

Guiding a healthcare startup through its business and digital transformations

Summary

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Background

Scrunch as an idea was born 3 years ago. Dr. János Vág, the deputy director of the department of Conservative Dentistry at the Semmelweis University and Dr. Botond Simon won the Innovation Award of 2019 in the category of clinical research. They have developed a new dental identification protocol, which involves 3D intra-oral scan to create the digital impression of the intra-oral pattern of the palate.

During their research they realized that there are not enough patient data available in research databases and that the dental industry is only in the beginning of the digital transformation. When we joined to the start-up, **the primary use case of the company was to build a patient centric dental database platform (SCRUNCH TREZOR)** for the following cases:

- Long-term storage of 3D dental data
- Identification of victims and criminals
- Using the 3D data for scientific and marketing research purposes
- Compare the prices of dental treatments based on ratings, locations, specificity and opening hours of the dental office.

Although the founders believed that their vision is the same, several discrepancies could have been identified:

- The beachhead market, where they wanted to gain market share, was handpicked rather than selected. During the initial discussions only two beachhead markets were defined: the wood-wind players and all patients. While the first beached market, the market of the wood-wind players, seemed to be narrow, the second beachhead market, all patients, was not segmented.
- We found that re-opening the discussion about identifying additional market opportunities is difficult.
- Finding out who the end-user is (patients, dentists, insurance companies, government, research institutions) and adopting the business model to it was an open question too.

Key questions

1. Since all members of the startup are Hungarian, do we understand the similarities and the differences between the dental systems of the European countries?
2. Knowing that we did not run a market research, do we have the right end-user profile?
3. As there was not a market research conducted, do we really understand what can add value to our potential customers?
4. What are the key technology enablers for our dental startup?
5. Entering to a highly regulated market like the healthcare sector, is it better to develop our own software or collaborate with a platform provider?

Findings of the research

- **The dental processes are quite standard across the observed countries.**
- All the dentists pointed out that their relationship with their patients is heavily **influenced by trust.**
- In all countries the **workload of the dental professionals is increasing.**
- One of the main revelations came from the interviews was that there is a difference between women and men regarding when they become health conscious: based on age, **women become health aware earlier** (between 25-35) than men, who became health (dental) aware after 40 years.
- Finally, all the dentists explained that **they spend a lot of** (sometimes too much) **time with consultation.** Annual dental checks are rare occasions therefore, **people tend to forget most of the information** that was discussed with them during the visit.

The end user profile

Based on the interviews with the dentists, I could identify a new potential market, women between the age of 25 and 35 years in customer-facing professionals for example, account managers, consultants or flight-attendants. Based on the interviews conducted with potential end users (who work either as account managers or HR consultants) the following end-user profile was created.

- 1) Our end-user is **a road warrior.**

During the day she visits her customers, delivers workshops or participate in business meetings. Therefore, at daytime she has no time to read messages, she may spend a couple of seconds with a message. Her screen-time arrives / comes in the end of the days, normally at home.

- 2) She is **not a tech-geek** at all.

She is a people-oriented person not a tech-guru. She uses digital solutions that make her life easier. Any digital solutions developed for her need to be user-friendly.

- 3) **Time** management is an important factor.

Due to her travel plans and schedule, wasting her time (reading lengthy messages in English, requesting for complex actions, completing surveys or uploading documents) will not be tolerated.

High level product specification

Based on the market research our end user will not value the dental database platform (the Scrunch trezor) as she is not concerned about privacy (she trusts her dentist) also migrating and maintaining another digital wallet is an unnecessary activity. On the other hand, accessing informative contents related to her existing dental problems, receiving bite-sized reminders (info-drops) and personalized health report would be rather valued products.

1) **Informative content related to her existing dental problems**

Instead of pushing general content, the to-be created content should focus on specific dental problems (cavities, impacted teeth, wisdom teeth problems, crooked teeth and gum problems) raise dental intelligence and provide prevention tips.

2) **Bite-sized reminders**

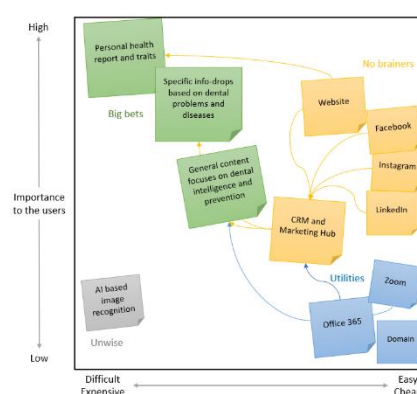
Based on researches made about learning concepts, people prefer small, self-contained information pieces - bite sized learnings. The typical duration of such a reminder is between 1 and 15 minutes and is usually focused on one or two learning objectives.

3) **Personalized health report**

Based on research data, samples and the input of the patient / dentist personalized health and risk report and recommendation could be developed.

Technology roadmap development

A value and effort prioritization matrix were used for the creation of the recommended technology roadmap. As noticeable on the below copied visual, I split the technologies into four major categories.



Recommendations, next steps

1) Develop a website

To start developing a website startups need to find a web hosting company, preferably a SAAS provider, such as Squarespace¹. When the web hosting platform is selected, **build the content**, create some simple pages: mission, blog, about us, research and contact.

2) Invest into a CMS, CRM and Marketing platform

Many CRM applications exists, however not all of them can accommodate the specialties of the healthcare industry. Healthcare providers have many unique challenges, especially when attempting to involve patients into the process. Based on my research and the above defined criteria, I recommend studying the following platforms: **Salesforce Health Cloud**², **Microsoft Health Cloud**³ and the **HubSpot** marketing, sales, CMS and CRM platform.

3) Pick five dental problems and diseases and develop informative content.

Select some dental problems (cavities, impacted teeth, wisdom teeth problems, sensitivity to cold, crooked teeth and gum problems) and start creating interactive content that focuses on dental awareness, information sharing and prevention tips.

¹ Squarespace (<https://www.squarespace.com/>)

² Salesforce Health Cloud (<https://www.salesforce.com/solutions/industries/healthcare/health-cloud/>)

³ Microsoft Health Cloud (<https://www.microsoft.com/en-us/industry/health/microsoft-cloud-for-healthcare/>)

