Kids.AI

Personalized Learning

The project idea

Kids.AI as a platform for kids seeks to be a bridge to the digital world for children, so that kids can effortlessly enjoy digital content for fun and educational purposes.

Kids.AI is a personalized learning subscription platform that features high quality content for kids. Kids.AI will have a particular focus on educational content and build a recommendation engine on the artificial intelligence methodology Case-Based Reasoning (CBR). Spotify has become a platform for music. Amazon has become a platform for books. Netflix has become a platform for movies and TV shows. They all have excellent recommendation engines, which improve with the amount of user interactions. Kids.AI would like to replicate the viable and scalable business model of Netflix and Spotify.

Nowadays families highly value quality time and quality experience. We believe that our product is going to deliver quality educational and entertainment content that appeal to 21st children. Kids.AI will help parents to occupy their children in age 4 (+/- 2 years) with personalized educational content that enhances children's development. The platform will also build a recommendation engine on the artificial intelligence methodology Case-Based Reasoning (CBR). Parents and schools can feel safe about what kids have access to through our platform.

Artificial Intelligence (AI) has become increasingly popular during the past year, with recent breakthroughs and warnings by Stephen Hawking, Elon Musk and Bill Gates. AI makes

self-driving cars possible, but artificial intelligence can also be applied to improve education. Information about how others successfully absorb education can be obtained through a detailed profile about each child, and this in turn, can be used to personalize learning. The shift from classroom education to digital learning opens up a world of possibilities.

Commercial potential

A world continuously becoming more digitalized brings with it great economic potential. The technological infrastructure has matured. The market size is already huge and growing in both developing and developed countries. There is enormous untapped market potential. Worldwide at least 130 million babies are born each year, and according to SBB in 2015, there were almost 316,000 children between ages 4-6 years in Norway.

Our business model is based on subscription, with our client base contributing 500 NOK per month per user. Our goal is to have 89,000 subscriptions in the first year of existence on the marked, which is 25% of existing market. Our predicted gross profit for 2017 is 1,931,900 NOK, and 406,566,400 NOK for 2018. We anticipate reaching a saturation point after one and a half years.

By replicating the business model of Netflix and Spotify we have an enormous opportunity for successful release. Spotify is now worth at least $10b. WhatsApp is not all that complicated to make, and it quickly gained half a billion users before being acquired for $20b.

To make the process of starting a company less risky, Kids.AI uses a methodology called "lean startup." This strategy favors experimentation over elaborate planning; customer feedback over intuition; and iterative design over traditional "big design up front" development.

To test our hypotheses, we implement an approach called customer development. Customer development is based on asking potential users, purchasers and partners for feedback on all elements of the business model, including product features, pricing, distribution channels and affordable customer acquisition strategies. We emphasize agility and speed. First quickly assembling a Minimum Viable Product (MVP) and immediately elicit customer feedback. Then, using customer's input to revise assumptions, we start the cycle over again, testing redesigned offerings and making further adjustments to ideas that aren't working. Agile development works hand-in-hand with customer development. Unlike typical year-long product development cycles that presuppose knowledge of customers' problems and product needs, agile development eliminates wasted time and resources by developing the product iteratively and incrementally. It's the process by which startups create the Minimum Viable Products they test.

The lean approach reduces the first two constraints by helping new ventures launch products that customers actually want. It does it far more quickly and cheaply than traditional methods, and also makes startups less risky. This strategy has emerged at a time when other business and technology trends are breaking down the barriers to startup formation. The combination of all these forces is altering the entrepreneurial landscape.

Customer insight

Kids.AI will help parents to keep their children busy with personalized, educational content that enhances children's development. Nowadays we have active lifestyles. Both women and men contribute to and participate in the job market, and therefore, families tend to have busy days. As a result, families also highly value quality time and quality experiences. This is where Kids.AI, a personalized learning platform, comes in. This personalized learning platform can provide high-end quality time for end-users: kids in age 4 (+/- 2 years) using new technology. As a result parents don't need to look for a safe and suitable content for kids, therefore saving time.

By leveraging the exponential potential of artificial intelligence, we seek to deliver the best and most personalized experience. Doing so will help us surpass competitors and maintain our long-term competitive advantages. The network effects of connecting all the dots within our platform towards the joy of continuously mastering new skills will create a strong lock-in as more user interaction further improves the personalized experience. A low monthly fee will ensure scalability and the perception of deriving much value, which allows for strong user retention.

Kids.AI will be available via Telenor's multiple channels of distribution. Initially, it will be available through a one-year subscription and an accompanying tablet with the Kids.AI platform. After the first year of subscription, the tablet will be replace by a new model. Previous versions will be shipped to Africa (to our partner LiteracyApp in Tanzania) and improve quality of life for kids in developing countries. Reusing our product is environmentally beneficial. We believe that shifting from classroom education to digital personalized learning will improve society.

Project team and implementation capacity

The project team currently consists of three members with a deep interest in education and emerging technologies. However, Kids.AI will be expanding our team to 21 members in 2017.

The first member of our team is Kids.AI's project manager, Lars Føleide. Lars is an Impact Entrepreneurship Researcher with 18 years of higher education in Computer Science, Marketing, Social Innovations, Finance and Research. In 2010 he began his PhD in the area of Innovation and Entrepreneurship at the Department of Innovation and Economic Organization, specializing in Social Entrepreneurship. In 2004 Lars created with four computer science students initially a student business, and later a company called netSite.

Dag Vikan has Master Degree in Informatics from NTNU with specialization in information security. Dag has extensive experience with Linux including: Apache / nginx, PHP / phpMyAdmin / MySQL, OpenVPN and web development.

Our third team member is Justyna Szynkiewicz. Justyna holds Masters degrees in both Social Science, and International Economic Relations and Social Policy. She also has a Bachelor degree in Management, and more than six years experience working with innovative companies and projects.

Kids.AI is also now looking to expand our team to 21 members. We would like to employ 18 students members from Trondheim to partner with Kids.AI for up to 100 hours of work per semester.

The supervisor for Kids.AI is Kerstin Bach. Kerstin is NTNU faculty at the department of computer and information science, within the Data and Artificial Intelligence research group. She is also currently part of a Horizon 2020 project called selfBACK (a decision support system for self-management of low back pain), which includes 23 researchers in Europe that use Case-Based Reasoning to incentivize those with lower back pain to engage in more physical activity through a mobile and wristband app (www.selfBACK.EU). Going forward, Kerstin has agreed to provide guidance for Kids.AI.

Associate partner Silvija Seres at the Norwegian investment firm TechnoRocks has already been introduced to Kids.AI. She has a PhD in Math, and worked for the search engine AltaVista in the 90s while living in Silicon Valley. She has four kids of her own, and having brought one of them to a panel discussion – who entertained herself with a tablet. So Silvija Seres understands the market potential here as a technologist, a parent and an investor. We hope to bring Silvija Seres onboard as a Business Advisor and eventually an investor.

Kids.AI has significant network, and the goals of those in network fits well with the aims of Kids.AI. Network connections also highlight the many resources that are here in Trondheim, and these resources can join forces in collaborative projects.

Kids.AI will continue building these relationships in order to address challenges related to data analysis and the development of artificial intelligence, especially in the area of refining appropriate and timely recommendations. Perhaps, in the future, Kids.AI will be able to partner with other members of our network to secure funding for additional research projects, such as the Alexandra Institute in Denmark. Those in our network currently include:

Telenor Group

As a main collaborator *Telenor Group* will deliver our product to the market. Telenor is operating in Scandinavia, Eastern Europe and Asia. Our business model includes Telenor as a key partner. Likewise, their channels of distribution are sustainable, explicit and have commercial potential. Telenor is investing NOK 50+ million in an agreement with NTNU, SINTEF and StartupLab have an initial horizon of five years to create an AI Lab in Trondheim. Kids.AI will be one of the first startups to join this new initiative at the start of 2017.

Other Startups

ParrotPlay.TV - Kids.AI will maintain contact with local startup ParrotPlay and it's CEO Borgar Ljosland, a serial entrepreneur who co-founded companies like Falanx Microsystems, FXI Technologies and Cstick Media, and served as a Director of Business Development in ARM ltd. ParrrotPlay and Kids.AI will develop a shared platform. (Letter of intent attached).

Helmet - Films & Visual Effects - company lead by Alexander Somma and three other film enthusiasts. Kids.AI will distribute Helmet content on our platform. (Letter of intent attached).

PeopleUknow - Kids.AI is also connected with Marianne Johnsen, the founder of PeopleUknow. Marianne is passionate about improving education at schools – with a particular focus on emotional development. Marianne has for many years been running a design bureau (*www.Tusj.no*) in Trondheim. Kids.AI will assist PeopleUknow with their data analysis.

U:turn - Another partner is Gunnar Gangstø, the founder of U:turn Trondheim, an organization that focuses on education and social entrepreneurship facilitated by technology. Kids.AI will assist U:turn with their data analysis.

LiteracyApp.org – While the focus of Kids.AI is on the Norwegian and Danish market, we're also in dialog about a partnership with the Norwegian startup LiteracyApp.org, which is participating in the $15 million Global Learning XPRIZE challenge. Kids.AI will help LiteracyApp enable children in developing countries to teach themselves basic reading, writing and arithmetic within 18 months with the help of artificial intelligence. (Project description attached).

Contributions from the university

Kerstin Bach has agreed to provide guidance in the development of Kids.AI going forward. Lars' involvement with selfBACK already provides insight into the artificial intelligence methodology Case-Based Reasoning (CBR). And NTNU already has dedicated resources toward Quality Education (SDG 4) through the Horizon 2020 project SOCRATIC, so it is likely that Kids.AI will get involved with the use of artificial intelligence for more personalized learning and improved education quality.

Project plan and budget

Kids.AI project currently is in the stage of planning. Kids.AI uses a methodology called "lean startup." to make the process of starting a company less risky. The lean strategy contains the following actions: planning, analysis and design, implementation, testing and evaluation.

Our main concern is customer discovery. In this phase we are focusing on two major development areas:
1) understanding what our customer needs are
2) examining (put forward our hypothesis) our ideas of what the needs of our clients are and what clients really want. To achieve product market fit our customer discovery phase will be repeated three times on a groups of 2, 15 and 25 families. In meantime our product will be under constant development.

After eight months of research and development our final product will be ready. First available for innovators and early adopters with a Kickstarter campaign. As a main partner Telenor Group will distribute our product to the market. Initially, it will be available through a one-year subscription and an accompanying tablet with the Kids.AI platform. Kids.AI will be available first on the Norwegian market, and reach the global market via Telenor's multiple channels of distribution. After the first year of subscription, our tablet will be replaced by a new model. Previous versions of the tablet will be shipped to kids in African developing countries so they can also develop digital skills.

After commercialization data from users will be regularly collected to maintain a high quality of personalized content.

Supporting activities are: marketing, networking, recruitment, team building, training and sale.