

## WHY

ORDERING  
HEALTHCARE PRODUCTS  
QUICK AND EASY

## WHAT

BUILDING AN ONLINE  
MARKETPLACE FOR HEALTHCARE  
EMPLOYEES AND NURSES

## HOW

AN MVP WITH GOOGLE  
CLOUD, PLUS A MOBILE FIRST  
USER INTERFACE DESIGN

BUILDING A NEW 'LEARNING AND GROWING' CLOUD PLATFORM IN JUST THREE MONTHS

duxxie

## CUSTOMER STORY

# IMPROVING E-HEALTH WITH AN INNOVATIVE PLATFORM TO SAVE TIME AND COSTS

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When people discuss the digitization in healthcare, they often only relate the hot topics in e-health such as electronic patient files or monitoring tools; blood pressure, diabetic, steps, heart beat, etc.

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“Improving home care is not exactly a hot item,” says Paskal van Lomm, Digital Director of Medux. “Which is a shame. If processes are executed in a smarter way, it saves a lot of time and costs.” Within Medux van Lomm started Duxxie; a new initiative which works as a start-up.

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## What is Duxxie

Duxxie enables a quick and simple way of ordering home care supplies. “Duxxie changes the process from time-consuming, multiple telephone calls and paper referral letters to an efficient and easy to use online experience.

## Inspiration

Large online retailers are the frame of reference. Van Lomm “What was missing was the ‘Booking.com’ of medical aids: one place where all relevant providers are represented, including our competitors.” Van Lomm’s broad experience in the field was helpful in that context. “Regarding business model and partner, Duxxie is very different from Medux. That’s why we decided to separate Duxxie from the rest of the company. Another advantage is that we now have full freedom to select the tooling, which we see as most suitable.” So van Lomm started drawing from a blank sheet of paper and created a start-up.

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## Partnership

Van Lomm’s had some previous negative experiences with traditional IT service providers. “I spent some time at the other side of the table, and I know the behavior and drivers of sales people in this sector. They come with a pile of resumes under their arm and try to eat up the client’s entire budget. I deliberately went on a quest to

find the right starting team. With a partner, I organized some evening sessions to connect with a network of self-employed contractors. I also asked Google in the United States who was at cutting-edge level with the Google cloud in the Dutch market. They set me on the trail of Xebia.”

## Challenge

Where Paskal van Lomm is in charge for Duxxie’s strategic and organizational aspects, Xebia consultant Marc Grol is responsible for the technology. “Our sweet spot is speed and quality,” says Grol.

“The initial challenge was to build a Minimum Viable Product (MVP) that would demonstrate that ordering products could be significantly quicker and more convenient to the end users: home care employees and district nurses.” Says Marc Grol. Van Lomm paints a picture of the current process: “If home care wants to order a kind of medical aid, they first have to determine if the insurance policy of the client covers it. After that, they have to check which contracts the insurance company has with which suppliers. And then they need to call the suppliers to check availability. Three steps, which will take an average of at least fifteen minutes.”

## Intelligence

“Instead of long telephone calls and referral notes, we ensure that the user can request items needed with a minimum number of clicks, giving them more time to spend on the patient,” says Marc Grol. A key aspect is a learning platform based on having the process detect previous orders of end users. “This makes the system more intelligent all the time.” The user interface design is ‘mobile first’. Through intensive interaction between users and the team, this ‘mobile first’ strategy seamlessly integrates with the front-end and back-end technology. Together with Paskal van Lomm, Xebia determined the user experience and look & feel.

## Cloud environment

For Duxxie’s basis, the choice was Google’s native cloud environment. “This was unburdening, as this enabled us to get directly and fast to the end user. It also didn’t obstruct us, by having to organize issues relating to infrastructure and the network. We can fully focus on what is important.”

## Create or buy?

Grol and his team continually make ‘create-or-buy’ decisions. Everything that does not contribute to a leading edge and distinction is bought. That is why a large number of platform components are supplied by third parties.” The manual work mostly concerns the screens for the end user. Also, the health care sector is based on the so-called domain logic: specific rules that must be processed in the system manually. Some products can be ordered in a few clicks. Other products are subject to complicated conditions and procedures. These conditions add a level of complexity that we would prefer to separate from the relatively ‘dumb’ user interface as much as possible.

## Full Freedom

If we discuss the success factors, Grol mentions the high degree of independency. “The combination of Agile and autonomy truly allows us to accelerate.” Says Grol.

What is key to accelerate your development process?

- › An all-round team uniting all knowledge, skills, and experience: people for the user interface, front-end, back-end integration.
- › Separation; Duxxie works like a start-up. It is isolated from the rest of the Medux. So the development team does not have to wait for others. Not for high-level authorization, not for the work of other IT staff. They put everything live using NoOps.
- › Continuous processes with automated testing and deployment.

*“Whenever we developed something new, it is tested automatically. If the test is successful, it automatically goes to deployment. In theory, we could do this in production too, but that usually requires more communication. That is done manually for the time being.”*

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### Lessons Learned

What are Grol's lessons learned from setting up Duxxie? “It is crucial to focus on the issues continually. As soon as you have that clear, you ask yourself how much time you are willing to spend on these issues. After all, some things need total perfection before delivery, and others can be delivered at 80%. It mainly depends on what you want to achieve, and how this contributes to the bigger picture.”

### Results

Van Lomm: “I wanted to keep it small in the beginning: Kickstart and improve continuously. Together with Xebia, we built a whole new platform in just months!” Around Mid-December, only 115 working days after the start date, Duxxie went live with the beta version.

“Xebia is driven and highly skilled in their field. Those developers are with Xebia because they work on cool projects. I think that is a benefit. Great people think much more in terms of cells and domains than in traditional organizational forms. They want to work on challenging projects and in diverse teams. They want to create impact and make the difference, together. This vision is fully in line with the way Xebia works; not hierarchical but organic, around or in line with an organization.”

Meanwhile, the team has nine people. Now Duxxie is going to work on a broader range of suppliers and scaling up the users. It is a continuous learning process. Every three sprints, they collect feedback. “Only then we are assured that we are developing something that they truly need,” says van Lomm. “For example, we predefined a birth and maturity package with an adjusted number of components. Specific aids and supplies in this package were hardly ever needed in practical situations. The platform behind Duxxie will show us the most frequently used combinations, which we will offer as a package.”

### About Medux

With about 1,000 employees, Medux provides supplies and aids of various brand names to the health care market. Harting-Bank, providing a full range of services relating to medical aids in health-care institutions. Medipoint, the largest provider of home care and wellbeing products in the Netherlands. AtlasKidtech, an expertise center with support and supplies specifically for children with locomotor handicaps. Furthermore, Medux provides the websites of brands such as Orthogonal (developing and manufacturing orthoses and specialist modifications), Eureva (importing recovery aids for people with a functional handicap or mobility issues) and MHG (medical aids for hospitals and health care institutions).

*“Xebia delivers experts who are very driven and highly skilled in their field. With the result, that we build a whole new platform in just months!”*

*Paskal van Lomm, Digital Director at Medux*

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