— There has always been a certain confusion about what UX (User Experience) Design is. UX Design is supporting design with the scientific method, applying it to the design challenges we're facing now or in the future and solving them through user-centered evaluation testing, research and combining a variety of methods to strategically attack those issues – resolving them to guarantee a better user experience.

When I say **User Experience**, I mean the holistic quality of a product or service and the quality in the way it is designed. Something which is very hard to describe even for users. Most of the time, to ask people to give an opinion about a product or a service is simply not enough. If you ask them, they would probably provide some vague, high-level interpretation – if it is good or bad for example – but at an unconscious level, there is so much more going on. Unconsciously, there is a so much hidden stuff beneath the surface that can only be discovered through observation.
For example, we created a mobile UX investigation laboratory at IMAGO Design so that we could go on site to people in the field: we observed users, even employing eye-tracking glasses, shadowed them and gave them diaries to record. If you just asked them with a one-dimensional question about whether the product is useful or not, you might hear an opinion that differs to what their actual experience is.

**However, through a more holistic approach, you can gain insight into things not possible without.** This approach counts more than ever today, especially in the field of technological design, as products are all connected. The industrial design from the '80s has shifted towards the digital design age, wherein UX design has to be applied in order to provide a valuable product experience that today are mostly also connected to a service. The interwoven interconnectivity between these two worlds is impossible to ignore and has very important implications for education as well.

**Until a few years ago, education was one-dimensional.** We used to educate architects, designers, and engineers – all silo-ed in their own different worlds. But now there is so much interconnectivity, that a different approach in educating people is needed. This does not necessarily mean that every engineer needs to be a designer, but both parties need to be aware of their own unique challenges, they need to be aware of the multitude of processes, and overcome the different communication barriers that still exist in many companies. The challenge of the future is to ensure multidisciplinary education, one that is more holistic and user-centered, as this type of design is what is shaping the quality of interaction the end user has. We have to tackle this using the scientific method because this is where science can really help the next generation of devices and services.

There are many new developments which have to be included in the education system. For too long, our education systems prevailed through a linear approach. Students had to learn certain subjects, write exams and then regurgitate this knowledge onto the page. These times are over. We need people that are both in the industry and in the academia in order to approach the coming challenges – including these parties in the knowledge transmission to the other students. The system needs people who are experiencing these changes firsthand. **It is so fast paced that freshly graduated students risk having an education which is obsolete two years time.** This cannot be allowed to happen.
An MVP is an early version of a product, that is designed to ensure that product vision and strategy are aligned with market needs.

Today, there are new ways to design products which, through MVP (Minimum Viable Product) approaches and VR experience, are prototyped and tested. There’s no need to write a book about how to engineer a product to find out two years later that nobody wants it. The same idea applies to education. We need it to constantly evolve and incorporate new advances, including them within this agile and adaptable educational model. Otherwise, we will have students emerging from universities with the product and design knowledge of their professors who stopped creating decades ago.

Ten or fifteen years ago, it would have been very hard to persuade companies to embrace this approach – but times have dramatically changed as products and services have become so ingrained in everyone’s lives. This big shift towards interconnected products and services means that most people today, including top executives, have had negative experiences with digital services and therefore know how important it is to get better information by investing in a user-centric/user experience driven approach. This is all part of the interconnectivity of today, and even very senior sales or marketing people ask questions about which methods we use, what is the best prototype model etc. They all speak our language now, which is a phenomenal development.

Like I mentioned, part of the reason why they speak our language is that most clients today have experienced the bad product and design experience firsthand. They have had products fail due to lack of holistic design. This can be disastrous
for a company, if you have one product on the market fail, then it is possible to survive, two or more, you are at risk of experiencing the end days.

**Nokia is a prominent example of a company which stuck too long to their business models,** to the development, to their ecosystem, and although they had amazing people, they couldn't stay grounded in the reality of the user. They had become adrift in a different world. Put simply, Nokia failed to follow a user-centered scientific approach and didn't go out to test an MVP with people. Designers stayed too long in the lab and most likely assumed that it was a good idea to push towards increased miniaturization. Only to find out, when it was already too late, that people want a big screen to display content on. **By spending too much time in the labs, they missed the change happening outside in user habits.** Companies today are more aware of such problems, and the result is better designs overall.

**Through MVP, companies can develop products whilst concurrently selling them.** They don’t require every component to be listed or built – just the core features of the product. From this, it is possible to create an interactive version of it, release it on the market and gain feedback in real time. It is a more radical and rapid approach towards product development, particularly suitable for startups because it allows them to find the right balance. If you wait for financing, it can take too long and their moment on the market could go to someone else. But if they start without it, they will go nowhere. MVPs are the in-between solution, affordable and fast. A company can launch four prototypes on the market, expose them to people and users, gain feedback and make decisions on which models should be developed further or which models have to be put on hold – all based on user feedback.

This more holistic approach is working so well that increasingly more clients choose to follow this approach. They want something to be built quickly, that is functional in one or two months, not two years.

In the future, the forms of interaction will multiply and we will choose according to availability and context. **In a decade, interfaces will be smart enough to recognize with whom and in which context they are.** Interfaces will adapt and will know the best solution to offer to us. The only thing they will have in common is that the successful ones will arise from a user-centric design method, ones that are both multi-dimensional and which have proven themselves through the scientific method. But we are living in a state of flux, so we must ensure that our educational systems reflect that. The screen interface will not