and group challenges	Workshops, partner with industry sponsors, lectures, tutorials, course readings	Workshops, industry projects, tutorials, study visits, online class discussions, group activities, individual research, self-directed learning	Work integrated learning, digital lectures, online discussion, independent research, Skype, blog posts, wikis, peer coaching
Assessment	Analysis of design process, designing research journal reflective essay active participation	Design projects. Written and oral, individual and group design activities	Oral Exam, project plan, research journal, intensive experimentation and project work, reflective essay	Business plans, pitches, business strategy simulation, exams, discussion online, blogs, workbooks, reflective essay	Reports, group work, presentations, critiques, solve industry-based problems, business reports, class participation

Appendix 2: Link between ICT and 21st century core skills

Figure 28: Link between ICT and 21st century core skills (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017)

21 st -century digital skills dimensions	Conceptual definition with operational components
Technical	The skills to use (mobile) devices and applications to accomplish practical tasks and recognize specific online environments to navigate and maintain orientation. Key components (e.g. Ng, 2012; Van Deursen et al., 2016): - ICT knowledge: understand the characteristics of (mobile) devices or applications. - ICT usage: operate basic (mobile) application operations and access resources for everyday use. - Navigation: avoid losing orientation when navigating online.
Information management	The skills to use ICT to efficiently search, select, organize information to make informed decisions about the most suitable sources of information for a given task. Key components (e.g. Ahmad et al., 2016; Snow & Katz, 2009): - Define: use ICT to formulate a research statement to facilitate the search for information. - Access: use ICT to find and retrieve information from a variety of online sources. - Evaluate: use ICT to judge the usefulness and sufficiency of information for a specific purpose. - Manage: use ICT to organize information so as to be able to find it later.
Communication	The skills to use ICT to transmit information to others, ensuring that the meaning is expressed effectively. Key components (e.g. Claro et al., 2012; Siddiq, Scherer, & Tondeur, 2016): - Transmitting information: use ICT to communicate information and ideas effectively to multiple audiences using a variety of media and online formats.
Collaboration	The skills to use ICT to develop a social network and work in a team to exchange information, negotiate agreements, and make decisions with mutual respect for each other towards achieving a common goal. Key components (e.g. Choy, Deng, Chai, Koh, & Tsai, 2016; Helsper & Eynon, 2013): Interactive communication: generate meaning through exchanges using a range of contemporary ICT tools. - Interactive communication: generate meaning through exchanges using a range of contemporary ICT tools. - Participation in discussions: use ICT to share ideas (e.g. in online platforms).
Creativity	The skills to use ICT to generate new or previously unknown ideas, or treat familiar ideas in a new way and transform such ideas into a product, service or process that is recognized as novel within a particular domain. Key components (e.g. Hinrichsen & Coombs, 2013; Mengual-Andrés, Roig-Vila, & Mira, 2016): - Content creation: use ICT to generate ideas or develop new ways of doing things.
Critical thinking	The skills to use ICT to make informed judgements and choices about obtained information and communication using reflective reasoning and sufficient evidence to support the claims. Key components (e.g. Greene, Yu, & Copeland, 2014; Lee et al., 2016): - Clarification: use ICT to ask and answer questions of clarification related to the problem. - Assessment: use ICT to judge the suitability of a source for a given problem. - Justification: use ICT to invoke arguments for claims based upon their consistency with other knowledge claims (e.g. personal, memory, testimony, coherence, rationality, replication). - Linking ideas: use ICT to link facts, ideas and notions. - Novelty: use ICT to suggest new ideas for discussion.
Problem solving	The skills to use ICT to cognitively process and understand a problem situation in combination with the active use of knowledge to find a solution to a problem. Key components (e.g. Greiff, Wüstenberg, Holt, Goldhammer, & Funke, 2013; Scherer & Gustafsson, 2015): - Knowledge acquisition: use ICT to acquire implicit and/or explicit knowledge about the problem. - Knowledge application: use ICT to apply implicit and/or explicit knowledge about the problem to find a solution.

Figure 29: Link between ICT and 21st century contextual skills (Van Laar, Van Deursen, Van Dijk, & de Haan, 2017)

21 st -century digital skills dimensions	Conceptual definition with operational components
Ethical awareness	The skills to behave in a socially responsible way, demonstrating awareness and knowledge of legal and ethical aspects when using ICT. Key components (e.g. Claro et al., 2012; Janssen et al., 2013): - ICT responsible use: decide about the legal, ethical and cultural limits of personally and socially responsible use of ICT, by understanding potential risks that exist on the Internet when using ICT.
Cultural awareness	The skills to show cultural understanding and respect other cultures when using ICT. Key components (e.g. Yang, Huiju, Cen, & Huang, 2014; Young, 2015): - Cross-cultural communication: attitudes towards online communication and collaboration experiences with people from different cultures when using ICT.
Flexibility	The skills to adapt one's thinking, attitude or behavior to changing ICT environments. Key components (e.g. Anderman, Sinatra, & Gray, 2012; Osman, Hamid, & Hassan, 2009): - Adapting to frequent and uncertain situations: attitude towards modify one's thinking, attitudes, or behaviors to be better suited to current or future ICT environments.
Self-direction	The skills to set goals for yourself and manage progression toward reaching those goals in order to assess your own progress when using ICT. Key components (e.g. Holt & Brockett, 2012; Quieng, Lim, & Lucas, 2015): - Goal setting: state learning or time goals when using ICT. - Control: willingness of individuals to take control of their own learning when using ICT. - Initiative: proactively take steps toward decisions and/or actions when using ICT. - Monitor progress: assess whether previously-set goals have been met when using ICT.
Lifelong learning	The skills to constantly explore new opportunities when using ICT that can be integrated into an environment to continually improve one's capabilities. Key components (Chai, Deng, Tsai, Koh, & Tsai, 2015; Uzunboyulu & Hürsen, 2011): - Knowledge creation efficacy: use ICT to create useful knowledge individually.

Appendix 3: The Enron scandal

« The Enron scandal, revealed in October 2001, eventually led to the bankruptcy of the Enron Corporation, an American energy company based in Houston, Texas, and the dissolution of Arthur Andersen, which was one of the five largest audit and accountancy partnerships in the world. In addition to being the largest bankruptcy reorganization in American history at that time, Enron undoubtedly is the biggest audit failure. It is ever the most famous company in the world, but it also is one of companies which fell down too fast. » (Li, 2010)

Full article :

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.663.9418&rep=rep1&type=pdf>

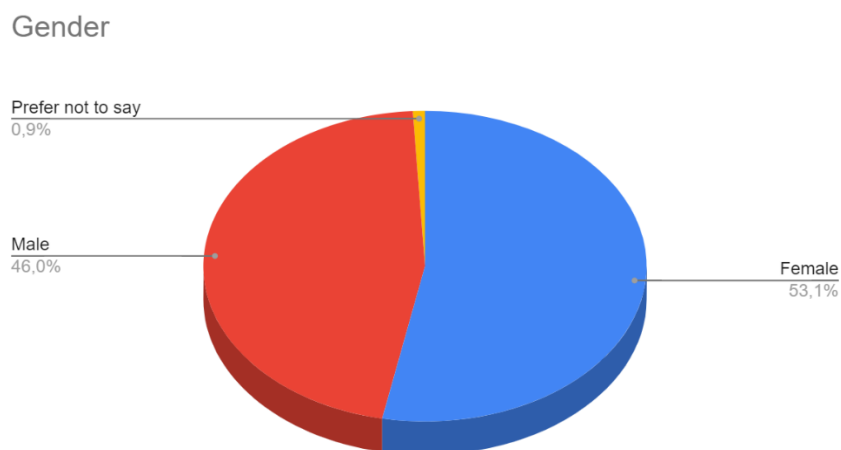
Appendix 4: Survey question & Results about missing skills in the CEMS

Link to the survey: <https://forms.gle/xinkYbiRaCoWbRhH7>

1. Gender

- Female
- Male
- Prefer not to say

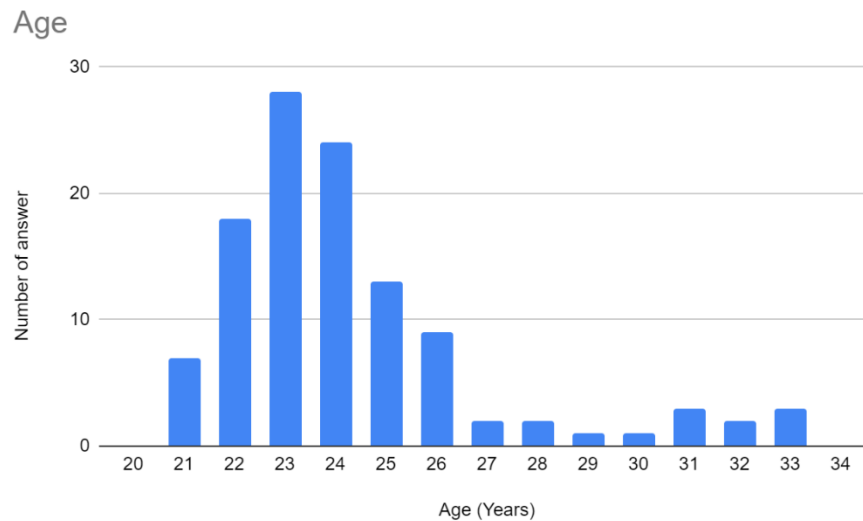
Figure 30: Participants' gender (CEMS survey)



2. Age

- Short answer (Numbers)

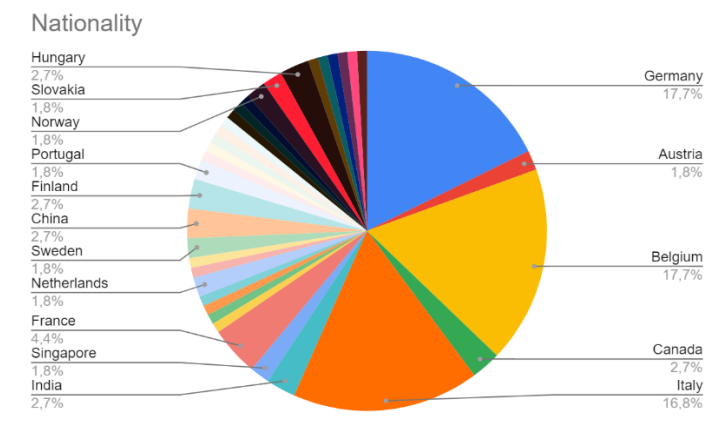
Figure 31: Participants' age (CEMS survey)



3. Nationality

- Short answer

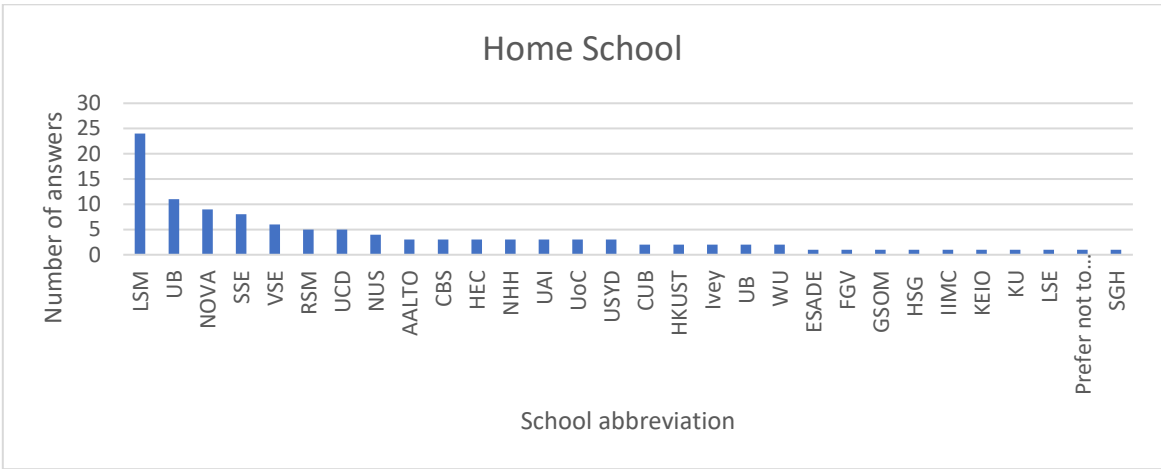
Figure 32: Participants' nationality



4. Home school

- Short answer

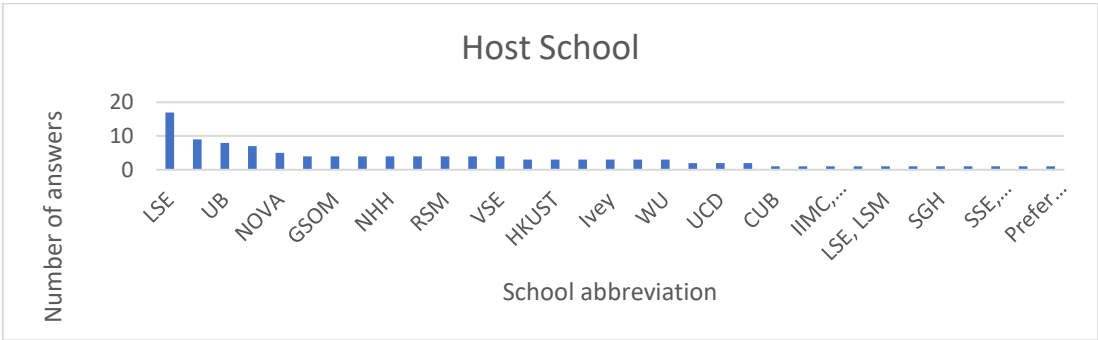
Figure 33: Participants' Home School (CEMS survey)



5. Host school

- Short answer

Figure 34: Participants' Host School (CEMS survey)

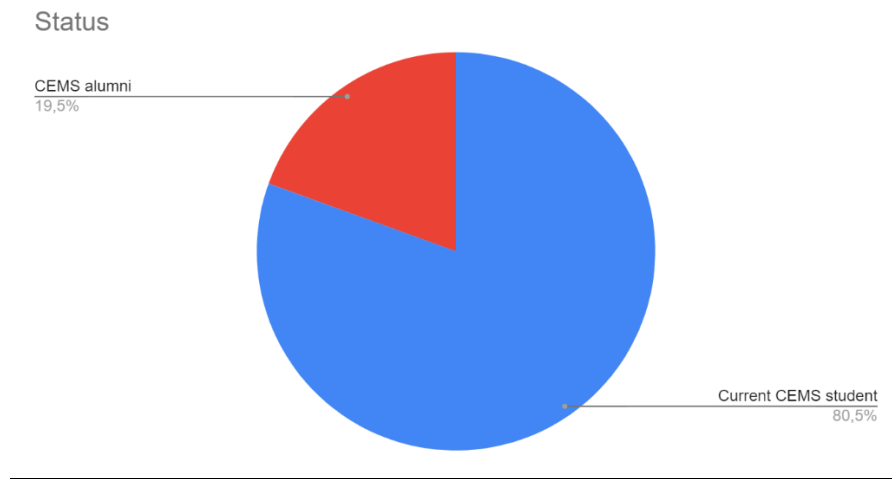


Some CEMS students have two exchanges.

6. Status

- Current CEMS student
- CEMS alumni
- Academic members
- Others

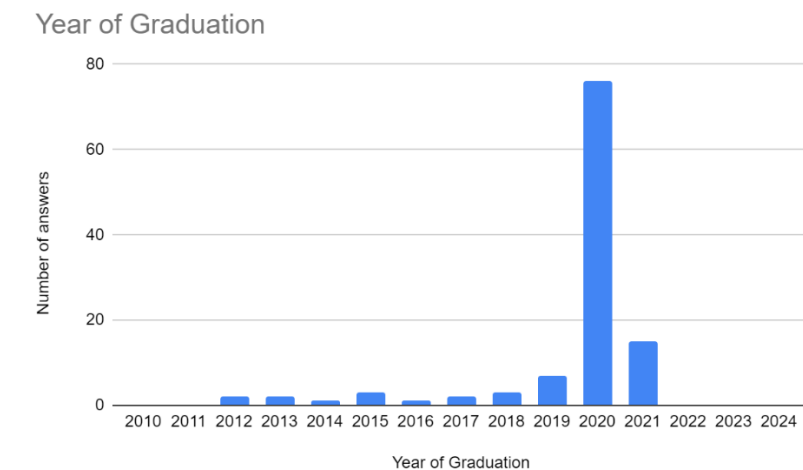
Figure 35: Proportion of current students and alumni participants (CEMS survey)



7. Year of graduation

- Short answer (Numbers)

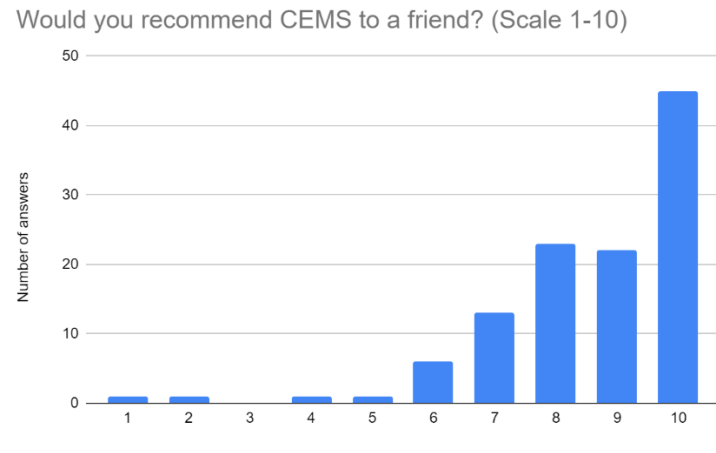
Figure 36: Participants' year of graduation (CEMS survey)



8. Would you recommend CEMS to a friend?

- Scale from 1 (Not at all) to 10 (Totally)

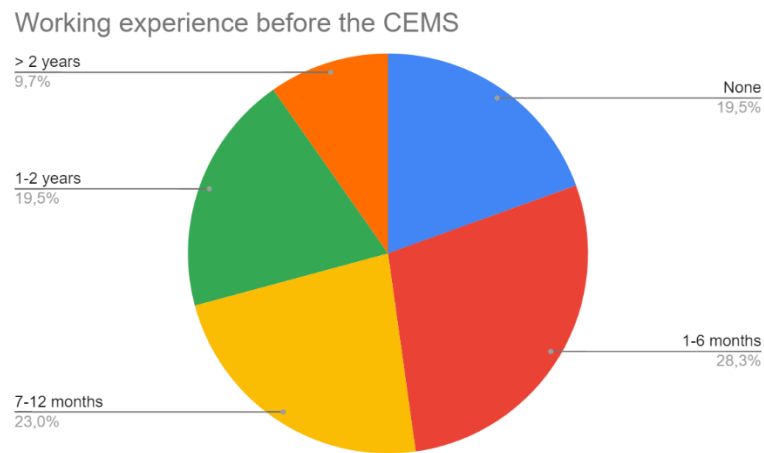
Figure 37: CEMS net promotor score (CEMS survey)



9. Working experience before entering the CEMS program (months)

- Short answer (Numbers)

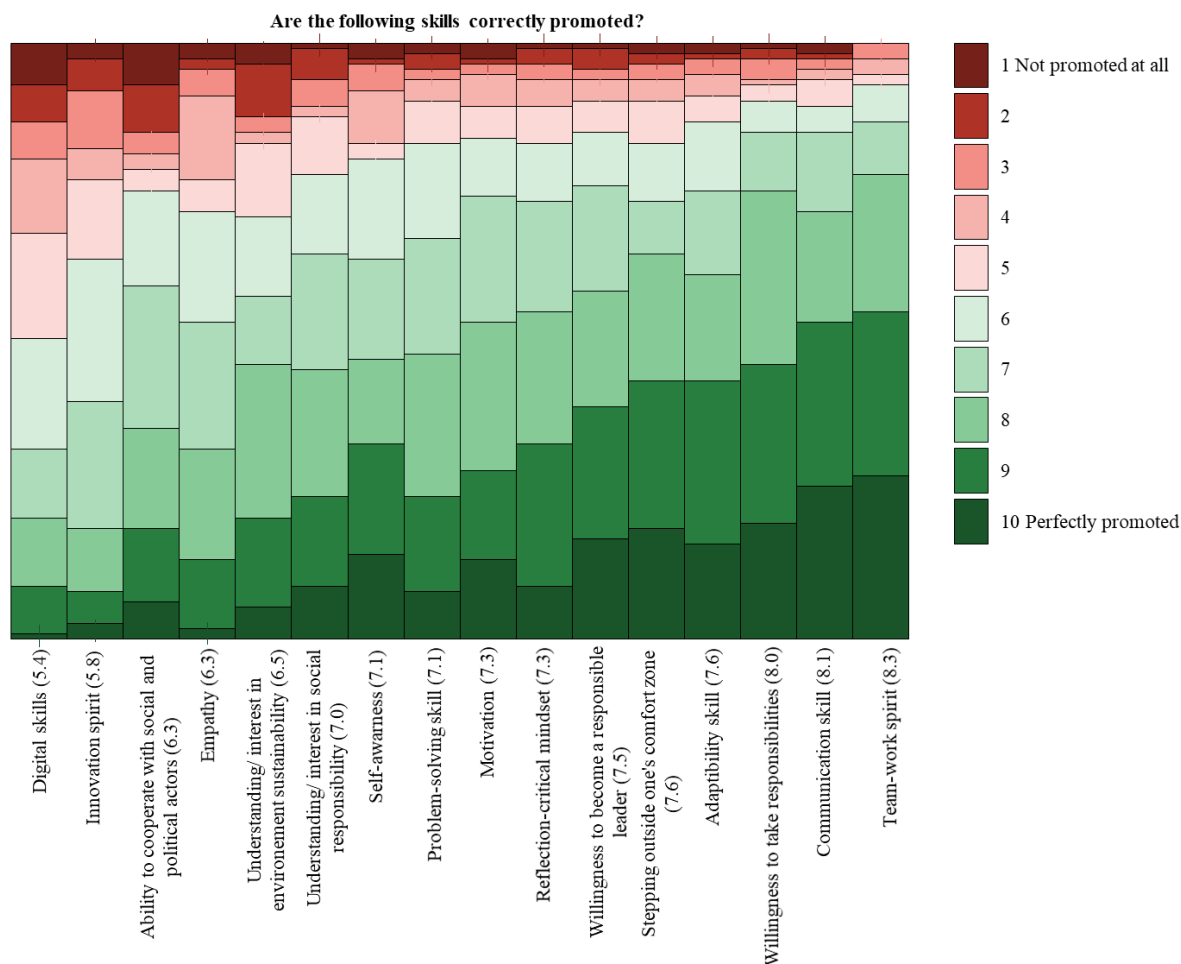
Figure 38: Participants' experience prior to CEMS



10. The next section helps us to understand if you believe those aspects are correctly promoted throughout the CEMS program? (1-10)

- Scale from 1 (Not promoted at all) to 10 (Perfectly promoted)

Figure 39: Students' perspective on skills promoted in CEMS (CEMS survey)



Brackets represents the weighted average.

11. Are there any other soft skills missing in the program? Which one?

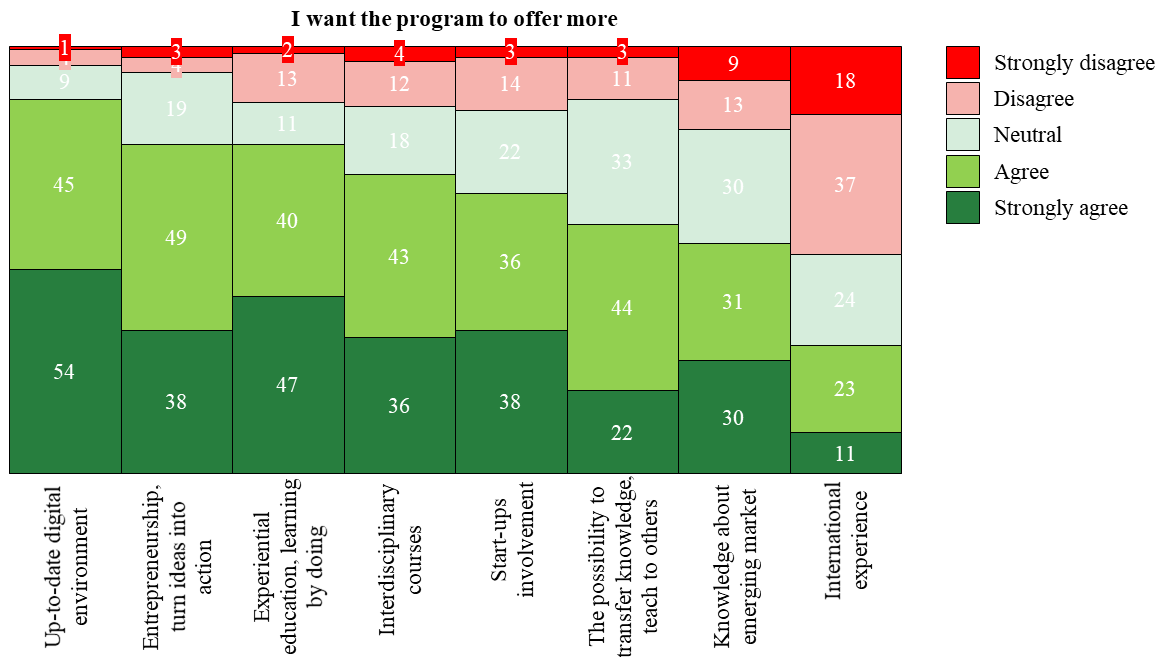
- Short answer

Creativity	Stakeholder management	Feedback	Negotiation
Communication	Quantitative skills	Innovative thinking	Emotional Intelligence
Hard skills	Negotiation skills	Entrepreneurial spirit	Leadership
Empathy	Dealing with conflicts	Common sense	Humbleness
Sales	Networking	Presentation	Respect
CV design	Storytelling	Interview preparation	Public Speaking

12. I would want the program to offer more

- Likert scale (Strongly disagree, disagree, neutral, agree, strongly agree)

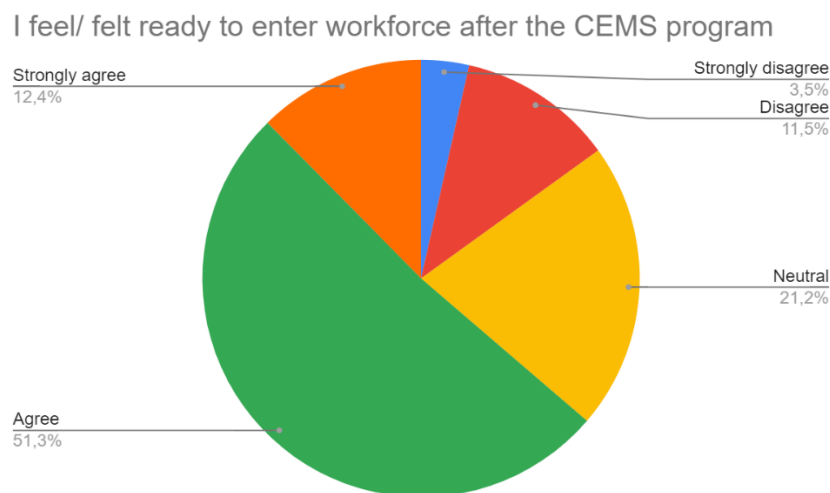
Figure 40: Students' opinion on new elements in the program (CEMS survey)



13. Do you feel you have all the skills and knowledge needed to enter the workforce? /When you finished your CEMS master, did you feel you had all the skills and knowledge needed to enter the workforce?

- Likert scale (Strongly disagree, disagree, neutral, agree, strongly agree)

Figure 41: Participants' opinion being well prepared to enter the workforce (CEMS survey)



14. If not, what do you think is missing?

- Short answer

Programming, computing, modelling skills	Data science skills	Sustainability skills
More specialization	Negotiation skills	Experience
Hard skills	Hard knowledge skills	Sales skills
Digital / Tech skills	Leadership skills	Responsible leaders
Practical real-world case-solving	Self-awareness & Self-confidence	How to start a company
Data analysis	Interview preparation	Career organisation
Presentation skill	Trust	Communication skills

15. Do you have any general recommendations for the CEMS program? (We're not from the CEMS office, we just want to improve our beloved program)

- Short answer

Connection with other students not only CEMS	Equal level of importance of CEMS in all schools	More transparency (selection process)
Improve website, better digital learning environment (own platform?), The website and IT platform should be updated	More alignment & collaboration between schools (learning outcome, curriculums)	Requires working experience before the CEMS
More international experience	Not only about consulting	Differentiate more the courses
Not allow exchanges in schools close to the home country	More privileges with corporate partners (i.e. interviews)	Official buddy program for the exchange students
Individual goal setting	Hard skill	Sales
Give back more to the communities we are in	More « on the field » classes, practical cases	Strengthen integration of non-EU schools
More feedback	More social diversity	More innovative thinking
More awareness about sustainability	Digitalisation classes	Add schools in developing countries

16. Analysis of the verbatim

We used two different methods to analyse the comments of the participants. First, as the survey consisted of 113 answers and that not everyone answered, it was not too time consuming to read all of them. Based on the first reading we created some categories to which we allocated the different comments. It helped us to have an overview of the opinions and see how many students were feeling the same. Secondly, we made a semantic analysis. Through Nuagedemots.co, we identified the terms most frequently used by the participants. It helped us to analyse the occurrence of specific words and identify the key words that we should look into. To make it more visual we used a word cloud, where the size of the words represents the rate of occurrence.

										The next section helps us to understand if you believe those aspects are correctly promoted throughout the CEMS program? (1-10)																	I would want that the program offers more:															
Gender	Age	Nationality (The one you relate the most)	Home school	Host school	Status	Year of graduation	Recommended CEMS to a friend?	Work experience CEMS (months)	Innovation spirit	Problem-solving skill	Adaptability skill-ability to adapt to change	Stepping outside one's comfort zone	Team-work spirit	Communication skill	Self-awareness	Empathy	Motivation	Reflection - critical mindset	Digital skills	Understanding/interest in Social responsibility	Understanding/interest in Environmental sustainability	Willingness to become a responsible leader	Willingness to take responsibilities	Ability to cooperate with social and political actors	Soft skills missing in the program?	International experience	Experiential education, learning by doing, on the field	Entrepreneurship turn ideas into action	The possibility to transfer knowledge, teach others	Interdisciplinary course	Start-ups involvement	Knowledge about emerging market	Up-to-date digital environment	all the skills and knowledge needed to enter the workforce?	If not, what do you think is missing?	General recommendations for the CEMS program	Email address					
Female	23	Germany	UAI	SSE	Current CEMS student	2020	10	8	6	6	7	8	8	8	7	7	7	7	8	7	7	7	7	7		Strongly agree	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Agree				irinafriessacher@yahoo.de			
Female	24	Germany	NHH	SSE	Current CEMS student	2020	9	6	7	8	8	8	8	8	8	8	7	7	5	8	8	8	8	6	can't think of any	Disagree	Disagree	Neutral	Agree	Disagree	Neutral	Neutral	Neutral	Strongly agree	Agree		I do like the exclusiveness of this program. However, I think it's important to also connect the program to university as a whole.	melissa.justianto@gmail.com				
Male	23	Austria	VSE	FGV EAESP	Current CEMS student	2021	8	9	7	8	10	10	10	10	8	7	8	6	2	8	7	10	10	2		Agree	Strongly agree	Neutral	Disagree	Neutral	Strongly agree	Agree	Strongly agree	Agree	Programming Skills, More specialization options such as e.g. Finance		Better website. Pushing level of importance of CEMS programs in all schools. In some it is the flagship program, in others it's just something that people do but that is not seen as the top notch program that it aims to be.	41524@student.hhs.se				
Male	26	Germany	SSE	HEC	Current CEMS student	2020	10	17	8	9	10	9	9	8	7	8	7	8	6	9	9	10	9	7		Neutral	Agree	Disagree	Agree	Agree	Strongly disagree	Disagree	Strongly agree	Strongly agree	Hard skills since no possibility of choosing a specialisation at LSM							
Female	22	Belgium	LSM	HSG	Current CEMS student	2020	9	5	7	9	10	9	10	10	5	4	9	8	3	7	6	8	10	8		Disagree	Disagree	Strongly agree	Disagree	Agree	Neutral	Strongly disagree	Strongly agree	Neutral								
Female	22	Belgium	LSM	UCD	Current CEMS student	2020	10	0	5	8	7	9	10	9	8	6	6	7	6	8	8	7	7	6		Agree	Strongly agree	Neutral	Neutral	Neutral	Neutral	Neutral	Agree	Disagree								
Female	25	Canada	Ivey	RSM	Current CEMS student	2020	7	12	5	6	4	6	6	6	4	4	7	4	1	5	2	2	8	2	I think there should be more of an emphasis on creativity	Strongly agree	Strongly agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Focus on digital/tech is missing. Also, as a master's student, I want less focus on theoretical lecturing and more focus on practical, real-world case-solving.	it was highlighted during the Corona pandemic that CEMS was not at all adapted for a digital learning environment. Perhaps having its own platform in the future to account for this. Also, exchanges should be discouraged to CEMS schools that are 3 hours drive away from host schools - to me, that is not "international".						
Male	25	Canada	LSM	RSM	Current CEMS student	2020	6	18	5	7	7	9	7	9	9	7	7	6	4	5	5	5	6	3		Strongly disagree	Neutral	Strongly agree	Disagree	Strongly agree	Agree	Strongly disagree	Agree	Strongly disagree		I feel like a lot is promised with regard to the corporate partners, but very little actually comes to fruition. We're only allowed to do events with partners, and we do skill seminars with them, but when it comes time to apply for a job, CEMS students are lumped in with everyone else, which defeats the whole point.						
Female	23	Italy	UCD	LSE	Current CEMS student	2020	10	14	1	1	1	1	9	1	1	1	1	8	1	10	8	9	9	1	Communication	Disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly disagree	Data analysis	No	Alessia.zurli@hotmail.com					
Male	21	India	VSE	LSM	Current CEMS student	2021	7	39	9	8	9	8	5	10	10	8	10	9	9	9	9	9	9		Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral									
Male	22	Belgium	LSM	LSM	Current CEMS student	2020	8	0	8	7	8	10	9	9	8	8	8	9	6	6	6	7	8	8		Disagree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree								
Female	23	Singapore	NUS	HMC, RSM	Current CEMS student	2020	6	0	5	6	6	6	7	7	7	6	7	7	6	7	8	8	7		Strongly agree	Agree	Neutral	Agree	Agree	Agree	Agree	Agree	Agree	Neutral								
Male	24	Italy	CBS	HMC	Current CEMS student	2020	10	12	10	9	9	10	9	9	10	8	9	9	9	10	10	9	9	10		Neutral	Strongly agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree								
Male	26	Germany	SSE	Keio	Current CEMS student	2020	10	14	9	8	10	10	10	10	10	9	10	10	9	8	8	10	10	10		Disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Some hard skills (economics, finance)	We could give more back to the communities we are in	41523@student.hhs.se					

Female	23	France	HEC	LSE	Current CEMS student	2020	7	12	3	5	7	6	8	8	6	5	7	6	4	5	5	6	8	7		Neutral	Neutral	Strongly agree	Agree	Agree	Strongly agree	Agree	Agree	Agree			
Male	23	Germany	NOVA	IIMC	Current CEMS student	2020	10	6	6	7	5	3	9	7	1	3	7	3	3	7	6	7	7	2		Neutral	Strongly agree	Agree	Strongly agree	Strongly agree	Neutral	Strongly agree	Agree	Agree	More hard skills, International job offers outside EU	More equal Learning outcomes, Individual goal setting, a good selection of hard and soft skills to acquire, more exchange between schools, stopping the host and home bullshit and just call it a full double degree	kpriv97@googlemail.com
Female	22	Belgium	LSM	FGV EAESP	Current CEMS student	2020	9	1	6	10	9	8	10	10	9	8	10	10	6	7	6	8	9	7		Disagree	Agree	Agree	Agree	Agree	Agree	Disagree	Strongly agree	Agree	Digital skills, sustainability skills	More « on the field » classes, practical cases & importance of sustainability and digitalisation classes	
Male	26	Germany	NOVA	SSE	Current CEMS student	2020	8	20	6	5	6	5	7	7	6	6	7	5	6	5	5	6	6	7		Disagree	Neutral	Neutral	Neutral	Neutral	Agree	Strongly agree	Strongly agree	Agree		More detailed feedback at the end of presentations, etc.	
Female	30	Philippines	SSE	LSE	Current CEMS student	2020	2	72	2	6	10	10	10	8	8	8	10	8	4	10	10	8	8	8		Disagree	Disagree	Neutral	Strongly agree	Strongly agree	Agree	Agree	Agree	Agree			
Female	31	Germany	VSE	NOVA	CEMS alumni	2017	8	15	3	5	8	7	10	10	3	3	8	6	8	8	1	4	4	4	This program is lacking hard not soft skills Empathy not only towards the "less fortunate" or risk groups, but also towards your peers. There is too much competitiveness sometimes, which is not inherently bad, but sometimes makes people act very selfishly.	Strongly disagree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	stronger alignment between schools, curriculums differ so much, also introduce mandatory monitoring of all schools on gender equality and equal opportunities when it comes to grading of subjects etc.	j.m.hopp@gmail.com	
Female	25	Chile	UAI	UB	Current CEMS student	2020	10	8	5	6	8	8	9	9	9	7	8	9	6	9	8	10	9	9		Disagree	Strongly agree	Agree	Neutral	Agree	Agree	Strongly agree	Agree	Neutral			
Male	24	Italy	CBS	IIMC	Current CEMS student	2020	10	12	10	9	9	10	9	9	10	8	9	9	9	10	10	9	9	10		Neutral	Strongly agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree			
Female	21	Belgium	LSM	NOVA	Current CEMS student	2020	10	1	3	7	6	6	9	9	6	5	8	9	4	9	6	8	8	6		Disagree	Agree	Strongly agree	Agree	Agree	Strongly agree	Agree	Strongly agree	Agree			
Female	23	Italy	UB	LSE	Current CEMS student	2020	8	6	7	9	8	9	8	9	10	10	10	10	5	9	9	9	9	9	No	Strongly disagree	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Disagree	Agree	Strongly agree			chiaratrimarchi@gmail.com
Female	23	Italy	UB	LSE	Current CEMS student	2020	8	3	8	6	7	7	9	9	8	8	7	9	5	9	8	10	7	8	no	Neutral	Agree	Agree	Neutral	Disagree	Agree	Disagree	Agree	Disagree	hard skills (business/financial plan, statistical softwares, quantitative analysis) heavily missing	Less bullshit, more content, quantitative and hard skills	
Male	24	Spain	LSM	IIMC, HSG	Current CEMS student	2020	8	12	2	2	3	2	3	3	3	2	2	2	2	3	2	2	3	2		Strongly disagree	Disagree	Disagree	Neutral	Strongly disagree	Disagree	Strongly disagree	Strongly disagree	Agree			
Male	33	France	USYD	SGH, TSEM	CEMS alumni	2015	10	30	7	8	9	10	10	9	8	7	10	8	7	7	7	7	9	6		Neutral	Neutral	Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree			fabien.martin87@gmail.com
Female	23	Belgium	LSM	CBS	Current CEMS student	2020	10	0	4	7	10	10	9	9	10	6	5	6	5	5	5	9	9	9		Disagree	Strongly agree	Agree	Agree	Agree	Neutral	Neutral	Neutral	Disagree	Hands on cases from companies		
Female	25	Poland	SGH	UAI	Current CEMS student	2020	7	13	4	7	8	5	6	7	4	4	7	7	2	7	5	5	7	6		Strongly agree	Strongly agree	Agree	Neutral	Strongly agree	Neutral	Strongly agree	Strongly agree	Agree			
Female	23	France	UCD	HSG	CEMS alumni	2019	10	12	7	9	9	9	10	9	8	10	9	8	7	7	9	10	9	8		Disagree	Neutral	Strongly agree	Agree	Neutral	Agree	Agree	Agree	Strongly agree			
Female	21	Belgium	LSM	CBS	Current CEMS student	2021	4	0	3	2	4	6	7	5	3	6	6	3	2	3	2	5	5	2	Sales	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Experience	Better collaboration between the different schools, more transparency (LSM), less of elite feel, offer better courses	
Male	21	The Netherlands	RSM	LSE	Current CEMS student	2021	10	4	8	7	9	8	8	9	9	8	10	7	5	5	5	4	9	6		Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Neutral	Disagree			dezeuw.robin98@gmail.com
Male	23	Russia	GSOM	UAI	Current CEMS student	2020	7	20	7	8	9	9	8	9	9	6	7	7	7	8	9	9	8	7		Agree	Agree	Neutral	Agree	Agree	Neutral	Neutral	Agree	Agree			spam@frcyk.com
Male	22	Belgium	LSM	NUS	Current CEMS student	2020	8	2.5	5	8	8	8	8	9	6	7	8	8	6	6	7	8	8	7		Disagree	Neutral	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree			oliver.yeung@student.uclouvain.be
Male	25	Croatia	LSM	UAI	Current CEMS student	2020	10	6	6	7	10	9	10	9	9	9	9	8	7	7	9	9	9	9		Agree	Strongly agree	Neutral	Neutral	Strongly agree	Neutral	Neutral	Strongly agree	Strongly agree			
Male	24	Sweden	SSE	USYD	Current CEMS student	2020	10	0	5	7	10	8	10	9	9	9	8	9	5	10	9	10	8	Negotiation	Disagree	Neutral	Agree	Neutral	Disagree	Strongly agree	Neutral	Strongly agree	Neutral	Sales skills, more analytics	Do some mandatory course on data analysis and maybe additional skill seminars in sales	karl.gabriel.ramirez@gmail.com	

Male	26	Germany	NOVA	LSE	Current CEMS student	2020	10	15	3	7	10	8	9	10	9	7	9	9	6	7	5	9	10	7	No	Strongly disagree	Strongly disagree	Agree	Agree	Strongly agree	Neutral	Disagree	Disagree	Strongly agree			
Male	23	Italy	UB	SSE	Current CEMS student	2020	10	0	10	9	10	9	9	10	10	9	10	9	8	9	9	10	10	8		Strongly disagree	Disagree	Neutral	Disagree	Disagree	Disagree	Disagree	Disagree	Agree	Strong Digital skills	More focus into digital	andrea.dellaventura.com@gmail.com
Female	22	France	UCD	UB	Current CEMS student	2020	10	6	5	8	8	9	9	8	7	7	8	9	9	7	6	6	9	9		Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Neutral			
Female	22	China	SSE	Ivey	Current CEMS student	2021	8	8	7	7	9	9	9	7	7	5	5	6	6	5	5	8	9	9		Disagree	Agree	Agree	Agree	Disagree	Neutral	Neutral	Agree	Neutral			
Female	24	Belgium	LSM	WU	CEMS alumni	2019	9	1	6	6	9	10	9	10	7	7	7	7	4	4	4	7	10	5	Emotional Intelligence	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Neutral	Agree	Agree	Emphasizing the fact that we need to really be responsible leaders and change the world into a better place not to go working for big companies just reaching for more profit	More diversity (social one)	
Male	23	The Netherlands	NUS	SSE, ESADE	Current CEMS student	2020	8	5	2	8	7	5	8	9	7	7	7	6	4	8	8	8	8	7		Neutral	Neutral	Strongly disagree	Neutral	Strongly agree	Strongly disagree	Neutral	Agree	Disagree	Hard skills is lacking really badly in CEMS and some universities only offer fluffy courses which don't enable students to develop these skills at all	1. Set higher minimum requirements on course quality 2. Differentiate the mandatory courses more, they are too similar 3. Push or even enforce the offering of hardskills modules at CEMS academic partners 4. Business project offering to universities must be at least 80% corporate partners ensure students and corporate partners get what they paid for!! 5. Topic quality of the business project must meet stricter criteria to ensure higher quality and levels of difficulty, it should have the level of difficulty of a master thesis	Kevin.coehrs@u.mus.edu
Male	25	Finland	AALT O	RSM	Current CEMS student	2020	9	36	6	7	5	8	8	9	7	7	8	7	2	2	2	5	6	1		Agree	Strongly agree	Disagree	Neutral	Agree	Strongly agree	Strongly disagree	Strongly agree	Disagree	Understanding the requirements of worklife. Many of the courses in the CEMS are full of useless shit. RSM is a great example of promoting to be a high workload school, but some of the courses are jokes what comes to implementation. Bring in companies to the classes and together collaborate with real life cases!		
Female	23	Italy	UB	SSE	Current CEMS student	2020	7	0	7	8	8	9	8	9	6	6	8	8	6	7	5	7	9	8		Neutral	Strongly agree	Agree	Neutral	Neutral	Neutral	Disagree	Agree	Agree			
Female	22	Portugal	NOVA	UB	Current CEMS student	2020	7	6	6	8	8	7	7	8	7	7	9	9	7	8	8	9	9	9	Leadership and Sales ability, properly taught not BS	Strongly disagree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Disagree	More practical experience in the real world with real companies	Better offer regarding mandatory courses and seminars. Really make sure that something students are obligated to do is worth it.	26129@NOVAAshe.pt
Male	25	United States	ESADE	IIMC	Current CEMS student	2020	9	12	7	8	9	10	9	8	10	9	8	9	7	9	8	9	8	7	Ability to present complex ideas in a clear way	Disagree	Strongly agree	Agree	Neutral	Disagree	Agree	Neutral	Strongly agree	Agree	Finance-related skills	Many of the classes are more theoretical than practical, and I prefer the latter.	timothy.aaron.hawk@alum.ni.esade.edu
Male	28	Portugal	NOVA	LSM	CEMS alumni	2015	5	3	5	5	6	4	6	7	6	5	5	4	2	2	1	4	5	2		Disagree	Strongly agree	Neutral	Agree	Strongly agree	Neutral	Agree	Strongly agree	Agree			rsorome@hotmail.com
Female	24	Germany	NHH	SSE	Current CEMS student	2020	9	6	7	6	7	7	8	7	7	8	6	7	5	8	8	8	8	8		Strongly disagree	Agree	Neutral	Agree	Disagree	Disagree	Agree	Strongly agree	Agree			melissa.justanto@gmail.com
Female	24	Germany	UB	NHH	Current CEMS student	2020	9	13	7	9	9	9	9	9	9	8	8	9	8	10	10	9	9	9		Agree	Agree	Agree	Agree	Agree	Neutral	Agree	Agree	Agree			
Female	23	Germany	LSE	UAI	Current CEMS student	2020	10	8	8	6	7	5	6	8	6	7	6	8	4	7	8	6	8	8		Strongly agree	Disagree	Strongly disagree	Neutral	Agree	Disagree	Neutral	Neutral	Neutral			
Female	22	Belgium	LSM	GSOM	Current CEMS student	2020	10	0	7	9	9	6	8	9	10	6	7	9	3	10	10	10	10	10	Interview preparation CV design, more presentations	Agree	Agree	Strongly agree	Neutral	Neutral	Agree	Strongly agree	Agree	Agree	Interview préparation	Better the exchange destination process, be more clear about why you are assigned to a destination. Implement an official buddy program for the exchange student (visas at GSOM, but not at LSM)	anaïs.bergeyck@gmx.fr
Male	21	Italy	UB	NUS	Current CEMS student	2020	8	9	6	6	7	6	7	7	6	7	5	7	5	6	6	6	7	7		Neutral	Agree	Agree	Neutral	Neutral	Neutral	Neutral	Strongly agree	Neutral	Hard knowledge skills	Transparency towards ranking and exchange allocation, more help for internships (especially from CP)	marineswaab@hotmail.com
Female	22	Belgium	LSM	VSE	Current CEMS student	2020	7	0	7	7	10	8	9	9	7	4	8	7	7	8	8	8	9	6		Neutral	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree			
Female	23	Italy	UB	HKUST	Current CEMS student	2020	8	3	3	6	8	8	8	8	7	7	8	6	1	2	2	8	8	3		Strongly disagree	Agree	Strongly agree	Strongly agree	Agree	Agree	Agree	Agree	Agree			licokica@gmail.com

Female	22	Belgium	LSM	Ivey	Current CEMS student	2020	8	0	6	9	10	10	9	10	9	7	9	8	8	9	9	9	9	7	Strongly disagree	Agree	Agree	Neutral	Agree	Strongly agree	Strongly agree	Agree	Neutral	Negotiation skills and more computing skills (There are a lot of courses that are more about writing and speaking skills than computing skills with software)	It can be interesting to not only have theoretical classes with examples and presentations but also more practical classes with simulations for example. We had this for our marketing class at Ivey where we had to simulate several market entries in South America for a toothpaste company. We learned a lot and we did a lot of analysis. It was interesting. It is not the case in all CEMS schools. I think CEMS should promote more inNOVative thinking to students when they are doing group assignments. They should promote thinking outside the box. Same when for skills seminar.	herve197525@hotmail.co m	
Female	22	Belgium	LSM	KUBS	Current CEMS student	2020	8	0	6	7	6	9	10	8	6	8	8	8	6	7	7	7	9	7	Disagree	Strongly agree	Strongly agree	Agree	Neutral	Agree	Neutral	Agree	Disagree	Digital skills (excel, data management), leadership skills, self awareness, practical know how/experience	Olivia.casterman@gmail.co r		
Female	22	Belgium	LSM	NHH	Current CEMS student	2020	10	0	7	8	9	9	9	10	7	7	8	10	5	10	10	10	8	Disagree	Neutral	Agree	Agree	Strongly agree	Agree	Agree	Strongly agree	Agree	Self-confidence	Be more open to other environments	camille.telemans@gmail.c om		
Male	23	Germany	UoC	LSE	Current CEMS student	2020	9	12	7	9	10	9	9	10	8	6	8	6	6	8	8	9	9	7	Agree	Agree	Strongly agree	Disagree	Agree	Strongly agree	Neutral	Strongly agree	Agree				
Female	33	Belgium	LSM	UB	CEMS alumni	2012	6	4	2	3	3	2	3	2	1	1	1	2	1	3	2	2	2	1	Disagree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly disagree	Digital skills	Better marketing and better centralized coordination			
Female	22	Italy	UB	WU	Current CEMS student	2020	7	6	8	9	9	10	10	10	9	9	10	10	8	8	8	9	9	9	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Agree	Agree	Agree		Martina.lorusso@studUB.i t		
Female	26	France	HEC HKUST CEMS alumni	2018	8	15	5	7	7	6	8	7	6	6	6	8	9	7	9	7	8	6	Motivating other, storytelling	Disagree	Agree	Agree	Agree	Strongly agree	Strongly disagree	Agree	Agree						
Female	26	Sweden	NOVA	KEO	CEMS alumni	2019	10	12	4	9	9	9	10	10	10	4	7	7	4	6	2	8	9	6	InNOVativethinking	Strongly disagree	Strongly disagree	Strongly agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Strongly agree	Disagree	Tech skills and how to start a company	Make a better website	
Female	23	Italy	UB	NUS	Current CEMS student	2020	10	3	4	8	9	10	10	7	6	6	8	8	5	8	8	9	8	7	Agree	Agree	Neutral	Neutral	Agree	Neutral	Neutral	Strongly agree	Agree	Hard skills			
Male	29	Germany	RSM	HEC	CEMS alumni	2016	9	12	3	5	3	3	10	9	6	8	9	4	4	3	3	8	8	5	Ability to lead diverse teams, in CEMS most people are straight A, highly motivated students	Disagree	Strongly agree	Agree	Agree	Strongly agree	Neutral	Neutral	Agree	Agree	More content involvement (such as real-life case studies) of corporate partners besides Business Program and Recruiting Events		
Prefer n	24	Prefer not to say	Prefer n	Prefer not to say	Current CEMS student	Prefer	6	24	5	5	5	1	5	5	5	4	4	2	3	5	5	1	1	1	Common sense	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Stop promoting SIW agenda	Prefer not to say	
Male	24	Italy	SSE	Wu	Current CEMS student	2020	10	8	7	8	6	8	10	10	10	8	8	10	4	9	9	9	10	10	Neutral	Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Agree	Strongly agree	Strongly agree	Disagree	The website and IT platform should be updated	41538@student.hhs.se	
Male	25	Australian	USYD	LSE	CEMS alumni	2020	9	25	7	9	9	9	10	10	8	7	8	7	9	10	6	9	9	9	Agree	Agree	Strongly agree	Strongly agree	Neutral	Agree	Agree	Strongly agree	Strongly agree		jvcoorey@gmail.com		
Female	23	Italy	UB	LSE	Current CEMS student	2020	9	3	8	10	9	10	9	8	9	9	9	9	6	9	9	10	10	10	Strongly disagree	Agree	Agree	Agree	Agree	Agree	Strongly disagree	Agree	Strongly agree				
Male	24	Bulgaria	FGV	LSE	Current CEMS student	2020	7	40	5	6	8	8	9	8	9	8	6	7	8	8	8	7	6	8	Entrepreneurial spirit	Strongly disagree	Strongly agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree			
Male	22	Germany	UCD	UB	Current CEMS student	2020	10	42	6	8	7	8	10	10	9	9	9	8	6	9	8	7	9	8	Disagree	Neutral	Agree	Neutral	Agree	Neutral	Neutral	Strongly agree	Disagree	Modeling skills	Master thesis after exams		
Female	31	Morocco	NOVA	NHH	CEMS alumni	2012	10	12	6	7	9	9	9	7	6	6	9	9	5	8	8	7	10	6	Neutral	Agree	Agree	Neutral	Agree	Agree	Strongly agree	Agree	Agree		Taoufik.kenza@gmail.com		
Female	23	Italy	RSM	CBS	Current CEMS student	2020	8	0	5	6	8	6	6	6	6	4	5	5	2	5	5	6	6	6	More focus on hard skills	Disagree	Agree	Neutral	Agree	Strongly agree	Disagree	Agree	Agree	Agree			
Male	23	Germany	USYD	UB	Current CEMS student	2021	8	8	7	8	9	9	8	8	8	7	8	8	6	7	4	8	8	7	None	Disagree	Disagree	Agree	Agree	Disagree	Disagree	Agree	Disagree	Agree			
Male	28	Czech	VSE	HKUST	CEMS alumni	2017	10	6	8	8	6	9	9	9	4	4	6	4	5	6	6	7	10	3	Effective communication, stakeholder management,	Strongly disagree	Disagree	Agree	Agree	Strongly agree	Agree	Disagree	Neutral	Agree			
Female	24	Germany	NOVA	IIMC	Current CEMS student	2020	10	9	8	10	10	10	10	10	8	9	9	9	7	8	8	10	10	8	Agree	Agree	Agree	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Digital skills	Make experience more equal across universities. Strengthen integration of non-EU schools. Add schools in developing countries, e.g. Africa, Southeast Asia, island nations, ...	34580@NOVAsh.pt	
Male	24	Germany	SSE	NUS	Current CEMS student	2020	9	4	6	8	9	7	10	8	7	6	7	8	8	8	8	8	7	Neutral	Strongly agree	Neutral	Agree	Neutral	Disagree	Agree	Strongly agree	Agree			ctsch95@gmail.com		

Male	25	Switzerland	HSG	HMC	Current CEMS student	2021	9	12	4	6	6	10	6	8	4	4	5	8	7	6	7	7	7	5		Disagree	Disagree	Agree	Neutral	Agree	Disagree	Agree	Agree	Strongly agree			
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Female	24	Italy	UB	RSM	Current CEMS student	2020	8	4	7	9	9	7	8	8	6	6	6	7	4	5	5	9	7	7	N/A	Disagree	Agree	Neutral	Neutral	Strongly disagree	Strongly disagree	Disagree	Strongly agree	Neutral	Digital skills, quantitative skills	Sometimes the courses are a bit repetitive, like the two CEMS mandatory courses didn't really add much knowledge	
Female	24	Belgium	LSM	KEIO	Current CEMS student	2020	8	0	3	6	8	8	7	9	8	8	6	7	6	7	8	9	10	6		Agree	Agree	Neutral	Agree	Agree	Strongly agree	Disagree	Neutral	Neutral	More experiential education	Less theoretical and boring classes.	
Male	32	Norway	UCD	NOVA	CEMS alumni	2015	7	24	1	2	2	3	4	3	3	1	3	3	1	5	3	3	3	1		Neutral	Agree	Agree	Agree	Agree	Neutral	Neutral	Agree	Neutral		Increase the average age of participants. Work experience inbetween bachelor and mast should be encouraged. Young students straight out of a bachelor program has little to offer outside of academic theories.	nicolai.kjaernes@gmail.co
Female	24	Finland	Aalto	SSE	Current CEMS student	2020	10	18	9	8	9	9	9	10	9	4	10	9	5	8	8	9	10	7		Disagree	Agree	Neutral	Neutral	Agree	Neutral	Agree	Strongly agree	Strongly agree			
Male	25	Germany	NUS	LSE	Current CEMS student	2020	10	18	6	7	8	8	10	10	7	7	10	9	8	8	8	10	10	9	no	Strongly disagree	Disagree	Neutral	Disagree	Disagree	Neutral	Neutral	Agree	Neutral	data science skills	put a stronger emphasis on data science related topics (such as coding in R or Python)	m.borchert@lse.ac.uk
Male	23	Italy	UB	NOVA	Current CEMS student	2020	1	1	1	1	1	5	10	1	3	3	1	1	6	1	1	8	8	1	Public speaking, quantitative skills, negotiation skills	Neutral	Strongly agree	Strongly agree	Strongly disagree	Strongly disagree	Agree	Agree	Agree	Neutral		Clearly explain how it works before the application process not once somebody has been already enrolled	
Male	22	Slovakia	VSE	SSE	Current CEMS student	2021	9	14	8	9	9	7	10	10	10	9	8	9	7	9	9	10	10	8	none missing	Agree	Agree	Strongly agree	Neutral	Neutral	Strongly agree	Disagree	Disagree	Neutral	more practical experience internationally (not just one internship)	CEMS should help students get more international experience, so they are easily able to find employment beyond their home country	
Male	24	Hungary	CUB	UCD	Current CEMS student	2020	10	28	3	4	4	4	3	10	4	5	4	5	4	10	8	10	7	4		Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Strongly agree	Strongly agree	Strongly agree	Neutral			
Female	24	Austria	RSM	SSE	Current CEMS student	2021	10	12	9	10	9	9	10	10	9	8	9	9	6	7	6	10	10	7		Disagree	Strongly agree	Agree	Neutral	Strongly agree	Agree	Neutral	Strongly agree	Agree	I think when it comes to soft skills we are very well prepared. Looking at more hard skills, I don't feel perfectly prepared though, but this could also be an "issue" of a Master in International Management, that is quite broad in general.		
Female	21	Belgium	LSM	CUB	Current CEMS student	2021	9	0	6	8	7	6	8	8	6	6	8	8	8	6	6	6	8	8		Agree	Agree	Agree	Strongly agree	Agree	Neutral	Agree	Agree	Agree		Need more hard skills- more material	sauvaz.charlotte@outlook.com
Female	22	Indonesia	KU	UB	CEMS alumni	2018	10	8	6	7	10	10	10	8	6	4	6	8	9	9	9	10	9	10		Agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly agree	Agree	Strongly agree			theny03@yahoo.com
Male	25	Canada	Ivey	LSE, NUS	Current CEMS student	2020	7	24	7	9	8	8	8	8	9	8	10	8	7	8	5	5	8	8		Disagree	Agree	Strongly agree	Neutral	Neutral	Strongly agree	Agree	Agree	Agree			cfremberche@gmail.com
Male	25	India	HEC	LSE	Current CEMS student	2020	10	30	6	6	6	9	9	9	9	9	9	9	5	4	7	7	8	6		Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Disagree	Strongly agree	Neutral	Strongly agree			rushapkhazanchi@gmail.co
Female	23	The Netherlands	RSM	NHH	CEMS alumni	2019	10	0	5	10	10	10	10	10	10	6	10	10	10	6	1	8	8	2		Neutral	Strongly agree	Strongly agree	Strongly disagree	Strongly agree	Strongly agree	Disagree	Strongly agree	Neutral	How to drive your own career path and when to make a new career move	Include way more awareness about sustainability (not just SDGs, but also Climate Agreements etc) and a focus on energy in general is missing. When I studied CEMS there was not one course about real sustainability, nor the Corporate Partners were actual sustainable partners. I.e. Equinor was admitted as corporate partner but are not at all sustainable. Also sustainable/ renewable energy partners (consulting partners or actual renewable energy providers) as CPs could give the programme a boost.	valeriehagen@gmail.com
Male	27	India	IIMC	LSE	Current CEMS student	2020	8	24	2	4	4	4	4	4	4	4	3	4	1	2	2	2	2		Strongly disagree	Agree	Agree	Agree	Strongly disagree	Strongly agree	Strongly disagree	Agree	Agree	Digital Skills		pranay2020@email.iimcal.ac.in	
Female	23	China	HKUST	LSE	Current CEMS student	2020	9	0	8	7	8	5	7	6	4	6	6	6	3	6	6	7	7	7	Dealing with conflict	Neutral	Strongly agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Excel skills	Give us more hard skills!!!! Like excel spreadsheet skills, ppt skills session	

Female	33	Germany	UoC	HEC	CEMS alumni	2013	10	28	9	10	9	10	8	10	9	9	10	10	8	8	8	10	10	9		Strongly disagree	Agree	Agree	Agree	Agree	Agree	Strongly disagree	Agree	Strongly agree			
Male	24	China	KEIO	LSE, LSM	Current CEMS student	2021	10	18	6	8	9	10	10	10	10	8	8	9	5	8	8	8	8	8	Entrepreneurship	Disagree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree		Expect more academic partners at Asia and Africa.	yuhongchen12319@keio.jp
Male	24	Italy	NOVA	LSE	Current CEMS student	2020	6	6	2	3	6	7	7	6	2	4	4	5	1	7	5	6	5	1		Neutral	Agree	Strongly agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Agree			
Female	24	Portugal	UAI	USYD	CEMS alumni	2019	9	10	6	7	8	8	7	5	5	7	7	8	4	6	6	7	7	7		Neutral	Strongly agree	Strongly agree	Disagree	Neutral	Strongly agree	Strongly agree	Strongly agree	Disagree	Communication skills		

Male	27	Hungary	CBS	IIMC	Current CEMS student	2021	9	30	6	8	8	8	8	9	8	7	7	9	5	8	7	9	8	7		Neutral	Agree	Agree	Neutral	Agree	Agree	Neutral	Strongly agree	Agree	Knowledge about new digital technologies (E.g.: AI)		
Male	26	Singapore	NUS	LSE	Current CEMS student	2020	6	9	3	4	5	4	4	4	4	4	4	5	3	3	3	3	3	3	NA	Strongly agree	Agree	Strongly disagree	Agree	Neutral	Disagree	Neutral	Neutral	Agree	Financial skills.	More finance related courses will enrich the program a lot more	
Male	25	Italy	LSM	VSE	Current CEMS student	2020	10	24	7	8	9	8	9	9	7	6	8	8	8	9	9	8	9	6	networking	Agree	Strongly agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Neutral	Shorter written reports and more projects and group works in the field	michele.zingaretti1994@gmail.com	
Male	26	Serbia	WU	NOVA	CEMS alumni	2019	10	0	9	10	9	5	10	10	7	7	9	9	4	6	6	9	8	6	/	Strongly disagree	Strongly agree	Strongly agree	Disagree	Agree	Strongly agree	Neutral	Strongly agree	Agree			
Female	24	Switzerland	UB	CBS	CEMS alumni	2019	10	0	6	9	10	9	9	7	8	6	10	8	6	2	2	4	10	2	Negotiation skills	Disagree	Agree	Agree	Strongly agree	Disagree	Agree	Strongly agree	Strongly agree	Agree	Excel skills, PowerPoint skills	Continuing promoting networking opportunities to create new connections - it's unique and incredibly valuable!	Bracey.sonia@gmail.com
Male	32	Hungary	CUB	UB	CEMS alumni	2013	10	2	5	10	9	9	8	5	10	2	8	10	1	6	7	8	8	1		Disagree	Disagree	Neutral	Disagree	Strongly agree	Agree	Neutral	Strongly agree	Agree			
Female	23	Hong Kong SAR	HKUST	UoC	Current CEMS student	2020	9	6	7	10	10	10	10	10	10	7	9	10	8	7	7	10	10	7		Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree			
Male	26	Italy	SSE	SGH	CEMS alumni	2018	10	2	8	8	8	9	9	9	8	8	7	8	6	7	8	8	8	8		Disagree	Disagree	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Agree	Excel	Deal more with numbers and use more excel	mirto.bonani@gmail.com
Female	24	Norway	NHH	VSE	Current CEMS student	2021	8	5	7	7	6	8	6	5	4	5	4	5	5	7	7	7	9	6	Humbleness, genuine team associations (meaning that you are never better as the weakest link in your team, and should help each other accordingly)	Disagree	Strongly agree	Agree	Agree	Neutral	Agree	Neutral	Neutral	Strongly disagree	Hands on experience, practical knowledge, not just being book smart	There is a world out there that goes beyond consulting! In many cems schools it seems more to be a consulting prep program. This should not be the situation. There are so many other great opportunities out there.	
Female	21	Slovakia	VSE	GSOM	Current CEMS student	2021	9	15	6	5	7	8	8	7	7	4	7	5	5	6	7	7	8	5	Respect, Constructive Feedback and Creativity	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Neutral	Trust in delegation of work	Cems Summer School (maybe could be taken as cems internship) to get together and turn some ideas into reality.	tancibokova.k@gmail.com
Female	31	Germany	UoC	Keio	CEMS alumni	2014	8	12	6	6	6	6	8	6	4	3	4	7	5	6	6	6	3	4		Disagree	Disagree	Agree	Strongly disagree	Disagree	Disagree	Disagree	Agree	Neutral	Restrictor on the language requirements		
Male	22	Italy	WU	Ivey	Current CEMS student	2021	8	3	6	7	7	9	9	9	9	9	9	9	7	8	8	9	9	9		Agree	Strongly agree	Strongly agree	Neutral	Agree	Disagree	Neutral	Agree	Agree			
Female	23	Belgium	LSM	GSOM	Current CEMS student	2020	7	0	6	6	5	5	8	7	6	6	8	7	7	6	7	6	8	6		Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Disagree	Real-life understanding of the business world	Turn into responsible management education	
Female	23	Finland	AALTO	HSG	Current CEMS student	2020	10	18	6	8	6	7	8	8	6	6	7	7	5	9	9	7	8	6		Agree	Strongly agree	Agree	Agree	Strongly agree	Neutral	Neutral	Agree	Agree		More support to actually fulfil the graduation requirements, eg more accredited language courses offered. More "career advice" offered, so that not so many kids would end up doing consulting because of social pressure. More support for alumni cooperation from the higher level.	
Male	23	Belgium	LSM	GSOM	Current CEMS student	2020	10	0	4	5	7	8	10	10	9	4	7	8	9	7	9	9	8	7		Disagree	Neutral	Strongly agree	Strongly agree	Agree	Disagree	Strongly disagree	Neutral	Agree			
Female	24	Belgium	LSM	VSE	Current CEMS student	2020	9	3	3	4	7	7	8	7	7	3	7	6	3	2	2	5	6	7		Neutral	Strongly agree	Strongly agree	Disagree	Neutral	Agree	Agree	Strongly agree	Neutral			

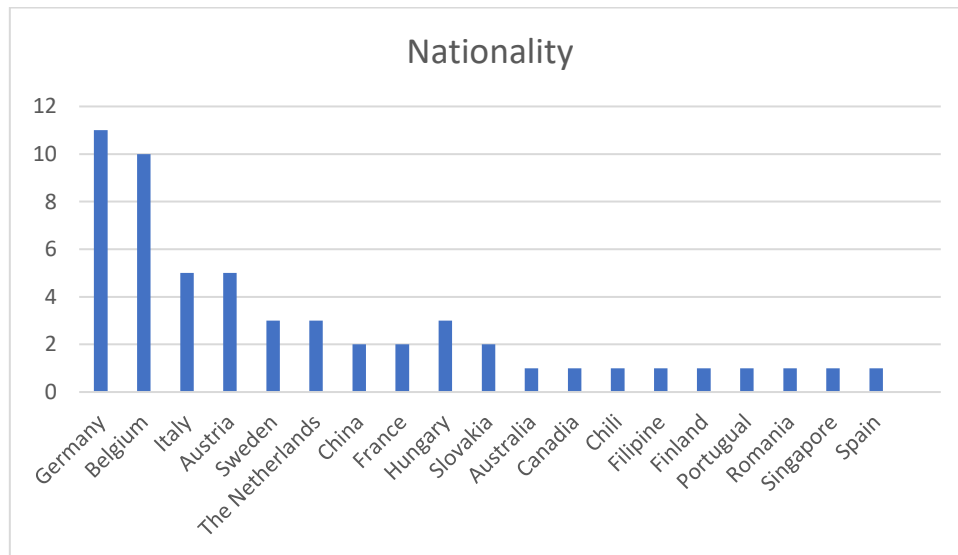
Appendix 5: Survey questions and results about the solution

Link to the survey: <https://forms.gle/2NYUgyckXAUXdxxCA>

1. Nationality of the participants

- Short answer

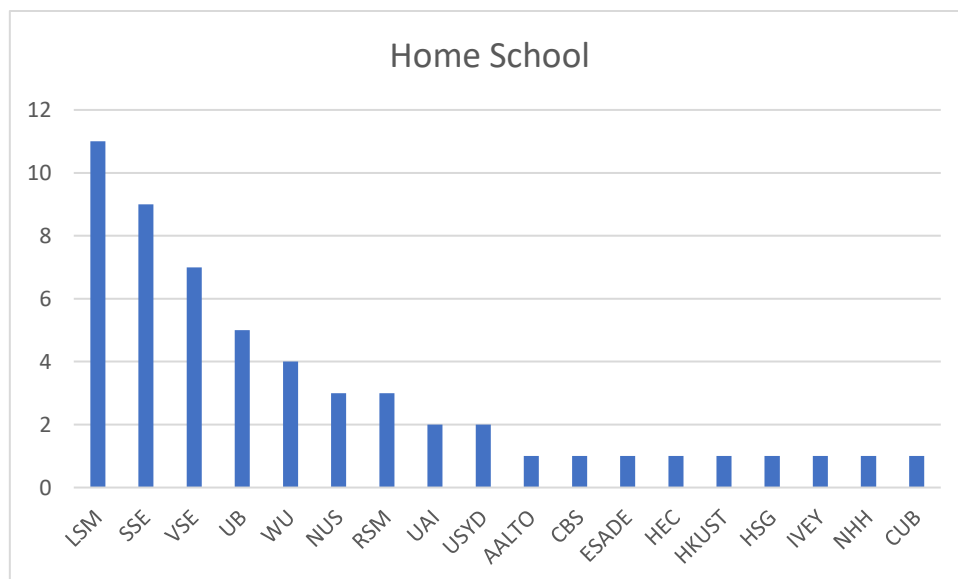
Figure 43: Participants' nationality (CEMS survey 2)



2. Participants home school

- Short answer

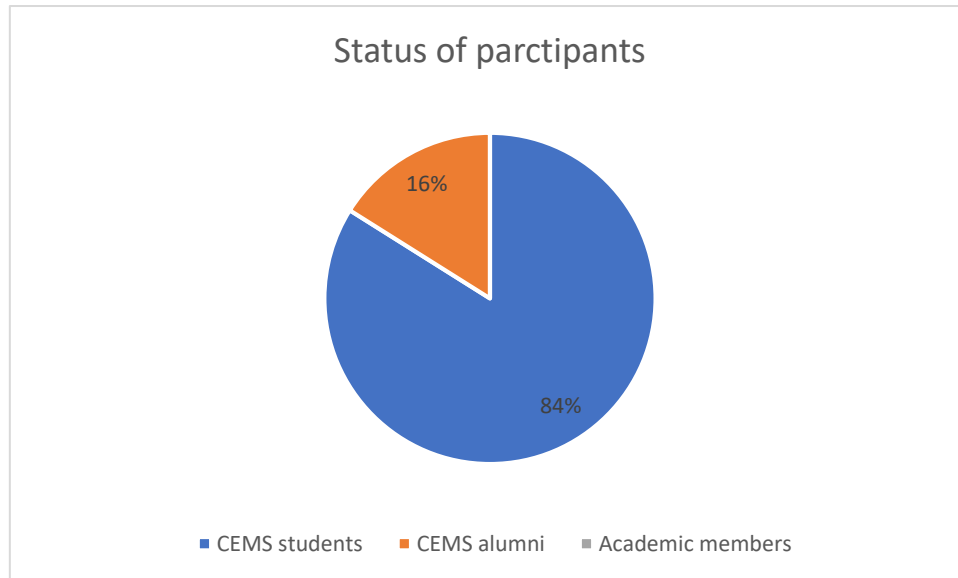
Figure 44: Participants' home school (CEMS survey 2)



3. Status of the participants

- CEMS students
- CEMS alumni
- Academic members

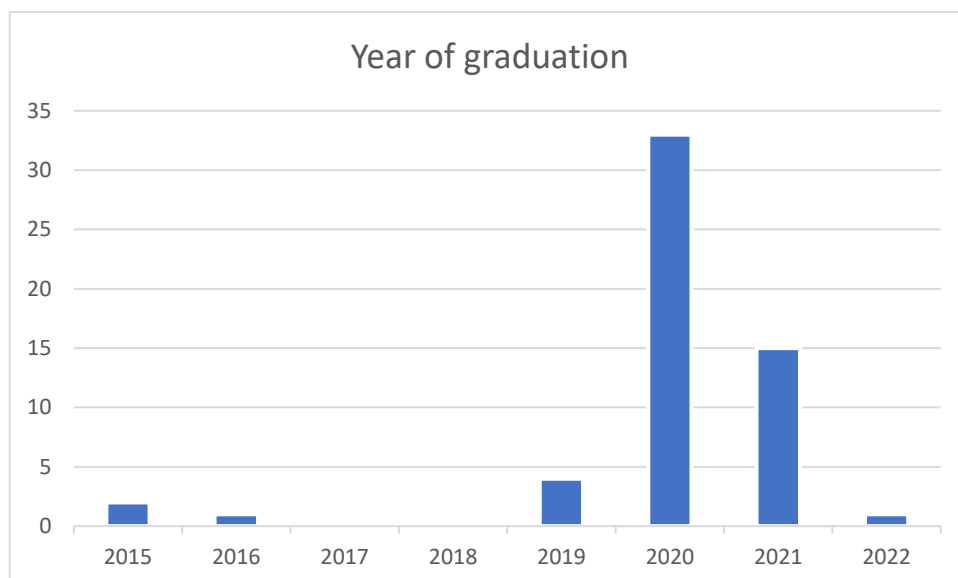
Figure 45: Participants' status (CEMS survey 2)



4. Participants year of graduation

- Short answer

Figure 46: Participants' year of graduation (CEMS survey 2)



5. First part of the solution: one exchange semester in a CEMS partner university in an emerging market.

One part of the solution consists of a semester in an emerging country. If the CEMS program is 2 years, it would replace one existing semester, if the program is one year, it would add one semester) The semester would be optional, it is to diversify the program and attract different profiles.

The semester would include:

- 1- Attend CEMS courses
- 2- Teach in a Tier 2 university
- 3- Work part-time in a local start-up

The CEMS student goes one semester abroad in a CEMS partner university in EM (e.g., India: IIMC, Egypt: AUC, etc.). There the student will take courses to satisfy CEMS requirements.

At the same time, he/she will become a teaching student in a Tier 2 EM university.

The steps to becoming a teaching student are:

- (1) successfully pass an exam in the specific course in one of the CEMS universities
- (2) do tutoring for one semester and
- (3) attend a training with the university professor. After these three steps, the student becomes a teaching student.

The student teaches the selected course to a class in a Tier 2 university. The main theory of the courses is given online in the form of a MOOC. The Teaching student completes the online course with the offline teaching, exercises and case studies.

University professor supervises 3 PhD Teaching assistants who supervise 5 Teaching students. The ratio is therefore 1 University professor for 15 Teaching Students. Therefore scaling significantly the educational impact.

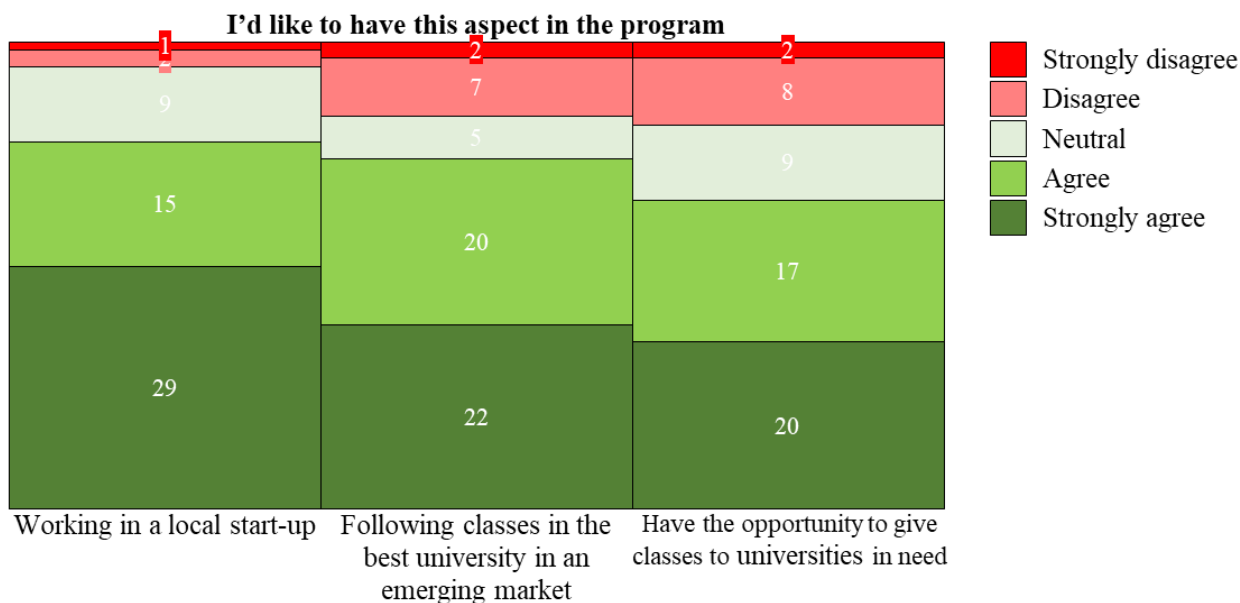
At the same time, the CEMS exchange student works part-time in a local start-up (CEMS social partners can find these start-ups)

These three solutions combined are extremely efficient to solve the missing skills of both the CEMS program and Tier 2 management education in EM.

I'd like to have this aspect in the program

- Likert scale (Strongly agree, agree, neutral, disagree, strongly disagree)

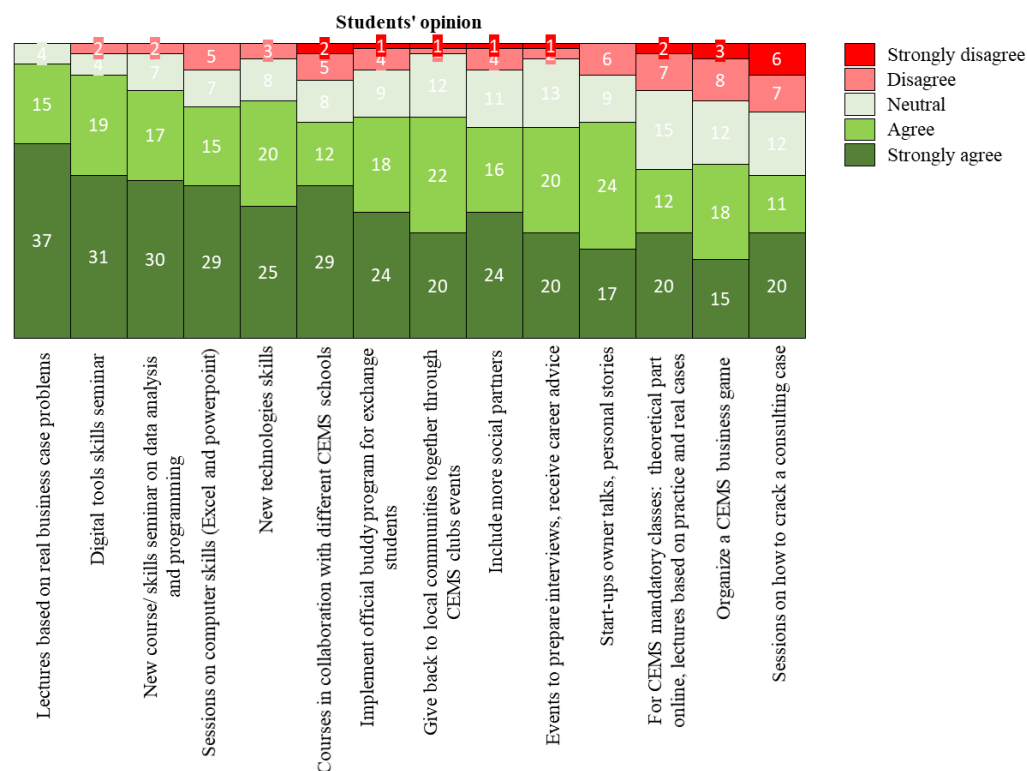
Figure 47: Participants opinion on the 3 elements forming the semester in EM



6. New skills seminars, courses and activities: I'd like to see in the program/ I'd like the program to offer:

- Likert scale (Strongly agree, agree, neutral, disagree, strongly disagree)

Figure 48: Participants opinion on the additional activities



7. General comments/suggestions: most relevant comments

- Short answer

Three elements together might be intense, but awesome if ambitious students

Maybe move the internship in the summer or winter break?

Negative comments about LSM

Might be considered racist or imperialistic
'I'll teach you something because I know better than anyone here'

Brilliant proposal, new idea: Students with skills in excel and ppt could teach others under the supervision of teacher

More hard skills (advanced excel, power point, data analytics software, business modeling, financial modelling, programming and statistics)

English issue, not everyone speaks English

Most students don't know the practicability of the real cases they made. Focus on finishing the task to solve the case

Issue: ROI aspect. Students who pay so much for their studies won't want to spend their time teaching others

8. Raw data (next pages)

					I'd like to have this aspect in the program			I'd like to see in the program/ I'd like the program to offer:																
Horodateur	Nationality	Home school	Status	Year of graduation	[Following classes in the best university in an emerging market]	[Have the opportunity to give classes to universities in need]	[Working in a local start-up]	[Digital tools skills seminar with the most advanced corporate partners]	[Skills seminar on new technologies]	[More courses given in collaboration with different CEMS schools]	[Lectures based on real business case problems]	[For CEMS strategy and CEMS leaderships mandatory class, have the theoretical part online, and focus the lectures on practice and real cases only]	[Sessions on how to crack a consulting case]	[Organize a CEMS business game]	[Start-ups owner talks, personal stories]	[Include more social partners]	[Events with CEMS club to give back to local communities together]	[Events to prepare interviews, receive career advice]	[Implement official buddy program for exchange students]	[New course or skills seminar on data analysis and programming]	[Sessions on computer skills (Excel and powerpoint)]	General comments/suggestions		
27-04-20 09:40	Germany	UAI	CEMS students	2020	Agree	Strongly Agree	Strongly Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree			
27-04-20 10:24	Germany	NHH	CEMS students	2020	Agree	Disagree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Disagree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree			
28-04-20 18:59	Italy	SSE	CEMS students	2020	Disagree	Disagree	Neutral	Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly agree	Agree	Agree	Agree	Disagree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree			
28-04-20 19:00	The Netherlands	RSM	CEMS students	2021	Neutral	Agree	Agree	Agree	Strongly agree	Strongly agree	Agree	Neutral	Strongly agree	Strongly agree	Agree	Neutral	Neutral	Agree	Strongly agree	Strongly agree	Agree			
28-04-20 19:05	Austria	VSE	CEMS students	2021	Agree	Disagree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Disagree	Neutral	Strongly agree	Disagree	Strongly agree	Strongly agree			
28-04-20 19:06	Filipine	SSE	CEMS students	2020	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Neutral	Neutral	Agree	Agree	Agree	Agree	Agree	Agree	Agree			
28-04-20 19:07	Belgium	LSM	CEMS students	2020	Strongly Agree	Strongly Agree	Neutral	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Neutral	Agree	Strongly agree	Strongly agree	Neutral	Strongly agree	Disagree	Agree	All three things together seem like a lot to handle on top of studying your own classes... But it sounds awesome if you're ambitious and not scared to spend personal time on extra work/teaching		
28-04-20 19:13	Austria	WU	CEMS students	2021	Strongly Agree	Strongly Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Neutral	Agree	Strongly agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree			

28-04-20 19:26	Italy	UB	CEMS students	2020	Disagree	Agree	Agree	Agree	Agree	Agree	Agree	Disagree	Strongly agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Less bullshit and more hard skills: advanced excel, power point, data analytics software, business modeling, financial modeling
28-04-20 19:31	The Netherlands	LSM	CEMS students	2020	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Delete LSM from the school list. It is a disgrace for the CEMS program, especially compared to decent schools
28-04-20 19:57	Belgium	LSM	CEMS students	2020	Neutral	Agree	Strongly Agree	Agree	Neutral	Agree	Agree	Disagree	Neutral	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Agree	Agree	
28-04-20 20:19	Slovakia	VSE	CEMS students	2021	Disagree	Neutral	Agree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Neutral	Agree	Agree	Agree	Strongly agree	Agree	Strongly agree	Neutral	Neutral	
28-04-20 20:25	Chili	UAI	CEMS students	2020	Strongly Agree	Neutral	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Neutral	Agree	Strongly agree	Neutral	Neutral	Agree	Strongly agree	Strongly agree	Neutral	Neutral	While I like the idea of the teaching student, coming from an emerging country, not everyone speaks English, even at a Masters level and much less in Bachelors. Maybe in India it's different, cause I'm sure more people speak English since they we're under British rule for a while. I don't know how it's in Egypt, and I'm sure you Jérôme will know better, but at least in Chile this would be super tough, as people mostly only know Spanish, and English only at an elementary level. Hope it helps :)
28-04-20 21:00	France	USYD	CEMS alumni	2016	Strongly Agree	Neutral	Strongly Agree	Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly disagree	Agree	Strongly agree	Neutral	Agree	Agree	Neutral	Agree	Neutral	
28-04-20 21:35	Italy	SSE	CEMS students	2020	Strongly Agree	Strongly Agree	Neutral	Strongly agree	Strongly agree	Disagree	Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	
28-04-20 21:42	Germany	SSE	CEMS students	2020	Neutral	Strongly Agree	Disagree	Strongly agree	Agree	Neutral	Agree	Disagree	Disagree	Neutral	Neutral	Strongly disagree	Neutral	Neutral	Strongly agree	Agree	Agree	
28-04-20 22:05	Belgium	LSM	CEMS students	2020	Strongly Agree	Disagree	Strongly Agree	Agree	Agree	Disagree	Agree	Neutral	Disagree	Disagree	Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	
28-04-20 22:55	Germany	HSG	CEMS alumni	2015	Strongly Agree	Strongly Agree	Disagree	Agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Strongly disagree	Strongly disagree	Neutral	Agree	Strongly agree	Strongly agree	Agree	Agree	Neutral	

																						Take into consideration what might be considered racist or imperialistic. The Instagram page nowhitesaviors has taught me personally a lot about the whole "I am not a professional but I'll teach you something because I know better than anyone here" issue.
28-04-20 23:22	Germany	WU	CEMS alumni	2019	Strongly Agree	Strongly disagree	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly disagree	Strongly disagree	Strongly disagree	Agree	Strongly agree	Agree	Strongly disagree	Neutral	Strongly agree	Strongly agree	
29-04-20 00:14	Germany	WU	CEMS students	2021	Agree	Strongly Agree	Neutral	Neutral	Neutral	Strongly agree	Strongly agree	Strongly disagree	Neutral	Strongly agree	Agree	Disagree	Disagree	Agree	Agree	Disagree	Disagree	
29-04-20 02:16	Australia	USY D	CEMS alumni	2020	Strongly Agree	Strongly Agree	Strongly Agree	Strongly agree	Neutral	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	Neutral	Neutral	Neutral	Agree	
29-04-20 06:10	Romania	WU	CEMS alumni	2019	Strongly disagree	Disagree	Agree	Agree	Disagree	Strongly disagree	Strongly agree	Agree	Agree	Disagree	Disagree	Disagree	Agree	Agree	Strongly disagree	Strongly agree	Strongly agree	Programming and statistics would have helped me in my job.
29-04-20 08:28	Germany	CBS	CEMS students	2021	Strongly Agree	Agree	Strongly Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Agree	Agree	Neutral	Neutral	Neutral	Neutral	Neutral	Agree	
29-04-20 08:36	Finland	AAL TO	CEMS students	2020	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Agree	Agree	Strongly agree	Strongly disagree	Strongly disagree	Agree	Agree	Agree	Agree	Neutral	Agree	Agree	
29-04-20 08:53	China	VSE	CEMS students	2022	Disagree	Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Disagree	The general advices this questionnaire projects are quite significant and beneficial to CEMS student. Indeed we already have "real-case" solving part in the teaching procedure, however most of us are not aware the practicality of the "case" we made. Students tend to grow the tendency "just to finish the task to solve the case" not to "think about the real use of the solution in terms of budget, labor, cost..." Also a complete events concerning the CV construction, interview process and career consultation would be more beneficial to both corporate partners and CEMS students.
29-04-20 09:09	Belgium	LSM	CEMS students	2021	Strongly Agree	Strongly Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Disagree	Neutral	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	
29-04-20 09:21	Hungary	UB	CEMS alumni	2019	Agree	Strongly Agree	Strongly Agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Neutral	Agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Agree	Neutral	

29-04-20 09:41	China	HKU ST	CEMS students	2020	Agree	Agree	Agree	Agree	Agree	Agree	Strongly agree	Agree	Strongly agree	Neutral	Neutral	Neutral	Agree	Neutral	Neutral	Strongly agree	Strongly agree	More hardcore skills please
29-04-20 09:49	Belgium	LSM	CEMS students	2020	Agree	Agree	Strongly Agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Neutral	Neutral	Neutral	Strongly agree	Agree	Strongly agree	Strongly agree	
29-04-20 09:58	Belgium	NUS	CEMS students	2020	Strongly Agree	Agree	Agree	Disagree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	
29-04-20 09:58	Singapore	NUS	CEMS students	2021	Agree	Agree	Strongly Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Neutral	Agree	
29-04-20 09:58	Italy	UB	CEMS students	2020	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	
29-04-20 10:04	Sweden	SSE	CEMS students	2021	Agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Neutral	Neutral	Neutral	Disagree	Strongly agree	Neutral	Agree	Agree	Agree	Neutral	
29-04-20 10:05	The Netherlands	RSM	CEMS students	2021	Strongly Agree	Agree	Strongly Agree	Agree	Agree	Agree	Agree	Disagree	Strongly agree	Disagree	Agree	Agree	Agree	Agree	Disagree	Agree	Agree	
29-04-20 10:11	Spain	LSM	CEMS students	2020	Agree	Agree	Agree	Neutral	Agree	Agree	Agree	Agree	Neutral	Neutral	Agree	Agree	Agree	Neutral	Agree	Strongly agree	Strongly agree	
29-04-20 10:12	Germany	SSE	CEMS students	2020	Strongly Agree	Neutral	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Neutral	Agree	Disagree	Disagree	Strongly agree	Agree	Agree	Disagree	Agree	Disagree	
29-04-20 10:28	Sweden	SSE	CEMS students	2020	Agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Agree	Agree	Agree	Strongly agree	Strongly agree	
29-04-20 10:35	Hungary	SSE	CEMS students	2020	Agree	Strongly Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Probably a ranking would fit this question better. These are all positive features that would enhance our education, so everyone would agree or strongly agree with most of them.
29-04-20 10:58	Austria	VSE	CEMS students	2021	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Agree	Agree	Neutral	Agree	Strongly disagree	Disagree	Neutral	Strongly agree	Strongly agree	Agree	Disagree	Strongly agree	Strongly agree	
29-04-20 11:10	Sweden	VSE	CEMS students	2021	Agree	Strongly Agree	Agree	Strongly agree	Agree	Agree	Strongly agree	Neutral	Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Brilliant proposal - an alternative idea could be that CEMS students deliver some of these additional classes (e.g. Excel/PowerPoint/PowerBI skills) under the supervision of a professor. So the student gets the experience in teaching and leadership but the quality of the course is validated by having input from a member of the academic faculty.

[illegible]

29-04-20 20:05	Austria	RSM	CEMS students	2021	Disagree	Strongly Agree	Strongly Agree	Disagree	Disagree	Disagree	Agree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	I really like the idea of the additional semester. I think, however, that having all 3 parts in one semester seems way too much. From my experience teaching a course, preparing for it etc. takes a lot of time and having courses and an internship next to that seems a bit too packed. Maybe the internship could then be moved to summer or winter break. But otherwise I think it's a really good initiative!
29-04-20 20:45	Germany	Nova	CEMS students	2020	Neutral	Strongly Agree	Strongly Agree	Neutral	Agree	Agree	Strongly agree	Disagree	Disagree	Agree	Disagree	Agree	Agree	Neutral	Strongly agree	Strongly agree	Strongly agree	
30-04-20 00:46	Germany	SSE	CEMS students	2020	Agree	Neutral	Agree	Strongly agree	Neutral	Strongly disagree	Strongly agree	Neutral	Disagree	Disagree	Strongly agree	Agree	Neutral	Disagree	Agree	Agree	Disagree	
30-04-20 08:06	Hungary	CUB	CEMS alumni	2020	Strongly Agree	Strongly disagree	Strongly Agree	Strongly agree	Neutral	Strongly agree	Strongly agree	Agree	Strongly agree	Neutral	Strongly agree	Agree	Strongly disagree	Neutral	Neutral	Strongly agree	Strongly agree	
30-04-20 16:10	Belgium	LSM	CEMS students	2020	Strongly Agree	Agree	Strongly Agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	
01-05-20 14:29	German	UB	CEMS alumni	2019	Disagree	Disagree	Neutral	Agree	Agree	Neutral	Agree	Disagree	Strongly agree	Agree	Neutral	Agree	Agree	Strongly agree	Agree	Agree	Disagree	

