

Appendix 1: Belgian INMLs description

The list provides the creation date of all the companies as well as a short description of their field of expertise. The following descriptions were all copy-pasted from the companies' websites.

AMOS (1983)

Founded in 1983, AMOS – Advanced Mechanical and Optical Systems – brings together the technical expertise of the 'Ateliers de la Meuse' engineering company and the optical know-how of the Astrophysics Institute of the University of Liege. Its team of 80 employees is specialised in the design and manufacture of very-high-accuracy optomechanical systems for the space industry and for professional astronomy. AMOS is active in three fields of expertise: Professional astronomy systems (...), Space systems (...) and Terrestrial satellite test equipment (...) (AMOS, 2017).

Aramith (1923)

Founded in 1923, Saluc started as a chemical industry specialised in tannery products, but converted after 1950 to billiards balls. Today, Saluc produces and distributes billiard balls under the registered trademark Aramith in more than 85 countries, and has a marketshare of 80 % worldwide.

The company is also specialised in the production of industrial balls used in all kind of applications, as well as in 9 pin bowling balls and trackballs. The exportation represents 98% of its activity (Saluc, 2017).

Automation & Robotics (1983)

This company founded in 1983 in Verviers is now a specialist in the conception and fabrication of tools intended to the ophthalmic industry. Their core business is the control and the positioning of the lenses. It targets clients in several markets among witch the automobile as well as in the chemical sectors (Automation & Robotics, 2017).

BEA (1965)

BEA is a leading manufacturer of sensing solutions for automatic doors systems. The company was founded in 1965 and its headquarters are located in Liège, Belgium. BEA also has offices in the United States, Japan and China and our products can be found across the globe (BEA, 2017).

Biebuyck SA (1938)

The company has become a worldwide genuine glass machinery manufacturer.

With a long history in the glass and Crystal market, Biebuyck has reached high-level knowledge and experience in the glass processing and machine manufacturing. A rigorous material selection and quality control ensure a high reliability of our products (Biebuyck, 2017).

Carmeuse (1860)

Carmeuse is a worldwide leading producer of high calcium and dolomitic lime, limestone and derived products, providing customized solutions and services for many different industries. The company is present on America, Europe, Africa, Middle-East and Asia (Carmeuse, 2017).

Cartamundi (1765)

The global family of games manufacturers and consultants. We are presently the world's largest manufacturer and distributor of playing cards and board games. Our secret? A skilled workforce that brings experience and passion to any game we make (Cartamundi, 2017).

Christeyns (1946)

A cleaner world is not built in a day. Christeyns was founded in 1946. Since then, it has grown into a major player on the global chemical market. From the small soap factory it once was, our group has grown into a stable international partner in 3 different fields of expertise: hygiene chemicals, engineered chemicals, construction chemicals (Christeyns, 2017).

CMI group (1817)

CMI designs, installs, upgrades and services equipment for energy, defense, steelmaking, the environment and other industries in general. The company assists clients throughout the

entire life-cycles of their equipment in order to improve the economic, technical and environmental performance of this equipment (CMI group, 2017).

Codine (1976)

In business since 1976, CODINE is a pioneer of Close Protection of Artworks (P.R.O.), seeking to promote the presence detection, active day and night, rather than traditional movements or other intrusion detectors (Codine, 2017).

Desleeclama (1892)

Our passion is to develop and produce stylish and smart mattress textile products that will inspire, comfort and protect you during the night (Bekeartdeslee, 2017).

DSi (2000)

DSi is a world leader in the use of radiotracer techniques. Their customers are from the automotive, lubricant, and aeronautic industries. They work as R&D partners for the development of new products and for a quick solving of technical problems.

They supply industrial equipment and measurement services worldwide (DSi, 2017).

EHP (Euro Heat Pipes) (2001)

Founded in 2001, EHP has taken over the spatial activities of the thermal control of the S.A.B.C.A.

Euro Heat Pipes is the European leader in Space Thermal control systems based on the use of Two-Phase Systems with more than 30 years of in orbit heritage. EHP develops Two-Phase solutions that enables optimized spacecrafts and payloads thermal architecture. EHP works all along in concurrent engineering with its customers to propose standard and customized products providing innovative, reliable, robust and qualified thermal solutions (EHP, 2017).

Elaut (1959)

Elaut is specialized in designing, developing, manufacturing and operating family amusement, vending and gaming equipment, with over 50 years of experience.

The company is one of the largest operators and concessionaires of amusement games and related equipment in the USA and Europe. Its concessions include remote-controlled truck and boat attractions, water blasters and traditional amusement game stands and arcades in various large amusement and theme parks, zoos, roadside attractions and museums. The Elaut group has its headquarters in Belgium and offices in the USA, Germany and Spain (Elaut, 2017).

Enzybel (2006)

Enzybel International, Blue Star Chemicals and Enzybel Asia Pacific have been developing plant derived enzymes for decades. While continually expanding our knowledge in this, we use our ever-growing expertise to improve the products we offer our customers. Their products are used in various industries such as pharmaceutical, food, textile or even cosmetic (Enzybel, 2017).

EVS (1994)

EVS is globally recognized as the technology leader for video production. Amid a rapidly evolving media landscape, our premium media technologies help broadcasters, rights owners and producers optimize live assets, engage audiences and increase revenue streams by monetizing content across multiple platforms (EVS, 2017).

Flying cam (1988)

Flying-Cam has been the world leader in providing super drone system for the civil industry since 1988. The company received two Oscars in Hollywood from the Academy of Motion Picture Arts and Sciences: the "Technical Achievement for the Invention of the Flying-Cam Technology" in 1995 and the "Scientific & Engineering Award" for the Flying-Cam 3.0 SARAH in 2014. Credits in Motion Picture Industry include: Harry Potter, James Bond, Mission Impossible, Transformers etc (Flying-Cam, 2017).

Galactic (1994)

For more than 20 years, Galactic is regarded as being one of the world's leaders in biotechnology serving the food, feed, personal & health care, and industrial markets. Based

on our valuable experience in lactic acid fermentation and the development of many other derivatives, we continuously create sustainable, innovative and health-friendly solutions in the field of food safety, nutrition and green chemistry (Galactic, 2017).

Heimbach Specialities AG (1874)

Since 1874 Heimbach Specialities has been a leading manufacturer of technical textiles for various technical applications and paper machine clothing, press felts and dryer fabrics for the paper machine industry (Heimbach Specialities, 2017).

I-MOVIX (2005)

I-MOVIX is the worldwide leader in extreme slow-motion for sports broadcast (from 75 to over 5,000 fps). The company's products are the first true ultra-slow motion systems, fully integrated for broadcast use, offering the unprecedented combination of very high frame rates and instant replay, or continuous streaming. The I-MOVIX technology has applications in live sports and other live TV productions, as well as in commercials, documentaries, feature films, industry and scientific R&D (I-MOVIX, 2017).

Iba (1986)

IBA develops, manufactures and supports medical devices and software solutions for cancer treatments. The company partners with healthcare leaders to provide cancer clinics and academic health centers with a fully-integrated approach of the patient flow (IBA, 2017).

IP Trade (2005)

IP Trade allows traders to increase productivity, efficiency and superior trading by optimizing performance through unified communications. And because we understand that a trading floor is not a "one size -fits all" environment, a series of trading applications and turret form factors are available to suit every type of user (IP Trade, 2017).

Iwan Simonis (1680)

Simonis is the global leader in cloth for pool, carom, snooker and pyramid. Simonis cloth is regarded as the best product of its kind because it makes every table play as good as it can

play. The cloth is one of the most functional parts of your billiard table and Simonis demonstrates its functional superiority by never interfering with the true roll of the ball (Iwan Simonis, 2017).

Jan De Nul (1951)

Innovation, expertise and sustainability. These are the corner stones of Jan De Nul Group's success. Thanks to its skilled employees and the world's most modern fleet, Jan De Nul Group is a leading expert in dredging and marine construction activities, as well as in specialized services for the offshore industry of oil, gas and renewable energy. These core marine activities are further enhanced by Jan De Nul Group's in-house civil and environmental capabilities offering clients a complete package solution (Jan De Nul, 2017).

Lambda X (1996)

Worldwide supplier of state-of-the-art ophthalmic metrology and quality control products, Lambda-X provide a comprehensive range of performing and reliable solutions for any type of IOLs, contact lenses & spectacles like the world acclaimed NIMO line of instruments. Besides our standard range, our capabilities in conception, prototyping & serial production are at your disposal for the development and production of your own product (Lambda-X, 2017).

Lasea (1999)

Founded in 1999, Lasea provides reliable, efficient, and high accuracy laser solutions for industry. Ultramodern clean technology, the laser in the service of industry and research meets the highest requirements. Lasea is specialised in high precision laser machining: marking, welding, engraving, drilling, cutting, texturing, and the removal of thin layers. Lasea applies its expertise in many sectors, including high quality watch industry and fine jewellery (Lasea, 2017).

Lhoist (1889)

Lhoist Group is a global leader in lime, dolime and minerals. With headquarter in Belgium, we are present in 25 countries with more than 100 facilities around the globe. We differentiate

our business by being close to our customers, understanding their needs and providing them with the high-quality products their activities require (Lhoist, 2017).

LVD (1952)

Established in the 1950s, LVD gained recognition as a precision press brake manufacturer. Significant growth in the 1990s, which included the acquisition of Strippit, Inc. in 1998, a U.S. based manufacturer of turret punch press equipment and the addition of laser cutting products to its portfolio helped position the company as a leader in laser, punching and bending technology. Today, LVD offers a full range of integrated products for the global sheet metalworking market. The company has five manufacturing facilities and is active in more than 45 countries following the principle of localized sales and service for each region (LVD, 2017).

Melexis (1988)

Melexis is a global supplier of micro-electronic semiconductor solutions and stands for engineering that enables the best imaginable future - a future which is safe, clean and comfortable. All of these aspects are reflected in the applications that our technology empowers (Melexis, 2017).

Meura (1845)

Specialized in the design and manufacturing of brewhouse equipment, Meura is currently a world leader in its field, offering state-of-the-art technologies to international brewing companies as well as to the craft brewing industry. Famous not only for its Meura 2001, Meura also supplies turnkey brewhouses, from milling to wort cooling. Today, more than 95% of our technology is exported worldwide and about 25% of the global beer volume is produced using Meura equipment (Meura, 2017).

Nanocyl (2002)

Nanocyl provides high quality Carbon Nanotube (CNT) solutions that improve the properties of your material such as ESD/electrical conductivity, mechanical reinforcement, thermal dissipation and eco-friendly fouling release (Nanocyl, 2017).

Nomacorc (2003)

Originally conceived as an entrepreneur's solution to cork taint and bottle variation, Nomacorc is now one of the largest producers of wine closures. Since the company's inception in 1999, Nomacorc co-extruded wine corks have become a trusted and widely-used way to close wine, protecting nearly 2.5 billion bottles of wine around the world each year (Nomacorc, 2017).

Petersime (1912)

Petersime provides world leading incubators, hatchery equipment and turnkey hatcheries aligned with the expertise and support to maximize return on investment (Petersime, 2017).

Pranarom (1991)

Pranarôm is a laboratory specialised in scientific and medical aromatherapy. It was founded in 1991 by Dominique Baudoux, a well-known pharmacist and aromaterapist, very much appreciated for his books on aromatherapy (Pranarôm, 2017).

Renson (1909)

RENSON®'s mission is the ongoing development and manufacturing of commercial and residential natural air ventilation products. These products have a positive environmental impact. They have none or minimal operational costs, they reduce exterior noise, they improve public health and they provide high quality fresh air supply (Renson, 2017).

S.A.B.C.A. (1920)

SABCA is one of the main aerospace companies in Belgium. Founded in 1920, it has built an extensive and varied know-how based on its 95+ years experience in designing, building and upgrading large and complex elements for aircraft and space launchers. Our customers and partners belong to the elite of the aerospace world and are spread worldwide (SABCA, 2017).

Skylane Optics (1998)

Skylane Optics supplies a broad range of optical transceivers, passive products and smart home. Our engineers work closely with our customers to find the best solutions for every

application and all major platforms. We are committed to provide high quality products and services to our customers (Skylane Optics, 2017).

Sonaca (1931)

Sonaca is active in the development, manufacturing, and assembly of advanced aerospace structures for civil, military, and space markets. Sonaca also supplies engineering and test services (Sonaca, 2017).

UCB Pharma (1920)

UCB is a global biopharmaceutical company, with a focus on neurology and immunology (UCB, 2017).

Van de Wiele (1880)

Van de Wiele develops, manufactures, assembles machines for carpet and velvet production, technical fabrics and BCF extrusion lines. Carpet and velvet consist like flat weaves of warp and weft yarns, but have an additional third dimension: the pile yarns. Thanks to this unique weaving technique, our weaving machines can weave high-grade carpets and the finest velvets since 1880, in weaving mills all over the world (Van de Wiele, 2017).

Vigan (1969)

VIGAN manufactures bulk materials handling systems mainly:

- Mobile pneumatic conveyors or vacuators or grain pumps.
- Pneumatic continuous barge unloaders and mechanical barge loaders.
- Mechanical and pneumatic continuous ship unloaders for vessels up to post-Panamax.
- Mechanical loaders for any size of ships.

VIGAN capabilities include also complete turnkey projects for port terminal including ship unloading & loading, storage facilities and bagging operations.

An affiliate company from VAN DE WIELE (Vigan, 2017).

Vlassenroot (1926)

Vlassenroot is world leader in the production of the most critical components of telescopic cranes: booms, turntables, and chassis for mobile cranes. Our core business is the production of advanced steel components, complex supersized components made of high strength steel, all according to the highest quality standards. The expertise and potential of our enterprise group are deployed in the construction of extraordinary infrastructural works, such as bridges, locks and tower blocks (Vlassenroot, 2017).

Appendix 2: Interview questions

General questions about the company

1. In 2 words, what is your function/job title inside the company? What does that role involve? What responsibilities does it entail?
2. What is the most sold item; what is your company's "cash cow"?
 - a) Which % of the total turnover of the company stems from sales of this particular item/line of products/technologies?
 - b) How long has the company been selling this particular item (a: from the moment the firm was created, or b: since some later stage – if the latter is the case; specify year of launch)?
 - c) Was it a pioneer as regards the development/sales of this item, or did it start with it when there were already other companies offering it in the market?
3. How would you define your target market e.g. in terms of potential users/buyers –who are your clients- and geographic outreach (are they a player on the national market, European or global market – let them specify that)?
4. Regarding your target market; what is your company's market share?
 - a) How do you estimate it? (f.i. are there analysts –like Gartner- that follow your market and do they issue reports that serve to estimate your market power; or do you engage in competitive intelligence activities yourself, and you follow up on sales figures etc. of your competitors)?
5. How would you characterize the "environment" or "dynamics" in your target market: are you acting in a **mature** (where products/offers/technologies have become more or less standardized and competition is largely based on price between companies that have been active in this market for a substantial period of time – often the market is dominated by a few strong players) or an **immature** market (there is less of a standardized design/solution and what the different competitors offer varies substantially; there are quite some newcomers in the market and/or the market shares are fragmented and divided over a considerable number of firms)?
 - a) Do you have a lot of competitors? How many do you consider as relevant market forces, in terms of:
 - a. competitors that have a higher market share than you;
 - b. competitors that are bigger in size than you;
 - c. competitors that are more innovative than you/competitors that are technologically more active/advanced than you?
 - b) Did the number of competitor vary along time?
 - c) How much does your offer differ from what others propose and is there a tendency towards some kind of standardized or common solution?
 - a. A lot (substantial difference); every player offers a unique solution; and that's probably how it will stay

- b. A lot (substantial difference); but there is a convergence towards a dominant design/product/technology going on so we will have to adapt our product
 - c. There is a marginal difference between the offerings, and we expect these marginal differences to remain
 - d. There is a marginal difference, but there is convergence going on
 - e. There is commonality between offerings, and we expect this to remain that way
 - f. There is commonality, but we expect divergence
6. Do you offer standardized or customized products to you clients?
7. How has the market share of your company, in the target market you address, evolved in the past 5 years?
- a) Went up
 - b) Stable
 - c) Went down
8. What is at present the total value of sales in your target market (= sales generated by your own firm and the competitors)? In x million or billions per year (if possible get a figure for 2016)
9. How has the total value of sales in your target market evolved over the past 5 years (= sales generated by your own firm and the competitors)?
- a. it went up
 - b. it stagnated
 - c. it went down

Marketing related questions

10. Do you apply one of those marketing strategies?
- a. Closeness with the customer
 - b. Price competition
 - c. Price/quality ratio
 - d. Economy of scale
 - e. Ingredient branding/promotion of the brand name/creation of the brand awareness
 - f. Cost leadership
 - g. Distribution network
 - h. Vertical integration/value chain development
 - i. Diversification
 - j. Advertisement
 - k. Other

What are your feelings about the technique you use?

11. In the past 5 years, how has the R&D budget in your company evolved (as a percentage over turnover)?

- a) Went up
- b) Stable
- c) Went down

12. What is the percentage of the turnover you now invest in R&D?

13. How many patent do you register a year?

14. In the past 5 years: to what extent has R&D led to the launch/introduction of:

- product innovations
- (production) process innovations
- organizational innovations
- commercial innovations?

15. If R&D budgets are not used to come up with commercial/marketing innovation affairs; does your company devote other means to commercial innovation or not?

- a. If yes; how? Through a specific budget or as part of a business plan action, dedicated department ...? ...
- b. If not; does that mean the company does not innovate its commercial / marketing activities, or that it does, but in a “learning by doing” manner (innovation takes place, but it is done in an on-the-fly basis)? ...
- c. If the company has implemented innovations in the field of marketing and sales over the past 5 years; which ones would you highlight in particular? ...

16. Can you select a “relevant competitor” whose market share went up in the past 5 years.

17. When you look at the “relevant competitor” you selected: would you say that they

- a. were more active and spent a higher % of turnover on R&D than your own company? Or equal or less?
- b. were more active in terms of launching
 - i. product
 - ii. process
 - iii. organizational
 - iv. commercial innovations than your own company? Or equal or less?
- c. If that competitor has implemented innovations in the field of marketing and sales over the past 5 years; which ones would you highlight in particular? ...

18. Do you perceive a correlation between “R&D intensity” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

19. Do you perceive a correlation between intensity of “product innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

20. Do you perceive a correlation between intensity of “commercial innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

21. To what extent do you opine whether marketing and sales activities increase in importance in function of the remoteness of clients? Do you have to do additional efforts to get on the radar of far-away clients (f.i. as internet is universally accessible for all clients across the globe ...)?

22. Which (other) challenges did your company encounter in the process of internationalisation?

23. What is your exportation percentage?

Appendix 3: Belgian INMLs' information

Company name	Localisation	Region	VAT number	Creation	Age	Sales Revenues	Number of employees (FTE)	Contacted	Response
AMOS	4031 Angleur	Walloon Region	425.172.378	1983	34	38.139.057	79,8	Yes	
Aramith	7604 Callenelle	Walloon Region	440.740.581	1923	94	17.206.268	145,8	Yes	Negative
Automation & Robotics	4800 Verviers	Walloon Region	423.637.107	1983	34	16.054.536	86,30	Yes	
BEA	4031 Angleur	Walloon Region	419.044.453	1965	52	47.757.876	156,3	Yes	
BIEBUYCK SA	7110 Houdeng-Goegnies	Walloon Region	401.746.284	1938	79	8.771.222	39,9	Yes	
Carmeuse	5500 Andenne	Walloon Region	431.473.519	1860	157	127.003.170	376,7		
Cartamundi	2300 Turnhout	Walloon Region	877.566.324	1765	252	46.246.967	243,5	Yes	
Christeyns	9000 Gent	Flemish Region	401.066.789	1946	71	71.735.569	106,1	Yes	
CMI group	4100 Seraing	Walloon Region	422.362.447	1817	200	275.020.682	774,0	Yes	
Codine	1300 Wavre	Walloon Region	416.508.397	1976	41	454.490	3,8	Yes	
Desleclama	8980 Geluvelde	Flemish Region	405.395.959	1892	125	1.208.006	41,1	Yes	
Dsi	7503 Froyennes	Walloon Region	471.661.213	2000	17	1.619.050	18,3		
EHP	1400 Nivelles	Walloon Region	474.521.723	2001	16	398.190	43,3		
Elaut	9100 Sint-Niklaas	Flemish Region	416.901.743	1959	58	17.671.745	59,7	Yes	
Enzybel	4530 Villers-le-Bouillet	Walloon Region	879.673.994	2006	11	6.841.741	9,8		
EVS	4102 Seraing	Walloon Region	452.080.178	1994	23	101.188.960	321,0		
Flying cam	4681 Oupeye	Walloon Region	433.096.189	1988	29	672.508	7,5	Yes	Negative
Galactic	7760 Escanaffles	Walloon Region	408.321.795	1994	23	33.121.157	85,0		
Heimbach Specialities AG	4721 Neu-Moresnet	Walloon Region	402.333.630	1874	143	12.965.602	112,8	Yes	Negative
I-Movix	7000 Mons	Walloon Region	871.683.372	2005	12	1.131.651	13,1	Yes	
IBA	1348 Louvain-la-Neuve	Walloon Region	428.750.985	1986	31	218.577.810	644,7	Yes	Positive
IP trade	4460 Grâce-Hollogne	Walloon Region	473.113.837	2005	12	8.263.016	23,8		
Iwan Simonis	4821 Andrimont	Walloon Region	428.960.130	1680	337	10.940.500	11,3	Yes	
Jan Denul	9308 Hofstade-Aalst	Flemish Region	406.041.406	1951	66	1.065.745.157	1.072,9	Yes	

Lambda X	1400 Nivelles	Walloon Region	458.269.372	1996	21	2.838.347	30,5	Yes	
Lasea	4031 Angleur	Walloon Region	465.268.616	1999	18	3.646.357	36,5	Yes	Negative
Lhoist	1342 Limelette	Walloon Region	459.399.522	1889	128	82.113.470	80,2	Yes	Negative
LVD	8560 Gullegem	Flemish Region	405.350.231	1952	65	114.714.858	385,0	Yes	
Melexis	8900 Ypres	Flemish Region	435.604.729	1988	29	46.343.790	195,7	Yes	
Meura	7600 Peruwez	Walloon Region	447.632.234	1845	172	50.301.594	128,6	Yes	
Nanocyl	5060 Sambreville	Walloon Region	476.998.785	2002	15	3.311.624	38,0		
Nomacorc	4890 Thimister-Clermont	Walloon Region	473.730.281	2003	14	50.375.165	206,3		
Petersime	9870 Zulte	Flemish Region	404.527.612	1912	105	72.205.333	213,7	Yes	
Pranarom	Ghislenghien	Walloon Region	430.155.012	1991	26	37.720.488	57,9	Yes	
Renson	8790 Waregem	Flemish Region	462.152.837	1909	108	83.875.938	195,8	Yes	Positive
S.A.B.C.A.	1130 Bruxelles	Brussels Region	405.770.992	1920	97	192.406.482	913,8	Yes	
Skylane Optics	5650 Fraire	Walloon Region	463.918.534	1998	19	2.066.343	13,0	Yes	Positive
Sonaca	6041 Gosselies	Walloon Region	418.217.577	1931	86	310.383.403	1.623,5	Yes	
UCB Pharma	1070 Bruxelles	Brussels Region	403.096.168	1920	97	2.228.643.503	963,2	Yes	
Van de Wiele	8510 Kortrijk	Flemish Region	405.450.595	1880	137	214.933.747	213,2	Yes	
Vigan	1400 Nivelles	Walloon Region	406.971.418	1969	48	25.799.462	23,6		
Vlassenroot	1702 Groot-Bijgaarden	Flemish Region	401.927.616	1926	91	16.693.658	47,6	Yes	Positive

Appendix 4 : Nicolas Bronchart' interview – IBA

Pouvez-vous m'expliquer quelle est votre fonction au sein de l'entreprise ? Qu'est-ce que cette fonction implique concrètement ? Je suis VP R&D, c'est-à-dire que je suis en charge de l'ensemble des fonctions de Recherche et Développements, pour les trois unités d'IBA qui concernent les applications d'accélérateurs de particules. Cela inclut donc, dans les équipes de mon groupe, de travailler sur le très court terme (ce qui est installé de nouveau actuellement, pour supporter les sites et les équipes d'installation), le court terme (ce qui sera installé dans la prochaine version du produit, soit endéans l'année en général), le moyen terme (ce qui sera inclus dans le produit dans les versions à venir, soit dans les 3-4 années qui viennent) et le long terme (recherche plus fondamentale, parfois avec des universités ou autres centres de recherches, réflexion sur les produits du futur, etc.)

Quel est le produit le plus vendu ? Quelle est la « vache à lait » de l'entreprise ? Actuellement, il s'agit des produits de ProtonThérapie. Nos solutions offrent donc une alternative à la radiothérapie conventionnelle pour soigner le cancer. Les avantages sont liés aux effets secondaires (dose radioactive beaucoup plus faible voire nulle sur les organes sains autour des tumeurs, moins de cancers secondaires dans les années qui suivent, meilleure qualité de vie des patients après le traitement,...)

- a. **Quel est le pourcentage du chiffre d'affaire qui est généré par ce produit ?** de l'ordre de 70%
- b. **Depuis combien de temps l'entreprise vend-elle ce produit ? (a : depuis que l'entreprise est créée ? b : après l'année de création de l'entreprise, quelle année ?)**
Non, pas depuis la création de l'entreprise. Le premier centre a été vendu vers la fin des années '90 (alors que IBA a été fondée en 1986), et le premier patient a été traité en 2001.
- c. **Etait-ce un produit pionnier quant à son développement/sa vente ou bien d'autres entreprises avaient-elles déjà développé un produit similaire ?** Il y avait déjà des centres qui traitaient des patients depuis pas mal d'années, mais il s'agissait toujours de centres de recherche, et non pas d'un produit « industriel » tel que proposé par IBA. Après ce premier centre, il y a encore eu beaucoup de boulot pour en faire justement un produit industriel, mais IBA était pionnière dans cette direction.

Comment définiriez-vous votre marché cible ? (En termes d'utilisateurs/acheteurs – qui sont vos clients – et de localisation – national, international, ...) Il s'agit de centres hospitaliers, soit spécialisés dans l'oncologie / traitement du cancer (quel que soit le type de traitement envisagé), soit de gros centres hospitaliers non spécialisés, mais suffisamment grands pour justifier un tel investissement. Selon les pays du monde, il peut aussi bien s'agir d'hôpitaux publics ou privés, académiques ou non. Le marché est mondial.

Quelle est la part de marché de l'entreprise sur son marché cible ? Sur l'ensemble des centres de protonthérapie en activité dans le monde, je pense que plus de 55% sont des centres avec des systèmes IBA. Et nous gardons ce niveau de part de marché en termes de ventes pour le moment, et certainement en termes de mise en marche / installation (certains concurrents ont vendu des centres, mais ne sont pas encore en mode clinique).

- a. **Comment êtes-vous parvenus à l'estimer ?** Le nombre de centre (ou plutôt de salles de traitements) vendus chaque année dans le monde est relativement réduit (entre 20 et 30 salles), donc chaque cas / vente / centre est bien connu.

Comment caractériseriez-vous l'environnement dans lequel vous évoluez ? Etes-vous dans un marché mature ou immature ? Nous sommes toujours dans un marché immature (early adopters). D'après beaucoup de spécialistes et plusieurs rapports internationaux, entre 15 et 50% des patients traités en radiothérapie conventionnelle pourraient bénéficier de la protonthérapie (rapport intérêt clinique par rapport aux surcoûts du traitement). Or actuellement, moins de 2% des patients en bénéficient.

Avez-vous beaucoup de compétiteurs ? Combien de compétiteurs considérez-vous pertinent en termes de :

- a. **Compétiteurs qui ont une plus grande part de marché que vous ?** IBA a la plus grande part de marché
- b. **Compétiteurs qui ont une plus grande taille que vous ?** Si on ne regarde que la protonthérapie, aucun compétiteur n'a la même taille (ou marché). Par contre, certains compétiteurs sont beaucoup plus grands en termes d'entreprise, parce qu'ils ont d'autres produits, sur d'autres marchés.
- c. **Compétiteurs qui sont plus innovant que vous ? / Compétiteurs qui sont plus axés/avancés que vous technologiquement ?** Difficile à dire. Je pense que l'image d'IBA est d'être plus avancé technologiquement, par contre, un de nos compétiteurs ne vend pas beaucoup, mais est reconnu pour vendre à des centres de recherche avancés, avec du « sur mesure » technologique.

Le nombre de compétiteur a-t-il varié au cours du temps ? Pas encore, mais cela va sans doute venir (acquisition ou faillite de certains plus petits compétiteurs, car les coûts pour rester sont très importants).

A quel point votre solution diffère-t-elle de ce que vos concurrents offrent ? Y a-t-il une tendance vers une solution standardisée/commune ?

Beaucoup (différence importante) ; chaque entreprise a une solution propre et ça va certainement rester comme ça Il y a des différences assez nettes en termes de technologies, mais les applications sont les mêmes. Cela va sans doute rester fort différent tant que les applications peuvent être « atteintes ».

Offrez-vous des produits standardisés ou sur-mesure à vos clients ? C'est principalement du sur mesure. On a un catalogue, mais il n'y a jamais 2 centres les mêmes. On fait toujours de l'engineering sur tous les centres qu'on fait. Il n'y a pas de centre clé sur porte. **Et ça c'est en fonction des demandes du client ?** Oui il y a toujours des choses soit au niveau du design du bâtiment, soit au niveau des équipements qu'ils veulent en plus dans la salle de traitement ou bien ils veulent des équipements d'imagerie particulier. Pour l'instant en tout cas on vend des choses qui n'existent pas encore, qui sont encore en train d'être « designée » ou qui vont être « designée ». Donc c'est forcément du sur mesure. C'est soit des choses que nous on met dedans et qu'on dit au client vous aurez ça, parce qu'on le développe. Soit le client nous dit « on aimerait bien avoir ça » et on dit okay on le met dedans. Et donc c'est quand même très spécifique. C'est pas du tout standard.

Comment a évolué votre part de marché, sur le marché cible, au cours de ces 5 dernières années ?

La part de marché est relativement stable. Elle est environ de 50%-55%. Elle a même plutôt augmenté ces 5 dernières années et puis maintenant c'est stable. Je crois qu'on est leader du marché depuis à peu près le début du marché.

Pouvez-vous me donner le nom d'un concurrent pertinent dont la part de marché a diminué au cours de ces 5 dernières années ?

On pourrait peut-être dire Varian donc la boîte américaine. Je pense que Varian a quand même vendu moins. Varian c'est la grosse boîte américaine leader en radiothérapie. C'est vrai qu'ils avaient aussi au début financé eux même des centres et ils ont du en mettre un en faillite. Parce que il n'y avait pas assez de patient. Ils y avaient mis tellement d'argent que ça ne marchait plus. Ce que nous ne voulons absolument pas faire parce qu'on se dit que si il n'y a pas de marché il n'y a pas de marché et donc on ne veut pas investir d'argent. On n'en n'est pas capable de toute façon. Eux sont plus grands. Donc c'est vrai qu'ils ont pris quelques claques.

Quelle est la valeur totale des ventes sur votre marché cible ?

Ca doit être de l'ordre de 500 millions par an.

Combien vendez-vous de salles par an ? L'année dernière on a vendu 14 salles. Donc ça doit faire 9 accélérateurs (3 grands et 6 petits) pour 14 salles de traitement. Mais ça sinon ça doit se trouver dans le rapport annuel. C'est de cet ordre de grandeur là et on a plus ou moins ça comme objectif.

Comment a évolué la valeur totale des ventes sur le marché cible ?

Ca augmente fort. Alors je n'ai pas les chiffres exacts mais ça augmente vraiment. **Aussi parce que vous avez développé le plus petit accélérateur ?** Entre-autre ça, et puis en général l'acceptation par le monde médical augmente. Et comme il y a de plus en plus de centres de plus en plus de patients et de rapports médicaux et d'articles qui disent que c'est bien, ça fait boule de neige. Tous les grands centres veulent leur proton thérapie dans leurs investissements. Comme ça ne se planifie pas d'un an à l'autre, quelques années à l'avance ils commencent à en parler. Les cycles de vente sont long hein. Les cycles de vente sont d'environ 3 ans donc entre le début des contacts et la vente et donc forcément il y a une certaine inertie mais maintenant c'est sûr qu'il y en a plus qu'avant.

Est-ce que parfois le patient demande à avoir cette technologie là ou c'est le médecin qui décide ? Oui, mais ça ne change rien dans la décision. Dns je sais qu'en Belgique on a rencontré des gens... Donc on n'a toujours pas de centre en Belgique. Il y a 6 ans il y a un couple dont le petit garçon qui avait un an a été diagnostiqué d'un triple cancer au cerveau ils ont réussi à opérer 2 des tumeurs et la troisième était à un endroit beaucoup trop dangereux. Et on leur a conseillé la radiothérapie mais la radiothérapie du cerveau c'est la mort parce que c'est palliatif. Et donc ils ont refusé et un médecin leur a mis sur un petit bout de papier « je ne peux pas vous le dire mais il y a la proton thérapie, renseignez-vous » et il ne pouvait pas le dire parce que ça n'existait pas en Belgique et que l'INAMI ne remboursait pas etc. Et donc ils se sont renseigné et ils ont essayé de faire du bruit avec ça mais le problème est que le délai d'installation et déjà rien que le cycle de vente sont beaucoup trop long. Donc finalement ils ont été acceptés dans un centre en Suisse (qui n'était pas un centre iba) et ils ont du

déménager là-bas pendant 3 mois parce que le traitement c'est environ 40 jours ouvrables d'affilés, tous les jours. Donc il faut être sur place. Et puis maintenant le petit garçon il a 6 ans il est en pleine forme il n'a plus rien. Et donc eux ils ont fait beaucoup de bruit en Belgique. Donc est-ce que ça a aidé à la décision de la KUL, moi je n'en sais rien. Parce qu'ils ont fait des pétitions, ils ont fait du bruit là-dessus en disant « c'est incroyable qu'on n'ait pas ça en Belgique ». Et donc finalement ils ont réussi à se faire rembourser une partie du traitement. Puisqu'ils ont du tout payer eux-mêmes et c'est de l'ordre de 150 000€ le traitement. Et puis l'INAMI leur a remboursé, si pas tout, une bonne partie du traitement. Mais après coup parce que l'INAMI ne pouvait pas dire qu'ils ont eu tort, puisque c'était une mort certaine et il est maintenant en pleine forme. Enfin, il a perdu juste un peu d'audition.

Utilisez-vous une stratégie marketing ?

Proximité du client : oui, un petit peu. On est en train de se régionaliser. On a maintenant un gros centre en Amérique du Nord et un autre centre en Asie. Donc à la place de tout baser sur Louvain-la-Neuve on essaye de se rapprocher un peu. Maintenant ça reste toujours un peu Louvain-la-Neuve centric. **Par proximité du client ce que je voulais dire c'est est-ce que ce sont aussi les discussions avec les clients qui vont faire que vous allez modifier le produit.** Dans beaucoup de cas il y a des choses spécifiques que le client demande. **Et dans ces choses spécifiques il y en a-t-il certaines pour lesquelles vous vous rendez compte que c'est plus pratique qui deviennent standard par après ?** Alors, ça devient parfois standard par après. Ce sont rarement des choses auxquelles on n'a jamais pensé. Par contre ça fait parfois des accélérations. Donc des choses qui étaient prévues pour plus tard qu'on met parfois plus tôt. Je ne pense pas qu'il y ait souvent ou qu'il y ait eu... le problème maintenant c'est qu'on se retrouve face à des choix de timing qui sont donc parfois accélérés suite à la demande de clients. Je ne pense pas qu'on s'est déjà retrouvé face à une demande de client en se disant « ha ben tiens, ça on n'y avait jamais pensé ». Le monde médical est aussi un monde où on parle beaucoup. Il y a peu de secret parce que ce sont des académiques qui veulent publier et qui veulent donc que ça se sache. Donc toutes les idées sont souvent publiées, il y a peu de secrets gardés. Il y a assez bien de collaboration par rapport aux marchés industriels où il n'y aura jamais de collaboration. Ici un grand hôpital de recherche des USA va collaborer avec un hôpital européen puisque de toute façon il n'y a pas de compétition ni de concurrence. La seule concurrence qu'il y a elle est académique et elle repose sur le premier qui en parle. Le premier qui en parle officiellement a quelque part un droit de préemption sur l'idée. Donc il y a beaucoup d'idées qui se disent. Et donc forcément nous on lit tout ça aussi et même si ce n'est pas nous qui avons l'idée on la met dans la roadmap parce qu'on sait qu'à un moment donné on va devoir regarder à ce genre de choses. Et donc certaines ventes accélèrent l'application ou le design de certaines choses. Ça change le délai, mais pas tellement le contenu.

Compétition sur les prix : ça oui toujours parce que c'est très cher. Maintenant c'est surtout sur les coûts que la compétition se fait. Si on arrive à diminuer les coûts le prix suivra. **Mais donc vous n'allez pas diminuer la qualité d'un produit pour pouvoir appliquer des prix plus bas ?** C'est du medical device comme on dit, donc c'est très réglementé et tout ça doit être réglementé par la FDA aux USA et par Iso 13485 qui est la certification des medical device en Europe. Si on ne fait pas les choses dans la qualité voulue, on ne peut pas le mettre sur le marché. **Et est-ce qu'il y a des contraintes légales différentes en fonction des pays ?** Oui oui. Au niveau compliance. Un peu par pays. Alors il y a 3 grands axes qui sont la FDA pour les USA et toute une série de pays se raccrochent à ça. Il y a le CE marking qui est pour l'Europe et

d'autres pays en dehors de l'Europe qui se raccrochent à ça et il y a le CFDA (Chinese food and drug administration) pour la Chine. Et eu il y a peu de pays qui se raccrochent à ça parce qu'en Asie ils se raccrochent plutôt à la FDE. C'est globalement le même genre de chose, mais ce n'est pas exactement la même chose et en compliance il faut parfois adapter en fonction du pays. Surtout les dossiers techniques et les réponses. Mais alors aussi ce qu'on voit mtn et là c'est pays par pays, en plus d'avoir le produit qui est certifié il faut que le processus qu'on utilise soit certifié même pour les ventes. Donc il faut des licences spéciales comme on utilise des accélérateurs de particules qui émettent des radiations radioactives il faut des licences spéciales d'installations et de traitement et ça c'est pays par pays. Mais c'est inclus dans l'offre globale. Donc on peut vendre en Chine mais il faut une licence spéciale pour vendre des produits à radiation. Il y a quand même des processus qui sont inclus dans l'offre qu'on fait au client mais qui sont pays par pays.

Economie d'échelle : Ben ça on espère. C'est pour ça qu'on construit une usine là-bas derrière, c'est pour en faire plus. On espère gagner sur les petits accélérateurs. Le but c'est d'en faire 10-15 par an et si on arrive à ça on va déjà réduire les coûts de manière assez importante. Surtout dans la partie test. Parce qu'on fait très peu de fabrication nous-même. Tout est sous-traité à peu près. Mais on fait tous les tests nous-même. Et les tests c'est 3 à 6 mois. Donc si on arrive à réduire ça, on réduit les couts de manières très très importante.

Promotion du nom : ça reste un marché très spécialisé et technique, donc il n'y a pas besoin de faire de promotion sur la marque.

Réseau de distribution : non c'est en direct.

Intégration verticale : On en fait un peu parce que depuis 4-5 ans, suite à des programmes de recherche avec l'UCL d'ailleurs on a inclus toute une offre d'imagerie médicale qui est intégrée dans le produit. Donc pour traiter il faut évidemment avoir les images de la tumeur etc et don on a maintenant intégré des moyens de reprendre des images. Alors ce n'est pas suffisant, mais ça permet d'améliorer le positionnement et valider pendant le traitement que ni l'organe ni la tumeur n'ont bougé, des choses comme ça. Donc on commence à intégrer l'imagerie de plus en plus tout ce qui est software en général fait partie de la chaine de valeur, il y a le traitement planning, qui est le niveau supérieur. Ça dépasse la salle de proton c'est tout le planning du traitement du cancer. Alors il y a des couches de plus en plus précises dans lesquelles on avait peu. Et maintenant on essaye de s'y développer pour offrir un peu plus au client à ce niveau-là. Donc c'est un peu une intégration verticale.

Diversification : on essaye de ne pas trop le faire. C'est déjà suffisamment difficile comme ça. Publicité non, pas besoin. Parce que via des hôpitaux c'est ou alors on considère la participation aux grande foires commerciales comme de la publicité. On participe à tous les grands congrès sur le cancer que ce soit médical ou commercial. Ca on est dedans parce qu'il faut être dedans quoi. Mais par contre de la pub en tant que telle non. **Et quand vous dites qu'il n'y a pas besoin de faire de promotion au niveau de la marque c'est parce que le milieu est tellement petit que tout le monde connaît déjà ?** oui, tout le monde connaît tous les players. Les médecins qui s'intéressent à la proton thérapie, ils lisent un article et ils ont les noms des 5-6 entreprises qui en font. De nouveau, c'est l'avantage d'avoir un marché qui est très publique et très ouvert. Il n'y a rien de caché. Il n'y a jamais quelqu'un qui va acheter un centre et ne pas en parler. Avant je travaillais dans l'autre unit, business industriel et là il y avait des clients qui nous disaient qu'on ne pouvait pas dire qu'on leur en avait vendu un quoi. Car ils estimaient que c'était un avantage compétitif dans le milieu industriel dans lequel ils étaient et donc ils ne voulaient pas que ça se sache. Et ici en proton ce n'est jamais le cas. Au contraire dès que le contrat est signé tout ce qu'ils veulent c'est le dire, l'annoncer. Parce que

eux c'est leur image de marque, ça leur apporte une plus-value d'avoir aussi une salle de traitement ou de recherche en proton thérapie. Donc la publicité elle se fait toute seule enfin sur la marque en tout cas. Et en plus de ça, comme nous on est leader tout le monde le sais. C'est nous qui avons plus de centre, de patients, de salles donc ça se sait très vite évidemment. Pas besoin de travailler là-dessus.

Quel pourcentage de votre chiffre d'affaire investissez-vous actuellement dans les R&D ?

A mon avis on doit être aux alentours de 10-15%, je ne sais pas exactement. C'est vraiment le cœur d'Iba. L'innovation c'est vraiment ce à quoi Iba est fort.

Au court des 5 dernières années, comment a évolué le budget des R&D au sein de l'entreprise (comme pourcentage du chiffre d'affaire) ?

a. Augmenté

b. Stable

c. Diminué

En pourcentage à mon avis il a diminué, parce que au plus on installe de centres, au plus le chiffre d'affaire sur l'installation et le service augmente. Et là c'est moins d'innovation. C'est plutôt structurel que stratégique. A mon avis il a diminué... Je n'ai pas les chiffres exacts. La valeur absolue augmente, mais elle croit beaucoup moins vite que le chiffre d'affaire. **Ok et donc le pourcentage diminue.** Oui le pourcentage diminue. Et ça, c'est justement dû au fait que l'innovation est clairement la force historique d'Iba maintenant on a deux forces : l'innovation et l'installation et le service. Ce sont les 2 choses qu'on fait vraiment très très bien. Et donc dans l'organisation on est 250 en R&D à peu près, et il y a 10 ans ils devaient être 150 alors qu'il y avait 300 ou 400 personnes. Et maintenant on est 1800. Donc je pense que c'est lié et ce n'est pas une volonté stratégique. En service ils sont 800 je crois à peu près. Mais il y a 10 ans ils devaient être 150. Enfin je n'en sais rien, j'ai pas les chiffres, mais c'était très faible. Parce que le truc c'est qu'on a des personnes d'Iba en permanence, avec chaque centre, donc dès qu'on vend un centre, il y a 10 emplois en plus. Structurellement. Et donc forcément ça fait qu'on se multiplie. **Et donc ces personnes-là sont des personnes locales ?** Oui, enfin, on essaye le plus possible. Mais il y a aussi des rotations. Des gens qui vont 3 ans sur un centre, 3 ans sur un autre, parce qu'ils aiment bien ça et donc c'est un peu un mélange d'expérience. Parce qu'évidemment avoir des locaux c'est l'objectif, mais on n'a pas forcément les compétences sur place. Donc on fait un mix des 2 et alors aussi finalement en tant qu'employé il y a peu de possibilité d'évolution au sein d'un centre, parce que c'est petit. Du coup ils peuvent avoir différents rôles au sein de différents centres. Il y a moyen de bouger au sein des centres pour ceux qui ont envie de bouger. Surtout aux USA par exemple. Ça il y en a beaucoup qui font. Parce qu'on a beaucoup de centres et là il y a beaucoup de rotation. **Et c'est lors de la construction ou lors ... ?** Alors ça commence vers la fin de la construction on va dire. Enfin ça dépend des contrats et tout ça. Ça dépend si on fait tout nous-mêmes ou non. Parce que parfois le gros-œuvre nous on ne le fait pas donc on laisse des boîtes locales installer l'accélérateur, le positionner en suivant le plan. Mais par contre dès qu'on commence toute la partie test et commissioning là ce sont des équipes à nous. Donc on essaye d'avoir les gens des sites déjà engagés à ce moment-là comme ça c'est une façon de les former aussi, de participer avec des gens de LLN. Donc un mélange des 2 dès les 6 derniers mois/la dernière année de l'installation, jusqu'au commissioning et au premier patient, on essaye d'avoir les équipes déjà bien avant.

Combien de brevet enregistrer vous tous les ans ?

Alors l'an dernier on en a enregistré 30, mais cette année on en a enregistré plus. Donc à mon avis on tourne entre 15 et 20 en moyenne. **Quelle est la motivation ? Est-ce un avantage compétitif ?** La motivation est multiple. Il y a un avantage compétitif et la protection. Ça c'est une évidence. En Belgique il y a un avantage financier, c'est-à-dire qu'on est subsidié à hauteur des brevets acceptés qu'on dépose. Parce que en Belgique ils promeuvent l'innovation et que les brevets c'est une manière de mesurer l'innovation. Donc on a des déductions assez importantes pour chaque brevet déposé. Mais bon, ce n'est pas le but premier parce que ça ne rembourse pas tout. Ça aide à l'innovation mais le but premier c'est la protection. C'est sûr.

Au cours des 5 dernières années, dans quelles mesures les R&D ont elles mené à :

- a. **L'innovation de produits**
- b. **Innovation de processus de production**
- c. **Innovations organisationnelles**
- d. **Innovations commerciales**

Quelle est votre impression suite à l'utilisation de cette/ces technique(s) ?

L'innovation de produit c'est tout ce qu'on fait. C'est innover et avoir des nouveaux produits. Donc le petit accélérateur, qui a eu son premier patient l'année dernière. Ça c'est un produit pur R&D évidemment. Nouvel accélérateur, nouvelle chambre, nouvelles salles.

Processus de production... Comme on ne produit finalement pas tant que ça. On sous-traite donc il y a peu de choses. Alors maintenant on commence à mettre en place ce qu'on appelle des groupes d'industrialisation pour vraiment faire un passage plus clean d'un nouveau design vers la production. Mais il y a peu d'innovation en tant que telle.

Organisationnelle... Là on a fait pas mal de choses. Ce n'est pas de la R&D, c'est plutôt l'ibm ça. On a eu pas mal de réflexion justement par rapport à la croissance etc. quand on a vu il y a deux ans on allait devoir engager énormément, on s'est rendu compte qu'il fallait qu'on change quand même les choses. Donc on était 1200 Et on allait faire +400 et +200 l'année d'après. Donc on allait faire +50% en peu de temps on s'est dit qu'organisationnellement il fallait qu'on change les choses quoi. Et donc c'est vrai qu'au niveau organisationnel on a essayé d'être un peu innovant. Mais ce n'était pas de la R&D ça.

Commercialement... Non, comme ce sont des marchés publics on suit des tenders, enfin des demandes d'offres. Enfin c'est public quoi, on n'a pas vraiment le choix d'innover.

Si la R&D n'est pas utilisée afin d'obtenir de nouvelles manières de faire du marketing/commerce ; est-ce que l'entreprise utilise d'autres manières de le faire ?

- a. **Si oui, comment ? Un budget spécifique, comme partie d'un business plan, département dédié, ... ?**
- b. **Si non, est-ce que cela signifie que l'entreprise n'innove pas d'un point de vue marketing/commercial ou bien qu'elle le fait, mais plutôt dans un apprentissage continu (learning by doing) ?**
- c. **Si l'entreprise a implémenté des actions en marketing/ventes ces 5 dernières années, laquelle voudriez-vous souligner en particulier ?**

On a un département marketing qui s'occupe aussi du product management. Donc la plus grande partie de notre marketing elle est basée sur le potentiel du produit. Donc tout ce qu'on peut faire avec le produit. C'est vraiment l'axe clinique qui est poussé en avant. Parce que la technologie est très complexe et donc comme on parle à des médecins, qui vont devoir

convaincre le management des hôpitaux, prendre l'axe technologique n'est pas toujours évident parce que c'est expliquer des choses dont le médecin se fout quelque part. Ce qu'il veut savoir le médecin c'est quel type de tumeur traiter, avec quelle précision, à quelle fréquence, avec quels effets négatifs, ... Donc c'est vraiment là-dessus, sur l'axe clinique qu'on fait notre communication marketing pour expliquer aux médecins les avantages d'abord de la proton thérapie par rapport à la radio thérapie et ensuite d'iba par rapport à ses concurrents. Ce sont les 2 axes principaux. Mais vraiment sur le biais clinique quoi. Alors ça évidemment c'est en R&D parce que avec tout ce qu'on développe on a toujours pour chaque « feature » qu'on rajoute dans le produit, on a des « feature user » comme on les appelle qui sont des gens du clinique, en interne chez Iba et qui valident que ce qu'on développe va faire avancer les capacités cliniques du produit. Donc on va pouvoir guérir mieux, plus vite, plus safe, ... Enfin, selon les axes recherchés. Mais le principal axe c'est vraiment toujours la clinique puisque c'est un produit clinique. Et donc il y a un département dédié qui s'occupe ... Dans ce département là c'est là que sont ce qu'on appelle le clinical solution groupe, donc ce sont les gens qui ont en général une expérience de traitement radiothérapie en hôpital et qui mtn travaillent chez Iba pour justement nous challenger sur ... On ne développe pas pour développer. On développe pour améliorer quelque chose. Et donc eux font ce point-là dans ce département. Et c'est dans ce département justement qu'il y a les products managers. Donc les gens qui regardent les roadmaps d'évolution des produits et vers où on va aller et comment y arriver quoi. Et dans ce qui a été fait ces dernières années, on a cherché à augmenter notre visibilité dans les grandes foires commerciales. Donc on a beau être connus et la marque connue, en tant que leader du marché on estime qu'on doit être aussi encore plus visible dans ces endroits-là. On essaye d'innover au niveau marketing pour créer du buzz un peu dans ce genre de choses parce qu'il faut se différencier. Donc par exemple, il y a 6-7 ans ils ont changé un peu le logo et l'image d'Iba parce qu'il fallait le rafraîchir. Et ils ont pris la couleur verte parce qu'il n'y avait aucune autre entreprise qui avait la couleur verte. C'est une des raisons. Alors ils aiment bien le vert pour d'autres raisons aussi, mais dans le médical tout le monde est bleu ou rouge. Tout le monde est bleu ou rouge ou les noms sont bleus ou rouges. Donc en étant en vert ça se différencie. C'est vrai, quand on va... J'avais été au plus grand salon mondial l'année dernière, il y avait un immense hall, c'était gigantesque. Iba en vert c'était le seul qui ressortait. Donc il y a quand même un travail innovant. Cette année-ci on était en mars à un autre truc. On était les seuls à avoir la réalité virtuelle. Donc les gens pouvaient circuler dans un centre avec des lunettes de réalité virtuelle. Donc il y a quand même une espèce d'innovation mais de nouveau pour montrer aux médecins qu'on est un peu différents et voilà ce qu'on va apporter de différent par rapport aux autres. Donc c'est un peu pour mettre en avant... C'est vrai que maintenant que j'y réfléchis, il y a un peu d'innovation marketing ou commerciale dans ce sens-là. On essaye d'utiliser sur notre site aussi pas mal de choses pour que quelqu'un qui recherche de l'information les retrouve plus facilement, si bien clinique que produit, qu'iba, que pas iba,... Et on met en place des focus group médicaux et là pas pour parler d'iba mais pour parler de proton thérapie. Et les avantages de la proton thérapie dans tel ou tel type de tumeur, pour promouvoir la proton thérapie, pas uniquement iba quoi. **Est-ce qu'avant de pouvoir vendre votre premier centre vous avez du promouvoir la proton thérapie en elle-même ?** Oui, alors les premiers c'était toujours des centres de recherche. C'est toujours comme ça que ça fonctionne dans le milieu médical. C'était des innovateurs de recherche qui veulent se lancer. Et alors ils trouvent des gens qui veulent bien leur fournir des équipements souvent sans garantie de performance et tout ça puisqu'on dépend des développement d'un centre. C'est comme ça que ça s'est fait. Parce que nous on

n'a pas de centre. On n'a pas de machine, on ne sait rien tester. Enfin si, on sait tester ce qu'on construit, mais une fois qu'on l'expédie il n'y a plus rien, on ne sait pas valider des choses... Donc toutes les validations se font sur les sites parce qu'on n'a pas le choix, parce qu'on n'a pas de site. On ne fait aucune intégration ici en usine, on ne sait pas le faire. Donc forcément, on dépend très fort du bon vouloir des premiers clients pour pouvoir avancer dans le développement et dans l'intégration complète des produits.

Considérez le concurrent pertinent dont nous avons parlé plus tôt ; diriez-vous qu'il :

- a. **Etait plus actif et dépensait une plus grande proportion de son chiffre d'affaire en R&D ? Ou c'était égal ? Ou inférieur ?**
- b. **Etait plus productif en termes de lancement d'innovation de**
 - I. **Produit**
 - II. **Processus**
 - III. **Organisation**
 - IV. **Commerciale**
- c. **Que votre propre entreprise ? ou égal ? ou inférieur ?**
- d. **Si ce concurrent a lancé des innovations dans le domaine du marketing lors de ces 5 dernières années, laquelle voudriez-vous souligner ?**

En R&D je n'ai aucune idée de ce qu'ils dépensent. J'ai l'impression que c'est moins, mais je ne sais pas en fait. Ils sont plutôt moins actifs [que nous] au niveau proton thérapie. Ils sont plutôt actifs sur la radio thérapie parce que ce sont les leaders, donc ils doivent l'être. Je suis en proton thérapie que depuis 6 mois. Je suis chez Iba depuis plus longtemps, mais je regardais plutôt de loin. Mais je ne pense pas... Ils ne sont pas très actifs en fait. Ils sont tellement gros ailleurs que je pense que le proton c'est plutôt un truc que le côté. Ce qui a c'est que comme ils sont très puissants ils peuvent parfois casser les prix un peu plus et des choses comme ça. Et alors ils sont américains et pour certains hôpitaux américains ça reste important d'acheter américain.

Percevez-vous une corrélation entre l'intensité de la R&D et l'évolution de la part de marché ?

- a. **En général**
- b. **Dans votre cas**
- c. **Dans le cas du concurrent sélectionné**

Oui ou non ? sauriez-vous expliquer votre réponse ?

Je pense que oui, mis par le côté image innovante oui. Maintenant c'est lié à l'intensité de la R&D mais je pense que ce soit en général, dans un marché immature comme on l'a maintenant comme on est très innovants, ça aide vraiment fort. Il y a vraiment une corrélation entre ce qu'on apporte de nouveau et l'attrait qu'on a. Par exemple ce qu'on fait aussi c'est que dans les contrats qu'on vend. Enfin on ne le fait pas aux USA parce que c'est illégal, mais dans le reste du monde on peut, on inclut quand les gens le veulent, des contrats de recherche avec les centres vendus. Donc nous on a un département de recherche, qui travaille sur leurs projets de recherche, mais ils gèrent aussi des contrats de recherche avec des clients donc les clients achètent un centre et ils disent qu'ils aimeraient bien en plus faire de la recherche (parce que ce sont des centres académiques, liés à des universités) et ils voudraient faire de la recherche dans telle ou telle chose et nous on supporte ça et on inclut dans l'offre globale, de la recherche. Et ça c'est très bien vu évidemment, pour des centres académiques. Les centres non académiques sont moins intéressés évidemment. Et donc ça permet de donner

toujours cette image innovante. Nous on supporte, on a des chercheurs on a des gens qui ne font que ça. Des gens qui ont un ou deux doctorats et qui ne font que de la recherche clinique ou médicale. Et donc ces centres là ils ont leurs propres chercheurs mais ils ont aussi leurs propres intervenants, on peut les mettre en contact. On a des réseaux d'université qui ont des centres et qui font des recherches ensembles, qui mettent leurs données ensembles et toutes sortes de choses comme ça. Donc il y a une vraie plus-value innovante au moment où on vend le « produit » et qui peut être intéressante pour certains clients.

Percevez-vous une corrélation entre l'intensité de l'innovation des produits et l'évolution de la part de marché ?

- a. En général
- b. Dans votre cas
- c. Dans le cas du concurrent sélectionné

Oui ou non ? sauriez-vous expliquer votre réponse ?

Oui, ça je crois que... Quand on a lancé la petite salle, ça a... Mais alors, est-ce que ça a un effet réel sur la part de marché... ça je n'en sais rien... Je pense que oui mais, comme on est relativement stable, j'ai l'impression qu'en part de marché... Il faudrait que j'analyse ça. Ça je ne sais pas, c'est le genre de chose pour lesquelles je n'ai pas le détail des chiffres. Je crois que oui. Parce que, cette petite salle, quasi instantanément c'est ça qu'on a vendu le plus. Presque du jour au lendemain. Mais de nouveau, je pense que ça a développé le marché aussi. Il y a des centres qui ne pouvaient pas se le payer. Ça ouvre une autre partie du marché. Donc ce n'est quelque part pas le même marché. Il y a les tous gros centres et puis il y a les plus petits centres. Mais c'est sûr que... dès qu'on l'a sorti les autres ont dit, oui, nous aussi on a des plus petites salles, mais en fait ce sont de gros accélérateurs qu'ils adaptent un tout petit peu. Alors je ne suis pas dans leurs PNL mais au niveau de leur marge, à mon avis ce n'est pas aussi bon, parce que leurs coûts n'ont pas diminués énormément. Alors que chez nous c'est vraiment totalement différent. On a vraiment fait un pas en avant en termes de cout et ça permet vraiment d'offrir quelque chose de nouveau et d'innovant et de beaucoup plus adapté à des petites salles. Peut-être que d'autres le développent maintenant, ça je n'en sais encore rien...

Percevez-vous une corrélation entre l'intensité de l'innovation commerciale et l'évolution de la part de marché ?

- a. En général
- b. Dans votre cas
- c. Dans le cas du concurrent sélectionné

Oui ou non ? sauriez-vous expliquer votre réponse ?

Ça je disais qu'on n'en n'a pas beaucoup.

Pensez-vous que des actions de marketing et de vente sont de plus grande importance dans le cas de clients éloignés ? Devez-vous faire plus d'effort pour rentrer en contact avec des clients à l'étranger ?

Nos clients ne sont qu'à l'étranger, on est à plus de 90% d'exportation. A part le centre à Leuven tout va à l'étranger. On doit être à 95% d'exportation. Donc on n'a qu'à l'étranger et ce n'est pas beaucoup plus compliqué. De toute façon on vole, on va voir les gens tout le temps. Mais ce n'est pas plus compliqué à l'étranger qu'ailleurs.

Quels autres challenges a rencontré l'entreprise dans son processus d'internationalisation ?

Le plus compliqué qu'on a maintenant ça reste ce que j'expliquais tout à l'heure au niveau de la compliance, au niveau du respect des règles locales. D'abord pour le produit, mis bon ça maintenant je pense qu'on devient meilleurs. Mais pour tous les processus de vente, pour toutes les licences qu'il faut pour vendre, les licences qu'il faut pour opérer, pour installer. Comme c'est local, chaque pays a ses règles parfois c'est même plus local que les pays. Aux USA c'est par état qu'ils ont parfois des règles différentes et il faut s'assurer qu'on a bien les licences pour chaque état. Ce n'est quand même pas évident d'être à jour et de ne pas se louper. Parce que comme ce sont des obligations légales, ben si jamais on vend, ça peut annuler le contrat, ça peut nous faire revenir en arrière. Et ça, ça reste très compliqué. Et là il n'y a évidemment personne en Belgique qui peut aider. **Et donc vous avez des personnes sur place ?** C'est le seul choix. Alors soit on en a suffisamment, aux USA c'est vrai qu'on a maintenant pas mal de monde, donc on a nos propres ressources. Quand on arrive dans d'autres pays ben il faut trouver des consultants locaux, il faut trouver des gens locaux qui peuvent aider. Et c'est encore plus compliqué quand, évidemment ce sont des pays avec des cultures ou des langues... Enfin par exemple les pays où ils ne parlent pas anglais c'est très compliqué évidemment. Parce que nous nous ne parlons pas beaucoup chinois et donc c'est pas évident de savoir les détails de ce qu'il y a derrière telle demande de licence, etc. Pour les contrats c'est compliqué, mais prenons des cas de compliance c'est encore plus compliqué je pense.

Quel est votre pourcentage d'exportation ?

95%

Appendix 5: Olivier Lambert's interview – Renson

In 2 words, what is your function/job title inside the company? What does that role involve? What responsibilities does it entail? I'm responsible for marketing business development. So basically, that means it's marketing through the whole chain. We are trying to figure out what is it the requirement of the market, so what is it, what can we provide the market to have a product that will have its unique selling proposition (USP). And ultimately what we will define as a design brief. That design brief is going to go into a R&D team. My product management guy is going to follow up the R&D to make sure the product is going through the different stages and once the product is gone through its design freeze I'll get my marketing communication team to work out a communication plan. So that really what I'm looking after.

And How long have you been in the company? Well, I've been in the company, I've worked here from 1996 to 1998 and then I left and then I came back in 2014. When you were here in the 90's was is also in the marketing department? I was responsible for the UK. So, I was a UK area manager. I had to do all the sales, look after the customers, build up a sales team do all those elements. But now it's marketing research, definition of products, communication about products and follow up, making sure that we are reaching the sales that we need to reach.

What is the most sold item; what is your company's "cash cow"? We have got different products. If you look at it we have big business units: natural ventilations, mechanical ventilations, screens, projects and outdoor. We have five business units. But they aren't cash cows. One of those cash cows is for example the fix screens, which is our screen product, "invisivent", which is one of our ventilation system and of course the "healthbox", which is our mechanical ventilations product. These are our 3 biggest cash cows for the moment. And therefore, we are continuously looking to make that range more interesting and make innovations within that.

Which % of the total turnover of the company stems from sales of this particular item/line of products/technologies? I would have to check that. I can check that for you. I'll come back to that.

How long has the company been selling this particular item (a: from the moment the firm was created, or b: since some later stage – if the latter is the case; specify year of launch)? Those three cash cows that we have been talking about, they have been for about 8 years in the market. We've had all kinds of other products before which are still... Some of them are still in our range. But they are no cash cows anymore. And we are now in a situation where we are renewing the cash cows. We are bringing out new healthbox, new invisivent and new fix screens. So this will be happening this year. **So it's all about innovation?** It's all about innovation. If you look at that for example, what we clearly see is that we create about 7 to 10 new products a year. Which is a lot. And from those 7 to 10 products a year, we generate sales. And if you look at it, in the last 5 years, you can see that 75% of the growth is coming from those. Ho sorry!! If you look at the turnover growth, you can see that 75% of that growth is coming from products we released in the last 5 years. So that's a lot. So this gives you an indication of the requirement for us to have a strong R&D team here. Our R&D has got about

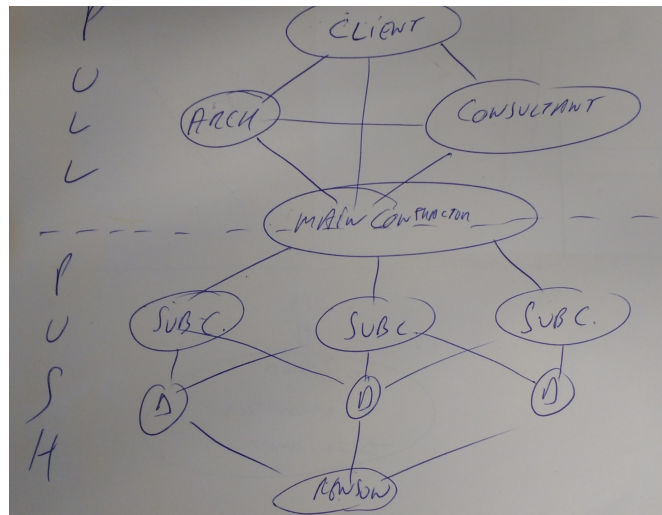
85 people in it now. Which is a lot. It's more than 10% of the work force. **Are they all engineers?** You've got engineers, you've got professors there but mainly engineers yes.

Was it a pioneer as regards the development/sales of this item, or did it start with it when there were already other companies offering it in the market? Yes. If you look at the fix screens for example. We would be the pioneer of the fix screen technology. So they were nobody in the market that had that. We believed in the product and we pushed the market towards that products. Ultimately you can see now that the fix screen is the most used type of product that you find in the market. **What is the competition for that type of product?** The competition before was a screen that had no fixations on the side. So if the wind started flapping it started to tear. And that's where we change the game and we went for fix screens. So that was clearly our pioneering effect. So you have the over frame ventilation system, with the invisivent. Again, we were pioneer with that type of product. And the healthbox, with our demand control ventilation system on CO₂, VOCs and humidity, we were also pioneer. With those products we were the pioneers. And it's every time very important for Renson as innovation and marketing is... We are trying to look all the time where are there some products that we can develop where we could be different than all the rest. And we are not going for the big markets, we are going for those niches. Finding out where we can make a difference and then focus on it and go for the sales on that. **And do your competitors try to copy you?** Yes, yes. Sadly enough they do. And that's why you can never think that you've reach the point where you now have everything. You have to look at developing new bits, new things. And that's what we are doing now. So for example with the demand control ventilation. There is nobody that has the same quality that we have with the same technology. Now we have done a lot of research already with all the data that we had and now we want to take it to the next level. We actually going with the healthbox that is fully connected to the cloud and that is allowing you also to get all the feedback on your product on here (shows the phone) so you can exactly see what the quality of the air is in your house. Something that in the past was never visible. People didn't now that there was a button there and the button you had to put it on or off. **But you would never know the impact of the ventilation.** Voilà. We want people to know what it does and that they will now be able to see it on their mobile. That's really important for us. **That's really interesting, I didn't know you were able to do that.** And the thing is that now we can start to analyze what the quality is of the air in different houses. So that's something that nobody has. There is research done by these guys with all the computer stuffs. They are doing research as well. But there are a lot of professors that want to have the information that we will have. Because they say it will be so interesting. And ultimately you can actually lead to changes in the legislation. Because currently the legislation is just defining a rule but it's saying, you have to provide so many cubes of air. You're product needs to do, for example, 50m²/h of air. Why? If there is nobody in that room, it doesn't need 50m²/h it just needs to have good air quality. So define what good air quality is and make sure that you measure it and that you adapt you system to meet that. That's what you need. Ultimately, legislation should talk about what it will do, not what it has to do to meet a certain requirement that is nowadays not defined. **Is that your goal to make the legislation change?** For us, what we want is of people to have exactly what they really require. And we think that legislation should actually aim to provide that. So if you want a safer car, ultimately then legislation should do anything to provide a safer car. But they should not use norms and legislations that is out of date. They should change the legislation towards a better and safer car. If we know that we have ventilation, why do we do ventilation? We do ventilation because we want good air quality. So ask for goo air quality. That's what we want.

How would you define your target market e.g. in terms of potential users/buyers – who are your clients- and geographic outreach (are they a player on the national market, European or global market – let them specify that)? Well we just got an exportation meeting, just to talk about geographic outreach. We reach actually from China all the way to America, Canada, Australia, ... We have spread all over the place now. What we try to do is that we try to understand where can we sell each product? We have got outdoor, ventilation, screens and projects. What is important to me is that there is also always legislation. And legislation can be a blockage. It's a blockage to trade. Legislations does not exist on outdoor. Which means it's great for international sales. Ventilations very specific, depend from country to country. Screens, no legislation. Projects, nearly no legislations. So for us, what do we do? Thanks to the outdoor business that we have created, we were able to go to an international market. So What do we do? We go and we say that our first priority is go into the market with our outdoor product, because it's an easy sell, there is no legislation, it's big turnover. So you'll find people that are interested in your business. Then while you're there, add into it your screen business. Because ultimately with your screen business you are in the same type of customer base. And then we go for ventilation. Why do we then go for ventilation? Because we have now turnover so we can have our sales people on the road, we can pay for them. So we can start developing long term elements and making sure that our products can be used in the country we want them to be used in. Projects we don't really want to push towards different countries because this is a product range with less USPs so less added value and if it's got less added value you cannot make margins on it. If you can't make margin on a product you are limited on the radius that you can sell it. So that's why we don't really want to push it internationally.

	Legislation	Priority
Outdoor	X	1
Ventilation	V	3
Screen	X	2
Projects	X	NO

And then you can ask yourself the question ‘Why did you decide to go for outdoor first?’ well if you look at the chain and I'll do it like this: (see drawing) you got a client and then in some cases he can work with an architect, he can work with a consultant (energy, acoustic, fire, ...)it could be any type of consultant) they will work together with the main contractor. You can have the subcontractor, you can have distributors and then you got Renson here. So, as Renson, this is my playing field.



So what do I want to do? I ultimately want this guy (the client) to have my product. That's what I want. As you can see sometimes it is very difficult, because you have to talk to so many people before you are going to get in. You are trying to influence the client. This can be a B2B client, this can be a B2C client. When I'm talking about a B2C client it's easy, it's you for example. You want to build a house and you can make a choice. You can go to a house builder who's got perhaps his own architects. Or you can buy yourself a piece of land, choose an architect, then the architect will need an energy consultant guy so he speaks to his advisors and then he is going to have a feedback, he will send the main files to the subcontractors with the requirements, they will buy the products from the distributors who will ultimately buy it from us. So it's a long chain. And then it's up to us to define for which product range how is this chain important. And of course, with the outdoor it's easy. Outdoor really is Renson → subcontractor → client. So it's easy, no architects, no consultants, no main contractor and the distributor and the subcontractor are the same guy in this case. So it's easy for us. One target. BOOM. Go and find yourself your ambassador. He is the guys that is going to install the product and ultimately that will work well. So easy. Priority number 1. Go for the low hanging fruits. And this get your brand known. So you support those guys. Support those guys so he can sell your products. So you get to start to promote your online activity. SEAs (search engine advertisement). I look on the map, I see the region where there is a lot of money and I look for an ambassador. When we have somebody as an ambassador, we begin to do SEA around that region. To make sure that, when people are looking for something around, that has anything to do with terrace covering, that they are going to be in contact with them. Great. So we support these guys so that the clients can find them and can find us, ultimately. Easy → priority number one.

Screens, what we find is that when these guys, a lot of them have experience in screens. Because they install the screens. So what we see is, these guys, when they are putting terrace covering, a lot of them are also asked about protection screens so ultimately, he guys who is doing subcontracting and distribution together, when you are into this, you might as well be into that. So you got 2 of our priorities going. Great. Off you go, you're going to get your business, you're going to get a little bit known and in the meantime, start looking to get contact with architect. Then your B2B story starts. Then here we are trying to build our brand in a B2B environment. So I'm talking about ventilation. "Who is the person who's going to decide?". Well, it depends, it depends on what type of project? Is it a house? Is it residential housing? Is it residential apartments, schools, healthcare, hospital, office, commercial

activity? What is it? And then you need to look. And say okay: in a standard house, who is going to make the decision. Because the house builder themselves are taking more and more of that market. In some countries they are 95% of the market. So they are not a single architect on that market. They are doing it. In Belgium 50-60% are going to house builder. The rest we still have an activity of buying a land then building a house. We love to do that with an architect. Other countries don't do that. Now of these housebuilders are a big part of the market, let's see them. The ones that are communicating with the clients, they decide what's in their house. Then how do we get them to talk about our products to the clients? They really don't want to do that, and we are in a totally different situation. Now we know who is the important guys, but he doesn't want to talk about my product. Why is that? Because he wants to sell his product, he wants to sell a house. And everything that is added to the house is making it more expensive. **The more expensive the house, the more difficult it is to sell.** And potentially the customer is going to move away. So he thinks "well if I don't have to talk about it, I'm not going to talk about it." Because potentially I will be losing business. So now you go and speak with them and telling them "guys, split up your offer. You can say: this is the house and if you want to add elements that are going to improve your quality of life, your comfort in the house then you can go for sun protection. Add that to the house, but don't offer it all in one pot, explain to them why it exists, explain to them why you want to use the Renson ventilation system in there. Because they need ventilation system. But why did you put Renson's? Because of the quality of air, you really want to have. So talk about the benefits you are going to get out of the product and you will be so much better." In Belgium, what have we done? We have created a group of housebuilders "the healthy space partners". They are actually people that say "look, we will promote the idea of a healthy house and we will always put forward ventilation and sun protection from Renson." Great. And now we have 14 housebuilders here in Belgium that are pushing that element. So they are creating awareness from their sides to the client. Again for me, I also need to create awareness to the client. So we do a lot of stuff. There are these little journals that we make. So we insert in "de standard", "la dernière heure", ... We put these little folders and we send them out. We do a lot of online activities in on that aspect as well. Social media activities, youtube stuff, sport sponsoring (the sun web team). So we are trying to make these guys aware what our brand is and we make sure that they understand what our brand is. That is very important as well. It is not only knowing Renson but knowing what Renson does. So this gives you an idea of the total concept. As I said it depends from situation to situation. Is it a hospital, then you're going to have your architect that is going to play an important role, the client is gonna have more requirements with regards to the facility management that is going to come afterwards so maintenance of everything, making sure that the costs are not going to be too high because that's ultimately what is very very important for these guys. The architect will then be in contact with energy consultants. So you're going to get a lot of these coming through they are gonna get a main contract and they are going to split up the package and somebody is going to do the window, another the terrace, and they will buy the Renson things. So, what we do is: we have guys realizing the pull making sure that the product is requested and we do that with our specification teams and in the Renson about 30-35% off all our visits are related to specification. So this is really important to us. And another team is going for the push. That is going to see distributors, subcontractors, the main contractor. They are going to make sure that the product is available that it is there and they also want to sell it, you see? So then you get a push into the market. Important here for us in pull is you cannot go in here and have a product that is a made to product. Because if you have a made to product, there is no point.

Because if you go here you want to at least to convince somebody that you have a product that is different than all the rest of the market. So that's why I need to make sure that, before we create a new product, that we will have a product that will have USPs. Otherwise there is no point.

So you potential users and buyers are different depending on the type of the product and then you reach for each one of them depending on the product. So it depends on the type of products, it depends on the type of projects, so there can be different things that exists.

Regarding your target market; what is your company's market share? Hum, in Belgium , if you look at mechanical ventilation, the C system, the C+ system is 60% of the market and within that 60% of the market, we have 75% of the market. So hum if you look at it, it is gonna be 50% market share of mechanical ventilation. That's nice

How do you estimate it? Well we get figures from the organizations. So, we have a ventilation organization and within the ventilation you have got the different manufacturers. And everybody is giving in their figures. So everybody gives the figures to somebody who's neutral, he is not part of the company and he will then put everything together and say look, the market is, this. And then you can look at the figures and say, then I have that much of the market. So it's finding these organization that represent the companies.

How would you characterize the "environment" or "dynamics" in your target market: are you acting in a mature or an immature market? Depends on the products again. In my opinion we are in a situation of young market because if you look at outdoor, the aluminum terrace covering, they have been introduced in the market, you can see more and more of them now, but it is not that old. It is about 5-6 years old really. Before it really started to kick off in the market. The ventilation, ventilation is a requirement but there is still so much to do, because in all these houses that have been build, there is no ventilation in most of those. I need to check it exactly, but I think before 2010 there were no requirement for ventilations in the houses. So it's non-existent. So all the houses got problems now with condensations, with mold growth, it's because of the lack of ventilation. It's some an obvious thing and that's why the legislation comes in place. If you have a house and you are not living in it. Well ultimately you will discover that it has already started to smell. Bad. Even if you are not living in it. But if you are living in it. Then you will have your CO2 level going up, the Volatile Organic Compound (VOC) is going up and the moisture (H2O) is going up as well. That means that everything that's fabric, everything that has glue underneath will send out chemicals. Chemicals come out of these products, continuously. If those chemicals are going out of the house, no problems. But if it closed, then the chemicals percentage is going to rise and if that rises continuously, you live in a really bad environment. And the problem that we have got is that you and I we cannot detect VOCs, we cannot detect CO2. H2O, when it gets really hot you start to feel it a bit, that it is humid. But the rest of it you don't know. So since we have not been equipped with these sensors, you need something that is going to help you create a good environment. So we are just in a stage now of really getting people to understand the need for ventilation. So for me it's a market that has so much potential still today. New-build and legislation will help that. Renovation, we still have a lot of work to do. Because of what legislation does. Legislation says to people "isolate your house". But what that does is that ... **Everything stays inside.** Yeah. And then you get the problems. Then you get the mold growth going to different areas. And then people start feeling tired. And then people start feeling ill. And then there is millions of people with asthma at the moment. So what you need to do is to make sure that you create

a system that will detect the level of CO₂, the level of VOC, the level and H₂O and that will extract what is required and makes sure that the air comes in according to what you extract. And that is simple. And there is a huge market for that. And in the meantime, we tell to people what the level of these things are in the house they are living in.

a) Do you have a lot of competitors? How many do you consider as relevant market forces, in terms of:

a. competitors that have a higher market share than you;

b. competitors that are bigger in size than you;

c. competitors that are more innovative than you/competitors that are technologically more active/advanced than you? More innovative? I can't see them. I think it also confirm by market reports that Renson is considered to be the most innovative competitor. So with that one we are good.

Btu there is competition. There is clearly competitions. You've got companies that we are in competition with, like Duco. He is from the coast. And the we've got other businesses with substitutes. We have the C+ but there is also the D system. Now this D system is a system that works very nicely in big offices and hospitals and stuffs like that. But then they want to turn this system into residential houses. Problem with residential houses is that you don't have the maintenance that normally is required to clean all the tubes. And the tubes in a house can't be such big tubes, they have to be smaller. But if they are smaller they are much harder to clean and this is an issue that exists. The D system is called a ventilation with heat exchanger so from an energy perspective it is something that is really nice to promote. Indeed it pre-heats the air coming in. But none of them say the issues you can have with your air quality after a while. None of them want to talk about that because ultimately the cleaning of it is not easy. But there are some big companies behind this. **And do you sell this product as well? Or only your competitors?** We have introduced it as well. Because ultimately there are some markets where you need to have it **offices and hospitals?** Yes. **But not for residential.** Residential we have introduced it as well because in Germany for example this is the biggest market. We have got strength here in Belgium because we have got a lot of sales people. But in Germany we are smaller than our competitors. So they have a lot more sales people. And if you want to change your market you do need a lot of sales people. Otherwise you have to follow the market. So we have the D system. But. We clearly identify the cost it will have to maintain this. We clearly identify the energy consumption of it, we clearly identify the cleaning process. Every 6 month you have to take out the filters, ... and we are also connected to this unit (shows phone) so it advises you: "now it is time to clean". That's a really big difference with all our competitors. We want quality of air! We don't want 50m²/h of air. But here we have some big players. We have players like Samsung, and they are big. You got players like Daikin. So the guys here, in this domain, they are really big. They really try to sell more and more. And they, of course, are working very hard on the lobbying activities. **To not advertise that it is not good air quality.** Yes. So they push legislation towards the D system while we really believe in this (the C system) so we want the legislation to be talking about air quality and not be talking about energy consumption or talking about this system. Because ultimately, you don't do this to consume less energy. You do this because you want better air quality. And the whole discussion about energy consumption is that we have now test carried out by the university of Gent and the energy consumption is much higher in the D system than in the C. It's ultimately simple to explain because here you need a fan at 2 places while in the C system you only need one, and it's not working all the time. So energy consumption in the C system is the same as a lightbulb. This is a lot more energy consumption. But the thought pattern is

“yes, but your air get heated so you have less heating costs.” Okay, how many times do you actually heat the air? Only one or two months a year that’s when you need it. So if you are putting you heat slightly up, you are going to be using less energy to improve a bit of the heating than to use this system all year long. And that’s now black on white, with tests results. But sadly enough, in legislation, the big players have done a good job because they value certain aspects that you’ve got in the D system and they value it higher. So we are fighting continuously with regards to this, because the architects ultimately need to provide the cheapest solution for the client so he is going to go to whatever he needs to do with the best possible points according to legislation. And that’s hard. So we know that with these guys it’s difficult. So we need to make sure that they (the final clients) want it. And that they understand the benefits so that they say “no, I don’t want the D system, I want the C one.”

And is it mostly in Germany, or as well in Belgium? It is everywhere. In every country you’ve got these discussions but in Belgium the C+ is the strongest. It is in other countries that lobbying activities, with these big guys, have done their work. Another point is, that, a lot of the heating companies, what have they seen? It is that the requirement for heating is going down because of the isolation business. So you don’t need these big boiler anymore. So their market is shrinking. And what are they doing? They are entering the ventilation market (D system) as well. So we can see that there is a lot of competition is this one. So it’s now our fight, with smart information, to get data so we can show the quality out of the air. And then we can show that our product is the best one that you can have. **And are there other companies manufacturing the C+?** We do this and Duco does it as well. But they are not as far as we are. **You were a pioneer with this system?** Yes. Okay.

Are the competitor bigger than you are? Yes yes, they are bigger than us. **And they have a higher market share?** Hum. **With the D product, yes, but not with the C product.** Yes **Because they don’t have it** Indeed. **And none of them innovate as much as you do?** Correct.

b) Did the number of competitor vary along time? I have seen that ultimately we were quite niche players. But because of legislation coming stronger and stronger, that means that the market is getting bigger and bigger and if the market is getting bigger, you are going to get more sharks. So you find that there are more people getting interested. And especially people sees that their market is shrinking. **And they are looking for another market that is going bigger.** So that’s why these guys are jumping from there pool into our pool. And that is important to us because Viessmann are big companies. So we need to ensure that with our technology we can stay head. **Yes, because they have a lot of money to innovate and therefore they have the possibility to enter a new market.** Correct. But that is where our big mind is. We don’t want to keep thinking about products specifically, we want to talk about a concept. So we know that in the end you want quality of air, comfort in your house. That’s what we talk about corroborations between our products. So we have the healthbox, that could actually steer also some protections. You have contact in the cloud with whatever. So with the internet of things you can have information about weather, then it can talk back to the box, which can talk back to the screens, and you can do all kind of things and you can start talking about a full system. So we are just thinking about making ventilations talk to screens, talk to ventilated cooling. So we are talking about an integrated system and then you are stronger than people who are just talking about one element.

c) How much does your offer differ from what others propose and is there a tendency towards some kind of standardized or common solution? Our differences always lies in finding the ... Looking at the quality, we are looking at what people ultimately want. It’s the main thing that is important to us. What we want and how could we work towards that?

And that is where we combine offerings. Where we combine ventilation with the screens, with everything. So we try to talk about a concept. We try to explain that to people. Think about it now. When you are in a situation of building or renovating. Think about the integration of such products because they will all have a positive impact on your quality of live. And we aim for high quality standard. So if you are using a screen of us, hopefully you will like it and then you'll say, look, I'm gonna buy another product from Renson. I'm gonna buy also the ventilation and ultimately you will go on and say "I'm happy with the ventilation, I'll buy a terrace covering from Renson as well. So that way we can reach more turnover with the same customer. **And between you and your competitors, are there a lot of differences between the products, or only marginal differences?** There are big differences because that's ultimately why we look so heavily on making a difference from the start. If you have an R&D team that is just creating products. Then you are going to be in trouble because there is now clear view as to why you've got it. If you start from the start and you have a product that has a very specific reason for existence and you know how you are introducing it on the market then you have USPs and you can differentiate yourself. And that's ultimately what Renson is looking for. How can we be different than all the rest? We want to have made to products. So there are enough differences.

And is there a tendency towards a standardized product (Do you offer standardized or customized products to you clients?) ? No, because the more you standardize... We are a company that does 2 things. We are a company that does a lot of made to measure. So you can say it's a standard product, but we make it for made to measure to have exactly what you require. And we also have this things where we supply length to people. So for example these things, we can cut them and you can say "look, I want 1000 of 50 millimeter. But we can also sell you a length of 6 meters. And there you can decide to whatever you want. So we have standard length people can cut to size and those are in our distributors, in the service points that we've got. Or we supply you with the exact length. So do we have standard products? Yes we have, but each one of them is different. And they are all specific, they are all made to measure.

How has the market share of your company, in the target market you address, evolved in the past 5 years? If you look at the past 5 years, our turnover has doubled. Which is nice, I don't think there are many companies that can say that. We have doubled our turnover also because this approach, the concept though and the internationalization. Has our market share grown dramatically within the country we are active, I think we have had increases but I wouldn't say they were the biggest increases. I think it depend from market to market, but I think our market shares have evolved dramatically in the countries we are active. **So it went up.** Yeah because we've added screens in these areas where we didn't have them before. But I can't say from how much we have increased. Because I can't how big was the screen market itself at tat stage

a) Went up

What is the total value of sales in your target market? Well I know the total sales of the company is 200 million. But it is very difficult to know the total value of the market. Again it depends on the product you're looking at. Like for the ventilation side, I do have these figures that we get from organizations and then they can figure out what the percentages are. But

there are so many different countries, so many different business units, ... It is difficult to get an exact figure.

How has the total value of sales in your target market evolved over the past 5 years (= sales generated by your own firm and the competitors)? Well, sales have doubled, so it went up.

a. it went up

Do you apply one of those marketing strategies?

a. **Closeness with the customer** We want to get closer to the customer. That's an important aspect to us.

~~b. Price competition~~

c. Price/quality ratio

~~d. Economy of scale~~

e. **Ingredient branding/promotion of the brand name/creation of the brand awareness** This is really important to us. Recognition of the brand name, that's what we want to do, a lot.

~~f. Cost leadership~~

g. **Distribution network** We need a really good distribution network because these are guys that are going to recommend your product. They are ambassador.

~~h. Vertical integration/value chain development~~ No, this is a wider integration. It's having a full concept. I don't need to be now an extruder of aluminum. I don't really want to do that.

i. **Diversification** Yes, it is important, but with a concept view. It needs to stick together. To have the concept. It has to be in the mission. If it's not to do what our mission is about, then what are we doing?

j. **Advertisement** Of course advertisement is important to us. But I wouldn't really call it a marketing strategy, advertisement, because for me a marketing strategy is branding, which is really important to us.

On the one side sponsoring is what we do, with sun web, football team (Zulte Waregem) as well. We are doing SEA, we are getting involved in www.gezond.be which is about all healthy aspects and within that we are a partner with regard to healthy air. So these are things that we all do. Getting to points of sales, out and about, co-branding. So we want our distribution network to have a good link with us. So that they can also start to do co-branding. We give journals to our ambassadors and those journals are personalized, they also have their name on it. So at least those things can then be distributed thorough the market and they have their name and our name locally on that market. And that is important for our branding as well. So co-branding is really important for us. **I don't think the Renson name is visible on the products, is it?** Hoo that is bad if you don't see it because you should, it is on all the products. It's an interesting point that you make because I was talking earlier about the links and specific made to measure products. All our made to measure products have to have the Renson name on it. I'll show you.

k. **Other**

What are your feelings about the technique you use? Do you feel they are good? Yeah, I feel they are good. That doesn't mean that we need to be complaisant. We still need to look and question ourselves, every single day. Is this good? Yes, but maybe there is something better. And things are going to evolve. And if we don't start looking now, we are going to miss the boat. So if you want to remain an innovative company, you need to look continuously, to continuously challenge yourself. Even the moment you just brought out a new product, you need to ask yourself, "what's the next thing". Don't think 'yes, now I have a new product and

I can sit behind and for the next 5 years I am fine.” No. Then in 5 years you are going to think about another thing and it will take you 5 years to get another product. So it's 10 years.

I noticed that you removed “price competition, economy of scale and cost leadership” from the list. Aren't you really looking for a reduction of the price? No, it's not our priority. Our priority is about the quality of the air. That's really what we want to focus on. And that's why we want to be as close to the customer. What we have done as well these last years is that we did customer panels. So we took our products and we had discussions with end customers, we've had discussions with installers and we have had quality discussions with them. In a specific environment. And you get to hear a lot of things: what they are looking for, what could be improved, what's their interest, all those kind of things. At least you can start working on a product that is going to meet the requirements that are in their heads. So panel discussions with the customers are really important. So getting closer to the customer is extremely important. Getting the opportunity to get this information in our pocket and the data. Getting the opportunity to get information from them is superb. So we want to get closer to the customer, we want our brand to be known, we want a distribution network that is going to be up there, that is going to be good, strong, people that know what they are talking about and people that will see Renson as a product that adds value and not as a cost. That is a very important aspect as well. Because the window manufacturer, this is a never ending discussion that we have but, the window manufacturer he wants to sell windows. Because that's his production. It's a bit like the house builder. He wants to build a house. And adding in a ventilator means that it's going to cost more for the consumers so potentially you are going to lose your business. So he doesn't want to lose the window so he tends to not talk about the ventilation nor the screen protection. So stop seeing it as a cost, but start seeing it as an opportunity. So that's why this distribution network is so important. You need that right mentality. Diversification... You just need to have the different products to meet the different requirements. And it spreads risk. And with the right portfolio, you can become stronger than your competitors. It's going from a simple product strategy to a multiple product strategy.

In the past 5 years, how has the R&D budget in your company evolved (as a percentage over turnover)?

a) Went up

It went up. **Even as a percentage of your turnover?** Yes because we have... if you look at it I think in 2000 there were about 10 people in R&D and now in 2017 there is 85 people in R&D. So you can see that it is an extreme growth. But it is the right thing to do. Because it allows us to diversify and be different. And that is really important.

What is the percentage of the turnover you now invest in R&D? I don't know. I can't tell you that because I don't know.

How many patents do you register a year? I know that we have got about 140 patents, but I don't know how many that's a year. We do about 7-10 innovations a year so for sure they are all patented. **Is it really part of your strategy, patenting? Because I know that some companies don't do it, some other do.** We do it... but we don't do it to sell. We do it to protect the technology. Because when you bring out the product, you need time to create, to generate sales. If your competitors can copy your products too quickly, you won't get the fruits. And that's important because you still need the cash coming in. You need to protect yourself for a certain period. So that's why we use patents. **Do you do it as well to get grants from the**

government? Yes. We work with the government, we get money from the government to invest into R&D as well. So we get funds. There is somebody in the office that is doing the applications and they are always advising us “this is the product that we will do, this is why we will do it, we will produce it here”. We need to make the whole plan: “this is why the product will be different, what the added value will be”, we do that and a lot of times we actually get funding.

In the past 5 years: to what extent has R&D led to the launch/introduction of:

- **product innovations**
- **(production) process innovations**
- **organizational innovations**
- **commercial innovations?**

When I’m talking specifically R&D, I’m referring to product innovations. This year, it’s helping towards commercial innovations. We are suddenly getting into the point that now, with the link that this is, we can start to think differently as well. You’ve got a unit in your house suddenly, this is connected to the cloud. If this is connected to the cloud, me, as an installer, I can be in contact with this as well. So as an installer I can understand if your product is working or not working. If I’m from a distance and that your house has just been build and I’ve got one of my guys going to do the installation, I know that the installation has been organized. I can see from the distance if the product is working or not working. So I can confirm that all from a distance. Also all the paperwork that is normally required to do all this is going through the machine automatically. With the machine here you’ve got your portal and on the portal itself I see that everything is in there, I can just print it and send it to whomever needs to get it. So for me administration goes down. It’s also a good planning tool. Planning goes up because I know every single time something has been organized, it’s all working properly. Also, I’m able to go for service. **You can see if it is working properly or not.** Yes. And if something is broken, I can know exactly what unit it is. I can know exactly what’s wrong. So when I’m going out, I know what I’m going to see. So it’s providing me with intel and it’s avoiding them to go there and then realize they don’t have the right item with them. Because now I know it in advance and I can take the item with me. So this it helps with commercial.

Do you do process innovations? We don’t do that enough now. We have got the e-wraps which is a system allowing us to lighten the discussion with a customer. When we have a customer, he is in contact with one of our people. We then have to put the information within our system and they send an oral confirmation and then it goes into production. Now, what we have done is we have provided them with a system “e-wraps”. You just put in the information in there and it goes straight to production. Therefore the client can enter an new order any time of the day, 7/7 24/24. So you can do anything you want whenever you want and there is no discussion anymore. You know what information you need to fill in. Sometimes here you had an order, but you were missing information. You needed to send it back to the client who hadn’t time to respond and then it comes back, ... and it takes a lot of time. We had a lot of these discussions in the past and the people said “It takes too long”. Yeah, but, it’s necessary. So having this has allowed us to have a process innovation. But this was mainly driven by IT, not by R&D. And we are now going to get a digital expert on board as well. He is going to allow us think more about digitalization within the whole process. So everything, every contact we have got with customers, how can we improve the process. Everything that we do in production, how can we improve, how can we get on the next step of digitalization.

Can you select a “relevant competitor” whose market share went up in the past 5 years. Yes, I could say Vasco for example. Their market shares went up. Vasco was one of the heating engineer that entered ventilation a few years ago. They have seen an opportunity to grow. They took some of our sales men.

When you look at the “relevant competitor” you selected: would you say that they

a. were more active and spent a higher % of turnover on R&D than your own company? Or equal or less?

No. They are active in R&D but they aren't as knowledgeable in R&D than we are. But the owners daughter is head of R&D and she is really driven as well. She really wants to make things right, she knows what she wants, she is good. So she is going to be a big competitor of us, for sure. They are also very aggressive in the way that they market. And whereas we are trying to focus on the quality of our products, they try to focus on destroying the competition (sending bad information about the C system). We can do this as well if we want to, but that's not our point, that's not what we want to do. What we want to do is provide people with a choice. But inform them properly about that choice.

b. were more active in terms of launching

i. product

ii. process

iii. organizational

iv. commercial innovations than your own company? Or equal or less?

c. If that competitor has implemented innovations in the field of marketing and sales over the past 5 years; which ones would you highlight in particular? ...

Do you perceive a correlation between “R&D intensity” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain.

Yes. But what you have to do with R&D is be very clear that the elements that you are going to be doing will be valuable in the market. Because you can be doing many nice things. You can do chairs in steel for instance, it will be way more resistant, but if the customer doesn't care about the fact that it is steel or not, it's not worth it. So it's just understanding what clients will appreciate as extra value. Because there is a cost to make it and there is a value perception. In that case, with R&D, it is going to give you the market shares you are looking for. If you don't do that, you will be going to have a lot of work but you won't be able to have a commercial advantage. **Did you already have the case?** Yes. **What were your conclusion?** That we have to stick to our market. We are in building material, in the hardware, but not in the roof market for instance. You have to understand how far the new innovation is going to be integrated in your new activities. If it fits into other activities, you will need a lot more of investments, because you don't have the knowledge, nor the distribution network. The question you have to ask yourself is “would you sell it to a friend?”. And if you say no, then you should think twice if it is a good idea.

Do you perceive a correlation between intensity of “product innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain It's the value you create with it. If the people perceive the value you are adding as an improve value proposition, then yes. If not, no. Because they will not appreciate it.

Do you perceive a correlation between intensity of “commercial innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no

– **please explain** It depends on what you call “commercial innovations”. Because commercial innovation for me is to think differently on how you can reach out your market. Let’s say you’ve got the sun protection market. The sun protection market was always a market that was there for renovations. You had a house, you wanted to add sun protection and you go to somebody that does sunprotection. And they install an element for sun protection which is quite visible from the outside so it looks quite bad. So people didn’t like it that much but they needed it, because it was too warm. So we saw that the market price were quite low. And at that point we bought a company that was going bankrupt. That company was making screens, but not fix screens as ours. Paul Renson wanted to create a product that was a combination of what we already had and our knowledge on ventilations and combine that now with our new knowledge of screens and make that into one product. And make sure that it can be invisibly introduced into a window and then the architects will like it. So the architect will then say “ha, no I’m not against that ugly thing you are going to put in the outside, because I can neatly introduce it, okay. And I can see the advantages, and the legislation actually provides me with more energy points if I use it. So I’m going to use it now.” And of course you have a product were you are unique, were none of the other screen producer have an alternative, because they don’t have the knowledge about ventilation, so they won’t make a combination of product. So we have a new product, that we were able to push in a new market because it was a market where nobody was really active and that you build and we got that market through window constructors. Because in that market it’s the window fabricator that’s going to come out he is going to put the window and with the window there will be the sun protection. Whilst in the renovation it is not a window constructor, it’s an energy specialist. Because the window was already there. So it’s a different market. We also had to look for different distribution channels.

To what extent do you opine whether marketing and sales activities increase in importance in function of the remoteness of clients? Do you have to do additional efforts to get on the radar of far-away clients? Yes, you have to do more efforts. But it’s very very difficult. You can’t do B2C communications in a country if you have limited sales. Unless you have a plan were you are going to make millions in the next 5 years. And then you are going to say yes I am going to do this, this, this and this. I’ going to use some several steps to reach those 5 millions. But then you need a real intensive approach. You can’t say I am going to put one person in a country, and now he needs to generate sales for me. And then btw we need to do a lot of B2C marketing. It’s not going to work because you can’t spend thousands and thousands in B2C marketing if you haven’t the sales. Your company cannot support it. So you really need to be careful as to what you do. So In our core markets we do B2C marketing. In our non-core market we focus on co-branding. We look for the right distribution points, the right ambassadors, we provide the ambassadors with a proper margin on the products and we ask them that, with that margin, they ensure the promotion of our products, and they also provide the service for the products. So it is a very important aspect for us. Then they will do the promotion, they will do co-branding. They will make sure that our brand is pushed locally around. And once we are targeting more and more sales with these distributors in different places in the country, at some point it will make sense for us to do national marketing. But local marketing, we can’t do that. It is just too expensive. **And are you visiting a lot your clients outside Belgium?** I myself, sadly enough, no. Because of lack of time. But my people, my team, they are. They go and see people. We are in contact to ensure that we know what is going on. But you can only do so much, and you do need to focus and for me it’s really really difficult

because I already have all these elements. And don't get me wrong, in a normal company you would only have one of these (5 business unit). It would be only one of these and a lot less countries that I would have to work with. So it's a big challenge to spread the marketing budget well enough over all these countries. And that's why we went for sponsoring as well, the sun web team because you do invest quite a bit of money, but it is seen thorough the world. And then you start working on point of sales, makes sure that you have the opportunity to promote your products, your brand, that they have the tools to communicate towards their customer base, ...

Which (other) challenges did your company encounter in the process of internationalization? I think the biggest issue is this legislation problem. This thing is extremely important. And that was because outdoor was introduced only 5-6 years ago. Before that it blocked our international approach. Because we could not afford to put people in a country for 3 years not having sales. You can't, it's expensive. So you need to generate sales and outdoor allows us to generate sales. I said legislation is important because it ensures that level of quality goes up in certain countries, but local companies within the country only use legislation as an opportunity for trade barriers. So they will always make sure that the legislation is written in such a way that nobody else can enter the market easily. So that's for example with our healthbox here, which is measuring VOC, CO2 and HO2. But in France they don't care about CO2, they don't care about VOCs so they said well your product is not good for our market. It needs to be just on H2O. So we had to make a product which was downgraded. So if you live in Mouscron, you will have a really good product, but if you live in Lille, you'll have actually a really limited type of product, a very reduced product. The stupid thing about it is that we introduced then this product after 2 years of working on the legislation and getting it approved. After 2 year, we get it to get into the French market. So with a very basic product, and we got rewarded for the best product of the year.

So that shows you that these are challenges that you need to encounter as a company and I said on the one hand you want legislation and on the other you don't want it. Legislation is great if it identifies the target, but it's crap when it identifies how you need to do it. So what I'm trying to say is: "give a target, say for example in a house the CO2 level should not be higher than 1200 pps" But how you do it, that I don't care. And then you provide the tools to all the companies to look for the best possible solution to reach that target. But if you are going to say, okay, I'm going to value this and value that... No, stop doing that because then people are just going to focus on that one little element.

What is your exportation percentage?

At this stage, it is 50%. So 50% of our sales is going outside of Belgium. And it's 15% that is going outside of the countries outside of the surrounding countries. So if you look at it, you have Belgium, then you get Holland, Germany, Austria, Switzerland, France and the UK. That is then 85% of our business. And then you got 15% that go outside that.

And how long ago did you begin to internationalize? Actually in 96, when I originally came, I was already UK area manager. So it had already started. But the really internationalization for countries further than our surrounding countries I think it's somewhere around the years 2000. So it takes time.

And Renson was founded in 1909. Ok, so it took really a long time to go outside of Belgium. Ho yes. If you look at the figures of our sales, then you will see, that between 1909 and 1970 the curve goes like this. And suddenly it goes like that. **Okay, and what happened in 1970?** The biggest element was here. It was decided to ensure we would create a brand, it was decided that we would going to go for innovation and it was decided that we should look outside of our own borders, so outside of Belgium. That what's happened then. And since then we have grown. **And in 1909 we began with ?** Originally everything started with door handles, which we are not doing anymore. So door handles as the very start with the company argenta. And e also had the material for shutters but then we changed more and more towards the inside. So Argenta was a business that we had. We also had a business in windows and it was a very important one. It was Paul Renson's uncle that was in that business. And at some point, they got requirement for ventilations. And they were wondering were they could find this they could find it anywhere, they had to contact a company in Germany, but it took a long time to get it. And at some point they sais "why don't we do it ourselves?". Great idea. So they took the product and put it on batibouw, the exhibition. And then there the companies came and said "this is interesting, I would like to have that" and then innovation came in, and it exploded. **It is interesting because I thought you had such a growth since the beginning.** No, no. It was really low and then waw. It had gone really fast. But that's difficult as well because you need to manage a lot of things. You need to get people on board, you need to train the people, you need to have more products coming in, it is really difficult.

Appendix 6 : Quentin Bolle' interview – Skylane Optics

Pouvez-vous m'expliquer quelle est votre fonction au sein de l'entreprise ? Qu'est-ce que cette fonction implique concrètement ? Je suis responsable du marketing de l'entreprise Skylane Optics. Je suis chargé de réaliser des enquêtes de marché et de promouvoir les produits de Skylane Optics.

Quel est le produit le plus vendu ? Quelle est la vache à lait de l'entreprise? Le produit le plus vendu de Skylane Optics est le transceiver et parmi les transceivers ce sont ceux de 10 gb qui sont les plus vendus. Mais nous possédons un nombre conséquent de produits car au fur et à mesure du développement de la fibre et des marchés, la capacité standard du transceiver va certainement augmenter (100, 200, ...) et nous nous préparons déjà à cette éventualité.

- a. **Quel est le pourcentage du chiffre d'affaire qui est généré par ce produit ?** 70% du chiffre d'affaire de Skylane Optics est réalisé par les transceivers.
- b. **Depuis combien de temps l'entreprise vend-elle ce produit ?** L'entreprise commercialise ce produit depuis le tout début. C'est avec ce produit que nous avons commencé.
- c. **Etait-ce un produit pionnier quant à son développement/sa vente ou bien d'autres entreprises avaient-elles déjà développé un produit similaire ?** Ce n'était pas un produit pionnier en tant que tel car les transceivers existaient déjà. Mais ils ont été les premiers à en faire des compatibles d'aussi bonne qualité.

Comment définiriez-vous votre marché cible ? Nous sommes sur différents marchés. Nos clients historiques sont les opérateurs téléphoniques (genre Proximus, orange, ...) qui leur achètent des transceivers pour leurs installations. Maintenant ils se tournent également vers les data centers et les centres de gaming.

Quelle est la part de marché de l'entreprise sur son marché cible ? Je n'ai aucune idée de nos parts de marchés actuelles. C'est trop difficile à calculer.

Comment caractériseriez-vous l'environnement dans lequel vous évoluez ? Etes-vous dans un marché mature ou immature ? Le marché est mature

- a. **Avez-vous beaucoup de concurrents ?** Il y a beaucoup de concurrents mais sans en avoir vraiment. Comme concurrents par rapport à nous il y a :
 - i. Les marques de switches (Cisco, dell, ...)
 - ii. Les concurrents low cost, de mauvaise qualité, mais beaucoup moins cher que les 2 précédents.NB : Nous sommes moins chers que les premiers, mais d'aussi bonne qualité et plus pratique parce que un seul et même transceiver peut aller sur n'importe quel switch. Par contre nous sommes bien plus cher que les deuxièmes mais pour une qualité sans pareil.
- b. **A quel point votre solution diffère-t-elle de ce que vos concurrents offrent ? Y a-t-il une tendance vers une solution standardisée/commune ?** Les solutions sont très similaires puisque nous sommes tous contraints par la

technologie des switches. Seul le fait que ce soit un compatible ou pas différencie les trancivers entre eux, et ça va encore rester comme ça pour des années.

Offrez-vous des produits standardisés ou sur-mesure à vos clients ? Nous offrons des produits standardisés. Nous faisons également des customizations, mais c'est vraiment minime par rapport au produit fini (ils peuvent mettre un capuchon vert à la place d'un rouge, mais ils ne touchent pas au code du produit par ex).

Offrez-vous des produits standardisés ou sur-mesure à vos clients ? La part de marché a bien augmenté ces 5 dernières années avant de se stabiliser un peu.

Pouvez-vous me donner le nom d'un concurrent pertinent dont la part de marché a diminué au court de ces 5 dernières années ? Malheureusement non.

Quelle est actuellement la valeur totale des ventes au sein de votre marché cible (=ventes générées par votre entreprise et les concurrents) ? Plus de 8 milliards d'euros.

Comment a évolué la valeur totale des ventes dans votre marché cible ces 5 dernières années ?

- a. Elle a augmenté.

Quel pourcentage de votre chiffre d'affaire investissez-vous actuellement dans les R&D ? C'est très difficile d'évaluer le budget investi en R&D. Celui-ci change tout le temps. Mais nous ne faisons pas énormément de R&D en fait car nous n'avons pas beaucoup de budget à y allouer. Nous avons passé des concours au niveau européen et nous avons su ramasser un peu de fonds de cette manière-là. Mais à part cela nous ne sommes pas très centrés sur les R&D.

Combien de brevet enregistrer vous tous les ans ? Nous enregistrons quelques brevets, mais pas tellement que ça. La technologie des tranciver n'est pas prêt de changer, il n'y a pas beaucoup d'innovation que nous pouvons y apporter.

Au court des 5 dernières années, dans quelles mesures les R&D ont elles mené à :

- a. Innovation de produits
- b. Innovation de processus de production
- c. Innovations organisationnelles
- d. Innovations commerciales

Comme nous ne faisons pas ou très peu de R&D, je n'ai pas d'exemples qui me viennent à l'esprit comme ça.

(→ Les questions suivantes se référant à cette question ont donc été passées.)

Quelles sont les techniques marketing que vous utilisez chez Skylane Optics ?

- a. **Proximité du client :** Nous sommes très proches de nos clients et nous nous servons de cette relation afin d'améliorer nos produits, par exemple dans la détermination du switch nécessaire.

- b. Compétition sur les prix :** Tout dépend du concurrent. Nous faisons clairement de la compétition sur les prix par rapport aux grandes marques (Cisco, Dell, ...). Par contre nous sommes toujours plus cher que les marques génériques low-cost. Cependant nous ne souhaitons pas essayer de les concurrencer au niveau des prix. En effet, si nous souhaitons diminuer le prix de nos trancivers, leur qualité en diminuera également et c'est quelque chose que nous ne sommes pas prêts à faire.
- c. Ratio prix/qualité :** C'est lié à ma réponse précédente. Nous privilégions vraiment ce ratio prix/qualité. C'est-à-dire que nous proposons des produits qui sont d'aussi bonne qualité que celle des trancivers « originaux » à un prix plus raisonnable que les leurs.
- d. Réseau de distribution :** Nous avons quelques contrats avec des distributeurs, mais nous nous chargeons également de négocier directement avec certains clients.
- e. Publicité :** Nous essayons d'utiliser les réseaux sociaux afin d'augmenter la connaissance de la marque, mais comme le produit en lui-même est très peu connu, même parfois pour des gens du métier, cette tâche s'avère être très difficile.

Pensez-vous que des actions de marketing et de vente sont de plus grande importance dans le cas de clients éloignés ? Devez-vous faire plus d'effort pour rentrer en contact avec des clients à l'étranger ? Oui. Oui, c'est important de faire du marketing dans le cas de clients éloignés pour faire connaître la marque.

Quels autres challenges a rencontré l'entreprise dans son processus d'internationalisation ? Le plus difficile est de trouver la bonne personne de contact. C'est déjà très difficile pour nous de trouver la bonne personne de contact, mais cela s'avère encore plus compliqué en dehors de Belgique.

Quel est votre pourcentage d'exportation ? 99%, nous ne vendons que très peu en Belgique.

Appendix 7: Olivier Blontrock's interview- Vlassenroot

In 2 words, what is your function/job title inside the company? What does that role involve? What responsibilities does it entail?

I am responsible for the Belgian production sites so we have 3 factories, in the Vlassenroot group. We have one in Belgium, one in Germany and one in Poland. And I am responsible for the Belgian production site. So my title is country manager, so it's this office and the factory across the road. So, it's a factory and an office.

What is the most sold item; what is your company's "cash cow"?

The company's cash cow is... So we make telescopic booms for cranes. In Belgium we bent half shelves like U shape steels that we bent. In Germany we weld it together and then in Poland we make smaller pieces that fits on this telescopic booms. So I think probably 70-75% of our turnover is from telescopic booms for cranes. So it's ... It's our main business, but the boom is our cash cow.

a) Which % of the total turnover of the company stems from sales of this particular item/line of products/technologies?

So it is 70-75% of our turnover. Maybe just the boom is probably just around 50%. So we do 75% for telescopic cranes and specifically for the booms for those telescopic cranes we do 50%

b) How long has the company been selling this particular item (a: from the moment the firm was created, or b: since some later stage – if the latter is the case; specify year of launch)?

Not since the firm was created. The company was taken over in 96 by my father in law. And in 96 the booms were really a small part of the business. So probably less than 10% of the turnover, maybe even less than 5% and then he started to really focus on this booms, he saw an opportunity for that booms. And they expended it. So, at the beginning there was only one production site here in Brussels but I think it evolve almost to going to 90% who was linked to telescopic booms somehow it was a huge growth, from 96 to 2008 the company grew from probably 2-3 million euro to above 100 million euros.

c) Was it a pioneer as regards the development/sales of this item, or did it start with it when there were already other companies offering it in the market?

There were already competitors, booms have always been made but the technology evolved as well. At the beginning the booms were just welded and then they started to get bended as well and Vlassenroot was a pioneer in the sense that it was the first one-stop shop for telescopic booms. In the past you could buy half shelf to one guy then you could get it welded at another company and then you could have the fitting done at another one and Vlassenroot was the first time you could do all the steelwork in one factory. Or at least in one company (not in one factory because we have 3 factories, but in one company).

How would you define your target market e.g. in terms of potential users/buyers – who are your clients- and geographic outreach (are they a player on the national market, European or global market – let them specify that)?

The booms is quite easy in the sense that you only have four or five main manufacturer of telescopic booms. So this is Liebherr, Manitowoc, Tadano and Terex. Those are the bigger one.

And then you have smaller ones as well. So this is quite easy to find. What is challenging for Vlassenroot is to find some kind of diversification in sales now. So we are trying to find smaller booms, we are trying to do other type of activities linked to booms, ... to expand the portfolio of sales. That's what we do now.

Because the market is kind of saturated? The market fell in 2008. In 2008 it was made about 6000-6500 cranes with these big four crane manufacturers and after the crisis they fell to about 1500-2000 telescopic cranes. So the market really collapsed and then everybody in the sector had the capacity to make 1000 cranes. Also the subcontractor like we were. And so after 2008 we started looking for alternatives you can do with your machines. So this is one thing we are trying to do now. We are trying to diversify in smaller cranes, sectors that in the past we didn't have to look at, we are now need to look at.

And was it because of the financial crisis? The financial crisis had an impact on construction worldwide and linked to that the cranes fell as well. Because people were buying a lot of cranes, even ones they didn't use. It was a crazy market at that time. From 6000 you drop to 2000. The market has never recovered from the crisis.

Regarding your target market; what is your company's market share?

I think today we have around 40%. I would guess 40% of the market.

a) How do you estimate it? (f.i. are there analysts –like Gartner- that follow your market and do they issue reports that serve to estimate your market power; or do you engage in competitive intelligence activities yourself, and you follow up on sales figures, etc. of your competitors)?

Well, if you have 2500 cranes so that means we have about 1000 cranes that we make. Yeah, booms for a 1000 cranes, that's about what we make.

How would you characterize the “environment” or “dynamics” in your target market: are you acting in a mature or an immature market?

It's a mature market. So the crane manufacturer is a mature market.

So there are 4 cranes manufacturer (=Customers)? That's what you said earlier.

There are 4 large crane manufacturers in the world and we define them by being able to supply North American market and European market. Because you have some Chinese competitors but the type of cranes they make is different. You don't find a lot of Chinese cranes in Europe. In fact, there are almost none. So we define 4 manufacturers, and we call them the big four and those big four supply the worldwide market including Europe and America which are the highest demanding markets when it comes to quality and safety. These 4 are the biggest manufacturers and then they are smaller ones. If you take the percentage, the big four would be about 85% and the smaller ones about 15%.

And where are those big 4 from?

- Liebherr is the biggest one. Liebherr is a German company
- Manitowoc is a combination of 2 companies. So Manitowoc is a US company but they took over a German factory in the past that was called Groves
- Tadano which is a Japanese family owned company and they have purchased a German company as well which was called Faun
- Terex which is a US based company but they also have taken over a German company.

Germany was really the heart of cranes manufacturers.

And Vlassenroot has always been Belgian?

Yeah. Actually Vlassenroot is the family name of the previous owners.

And who are your competitors?

Ferro Umformtechnieken, Depa and Teleskop.

a) Do competitors have bigger market shares than you?

In the past we were market leaders I think now we are at par with one competitor. But we have a broader range of product. We don't compete over the full range of our products. They are specific things where we compete and I would say that we are equal there because Vlassenroot lost some market shares last year. I would say that 3 years ago we were incontestably the market leader, now we are at par.

b) Did the number of competitors vary along time?

No. It's almost the same. It didn't really change a lot the last years. You have some more competition in small cranes, but in large cranes it's always the same. The barriers of entry are quite high, so it's not so easy. And also barriers of entry are high because: investments are important, it's difficult to get to know the customers, to have the quality, etc. And also we see that we have competitors that do for instance only bending. They don't do the welding and they didn't integrate vertically.

c) How much do your offer differ from what others propose? Is there a tendency towards some kind of standardized product?

I think quality wise and price wise there is not a lot of difference. I think quality is very broad, you can have just quality of your products but you can have also the quality of all the rest. How is your contact with sales, how is your after sales, how is your order entry... all these things are really important and there I think we have improvement to make towards competitors. That's why I think we lost some market share so we are working hard over our quality, how responsive we are, how quickly we respond to the questions that come in, how the quality of our products evolves, the quality KPI's on each delivery... All these types of things.

But the product itself is really similar? The product itself is made by the customers. So the customers defines the design and we execute it. The only thing that we do is that in the last stage we give some remarks to make the manufacturing easier. But in general, the designs come from the customers.

How has the market share of your company, in the target market you address, evolved in the past 5 years?

d) Went down

It went down with some customers. Due to unfortunate choices that were made at the time.

By you or by the customers? By the previous managers.

What is at present the total value of sales in your target market?

For what we do? **Yeah.** It depends how you define the target market, but I would say around 150 million. Just the telescopic booms. Maybe 150-200 million. It depends how broad you define it. For instance, in large cranes the market is smaller, if you take all the cranes, with the big four, I think it's around 200-250. And that's not consistent with what I said earlier with 40 percent market share, but it depends. In our target market, for bigger cranes the market is more. It's probably 120-130.

How has the total value of sales in your target market evolved over the past 5 years (= sales generated by your own firm and the competitors)?

c. it went down

Even after the crisis? Yeah, it still went down. Two years ago was minus 5%, last year was minus 3% and I think this year seems to be growing again.

For the moment, we have to compete with market share. It's not a growing market, it's stable.

Do you apply one of those marketing strategies?

- a. **Closeness with the customer**
- b. **Price competition**
- c. **Price/quality ratio**
- d. **Economy of scale**
- e. **Ingredient branding/promotion of the brand name/creation of the brand awareness**
- f. **Cost leadership**
- g. **Distribution network**
- h. **Vertical integration/value chain development**
- i. **Diversification**
- j. **Advertisement**
- k. **Other**

It's a difficult one because they always tell you that you have to choose and not do everything at the same time. Cost competitiveness..., I think we try to do cost/quality. I think that's important. Cost/quality includes cost efficiency as well. And customer intimacy as well. Those are the most important. We do the rest also but in smaller scale.

So the 2 ones you are focussing on are cost/quality and customer intimacy. Yes. But there are some that are linked as well. If you say economies of scale and cost efficiency, there is a link between both. **And would ingredient branding be a thing that you can make?** No, we don't do that but our steel manufacturer does that. **Is price competition something you are really focussing on? Or you focus on quality and you'd rather have a higher price?** We always say that you have to be in the cloud. Being in the cloud meaning that you have to be in the interval (plus/minus what the customer expects). So you have to be inside that interval. And then, I think the most important is that you focus on quality that the priority of everything and then price is less important. Well, price is always important, but I mean it's not an issue today. As long as you have market share and volume, it's fine. **Do your customers compare a lot prices between competitors?** Yes. **Can they switch easily from one to the other?** Yes. But they won't do it. But they compare. It depends, actually. It depends on the customer. You have customers, for instance, that have different types of cranes. They have 60 tons cranes and 100 ton cranes and they will give one type of crane fully to one supplier. That means for example that, Vlassenroot, if you see a 500 ton Liebherr it's always made by Vlassenroot. If you see a 250 ton crane it's never made by us. But then you have other competitors. Other competitors of Liebherr for instance and they say we give 50/50: if you have a 500 ton crane we give 50% to Vlassenroot and 50% to a competitor. So it really depends from one competitor to another. **And do you do a lot of advertisement?** Not enough. I think with our big four it's less important. I think customer intimacy is really important. To have a good account manager that follows up all the questions. Who responds quickly, makes sure that the deliveries are on time, follows it up if there is an issue, communicate proactively,... that's really important with the big four. We have to do more advertising and we will do a lot of work now, in the coming

months on renewal of websites, brochures etc. We are doing a lot of work. To make sure that, for instance, Vlassentoot is known in the market as “they do big bending for telescopic cranes” and so if somebody has another thing they use or a machine they use, they won't think automatically about Vlassenroot. Because they think Vlassenroot only does cranes. So Our advertisement or our communication is not good.

In the past 5 years, how has the R&D budget in your company evolved (as a percentage over turnover)?

It's stable. Well, it depends on the project. For instance, last year we had done quite a lot of investments in Poland and in Germany, Belgium somewhat less. We are doing some investments now in IT and we are expecting to have quite a lot of R&D spending this year and part of it, especially next year in welding in Germany, and probably have big capex investments... No, it's R&D hein? **Yes.** No so IT is not R&D but we have investments this year in Germany for projects next year and we might have some projects in Belgium.

What is the percentage of the turnover you now invest in R&D?

I think this year it's going to be 2-3%. No less less less. Less than 1%.

Is there room for R&D in your field of expertise. Yeah, we have to, we have to. But a lot of our R&D is done as well with machine suppliers. Typically what we do is, we look for new technologies. And then we enter subsidy in general, to be subsidise for the research. Then you look for a partner and then machine supplier and you do that together. **So you don't support all the R&D on your own?** No. If we do R&D it's more about testing. So what we would do for instance, if we test some welding. So the R&D is: we supply the material, we supply the part. Then it goes to somebody that has the machine, it's probably the machine supplier who has test centre. Then you have the welding done there and you send it to the lab to analyse it and that's how it starts. So what we do is we invest the time of our people to follow up the project and material and also the cost of the tests if they have to be done by the supplier or by a labo to do the research and the testing of the pieces that have been made.

Do you register patents?

Yeah. Our product is patented by our customers. So the only think we could patent is if we find some new way of assembly for instance. And then we look at the possibilities there are, but it's not always easy to find a patent or to find something that you can patent. Typically, we would look at it. We have one specific small part that we were able to patent. But we typically look at it because it's quite advantageous if you can have a part of your turnover that comes from patented products. It's fiscally interesting.

In the past 5 years: to what extent has R&D led to the launch/introduction of:

- **product innovations**
- **(production) process innovations**
- **organizational innovations**
- **commercial innovations?**

In Germany we have done a big step forward 3 years ago. We had a machine to do the welding of the telescopic booms. That was a process of about 8 years before it as operational. So that's 11 years ago that we started to look into that technology and they improved it for process. And especially for the steel that we are working for. So that was a really big one from 3 years ago. There's going to be a really big one coming for bending. That's process innovation but

that comes from the machine manufacturer. And they have done it on small scale, on small products, we are bending really big pieces here so that something we are going to work on during the next 2-3 years. So that's a big one coming up here in Belgium and then in Poland we do a lot of manual welding, so the next step would be automatization. That's going to be the next step. But today we don't do any products. So we are only subcontractor. We never sell parts directly to the market.

So, as the R&D budget are not used to come up with commercial or marketing innovations, does the company devote other means to commercial or marketing innovations?

So as I said for the moment we are only subcontractor so we don't do innovations on the product itself. So what we do something it's more linked to how we make it: we go back to the customer and say: "maybe you could do this and this and this, it would be easier to make it" but that's not really huge innovation. So no, we don't do it. And on marketing what we have to do is, so we have a website and we need to look into Google analytics every 6 months and really make something that is relay much more attractive.

Can you select a "relevant competitor" whose market share went up in the past 5 years?

Yeah, Ferro is one. Is a German company. It's a German competitor of ours that grew quite well these past 5 years.

When you look at the "relevant competitor" you selected: would you say that they

- a) **were more active and spent a higher % of turnover on R&D than your own company? Or equal or less?**
- b) **were more active in terms of launching**
 - i. **product**
 - ii. **process**
 - iii. **organizational**
 - iv. **commercial innovations than your own company? Or equal or less?**
- c) **If that competitor has implemented innovations in the field of marketing and sales over the past 5 years; which ones would you highlight in particular? ...**

Not really in innovation but I think they were better in sales. They were closer to the competitors, customers' intimacy, they were better in that. I think we were not good in that area last years. A bit too aggressive in some price negotiations and then... we made some mistakes there. So I think our competitor was better in there. I think it's also linked to our failure in some way. We had the market share and we lost it, that's painful. **And did you invest a bit more in sales then?** Yeah. What we are doing now is that we are increasing the budget for sales. So we are hiring people in Germany. Specifically we are hiring 2 people now and hopefully they will be operational in august or September. We are hiring an account manager (so that's more of a farmer type of sales) and we are hiring somebody for hunting. A bit more aggressive profile, a bit more on the road, looking for new opportunities. **Worldwide, where are your biggest customers?** Si it's in Germany and US. That's the biggest ones. **Do you also have a lot of sales people in the US?** US is Manitowoc, we only have one customer there. So we do it from Belgium. We take the plane, we go and visit them.

Do you perceive a correlation between intensity of "R&D intensity" and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

There's a correlation.

In general or just in the case of your company? I think in general. If you define innovation by finding something new, by innovating, then you have to do that as a company. There are 2 things you can do: you can manage what you already have (and that's good) but if you want to take a step forward you always have to innovate, in whatever area you are working. As soon as you stop and you say we are Okay and we are going to continue to manage what we have now without improvement, then you are out of business in a couple of years. It's really about continuing to find ways to be better. **And how do you find the inspiration for R&D? is it coming from the customers? From the competitors?** It's coming from everywhere. Innovation can come from an operator that says maybe we should try to do it this way it can come from a customer, it can come from a competitor, it can come from everywhere. I think as management or CEO (which I am not, I am country manager here in Belgium) it's something you have to constantly do. You have to read, you have to listen and then you have to try to find the bigger picture and you have to try to find the way of defining your strategy and say let's go for this, let's go for that. That's important. Top level that's the most important. You have to be an inspirational leader but you also have to focus on where you want to go, what is your strategy, what is your business going to be in 2, 5 and 10 years time. That's really important.

Do you perceive a correlation between intensity of “product innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

Also

Do you perceive a correlation between intensity of “commercial innovations” and market share evolution – in general/in your own case/in the case of the selected competitor: yes/no – please explain

Also. Everywhere. As long as you are innovating, in whatever area it is. You can do it on marketing, finding new ways to address the customers, communicating a better way to a customer, where is your part, where is it going to be tomorrow, where is it going to shift, is it already? Is it stuck? All these types of information are important. We are not doing it today, but of course you have to find out what adds value to your customers that's really important. But you can be innovative in so many ways you can be innovative in the way you communicate with my after sales, with my ... everything is important. How I ship, is my shipment good, ... all these details. Every detail is important. But you have to start somewhere. You cannot do everything at once but every innovation that add value to your customer should be replaced.

To what extent do you opine whether marketing and sales activities increase in importance in function of the remoteness of clients? Do you have to do additional efforts to get on the radar of far-away clients (f.i. as internet is universally accessible for all clients across the globe ...)?

Yeah. That's the most difficult. We have to find time to meet our customers you have to combine that with daily activities so that's difficult. That's a difficult one, but you have to do it. You have to go and visit your customers. There is no way you can...especially if you have competition that takes time to do that as well. You have to do it.

So we have Vlassenroot and there is another activity that I am also in charge of and that's also a very niche activity. It's much more than Vlassenroot it doesn't respond to all the terms of hidden champion but it's a very small hidden champion and there we are supplying a little bit everywhere in the world much further than Vlassenroot. We go to Brazil, India, North America, Australia, ... and there you have to travel as well. But there you have less competition and we have a product offering that is much more different than our competitors so it's easier to be able to separate the brands and then it's easier, you can travel a little bit less. Because your brand is really strong. **Can I ask you what is the brand you are talking about?** Yes, so we do production mold for the cement industry. You make these mold. **Is it linked to Vlassenroot?** It's linked to Vlassenroot in the sense that we bend. It's a worldwide activity and there it's easier. Because there I am very good on price quality so my brand name is really strong. So whenever somebody wants to buy molds they think about Sitomeca. That's top of the mind brand. They know that's quality. It's easy to be in a business like that, but nevertheless you still have to look for price innovation, for new customers, ... **Even though it seems difficult to innovate in that field.** Yeah but you can improve. I can still do something about my costs I still have to improve the quality. Sometimes you have something that goes wrong and you have to be able to respond quickly. You send sheets to Russia and you have 80 mold that are bad that you haven't seen in years because it's on the bottom then you have to make sure that you can quickly react. You don't have a lot of discussion about whose wrong, you just send it out and that's it. You build your brand. You don't make a big fuss about it, you send it you and then the next time they talk about it in the market they will say "we had some issues and they sent 80 pieces right away, no discussions it was perfect". **So that is about service quality?** Yeah. **And is that your own company?** Yes. **And you manage to do that at the same time as country manager?** We try to do that it's difficult to combine. You have to have good people and I have I am very lucky to have really good people at Sitomeca. And they are able to manage most of the business without me. I'm just doing sometimes a bit of commercial. But it evolved. At the beginning, it was 100% of my time, because it was a company out of bankruptcy, so you have to rebuild a team and so on.

Which (other) challenges did your company encounter in the process of internationalisation?

I believe the most difficult is the way you communicate and your intimacy with your customer. That's the most difficult. Your customer is far away you have to be able to go there to travel, to understand who is there. That's the most difficult. The rest is... We have a product. Whenever you are able to sell it we know we can do that correctly. We know we can make our part correctly, we know we can ship it in the right way, ... All of this is okay. But the quality of the contact is what is really important.

Do you know your exportation percentage?

Here in Belgium? 99%, in Belgium we don't have any customers. The only thing that we do is small bending for bridges for instances, and there we have a couple of customers. But in Belgium we are trying to find new ways of sales as well. Before 2008 we had some small customers for smaller pieces, and then we had the telescopic cranes. And then in 2008 with 6500 cranes to produce, the company was running full time, 24h/7d, continuously. Because of that, the volume was increasing and we kicked the small customers out because it was not interesting anymore. So now we are trying to re-find these small customers.

In our German factory, we export very little, because everything is sold in Germany except the part that goes to the US, but that's only a really small part, that's only 10-15%. From Poland it depends. I would say we export also more than 90%. It depends if you have local customers or not. Everything that is linked to telescopic booms is going to Germany. So there you export a lot So Germany itself, most of it stays in the market because we have most of our manufacturers there, Poland exports a lot to Germany because they also have a lot of manufacturer there. If you do trains, sometimes that stays in Poland. But sometimes you have to ship it to the US as well. It depends. I would say that most of our exports are going to Germany.

Appendix 8: Comparison of interview results

	Skylane Optics	Vlassenroot	Iba	1986	Renson	1909
Creation year	1998	1998	1986	1986	1986	1909
Age	19	19	91	31	31	108
Company's cash cow	Tranceivers are Skylane cash cows. Nowadays, the 10gb are the most sold, but this is going to change with the capacity of the optical fiber. Skylane is already ready to follow the changes	Telescopic boom for cranes	Proton accelerator		There are 3 of them: -The fix screen - Invisivent (ventilation system) - The Healthbox	
% of turnover from the cash cow	70%	50%				
How long this item has been sold?		Not since the firm was created. They expended it's production later, after 1996			Theses 3 products have been for about 8 years on the market	
Pioneer?	Tranceivers already existed, but they were the first ones to offer compatible ones of really good quality	Vlassenroot was a pioneer in the sense that it was the first one-stop shop for telescopic booms	Yes		For the fix screen, yes. There were nobody in the market that had that, and now you can see that the fix screen is the most used type of product on the market. For the invisivent and the healthbox we were pioneer as well.	
Who are the customers? Where does they come from?	The customers are telecommunication firms such as VOO and Proximus. But nowadays that market is a bit saturated therefore they also aim for data and gaming centers.	They have 4 big customers: Liebherr, Tadano, Manitowoc and Terex. They come from Japan, USA and Germany. The biggest part of the crane business is in Germany. They are now looking to diversify in smaller cranes.	Hospitals		From China all the way to America, Canada, Australia, ... Depending on the product we are talking about, the customer will be different. It can be either the architect, the end customer, the building contractor, the subcontractor or the distributor.	
Company's market share	No idea. It is too difficult to compute	40% of the market. They are able to compute it because they now the amount of cranes manufactured a year.	53%. They manage to compute it because they know the amount of rooms sold a year. They know it because each acquirement is made public		For mechanical ventilation we have about 50% market share (60% of the market is the C- system and we sell 75% of them). We are able to compute it thanks to the research of an organization.	
Mature or immature market?	Mature market		Immature		It depends on the product, but mostly immature.	
Are you the market leader?		3 years ago they were incontestably the market leader, but due to unfortunate bd decisions, they are now at part with another competitor.	Yes		For the C system, yes	
Who are your competitors? Did the number of competitors vary along time?	The competitors are the switch brands (cisco, dell,...) which also sell tranceivers, but no-compatible ones. very low cost competitors, but which quality is really bad.	Among smaller cranes there is more competition. Barrier of entry are high, in term of investment but also in term of getting to know the customers			There are no competitors that are more innovative than they are, but there is competition. In ventilation the big competitors (for the D system) are Samsung, Daikin, ... and heater companies that are entering the business. There is only one other company manufacturing the C system, Duco, and they are not as far as Renson	
How much does the offer differ?	Not that much, except that their switch is either compatible and less expensive (but of the same quality) or of better quality (but more expensive)	Quality wise and price wise there are not a lot of differences. The product is made by the customer, so there are no standardized products that they make.	Hitachi, Varian and Mevion		With the legislation becoming stronger, the market is growing bigger (because it is now a requirement to have ventilation while before it was optional) therefore there are more competitors.	
How has your market share evolved ?	It went up before stabilizing a bit	It went down with some customers			There are big differences. They look heavily on making a difference from the start	
Are your products standardized or customized?	They sell standard products	They sell customized products. It is the customer that designs the products, therefore they manufacture a different product for each customer.			It went up. Dramatically in the countries they weren't in before and a bit in the countries they already were in.	
What is at present the total value of sales in your target market?	more than 8 billion euros	It depends how you define the target market, but I would say around 150 million. Maybe 150-200 million.			So do we have standard products? Yes we have, but each one of them is different. And they are all specific, they are all made to measure.	
How has the total value of sales in your target market evolved over the past 5 years	It went up	It depends how broad you define it.			The total sale of the company is 200 million. But it is difficult to have an exact figure for the whole market.	
		It went down			It went up	

Marketing	<p>they are close to their customers and use their feedback to improve the services. They compete on price against the switch brands, but don't want to compete with the Chinese because it is impossible to keep their current quality at such a price. They try to make the consumer more aware of the brand, but it is really difficult because only a few people know what a transceiver is. They also use social media.</p> <p>It is difficult to assess the budget they spend on R&D, because it constantly changes. They had some subsidies from the EU but they are not really innovating, as the product is already defined by switch brands.</p>	<p>Focus on cost/quality (and therefore cost efficiency) and on customer intimacy. No ingredient branding at all.</p> <p>And no particular focus on price. They just have to be "in the cloud" (+/- what customer expects). Quality is the priority, price is less important.</p> <p>They do not enough advertisement. It is not really important with the big four (with them what matters is the customer intimacy), but with the smaller crane manufacturers it is really important.</p> <p>They want to change their image a bit because currently they are only associated with cranes, even though they can do other things.</p>	<p>their customer in USA and Asia, even though everything is still managed from LIN. Requirements from the customer sometimes become generic and often Iba had already thought of it before. Sometimes a requirement move a development forward, though.</p> <p>Price competition is a key element for them. Proton therapy is so expensive that the competition is mainly about the price (moreover it is a public business, price is a really big requirement). They try to reduce the price to the maximum while keeping the best of the quality (otherwise they can't sell it, as it is a medical device the law is quite strict).</p> <p>Economies of scales they hope they will manage some. This is the reason why they keep building new factories. If they sell 10-15 small accelerators they will manage to reduce significantly their costs.</p> <p>Brand awareness: the market is small enough they don't have to do it.</p> <p>Vertical integration: Since 5 years they try to incorporate medical imaging in the accelerator in order to see the tumor in real time</p> <p>Diversification: they try not to do it. It is hard enough as it is.</p> <p>Advertisement: not necessary because all there are only a few players on the market and they are already well known. Moreover, hospitals are proud to announce they</p>	<p>Closeness with the customer: Yes, they want to get closer to the customer. It is really important.</p> <p>Price competition: No</p> <p>Price/quality ratio: Yes, but no content</p> <p>Economy of scale: No</p> <p>Ingredient branding/brand awareness: Yes, brand name recognition is important, they want to do it a lot</p> <p>Cost leadership: no</p> <p>Distribution network: Yes, they need a really good distribution network, they need people to recommend their products.</p> <p>Vertical integration: no</p> <p>Diversification: Yes, it is important, with a concept view. It has to be in the mission</p> <p>Advertisement: yes, they do sponsoring (foot cyclism), they do co-branding, the leaflet in the news, ambassador promotion,</p> <p>Other: SEA, gezond.be, discussion panels with consumers, installators, ...</p> <p>He has the feeling the techniques are useful, but that he still has to look into it and see if there is room for improvement?</p> <p>Price is not their priority. Their priority is to have a good air quality.</p>
How has the R&D budget evolved?	<p>they don't know</p>	<p>It depends on the project, but it is relatively stable</p> <p>Less than 1%, and they try to have subsidies from the government. A lot of their R&D is done with the machines suppliers.</p>	<p>In term of percentage it went down, because they now earn more than before. The absolute value goes up but it proportionally went down.</p> <p>Around 10-15% of the total budget. Innovation is really important to Iba</p> <p>Yes, we do. Last year we registered 30 of them. But in average it is 15-20 a year. There are several motivations to register a patent. The biggest one is the protection of know how many a year that is.</p> <p>They patent to have protection and to generate a competitive advantage that will generate money. They also aim at the government subsidies.</p>	<p>he didn't know</p>
Do you register patent?	<p>Yes, a few. The technology surrounding the transceivers is not soon to be changed,</p>	<p>Yes, we try to but it's not easy. Because our product is patented by our customers. The only thing they can patent is the process the product is made by (new assembly way f.i.). But they try to patent because it's quite advantageous if part of the turnover comes from patented products.</p>	<p>Product innovation is what they do. They try to improve their product and create new ones, as the smaller accelerator.</p> <p>Process innovation: not really, because they don't produce the good themselves.</p> <p>Organisational innovations: it is not coming from R&D but they have tried some organisational innovations during the last years. Indeed, has they knew they will have to hire new people and double the size of Iba in a short time, they thought about integrating everybody in an innovating way.</p> <p>Commercial innovation: no because they are on a public market. There is therefore no room for commercial innovations. On another hand they try to differentiate themselves with another color of logo (everybody is in red and blue and they are in green) or they try to be innovative on the different fairs they go (with VR f.i.)</p>	<p>When talking about R&D he talked of product innovations. But now the product innovation is leading to commercial innovations as well. Indeed thanks to the healthbox they can now offer new services. It also reduce the amount of paperwork.</p> <p>They do a bit of process innovation, but not enough</p>
To what extent has R&D led to the launch of innovations?		<p>They cannot do product innovation as they are only subcontractors: they produce other's products, and never sell them directly on the market. But they look into process innovation with the machine manufacturer.</p>		

	Skylane Optics	Vlaasroot	Iba	Renson
Does the company devote other means to commercial or marketing innovations?		They want to change their website and to be more present on the internet	Improvement of the website, promotion and awareness of the proton therapy itself (not necessarily Iba)	
Do you perceive a correlation between intensity of "R&D intensity" and market share evolution?		Yes, there is a correlation. I whatever area you are working. As soon as you stop and think you are okay, and only want to manage what you already have, then you are out of business in a couple of years.	Yes	Yes. But what you have to do with R&D is be very clear that the elements that you are going to be doing will be valuable in the market
Correlation "product innovation" <-> market share evolution		also		It's the value you create with it. If the people perceive the value you are adding as an improve value proposition, then yes. If not, no. Because they will not appreciate it.
Correlation "commercial innovation" <-> market share evolution		Also.	Not really	
Does marketing importance increase with the remoteness of the client? Do you have to do additional efforts?	Yes it is really important to develop marketing in that case because you have to get your brand known	time, you have to do more efforts. You have to take the time and visit them, especially if the competition is doing that as well.	As they nearly only have a market outside Belgium, they don't think it is harder. They have always done it. They take the plane and meet them.	Yes, you have to do more efforts. They find it difficult to enter a new market.
Other challenges?	The most difficult is to have to right contact in front of you.	the most difficult is to keep the intimacy with the client. To be able to travel and to know what's going on there. Everything else we know we are doing well (the product, the shipping, ...), so it's okay. But the quality if the contact is what is really important.	The biggest challenge is legal, it's the compliance and the local rules. Not only for the product itself but also for the sales authorization, the licenses, ...	
Exportation percentage?	99%	99% of our products are going out of Belgium	95%	The legislation 50% outside of Belgium. And it's 15% that is going outside of the countries outside of the surrounding countries
Legal constraint	no	no	yes	yes (for the ventilation)
Do you often go and visit you customers abroad?		Yes, we take the plane and go and visit them.		Yes
Where are the idea for innovation coming from?		everywhere, from an operator, from a customer, from a competitor, ...		Discussions with customers and installators
Leadership role		He thinks that " (...) as a CEO that is something you have to constantly do. You have to read, you have to listen and then you have to try to find the bigger picture and you have to try to find the way of defining your strategy and say let's go for this, let's go for that". "have to be an inspirational leader but you also have to focus on where you want to go, what is your strategy, what is your business going to be in 2, 5 and 10 years time."	(Not necessarily the leader) They read a lot the medical observations to stay on top of the knowing about the disease and the feedback on proton therapy	
General opinion about innovation		As soon as you stop and think you are okay, and only want to manage what you already have, then you are out of business in a couple of years. You cannot do everything at once but every innovation that add value to your customer should be replaced		And it's every time very important for Renson as innovation and marketing is... We are trying to look all the time where are there some products that we can develop where we could be different than all the rest. And we are not going for the big markets, we are going for those niches. Finding out where we can make a difference and then focus on it and go for the sales on that