

 **PLAY AND LEARN** 

Point

Individual Assignment Design Innovation Methods

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15/04/2020

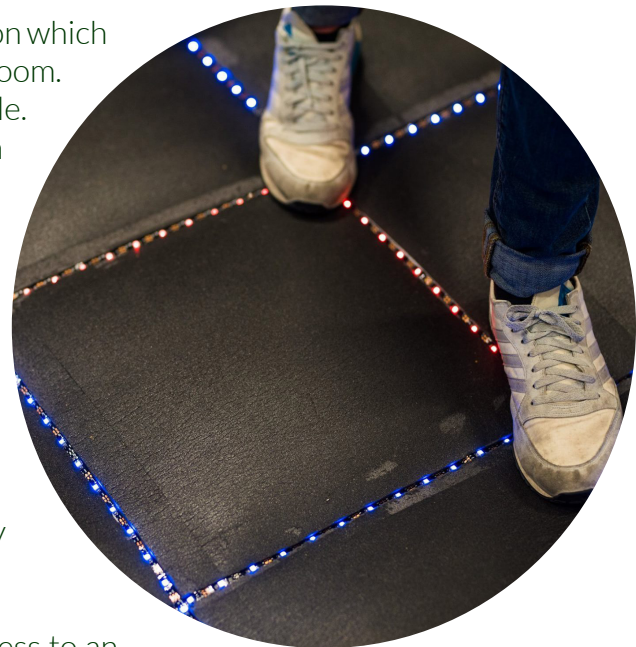
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Introduction

In this document a deeper perspective will be given to the business plan of Point C: An interactive play mat on which energizers are played to keep the students focused and motivated (Liefhebber, 2019). The energizers that can be played on the platform will train important 21st Century Skills in the form of creativity, communication and collaboration.

The initially targeted group was the domain class of the first grade middle school students at the Dr. Knippenbergcollege in Helmond. In this type of education they combine traditional classes into project based learning with a rubric grading system. By doing so they try to focus on motivating children to set their own goals and learn by doing rather than repeating theories without applying them. It is still in an exploratory phase, however they believe a switch from traditional education towards project based learning is bound to happen. Due to lesser classes the average time for each class are longer and there are less moments in between lessons where the students would normally have a short break and be able to stand up. Therefore the students would lose focus overtime during these lessons. Their request was therefore to create an innovative way to keep the students focused during the whole lesson.

As a solution Point-C was created. Point-C is a platform on which around 25 students can play an energizer in the classroom. It is a mat with the size of 4 by 4 meters which is rollable. On the mat a grid of 9 by 9 lines of LEDs is visible. On the intersection points of the lines spots and pressure sensors are implemented. The spot is bigger than the other LEDs, which makes it intuitive to step on. The pressure sensors makes the users able to draw lines between spots, by stepping on two connected spots from one to the other. By doing this again, the users can erase the line. The 'passive' background color of the lines is white, drawn lines are represented by a blue, red, green and yellow colors, depending which team drew the lines, and the feedback will be given by flickering in the according color.

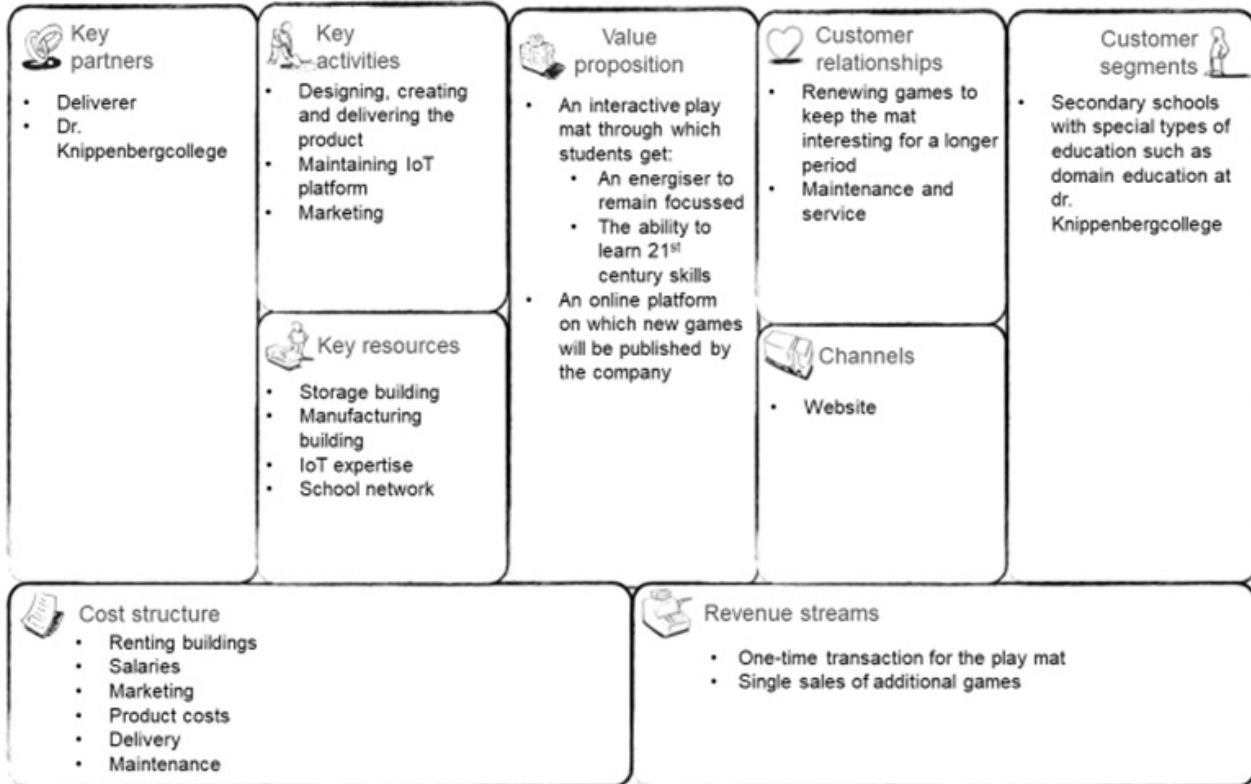


A purchase of Point-C would include: the mat itself, access to an application, service and maintenance. Access will be granted by using the verification code belonging to the mat. In the application a catalog will be available with a set of energizers. This package is offered, since interviews with teachers gave the insight teachers do not have time to prepare extra in-class activities. Next to the catalog there is an option for the teacher to create games, change games and add aspects to games to stimulate creativity and to keep the game renewing.

In this document the initial business model canvas will be described and evaluated. It will then be improved through the Get-Keep-Grow funnel and investigating revenue streams. The new business model canvas will be then explained followed by how the propositions made in this canvas will be validated and tested.

Initial Business Model Canvas

After the project the product ended at the state described in the introduction. Putting everything together in a business model canvas (Osterwalder, 2010) results in this canvas:



A number of things can be noticed from this initial business model:

- The customer segment is rather small, since there are only a limited amount of schools with special education. If it would only be focused on dr Knippenbergcollege's domain education there would be only one school that would be able to benefit from the product.
- The product is sold in one package including all the services that the company provides, such as the IoT platform, maintenance and a catalog of energisers.
- There is only one channel through which the product can be bought, which is an online channel.
- There are almost no existing key partners. To refrain from the need of a delivery department this would be done by a partner, however this does not change much for the company itself. Dr. Knippenbergcollege is a key partner since the product was essentially developed for them, however if the product would be sold elsewhere this specific relationship would have to alter since the product needs to meet more general requirements.

After reflecting on this initial business model it visible that it is quite poorly done. The small market segment combined with the singular purchase of the complete package makes it very difficult for the company to survive, since the package would have to be ridiculously expensive. Normally they would have to be sold on a regular basis, however since the investment is quite big it is unlikely for a school to buy newer versions for example and since there are only a limited amount of schools in the target group these purchases would stagnate at some point.

Get-Keep-Grow

Some elements would have to change if the company would have a decent chance of creating a market and thereby survive. The Get-Keep-Grow funnel will be used here to see if additional opportunities can be found to create a more stable and certain base for the company (Blank, 2012).

Get

Let's start with the main problem: the customer segment. This targeted group is way too small for the company to survive. Rather than just focusing on newer education based schools all the secondary schools are taken as a target group. The immediate energizer use that it had at domain education falters slightly since at the traditional education the lessons aren't as long; namely about 50 minutes. Instead group the product's strength in 21st century skills will be used as appeal for this target group. The product will be more used as a full lesson rather than a quick break within one. By creating this larger target group more awareness is created that could actually lead to a purchase. Dr. Knippenbergcollege is ahead of the pack and therefore other schools will look to the approach of this particular school with its new approach. Dr. Knippenbergcollege focusses on 21st century skills and Point C is an relatively easy way to implement these skills in traditional education with the additional advantage that it doesn't take much time for teachers to prepare such lessons. Teachers have very little time to prepare new innovative ways of teaching so this fun additional lesson is not held back by extra preparation work. Next to regular advertising methods this leader role that Dr. Knippenbergcollege has leads to interest in other schools leading to more possible purchases.

Apart from that it might be interesting to find another way to convince schools to use Point C. To create another way to provide the product would be through a collaboration with a provider of school materials as Malmberg or a provider of additional behavioral lessons as Kanjertraining (Malmberg, 2020; Kanjertraining, 2020). Through these companies with already established networks a lot of schools can be put in contact with Point C which may lead to a purchase. If these types of companies would recommend purchasing Point C would only nudge schools more towards this purchase and therefore further down the get part of the funnel.

Keep

Once Point C is bought it is important to keep the customer around. Initially this was done through providing services, to help the customer if something was unclear or went wrong, and providing maintenance services. While these are relevant and necessary aspects of the product, the platform on which new games could be placed by and for other users does not quite meet the teacher's needs. Even though new games of course keep Point C renewing and interesting this should not be done by the users: the teachers themselves. The teachers lack time to implement new lessons so creating a game on this platform does not seem like a reasonable idea next to technological difficulties on how to actually create this game on the platform. New games do have to keep coming to keep Point C new and interesting however. Instead of creating games themselves the teachers can provide the company with new game idea, which the company will then realize and provide to the users accompanied with strong support.



Grow

Lastly the unbundling method to grow the customer will be applied. Right now the every element of Point C is bought as a package with a single time purchase. Through unbundling this into different product that can be bought creates two strong values. A no worries policy can be set up for which a small fee can paid monthly in case something breaks. The renewing games and additions to games can be a monthly subscription rather than a given. By doing so the company also creates revenue over a longer period of time rather than just the one purchase. For the schools this is beneficial since the first investment in purchasing Point C will drop since the company also creates revenue overtime. This makes the product more accessible for schools to step into.

New Revenue Streams

Some additional revenue streams could be set up with the same product package. A start was shown previously through unbundling the package into smaller products that could be bought or subscribed to separately. The play mat itself can still be bought with a single time purchase. The buyer would receive the play mat and a basic set of games.

Apart from this initial purchase new games will be uploaded to a platform to which the customers can subscribe. On this platform new games or additions to games will be published by the company to keep the game renewing. Next to that the customers can subscribe to a no-worries policy. If something were to break afterwards the company would cover the expenses.

Additionally a form of rental could be created for businesses that would like to use Point C for one day courses at the company. They would not want to make the investment to buy the product since it will rarely be used. Creating this rental option would make for a good additional source of income.

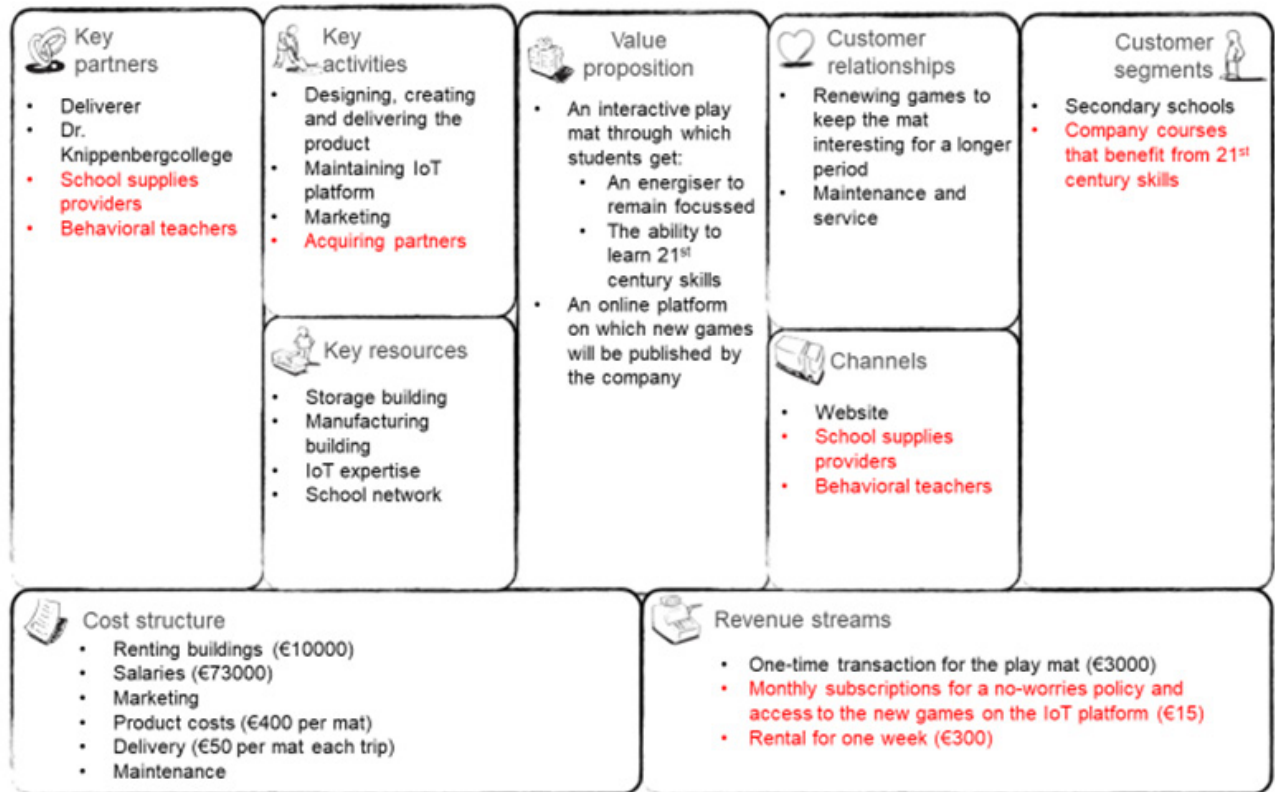
Prices

With the revenue streams listed the company's costs are put together to determine the prices for the product and services. Some assumptions on the companies essentials will be made to make an estimation. The company will consist of two employees: a technology and R&D employee and a project manager sales employee. It is a startup company so the employees will have to be resourceful and learn a broader set of skills. The average income in the Netherlands is €36.500 per year so this creates €73.000 of salary costs (CPB, 2017). An office of 50 m2 with an average price of €200 every year gives a combined fixed costs of €83.000 (Bak, 2017). The products materials cost €400 per mat and €50 for transport which combines into €450 variable costs per mat (Liefhebber, 2019; PostNI, 2020). There are 642 secondary schools in the Netherlands (CBS, 2015). The targeted number of purchases each year is 5% (32) of the secondary schools. These purchases will even out the expenses, which results in a cost of €3000.

The services and rental option are then the margin for the company. Following RTR the rental option will cost 10% of the purchase cost so €300 for a week. Of course less money will affectively be made since the product has to travel the distance twice along with the costs that comes with the communication, but the initial investment in terms of materials will be earned back in two rental periods. For both the no-worries policy and the IoT platform a monthly fee of €15 which will result in €360 per year. This amount is the likeliest to shift due to lack of experience in the area. If these services end up costing more for the company or it cannot match the expenses in value the prices will shift.

Introduction

After implementing these additional steps and changes the business model canvas looks like this:



The value proposition hasn't changed since the base product remains the same. Point C is still the interactive play mat that provides value through an energizer and/or learning 21st century skills. This is accompanied by the online platform on which renewing games are published. The only thing that did change is that these new games are provided by the company rather than a community.

So what did change? To make the product more accessible the services have been unbundled from the product which results in a lower purchase price. These services have turned into monthly subscriptions which become the margin for the company. A rental option for company courses has also been setup to meet a different target group, but the main focus remains on secondary schools.

In terms of resources and activities not much has changed. The product is the same and its manufacturing and the needs for this such as buildings and expertise therefore don't change. One important activity has been added however: Acquiring partners. The company and Point C are unknown to the field. Even though dr. Knippenbergcollege is a nice idol to which other schools look up, it will result in a relatively low awareness. Through creating key partnerships with school supplies providers this awareness will raise and these partners will solidify the credibility for the product's usefulness. This will provide the necessary start of first publicity that will get the company going.



Product-market fit and plan

To confirm the steps that are planned to be taken in the business model canvas described previously a few activities have to be done. In the canvas three parties are mentioned in the secondary schools, company courses and school supplies providers.

Starting with secondary schools, tests will be done at dr. Knippenbergcollege. The students of the domain education will use the product as an energiser in between lessons as it was initially intended. Next to that a traditional class of students will use Point C as a lesson to learn 21st century skills in a fun manner. In both tests an observation will be held by the company. The product will be used once a week for four weeks and through evaluating together with the teachers the value for the product will be determined. This is spread over a number of weeks to see if progress in the 21st century skills is visible and if the product keeps its energiser effect after longer use. This is the most essential test since it focusses on establishing and proving the product's core values. If this test fails to prove the product's values it will become difficult to convince others to become a partner of the company.

Then the potential key partners will be contacted through cold calling (Ward, 2019). Initially their expertise on secondary schools will be used to determine the quality of the prices that are proposed now. This will be done through evaluating the 21st century skills and see how much value this adds to the current education. Throughout the conversation their enthusiasm towards the product will be evaluated and the final topic of the conversation will be if they are interested in selling the Point C and its services through their channels. The goal here is to find the required information to find accurate and fair prices in the first place, but followed by convincing the companies to become a partner. Their network and credibility would boost Point C in terms of awareness and accessibility.

After acquiring this key information and potential key partners the sales will have to be made. Through the key partners, own channels and additional advertisement the customers will be reached. In the beginning schools who already focus on newer forms of education will be contacted, since they are most likely to try this new tool and implement it in their own education opposite to fully traditional schools. After purchases close contact with these first purchases will be maintained to further improve and strengthen the proof and value that Point C brings to other, more hesitant, schools. In the years to follow the more traditionally based secondary schools will become the focus to reach the quota of 32 purchases per year.

The company courses will be contacted once again through cold calling. Through these conversations it is investigated how their courses are setup in terms of structure and to see if it has weaknesses on which Point C can improve this course. In advance the group will have been investigated to be able to strongly pitch Point C, but the additional proof of the findings is needed. The goal of these conversations is to find out if this is a potential additional market segment or not.

The last activity in the first years of the company will be investigating if the monthly subscription for maintenance and the IoT platform is accurate. Due to inexperience the price may be off in both directions. It might be that the consumers do not get enough value from these services or it costs the company more than it actually earns them. Therefore the service will first be handed out towards the first set of users to investigate the costs and values that these services bring before distributing it to all the users.

References

1. Bak, R.L. (2017), "Kantoren in cijfers 2017". Retrieved from: <https://www.fmn.nl/stream/kantoren-in-cijfers-2017.pdf>
2. Blank, S., & Dorf, B. (2012). The startup owner's manual: The step-by-step guide for building a great company. Pescadero, CA: K & S Ranch.
3. Centraal Bureau van de Statistiek (2015). "Hoeveel scholen telt Nederland? Belangrijkste cijfers over het onderwijs met Onderwijsincijfers.nl op één website te vinden". Retrieved from: <https://www.cbs.nl/nl-nl/nieuws/2015/15/hoeveel-scholen-telt-nederland-belangrijkste-cijfers-over-het-onderwijs-met-onderwijsincijfers-nl-op-een-website-te-vinden>
4. Centraal Planbureau (2019, 15 august). "Kerngegevensstabel 2017-2020". Retrieved from: https://www.cpb.nl/sites/default/files/omnidownload/Kerngegevensstabel%202017-2020%2C%20plus%20koopkracht_0.pdf
5. Kanjertraining (2020) Retrieved on 11 April 2020 from <https://www.kanjertraining.nl/training/trainingen-voortgezet-onderwijs/basistraining-po/>
6. Liefhebber, B., Hendrix, R., Weeda, B., Van Kempen., Rijnders, F. (2019) "Point C". Retrieved from: https://drive.google.com/open?id=1ChpGpkdhsnLlyVSzWeXBM-Hq2v1i2Vk2_
7. Malmberg (2020) Retrieved on 11 April 2020 from <https://www.malmberg.nl/voortgezet-onderwijs.htm>
8. Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.
9. PostNL (2020) Retrieved on 12 April 2020 from <https://www.postnl.nl/tarieven/tarieven-pakketten/Pakket/NL/20-23kg>
10. Ward, S. (2019, 3 December) "11 Cold Calling Tips for Successful Sales". Retrieved from: <https://www.thebalancesmb.com/cold-calling-tips-2947162>