

NORA PEKKER

*User Experience Researcher &
Designer*

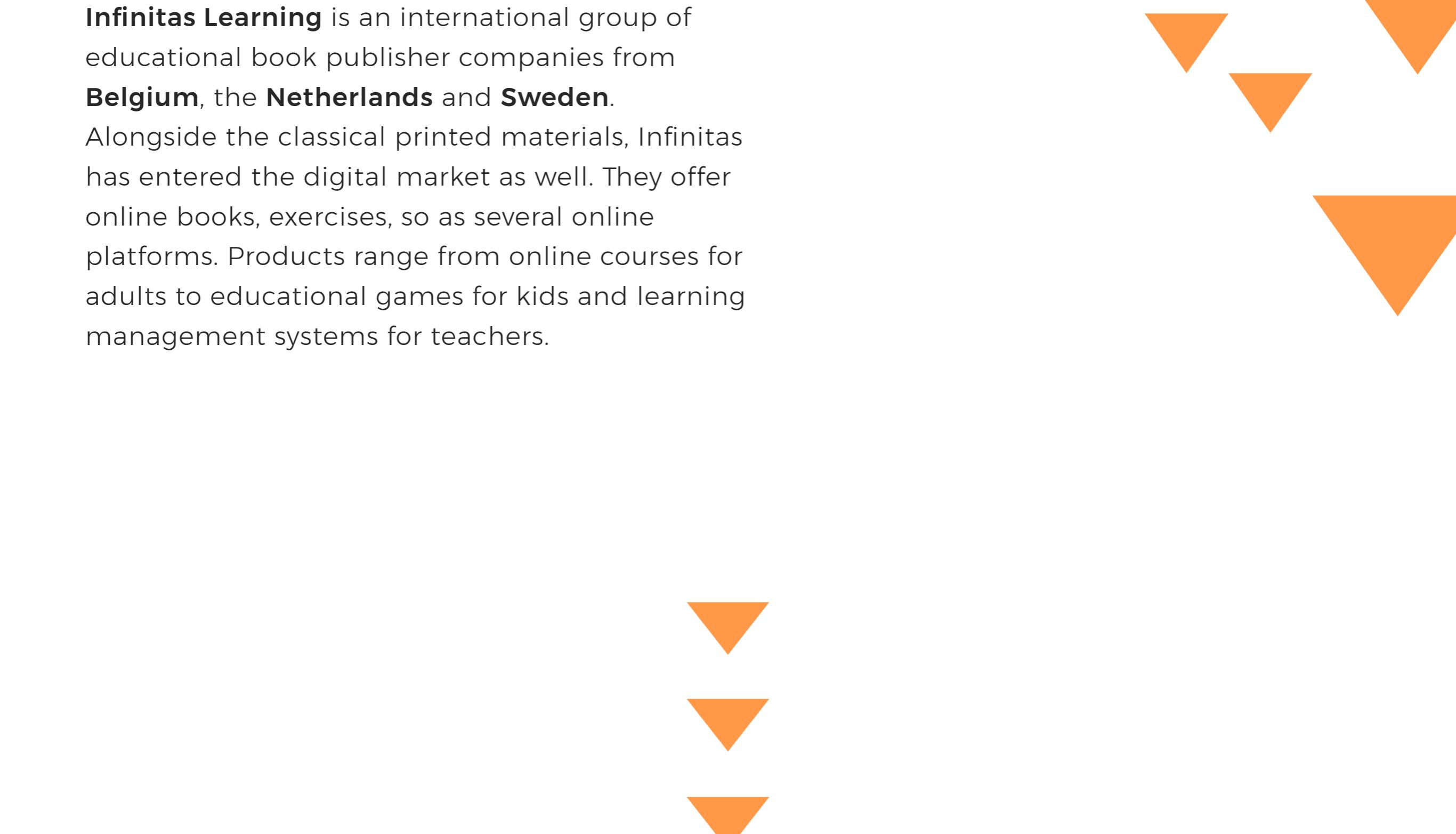
Case studies

Table of content

iCom Player	3
KPIs for Infinitas Learning	4
Scoodle	5
Plantyn Authoring tool	6

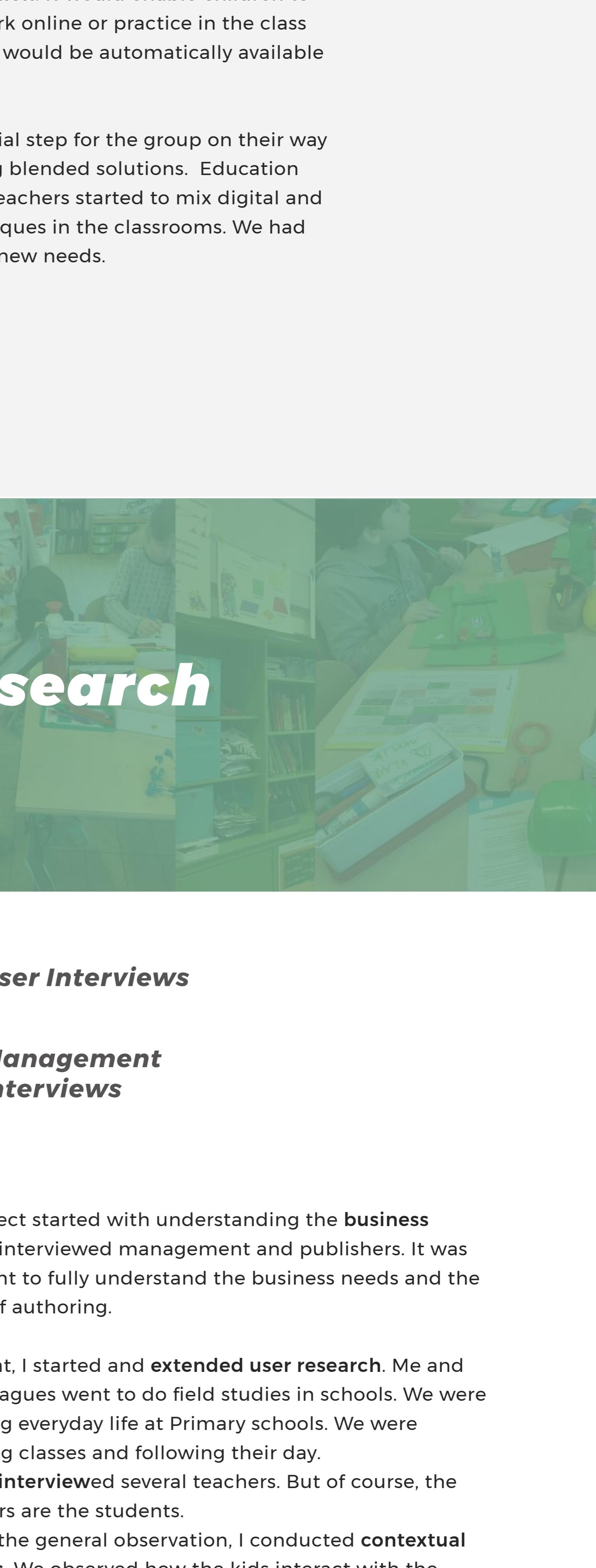
iCom Player

Online exercise player for children in primary education



The customer

Infinitas Learning is an international group of educational book publisher companies from **Belgium, the Netherlands and Sweden**. Alongside the classical printed materials, Infinitas has entered the digital market as well. They offer online books, exercises, so as several online platforms. Products range from online courses for adults to educational games for kids and learning management systems for teachers.



The project

My task was to create an **exercise player** for **primary education**. It would enable children to make homework online or practice in the class and the results would be automatically available for the teacher.

This was a crucial step for the group on their way to start offering blended solutions. Education has changed, teachers started to mix digital and classical techniques in the classrooms. We had to address the new needs.

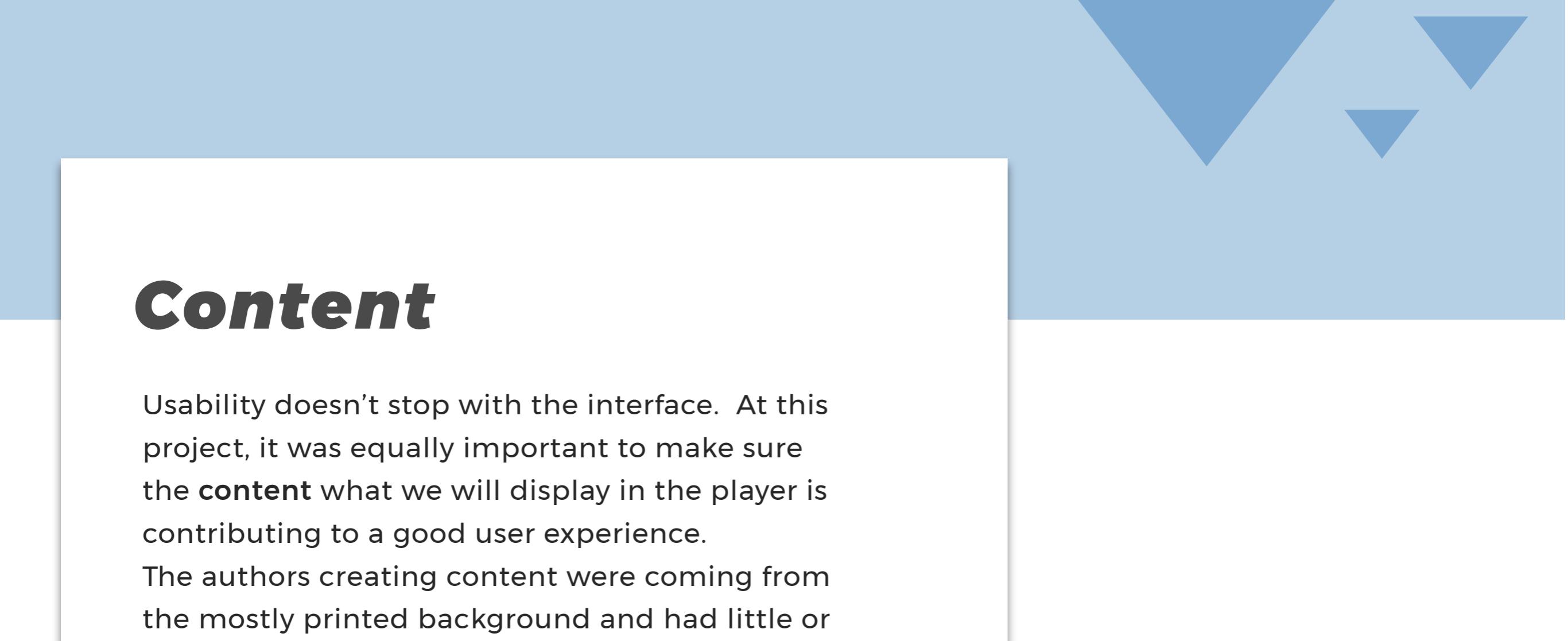


Ideation + Continuous testing

After **analysing the research data** and clarifying the high-level user needs I divided the project into **smaller chunks**, which can be designed and developed in a relatively small time period in order to make sure we can work smoothly with the **agile development team**. For example, each interaction type was a separate chunk, or the navigation elements, the evaluations, showing hints etc. I would pick a task, and start with some research on that specific topic. After the **ideation phase**, I would turn them into **low or medium fidelity prototype** and go out immediately and test them.

Working with small parts at a time, gave me a lot of flexibility and chance to do **continuous testing and iteration** on the design, because of the limited scope of each part. We built up long-term relationships with schools where we could go and do quick usability tests regularly.

As the chunks were so small, both the ideation, testing and iteration could be done fast. We were able to continuously deliver designs to the developer team.



Content

Usability doesn't stop with the interface. At this project, it was equally important to make sure the **content** what we will display in the player is contributing to a good user experience. The authors creating content were coming from the mostly printed background and had little or zero knowledge about web usability. Therefore a part of my task was to share knowledge and educate them. I created guidelines and training to explain the possibilities and limitations of online content display.



UI + customisation

At this project the most important aspect if the UI was to be **neutral** and **flexible**. It has to accommodate all kind of content. The player would be integrated into several platforms across countries. Obviously, all platforms have different UIs and different ways of integrating the player. Therefore the main goal was to create a minimalistic interface with **customisable UI elements**. So the focus was to strip back the UI and build a consistent **design system**, which can be easily modified for the different platforms.



UX evaluation

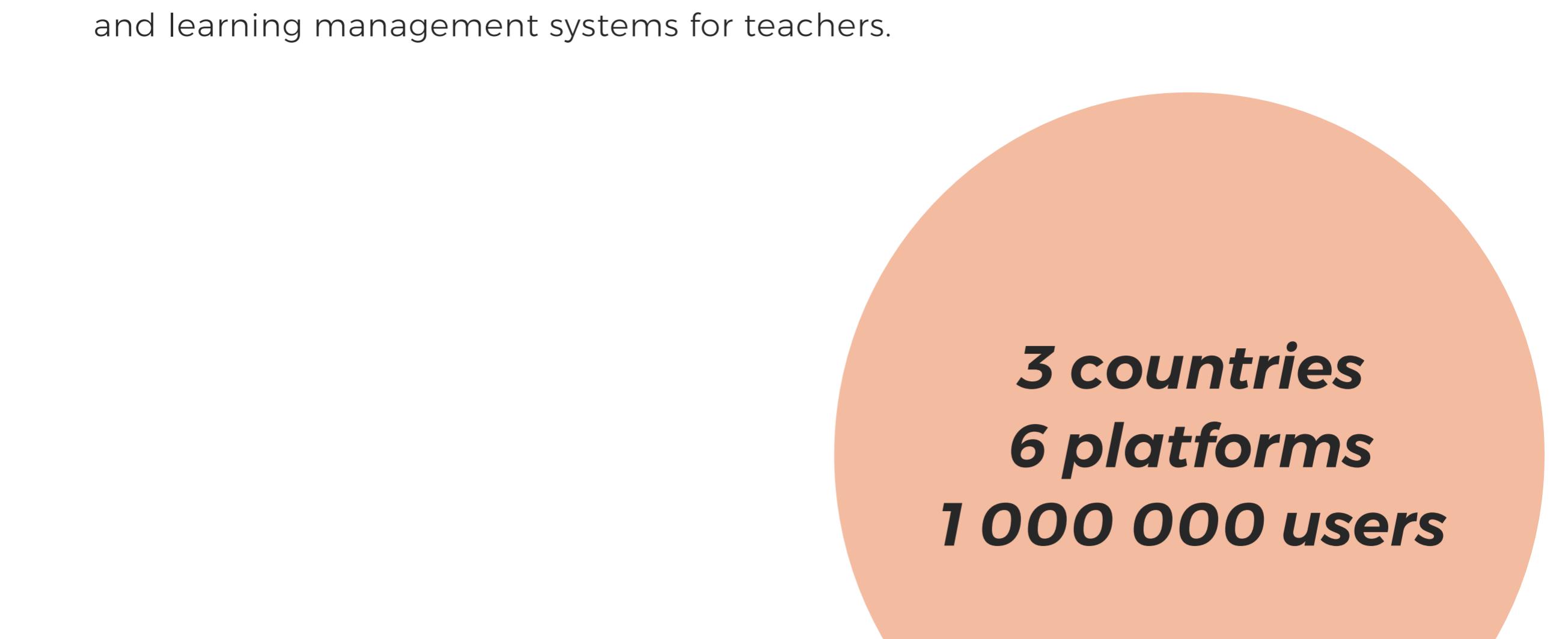
When we were designing the smaller elements of the product we included fast semi-formal usability tests after every chunk. At that stage, the goal was to find the areas to improve and iterate.

But that can never replace **rigorous UX evaluation**. So I set up a plan to run an extensive evaluation of the product. The main goal was to measure the walk up ease of use for new users. I choose **Initial user performance** as the UX measure to evaluate. I have chosen **error rates** as a metric. We were testing several smaller aspects of the player such as the interaction types, the evaluation etc. Therefore we set the target levels tight to be <1 error per task.

The evaluation was planned to be done in four countries. In every country, we test with 1-1 class (usually around 15 students) for each age group. The usability tests were run individually and on a mixture of devices (laptop, phone tablet).

After the usability test, every task which did not reach the target level was revisited and further iterated.

Alongside the classical printed materials Infinitas has entered the digital market as well. They offer online books, exercises, so as several online platforms. Products range from online courses for adults to educational games for children.



The task

was to create benchmarks to evaluate the success of the online products across the countries and over time. The platforms have very different functionalities, target groups and strategies. Therefore the challenge was to find KPIs which can be applied for the wide variety of products.

The goal was to set up a system which can be used for standard reporting on a regular basis, over platforms and countries.





Usage

2.

There can be several indicators of user behavior. One way to determine the opening of a page is to look at the **usage**. We were already measuring this directly from LOG files. This indicator shows the success of our different campaigns. What we are interested here is the usage of the website. Therefore we set up a benchmark. We want to know what percentage of visitors who open a page



Engagement

3.

The third part of user behavior is engagement. We were measuring this by tracking users who spend at least pre-defined amount of time on a page. The time spent

NPS + **SUS**

Overall Net Promoter Score:

-100

The dashboard displays a summary of user interactions and a poll result.

User Activity Summary:

Category	Value	Percentage
100	8	42 (23.2%)
7	18	18 (9.9%)

Poll Result:

Hoe waarschijnlijk is het dat je Scoodle aanbeveelt collega?

Response	Count	Percentage
100% (6.35%)	1	100%
90%	1	100%
80%	1	100%
70%	1	100%
60%	1	100%
50%	1	100%
40%	1	100%
30%	1	100%
20%	1	100%
10%	1	100%
0%	1	100%

Site Dashboard:

ANALYTICS

- Heatmaps
- Recordings
- Funnels
- Forms

FEEDBACK

- Incoming
- Polls
- Surveys
- Recruiters

Collecting data from 9.3% of traffic. [Learn more](#)

User Activity Table:

#	USER	PAGE	Device	Location	OS	DATE	Score
442	Anonymous	/Classroom/Class?i...	Desktop	Belgium	Windows	6 hours ago	7
441	Anonymous	/Classroom	Desktop	Belgium	Windows	6 hours ago	9
440	Anonymous	/Classroom/Class?i...	Desktop	Belgium	Windows	6 hours ago	9
439	Anonymous	/Classroom	Tablet	Belgium	Apple	7 hours ago	10
438	Anonymous	/Classroom/Class?i...	Desktop	Belgium	Windows	8 hours ago	8
437	Anonymous	/Classroom/MyClas...	Desktop	Belgium	Windows	8 hours ago	10
436	Anonymous	/Classroom	Tablet	Belgium	Apple	9 hours ago	3
435	Anonymous	/Classroom	Desktop	Belgium	Windows	21 hours ago	10
434	Anonymous	/Classroom	Tablet	Belgium	Windows	a day ago	10
433	Anonymous	/Classroom	Tablet	Belgium	Windows	a day ago	8

conclusions.
In the given time
running the sam
then compare th

it is more important to the previous results. The plan is to
at those studies every year.

Training

So the benchmarks were set up. It was all ready to measure our platforms' success, and our users' satisfaction. But how will we build

users' satisfaction. But how will we build successful platforms? The only way to create delighting products for our customers is if we understand them. The online questionnaires

understand them. The online questionnaires, metrics will never give us an in-depth insight into their behaviour, feelings, opinion. We will never get answers for our why's. I can't

never get answers for our why's. I can't emphasize enough the importance of **qualitative user research**. Therefore, I created guidelines and held trainings.

Therefore I created **guidelines** and held **trainings** on **user research** and **usability tests**. I give practical tips for the product teams in the different countries to help them understand

different countries to help them understand their users. This will ensure that the companies not only know how to measure the success of their platforms but to understand how to build

their platforms but to understand how to build a successful product based on their users' needs.

Scoodle

Learning management system for teachers

Scoodle is the online platform of Plantyn, a leading educational publisher in Belgium. They provide online materials and planning tools for teachers. I get the task of redesigning the way they present their online content in their platform.

Research

The first step was to understand the **business needs**. I interviewed managers to understand what were the requirements from their part. As there were ex-teachers working with us I also conducted **Expert interviews** about the topic to get a deeper understanding of their word. Then I started my research. I set up Google **Analytics** and **Hotjar** for them. I created funnels and waiting for the heat maps to get ready to have a better understanding of the problems and user behaviour. I trained my teammates how to conduct **user researches**. Then we started to see schools to do **field studies**. We were **observing** teachers. We followed them for a day tried to understand the dynamics of teaching a class, the preparation before and after. We also conducted several **interviews** with them. I was, of course, focusing on the specific task I was given, but during the interviews and shadowing, we learnt so much more about their way of work.



Field studies

User Interviews

Observations

Online polls



Management interviews

Expert interviews

Competitor's analysis

Analytics & heatmaps

Analyse research

I started to analyse the research data. I created **personas**, **user journeys**, **empathy maps** as usual. Although in some aspects there were a lot of common things coming from those findings, I also started to see two very distinct patterns. **We learnt from our observations that the world of primary education and secondary education is completely different**. The way how teachers prepare for their classes, plan their year, hold a class is just a whole different approach. Of course, because of that, they had different needs, they used different parts of our platforms for different reasons.

THINK

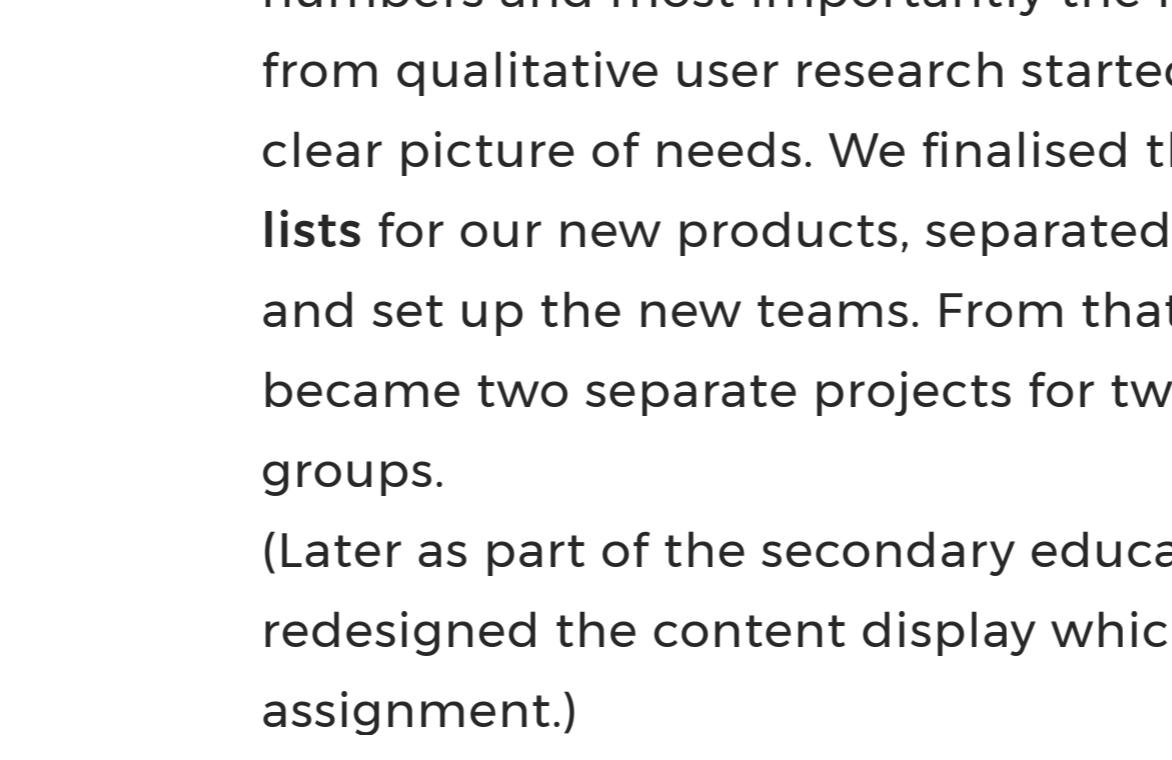
FLUENCE

New directions

This made us realise that it is time to **rethink our product strategy**. Our current offering did not fully meet the needs of nor primary teachers nor secondary teachers. There was some overlap of course but to create a really relevant product we had to split our platform into two. Primary education was all about meeting government goals, using premade contents with a lot of games and it was all planned at the beginning of the year. While in secondary education it was more about freestyling, using their own exercises and way less planning.

Also, the market positions of our products were different. We decided to split Scoodle and create

Scoodle Primary and Secondary and build different strategies for them.



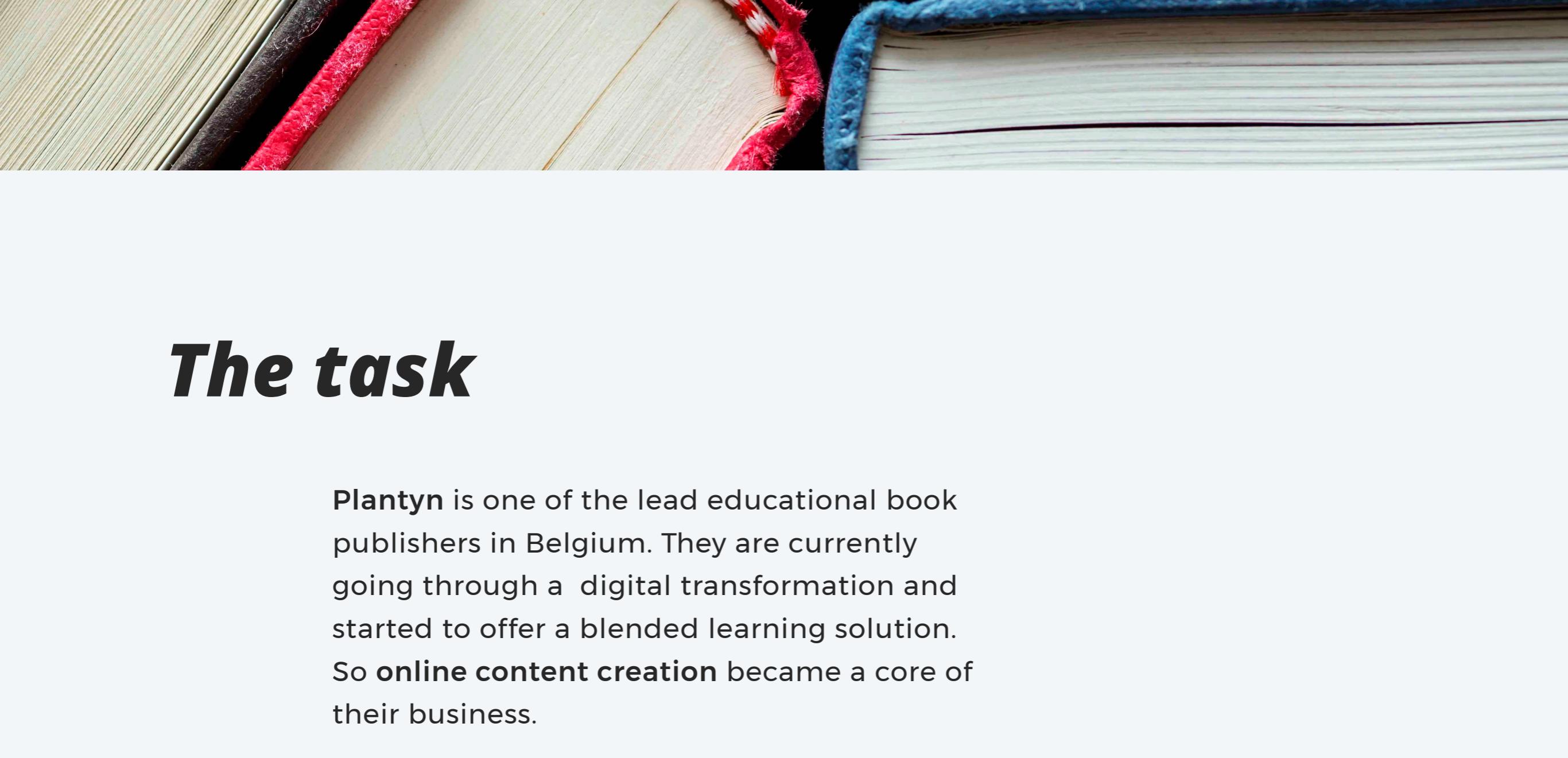
Redefine the products and set up new feature lists



We set up the **new strategies** with business for Scoodle Primary and Secondary. After having the high-level goals defined, I returned to my **research data** again to be able to define the needed functionalities in more details. I studied my analytics and Hotjar data. The numbers and most importantly the information we get from qualitative user research started to draw a very clear picture of needs. We finalised the **new feature lists** for our new products, separated the code bases and set up the new teams. From that point on, Scoodle became two separate projects for two different target groups.

(Later as part of the secondary education team I also redesigned the content display which was my original assignment.)

Plantyn - Authoring tool



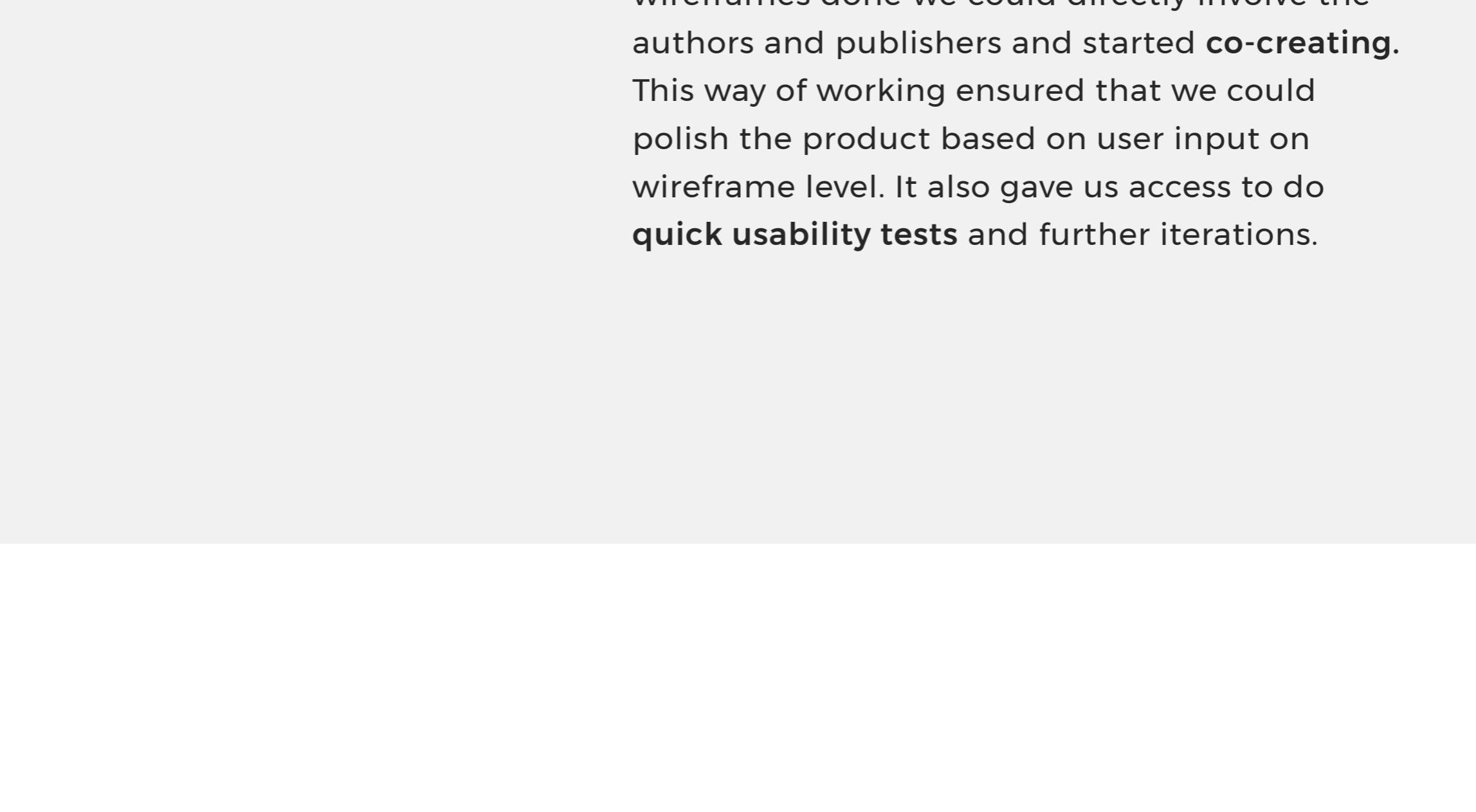
The task

Plantyn is one of the lead educational book publishers in Belgium. They are currently going through a digital transformation and started to offer a blended learning solution. So **online content creation** became a core of their business.

My task was to reinvent the way authors create their online methods. I had to design a new **CMS** for them to make the authoring and publishing process more efficient.



Research analysis



Personas

User Journey

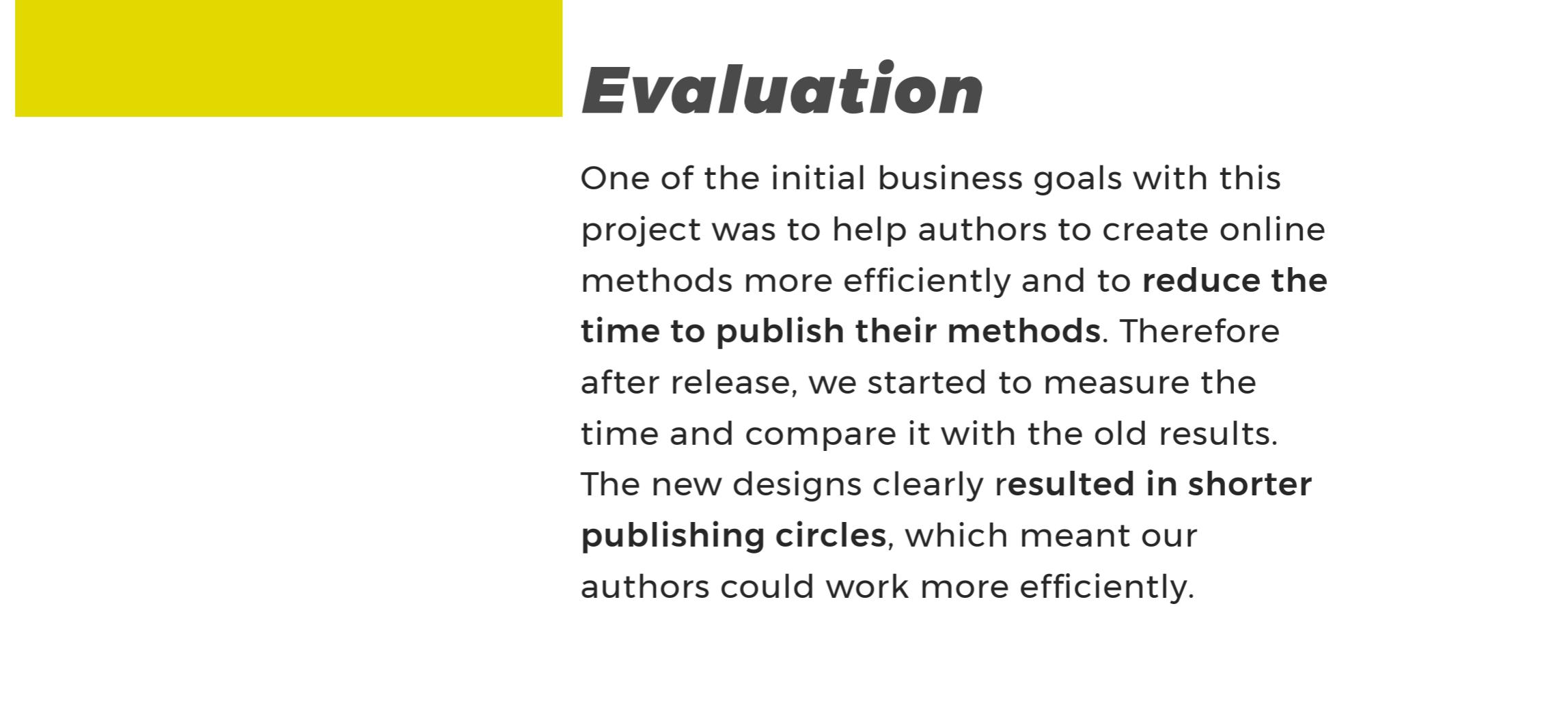
Empathy Map

After the research, I analysed the results. I created **personas**, **user journeys** and **empathy maps** to get a better understanding of user needs.

I drafted the first feature lists and created the information architecture.

Ideation + early stage testing

Because of the ideal situation that the users were continuously available, we could **involve them early** on in the ideation phase. We could test our ideas very fast, without having to do high fidelity prototypes. After having the first wireframes done we could directly involve the authors and publishers and started **co-creating**. This way of working ensured that we could polish the product based on user input on wireframe level. It also gave us access to do **quick usability tests** and further iterations.



UI + design system

When I started to work with Plantyn they had no style guides, design system or any **standardisation** of the UI. So from that perspective, the goal was clear: using their current visual identity as a starting point and then build a new modernised version of it and turn it into a proper **design system**.

Evaluation

One of the initial business goals with this project was to help authors to create online methods more efficiently and to **reduce the time to publish their methods**. Therefore after release, we started to measure the time and compare it with the old results. The new designs clearly **resulted in shorter publishing circles**, which meant our authors could work more efficiently.

Would you like to see more?

*Please contact me for my full portfolio:
hello@norapekker.com*