

Business innovation: playing your strings to strengthen your play Orchestrating harmony in sustainable value systems

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dr. Jean Louis Steevensz © Lector Business Innovation Inaugural Lecture Sep. 29, 2022

PROGRAMME 29 SEPTEMBER 2022

13.30-14.00	Welcome & Reception
14.00-14.15	Opening Xavier Aldape Perez & Rob van Dun, members of the research group
14.15-15.30	Guided tour with four different topics
15.30-16.00	Coffee break
16.00-16.10	Speech Wouter Josso, Managing Director Fontys International
	Business School
16.10-16.20	Speech Arian Steenbruggen, member Executive Board
16.20-16.55	Inaugural lecture Jean Louis Steevensz
16.55-17.15	Musical intermezzo
17.15-18.30	Buffet

INTRODUCTION

Business innovation is a multidisciplinary area of expertise that bridges the gap between traditional areas of study such as business administration, organizational studies, marketing, design, engineering and entrepreneurship. Business innovation focuses on creating, accelerating and managing new and sustainable business models through innovation (Crossan and Apaydin, 2010; Keeley, Walters, Pikkel, and Quinn, 2013).1

The concept of business innovation contains a paradox: the word 'business' literally refers to the things where one's time and attention are currently focused, while the linguistic origin of 'innovation' is just the opposite. The famous economist Joseph Schumpeter gave the word a modern interpretation in the 1930s. He defined innovation as "new combinations of new or existing knowledge, resources, equipment and other factors". According to Schumpeter, innovation is to be regarded as part of the economic domain, with a commercial purpose.

The above mentioned paradox distinguishes business innovation from other fields of management science. On the one hand, an organization strives to be efficient in managing its current affairs, while at the same time it also wants to be adaptable to

the changing demand of tomorrow. Business innovation is an organizational process with the objective of introducing new ideas, workflows, methodologies, services products and/or services, which results in improvement of existing products, services or processes; solving a business problem; or reaching new customers. Casadesus-Masanell and Zhu (2013: 464)² argue that the core of business innovation is to define value propositions for customers, suppliers and partners, thus to find new ways to generate revenue. Innovation in this context is to be regarded as recognizing opportunities, and if necessary it also means taking a new path.

New technologies create new markets and new ways of using products. According to the eminent Peter Drucker, the father of management thinking, in the late 20th century technology was changing faster than society could keep up.

Because of all the technical innovations it looks like our research group fades to the background. In this respect the research group business innovation can be compared with a bass guitar player: seemingly in the background and somewhat drowned out by the vocals and lead guitar(s), i.e. the technical innovations. The bass guitar player is however the conductor of a band. This person lays the basis of a chord by determining and playing the (agreed) ground tone. Besides, the bass guitar player is also always thinking (% of a chord) ahead of what will come/to play next.

¹ Source: WeWork. "What Is Business Innovation and Why Is It Important?

² Casadesus-Masanell, R., Zhu, F. 2013. Business model innovation and competitive imitation: The case of sponsor-based business models. Strategic Management Journal, 34(4), pp. 464-482.

Results of business innovation should lead to competitive advantage in order to help the organization grow and achieve its strategic objectives.

Thanks to the work of Osterwalder (2004) and others, over the past two decades, thinking in terms of business models has helped many organizations to make their value propositions explicit, to think about how they organize value delivery and capture, and ultimately helped businesses to reflect on whether their business model is optimized to deliver competitive advantage.

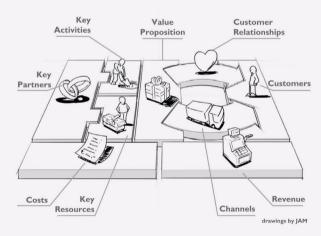


Figure 1. Business Model Canvas.

That is however not possible without taking the environment into consideration. We teach our IB students already early in their academic career the importance of looking at environmental aspects of a company. Let's have a look at my analysis. One can argue that the current social and economic developments reinforce each other and require a new view on entrepreneurship. Considering all the news about ongoing price increases I had to think of the German movie "Die fetten Jahren sind vorbei (2004)", where three young anarchists break into villas of people they perceive as rich. They don't steal anything, but just turn the couch upside down and leave a short note: 'The fat years are over'. Eighteen years later, a similar message can be heard - but this time from the upper echelons of society. "We will collectively become poorer," said our Minister of Finance recently.

These days it seems that everywhere we run up against limits, and we (slowly) start to realize that 'everything, all the time, everywhere', as philosopher Stuart Jeffries summarized this postmodern era, is not only not sustainable, but also undesirable. Labor shortages and disrupted supply chains have put an end to our "frictionless life." Janan Ganesh recently wrote in the Financial Times: waiting and unavailable products are becoming more common.

The current agricultural crisis confronts The Netherlands with the inconvenient truth that we want more than this tiny piece of Earth can handle. The pursuit of economic growth is exhausting our planet. Thursday, July 28 was Earth Overshoot Day – Everything the Earth has to offer in one calendar year in the form of raw materials and food ingredients was used up by humanity in less than seven

months. Earth overshoot day for The Netherlands was reached already on April 12 of this year. If we all would live like the average Dutch, we would need 3.6 Earth alobes.

The urge for more is also turning socially: from Marie Kondo to disappearing Netflix subscribers, which poured an inexhaustible stream of series over the viewer. Oliver Burkeman's bestseller 4000 Weeks, who's title refers roughly to the average number of weeks we are on this planet, advocates a life not about productivity and bucket lists; instead we should guietly and devoutly accept that there are limits to what is possible in life. Due to circumstances I had more time to read over the past months and one of the books I read was II Gattopardo (The Tiger Cat) by Giuseppe Tomasi di Lampedusa (1958) and my attention was caught by the following relevant sentence: 'If we want everything to stay the way it is, everything has to change."

The Floriade 2022 is like all other world exhibitions, a reflection of our current era. More specifically, as a state of our country and its ideas about the future. If you look at the Floriade this way, the exhibition shows precisely our doubts and our struggles about the future, while at the same time our immense challenges become visible. This year's Floriade also showed how difficult it has become for multinationals, cultural institutions and government to communicate with society in a credible and inspiring way.

The Covid pandemic has demonstrated the limitations of relying on rationality and science alone as a form of communication to large numbers of people, particularly in polarized times.3

In these fast-moving and highly uncertain environments, how do we navigate what we do know and what we don't? In the absence of sufficient facts, where we still need to make decisions and go on together, how do we find out what to do? The goals we want to pursue motivate us to think about the future. However a demon of uncertainty stands between us and our goals. Uncertainty about what may or may not happen. Scholars, investment analysts, and others spend huge efforts trying to make forecasts precise and accurate to closely match an actual outcome. But the real purpose of forecasting is however not to be right, but to be ready 4. Readiness means being flexible enough to respond constructively, no matter what kind of situation we are facing.

The mentioned rapid changes lead to greater uncertainty and complexity. These dynamics are often referred to as a VUCA environment - Volatile, Uncertain, Complex, Ambigue. Business model innovation approaches usually do not take into consideration such dynamics and are thus no longer appropriate to deal with such meta-level pressures and micro-level disruption.

³ Chris Mowles, 2021. Complexity - A key idea for business and society. Taylor & Francis Ltd 4 Fred Phillips, 2020. What about the future. Springer.

To deal with VUCA dynamics effectively, a more transition oriented thinking and organizing is required, triggering a significant change in the way doing business is arranged and organized. Renewal of business models is necessary to enable organizations to continue to create value in a turbulent future. This requires a mode of explorative business model innovation focusing on increasing reflexive capacity, mobilizing networks and "learning while you go" to explore future roles, collaborations and new organizational arrangements. The ambition of the research group is to take a step towards disruptive innovation, changing the logic of value creation and shaping new transaction models that are more appropriate for tomorrow's world.

However, many companies continue to do what they have always done and also do not change or adapt their strategy and corresponding business model. Our experience of recent years shows that SMEs are reluctant and find it risky to experiment with an existing business model.

It is our objective to guide SME's through the necessary transition processes by providing case based solutions for business *(model)* innovation. We do this by means of three research themes, which are in line with trends and developments in the Limburg region, and that enables us to contribute to the further development of the region. The research themes also connect with the education programs of the Fontys International Business School in Venlo.



Figure 2. Areas of focus of the research group business innovation.

To be able to deal with the increasing complexity of the challenges and to further increase the societal impact of our research, the research group business innovation is connected to two Fontys centers of expertise: enabling technologies (high tech systems & materials), circularity & sustainability, and the knowledge center: Al for society. Here different research groups work together on larger projects.

dr. Jean Louis Steevensz · Business innovation



THEME 1: INTERNATIONALISATION

Let me start by emphasizing that for this topic the Fontys International Business School has everything in place to help companies in this region: international students & lecturers, a worldwide network with universities. Global competition is a major driver of innovation in today's world. When a company decides to internationalize, it takes its value proposition to international markets. In other words, it is not just the export or import of a company's products, but the business models that companies use that help to make them internationally distinctive and competitive. As firms internationalize, they face increasingly complex environments and must learn to deal with the challenges that go along with the establishment of foreign operations.⁵

Are you aware that Limburg is the most internationally oriented region in The Netherlands and has the highest percentage of companies involved in international trade? According to Central Bureau of Statistics Netherlands (CBS), Limburg also has the largest international trade sector in relation to the size of the export economy⁶.

The recent slowdown in the global economy is forcing SMEs to redefine business models for internationalization.

⁵ Ruigrok, M., Greve, P. 2004, The internationalisation of top management teams and boards in Nordic countries. Research platform Alexandria, University of St. Gallen.

⁶ https://www.cbs.nl/en-gb/figures/detail/70017eng?q=international%20trade.

The business models used in local markets may need to be adapted to local conditions. While globalization implies the blurring of borders and greater integration, there are recent developments in the world such as more conservative trade policies, trade wars, dissolution of international trade agreements and more recently the disruption caused by a pandemic and even a war, that have an impact on international business. These developments may require companies to rethink their business models focused on international markets. One of the possible trends is that SMEs may start to use more local suppliers. This trend has an economic impact, especially on those organizations that rely on cost advantages by producing abroad (e.g. China), and therefore more than ever face the challenge of reviewing their activities and developing new and/or revised agreements with current and/or new partners. To realize this, it is important to investigate in which direction international business will move. Existing corporate visions and strategies need to be challenged and insight need to be gained into how relationships with key partners really work. As a result, a value-oriented network of companies can emerge with new or adapted supply chain processes that are in line with the changing international playing field. Such a transition is important for all entrepreneurs in the Limburg region, in order to remain successfully active on international markets in the near future, and to maintain its leading position in the Netherlands.

The ongoing digital transformation, such as the emergence of Smart Industry, also referred to as the 4th Industrial revolution or Industry4.0, big data and AI, stimulate new ways of producing and organizing. This creates new opportunities in the value chain, because lead times can be shortened and consequently work can be done more efficiently. Machines can be linked and read out, so that a good insight can be obtained into what is really happening in the factory and processes can be optimized more guickly. All the developments in the field of Smart Industry help SMEs to compete more successfully on international markets. In the field of the servitization these developments also play an important role.



Figure 4. Internationalisation, with less travelling: monitoring installations remotely.

THEME 2: SERVITIZATION

The trend 'from ownership to use' is one of the most important trends, both nationally and internationally. The idea of Product-as-a-Service is that a company does not sell its products, but offers them as a service. Providers and/ or manufacturers retain ownership of the products they offer, often including maintenance. Product-as-a-Service (PaaS) is a revenue model that is becoming more popular.

In the manufacturing industry this trend from products to service is generally named: servitization. The servitization research line exists ever since the research group was founded in 2017. Predictive servitization by offering smart services based on machine data holds great promise.

Manufacturers of industrial machinery and equipment have many reasons to pursue digital transformations. The potential to redefine how products are created, made, sold, and serviced is profound. Within plants and factories, new digital capabilities are increasingly at the heart of virtually every process and activity, leading to enormous gains in efficiency and productivity. For industrial companies, however, the power of digital to change virtually every aspect of the business requires an added dimension: the ability to support a shift from a product-centric business model to a solutions-centric model. Here lays a challenge, while traditional companies in the manufacturing industry often still focus on the development & production of products in the form of physical

goods.⁷ By combining hardware, software, and services into a tightly integrated, tailored solution that meets a broader range of customer needs, companies can achieve higher margins, by increasing its customer intimacy. A company now sells continuously services instead of only one machine and spare parts. In close cooperation with a Fontys Center of Expertise, a Knowledge Center and two other Universities of Applied Sciences as well as companies, members of the research group will pursue this theme especially for the manufacturing industry. Since 2018 two PhD candidates, Lisa Bakir and Xander Stegehuis, worked on this theme and realized a solid academic foundation, where we will continue to build upon. Many thanks for this!

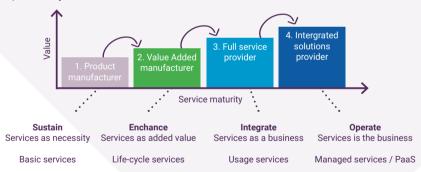


Figure 5. Servitization maturity model - the transition can be planned. (source - Praetimus - The Servitization Maturity Model ²⁰ - 2012)

⁷ Bosslau, M. 2012. Digital Engineering of dynamic business models for smart product service systems. Thesis template.

THEME 3: SUSTAINABLE FOOD TRANSITION



Figure 6. Insect burger - our near future food.

Traditionally the Venlo region is known for its agrofood and agrotech companies and respective educational institutes, like the HAS and the location of University of Maastricht Greenport Venlo.

Since this sector represents a substantial turnover, members of the research group explored the business aspects and since 2020 we concretely work on several (funded) projects in this field.

The growing world population represents a big challenge for the current food supply. An expected growth to 9 billion people by 2050 is creating a necessity for a substantial increase in food production. However, this demand is placing heavy pressure on limited resources such as land and water. The conventional production of animal protein in Western countries requires significant resources. For instance, 70% of all agricultural land worldwide is used for livestock production, mainly for the cultivation of feed. To face these problems, current food production needs to be re-evaluated, and a sustainable and efficient system introduced. If chewing on a fried tarantula leg or biting into a crispy grasshopper makes you cringe, you could be missing out. More than a quarter of the global population regularly munches on edible insects. "Growing bugs would absolutely create a lesser impact on the environment than the meat industry," said entomology professor Davidowitz, at the University of Arizona and head of edible insect research group HexaFeast. For example, cattle generate 100 times more greenhouse gas than crickets for the same amount of protein and require more land and water in the process, according to the Food and Agriculture Organization of the United Nations.

This research theme aims at searching for strategies to speed up the process to make insects a crucial part of the sustainable diets of North-West Europe. We investigate the improvement of the insect production as well as consumer attitudes. Partner institutions, companies, bachelor and master students, and (assistant-) researchers are involved, forming a large multidisciplinary group. At the end of this project, knowledge will be transferred to enterprises and actors from the whole supply chain for the development of the European insect-food market.

ABOUT DOING RESEARCH

The research group focuses on applied research, which implies finding practical solutions for specific problems. To realize this we work together with companies and institutions in Limburg and internationally on attractive assignments, where we involve partners in education, students as well as lecturers.

The research group is part of an university and these are the institutionalization of curiosity, where everybody, teachers and the taught, is involved in the struggle to discover what we know and the way that we come to know it. In a Business School, knowledge is not a commodity, but a social achievement which involves struggle, discussion, getting lost and disappointment as well as joy. To know, you have to experience not knowing: achieving anything worthwhile (e.g. research results, a publication, attaining a BSc, MSc, or even a PhD), often involves feeling blown about.8 As young and upcoming business professionals, students will have to have an investigative / research attitude in their work. They must therefore learn to find solutions themselves and when they do this, they notice that this is inspiring and exciting. Dissemination of our knowledge, so that you all can benefit from the results of our research, is mainly done via the world's oldest profession, and this not what you are thinking. It is in fact the biggest industry on Earth: Story Telling.⁹

8 Quote from Chris Mowles, Ralph Stacey - University of Hertfordshire, UK

Every book, every film, every news item and just about every post on social media is all about stories. So we use case studies to raise interest and build our/your story. It is the number one source of evidence for business decisions. Here the core advantage of data comes in and that is that it tells you something about the world that you didn't knew before. This guote from Hilary Mason, data scientist and founder of Fast Forward Labs, describes what data is all about and why it is so valuable. Data finds patterns, tells stories, and deepens the understanding of the world around a business. When businesses apply it in a proper context, it can make a huge difference.

Without bothering you with systematic reviews, this method or that method, the research group still needs to ground it's work in the academic environment. I realize however that research methods is boring for most people and frankly most people don't care. So I will limit this part to a short summary of relevant literature for the mentioned research themes.

The overarching topic of the research themes is business (model) innovation. In the academic world there are two schools of thought regarding business model innovation. On the one hand, there are academics who adhere to a cognitive perspective. In this perspective, business model innovation is understood as a forward-looking process, where different models are first conceptualized, evaluated and tested before being implemented. But there are also academics who adhere to an evolutionary perspective. They see business model innovation

⁹ David Wilkinson, 2017. Why evidence based practice probably isn't worth it - working paper.

as a backward-looking process, where experiences from experiments are used to refine and implement a new business model.

Few guidelines have yet been derived from the two perspectives on how business model innovation can be stimulated in practice. Moreover, both theoretical schools are not aimed specifically to SMEs, which differ from large companies in their context and working methods. Traditionally, SMEs often work from an evolutionary perspective: they have few formal structures and learn along the way. This approach may fall short for a radical process such as the development and implementation of a servitization or a sustainable business model. Therefore, a hybrid between the evolutionary and cognitive perspectives seems desirable, requiring research that connects both perspectives.

Action research is a research methodology that is aimed at changing practices as well as developing knowledge about that change. This is in contrast to many other forms of research, that primarily focus on knowledge development. Characteristic of action research is that this is never an activity of just one person, but always of a group. Action research concerns social scientific research, which according to Argyris (1993) leads to 'actionable knowledge' (hence the use of story telling as means to disseminate our knowledge).

Considering business (model) innovation more in detail, generally every business model comprises in essence a series of key decisions that collectively determine how a company realizes profits, incurs costs and manages risks. Business model innovation is often regarded as changes in those decisions, e.g.: (1) What mix of products or services to offer? (2) When do important decisions have to be made (timing=everything)? (3) Who are the decision makers? and how do they arrive at their choices?

Consequently many authors use a component based description of business models to reduce complexity by means of partial models. Value proposition and revenu mechanisms are often presented as partial models. 10 Transition to sustainablility implies however also a focus on creation of ecological and social value. This does not mean that financial value is not important or comes second. For companies creating financial value is necessary for survival.¹¹ There is however limited empirically established research literature on how sustainability can guide business model innovation for wider transformation of an entire industry. Current business (model) innovation trajectories predominantly aim at optimizing business-as-usual practices thereby maintaining the status-quo. 12 The scale of the challenges we are facing in the coming years, require however business models that are based on collaboration and on value being co-created between parties in (supply) chains and networks.

¹⁰ Maier, H., Bosslau, M., 2012, Dynamic Business Models for Industrial Product-Service Systems. The 30th International Conference of the System Dynamics Society. 13th PhD Colloquium 2012 St.Gallen, Switzerland. DOI: 10.13140 / RG.2.1.5018.8960

¹¹ Jan Jonker; Niels Faber, 2021. Organizing for Sustainability. Springer, Open Access: Organizing for Sustainability | SpringerLink

¹² Gorissen, L., Vrancken, K., Manshoven, S. Transition Thinking and Business Model Innovation— Towards a Transformative Business Model and New Role for the Reuse Centers of Limburg, Belgium. Sustainability 2016, 8, 112; doi:10.3390/su8020112.

Transitions like described in this inaugural lecture are the work of human beings. Since in the end human beings are buying products and or services, it is relevant to study the changing social interaction during the transition processes.

One perspective which is suited to do this is the complex responsive processes approach, where organizations are regarded as self-organizing patterns of communicative interacting and power relating between humans in the living present. 13 Change and organizational development in this perspective are not conceptualized as a result of management plans or organizational blueprints.¹⁴ The complex responsive processes perspective does provide a basis for answering the guestion of how professionals in organizations can develop an attitude that allows them to better deal with complexity in practice, because it refocuses attention to the processes of daily, local interaction in which actors including the researcher are embedded. 15 Time is fundamental to a complex understanding of social life, given that complex systems are 'path dependent': what has happened has a big influence on how things are now, and what can happen 16.

The topic business model innovation is very wide and by selecting three specific and for this region relevant themes, we are convinced to be able to help you to strengthen your play. As you also might have noticed I happen to be a bass guitar player and also orchestrator of this research group. The other members of the band, who each played an important role setting up the research lines and who actually take care that research results are realized, are Devrim Eskiyerli associate lector & internationalisation, Sonja Floto Stammen - sr. researcher & sustainable food transition, Natalia Naranjo-Guevara – sustainable food transition, Rob van Dun – business modeling, Etienne Engelhart - fieldlab circular transition, Khalid Raihan – circular supply chains, Denise Anderson-servitization/business modeling in the para-medical field. Saskia Gerhards – business modeling & big Data & Al from a business perspective, Frank Marks – servitization, Ioana Grosu – bridging education and research, and our valuable student assistants Valentina Bertini, Felix Klanke and Kristin Valentinova

Last but not least Janet Antonissen who is our link between education, research and the working field, but who felt the past months like a marriage counselor, because she was responsible for organizing this event.

¹³ Stacey, R., 2003. Stacey, R.D. (2003), Learning as an activity of interdependent people. The learning organization, 10(6), pp. 325-331

¹⁴ Mowles, Chr., 2011. Rethinking management. Farnham: Gower Publishing Limited.

¹⁵ Steevensz, J.L., 2018. Challenges Developing Customer Orientation in Technical Oriented Organizations - A Study of a Social Rich, Multifaceted and Complex Phenomenon. PhD Thesis.

¹⁶ Mowles, Chr., 2021. Complexity - A key idea for business and society. Taylor & Francis Ltd.

Figure 7. The members of the research group.

Front row (from left to right): Denise Anderson, Saskia Gerhards, Jean Louis Steevensz, Rob van Dun, Ioana Grosu, Etienne Engelhart, Sonja Floto-Stammen, Khalid Raihan, Devrim Eskiyerli. Back row (from left to right): Valentina Bertini, Natalia Naranjo-Guevara, Janet Antonissen, Xander Stegehuis, Frank Marks, Felix Klanke.

Ik heb gezegd.

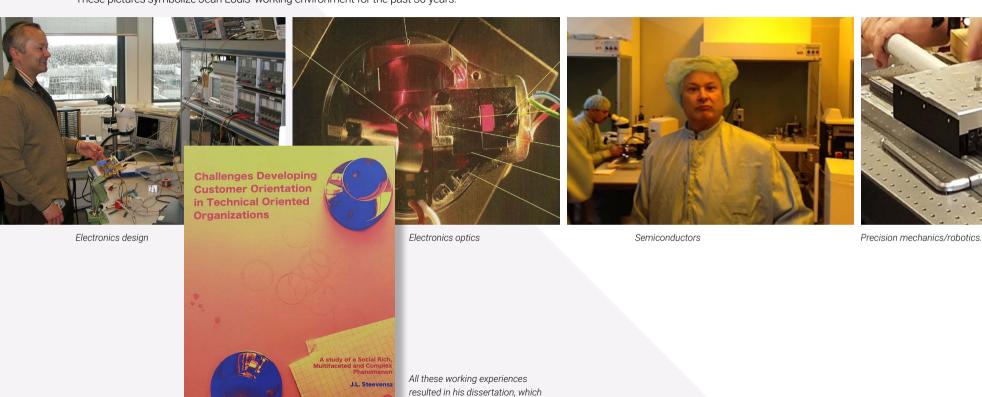




Jean Louis Steevensz holds a degree in Electrotechnical Engineering and Management Science (Marketing and Supply Chain management) and attained a PhD in a marketing related topic. For his doctoral thesis Jean Louis performed a qualitative inquiry of everyday organizational life, that has characteristics of autoethnographic research. The purpose of this study was to gain a deeper insight into the practical judgments people are making together in ongoing organizational life and so enrich the understanding of how customer orientation emerges in technical oriented organizations.

Jean Louis started his working career in 1983 at Philips Healthcare after attaining his engineering degree. He worked in the MRi department, where he was involved in the first installations of MRi diagnostic systems worldwide. During these years an interest for commercial aspects emerged and Jean Louis changed to Philips Industrial Electronics, a working environment closer to his engineering background. Industrial Engineering was also the group of Philips, where ASML originates from. During this period Jean Louis became proficient in marketing and sales, experiences which were further extended during his time in Germany, where he lived for more than 5 years. Upon his return to The Netherlands, Philips had finished the Centurion operation and consequently Jean Louis pursued his career at a spin-off of Philips. He continued to work for a number of companies that used to be part of Philips, and all of them are active in the ASML supply chain. Besides his work, which comprised serving customers in a variety of complex industrial and high tech environments, Jean Louis investigated ways of understanding what is needed to consider a customer more important in the work we do.

These pictures symbolize Jean Louis' working environment for the past 30 years:



is still available on request.

Open Universiteit

During this study, Jean Louis learned about teaching young business professionals and decided to pursue a career in this direction. In August 2019, less than one year after attaining his PhD and after 35 years of experience in internationally oriented technical environments, he started at Fontys as lecturer/researcher. Three months later he became responsible for the research group business service innovation. This position was formalized in 2021, after the research group received extension.

linked.com/in/jean-louis-s-302721

Info and contact Research Group Business Innovation

- www.fontys.nl/Over-Fontys/Research-Group-Business-Innovation (NL) www.fontys.edu/Research-2/Research-Group-Business-Innovation.htm (EN)
- Research Group Business Innovation
- @wowinsect @researchgroupfontys

For more info

rgbsi@fontys.nl



Figure 8. Jean Louis as lecturer.

