FPT UNIVERSITY

INTELICADE

EXPERIENTIAL ENTREPRENEURSHIP REPORT

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CHAPTER 1. KEY PARTNERS

1.1. Identify what our business's need

Our key customers are young people of school age, specifically under elementary school. So we want to collaborate with a business that can help us reach those customers as much as possible. Our game is educational, so it requires high accuracy in the knowledge that is integrated into the levels. Therefore, we need advice from experts in the field of education

1.2. Where can our business can find potential partners

- Participate in educational and gaming networking conferences, seminars and events.
- Interact with online communities, forums and social media groups focused on education, games

1.3. Identify key partner

- Educational center is the key partner we will focus on

    + Today's educational centers are growing stronger and receiving more support from parents and students, so there will be a lack of fever if we do not cooperate with these partners.
    + In the educational center, their program is just not about learning, there are many extracurricular activities. So it is more easy for us to bring our game into their lesson
    + The experts, teachers of the center can help us to prepare or check if the knowledge that we want to bring in our game is suitable or not.
    + With educational centers we are able to reach a large number of customers who are students of the center.

1.4. Which values the partners will receipt from us

- Our game cleverly integrates knowledge with animations and animated characters to help students more interested in learning.

- We can design games specifically for each center's curriculum
- Status and learning capacity of students through reports

1.5. Some educational center are suitable with our business

- Apollo English : is the first 100% foreign-owned English training center in Vietnam, established in 1994. Apollo is proud to be a member of International House - a prestigious and longstanding English organization of the United Kingdom.
  + Student's age is between 6 - 13 years old
  + Their scale is quite large with 7 centers in Hanoi
  + Unique and novel teaching methods, professional teachers

- ILA Vietnam: company operating in the field of English education and training l, specializing in providing learning programs and training services for children and adults.
  + Student's age contains 6 - 13 years old
  + Their scale is about 4 centers in Hanoi
  + The teachers at ILA English Center are qualified and experienced native teachers

CHAPTER 2. KEY ACTIVITIES

2.1. Product Manufacturing

2.1.1. Game Development

- Conducting in-depth research on learning objectives, target audience, and age-appropriate game mechanics is crucial for creating an effective educational game. It involves identifying specific educational outcomes, understanding the characteristics of the target audience, and researching game mechanics and learning theories. This research provides valuable insights that inform the design process, ensuring that the game aligns with educational goals and meets the needs of the intended audience.

- Designing game concepts, storylines, characters, and levels that align with educational content is critical in game development. Once learning objectives and target audience have been established, the design phase begins. The goal is to create a compelling game concept that seamlessly integrates educational content into gameplay for effective learning. Engaging storylines or narratives are crafted to

motivate players to progress and explore further. Relatable characters that support learning objectives enhance immersion. Careful planning and structuring of game levels or stages allows for the progressive introduction and reinforcement of educational concepts.

- Creating game assets such as graphics, animations, sound effects, and music is crucial for enhancing the appeal and effectiveness of an educational game. Age-appropriate graphics improve aesthetics and ensure they resonate with the target audience. Animations bring characters, objects, and actions to life, making the game more engaging and immersive. Suitable sound effects and background music complement gameplay, providing auditory cues and feedback that reinforce learning and emotional engagement. These elements work together to create an immersive and enjoyable educational gaming experience.

- Implementing interactive features, game controls, and user feedback mechanisms is crucial for creating an engaging and effective educational game. The implementation phase focuses on developing intuitive game controls that are easy for children to learn and use. Interactive features promote exploration, problem-solving, and critical thinking, ensuring active engagement with the educational content. User feedback mechanisms, such as hints, progress indicators, or rewards, guide and motivate players, fostering a positive learning experience. These elements work together to enhance interactivity and educational value.

2.1.2. Content Creation

- Developing educational content for a game involves aligning it with learning objectives and curriculum standards. This requires defining the knowledge, skills, or concepts to be covered. Researching educational resources, curriculum guidelines, and expert recommendations is essential for ensuring alignment with educational standards and desired learning outcomes. Thorough research guides the creation of content that meets educational requirements and fosters effective learning

experiences in the game.

- Creating lessons, quizzes, puzzles, and other interactive learning materials is essential to enhance the educational experience in a game. Lessons provide a structured and organized approach to presenting content, while quizzes and interactive exercises reinforce learning and assess progress. Including puzzles, challenges, and problem-solving activities promotes critical thinking skills and encourages players to apply their knowledge in practical and engaging ways.

- Incorporating multimedia elements such as videos, images, and audio is crucial to enhancing engagement in educational games. Videos provide visual demonstrations and real-life examples, while images and illustrations reinforce key concepts. Audio elements, such as voice-overs and sound effects, not only enhance engagement but also convey information effectively, making the learning experience more immersive and stimulating.

2.1.3. User Experience Design

- Designing an intuitive and visually appealing user interface (UI) is crucial for a positive user experience. The UI design should engage the target audience while being organized in a logical and intuitive manner. Easy navigation and accessibility of features are prioritized, ensuring users can seamlessly interact with the game. Clear labels, buttons, and icons guide users through the game, making interactions intuitive and enhancing their overall experience.

- Optimizing user interactions, game controls, and feedback mechanisms is crucial for creating a seamless user experience. Responsive and smooth interactions that provide immediate feedback enhance engagement. Game controls should be intuitive, easy to learn, and aligned with the capabilities of the target audience. Incorporating interactive elements like drag-and-drop, gestures, or touch interactions further enhances engagement, creating a more immersive experience for the users.

- Incorporating gamification elements such as rewards, badges, and leaderboards enhances user engagement. Rewards, badges, or virtual currency can incentivize progress and motivate users to complete tasks or achieve milestones. Designing leaderboards or ranking systems fosters healthy competition among users, encouraging better performance and creating a sense of achievement and social interaction within the game.

- Iterating on the design based on user feedback and data analytics is crucial for continually improving the user experience. Analysis of user feedback, behavior data, and metrics identify areas for improvement. The design can be iterated upon based on user feedback and data-driven insights, adjusting UI elements, interactions, or game mechanics. Ongoing monitoring of user feedback and engagement metrics ensures that the user experience is continually optimized, meeting the evolving needs and expectations of the users.

2.1.4. Maintenance

- Regularly updating and improving the game based on user feedback and emerging educational trends is crucial. Gathering and analyzing user feedback provides insights into their experiences and suggestions for improvement. Reviewing user suggestions, bug reports, and feature requests helps identify areas for enhancement. Staying informed about emerging educational trends and advancements in game design and pedagogy ensures the game remains relevant and up to date with current educational practices.

- Conducting quality assurance testing is essential to identify and fix any bugs, glitches, or usability issues. Thorough testing validates the functionality of all game features, interactions, and educational content. Testing on different devices, operating systems, and screen sizes ensures compatibility and optimal performance for a diverse user base. Addressing any issues identified during quality assurance testing ensures a smooth and enjoyable user experience.

- Monitoring game performance, load times, and server stability ensures a smooth user experience. Monitoring load times, response times, and overall stability enables prompt identification and addressing of performance bottlenecks or server-related issues. Implementing monitoring tools or analytics enables tracking of key performance indicators, allowing for proactive measures to maintain optimal game performance and user satisfaction.

- Providing ongoing technical support and troubleshooting for users is essential. Establishing user support channels allows users to seek assistance when needed. Responding promptly to user inquiries and technical issues ensures a positive user experience and maintains user satisfaction. Clear and helpful troubleshooting guides or tutorials can be provided to help users resolve common problems independently.

- Collaborating with the development team to implement feature enhancements and optimizations is crucial. Prioritizing user feedback and emerging needs, the development team can work on improving the game. Regular collaboration and communication optimize game performance, user experience, and educational effectiveness. Staying updated with the latest trends in technology, educational research, and game development helps incorporate improvements that enhance the overall quality of the game.

2.2. Essential Activities

2.2.1. Data analysis

Data analysis plays a critical role in improving learning outcomes and overall user experience. Market analysis provides insights into current trends, user preferences, and competitors, helping to inform decisions related to game content, design, and marketing strategies. User data analysis, such as engagement metrics, behavior patterns, and feedback, enables understanding of user needs, preferences, and learning styles. Analyzing this data can inform decisions related to game mechanics, content, and design, ensuring optimal learning outcomes and user

experience. By leveraging data analytics, game developers can continuously improve the educational value and user experience of the game, catering to the evolving needs and expectations of the users.

2.2.2. Human Resource Management

Human resource management (HRM) encompasses the recruitment, training, and development of employees. Recruitment involves identifying and attracting candidates with the required skills, experience, and qualifications to fill job positions. Once hired, training is provided to equip employees with the necessary knowledge and skills to perform their job duties effectively. Ongoing development opportunities, such as mentorship programs, leadership training, and skills training, enable employees to grow and advance within the organization. By investing in employee recruitment, training, and development, organizations can foster a skilled and motivated workforce that contributes to the success of the organization. Effective HRM practices also support employee retention, ensuring that valuable talent is retained within the organization.

2.2.3. Financial Management

Financial management encompasses various aspects of managing an organization's finances, including financial planning, capital management, revenue and expenditure management, and financial reporting. Financial planning involves forecasting future financial needs, setting financial goals, and creating a budget to achieve those goals. Capital management involves managing the organization's capital structure, including equity and debt financing. Revenue and expenditure management involves managing cash inflows and outflows, ensuring that the organization has sufficient funds to meet its financial obligations. Financial reporting involves preparing and presenting financial statements, including the balance sheet, income statement, and cash flow statement, to provide stakeholders with a clear understanding of the organization's financial performance. Effective financial management practices enable organizations to achieve financial stability, make informed financial decisions, and achieve long-term financial sustainability.

2.2.4. Marketing

- The rise of the internet has revolutionized the way businesses and organizations communicate with their target audience. Online platforms such as websites, blogs,

social media, and online advertising provide numerous opportunities to reach a wider audience and engage with them. Websites provide a digital presence for businesses, allowing them to showcase their products or services and provide information to potential customers. Blogs enable businesses to share their expertise, provide valuable insights, and establish themselves as thought leaders in their industry. Social media platforms enable businesses to engage with their audience, build brand awareness, and create a sense of community around their brand. Online advertising provides targeted advertising opportunities, allowing businesses to reach their desired audience with precision. By leveraging online platforms, businesses can expand their reach and build a strong online presence, leading to increased brand visibility, customer engagement, and ultimately, business growth.

- Interactive communities provide a platform for users to interact and collaborate with each other. These communities can take various forms, such as online forums, chat rooms, social media groups, or collaborative workspaces. Interactive communities enable users to share knowledge, experience, and insights with others who share similar interests or goals. They also foster a sense of belonging and create a supportive environment for users to engage with each other. Interactive communities can be beneficial for businesses and organizations as they can provide valuable insights into customer needs, preferences, and behavior. They can also be used to facilitate customer support and provide a platform for users to give feedback and suggestions. By fostering a strong and engaged user community, businesses and organizations can build brand loyalty and establish themselves as a trusted and valued resource in their industry.

- Building partnerships and communities with relevant organizations and schools can be beneficial for businesses and organizations. These partnerships can provide opportunities for collaboration, knowledge sharing, and resource sharing. For example, partnerships with schools can create opportunities for businesses to provide educational resources and programs to students, while also building brand awareness and establishing themselves as a valuable partner in the education sector. Collaborations with relevant organizations can provide access to new markets, customer segments, and resources, leading to increased business opportunities and growth. By building strong partnerships and communities, businesses and organizations can leverage the strengths and expertise of their partners, creating a mutually beneficial relationship that drives innovation and growth.

- Traditional marketing refers to the use of traditional media channels such as print, radio, television, and billboards to promote products or services to potential customers. While digital marketing has become increasingly popular in recent years, traditional marketing still has a place in reaching certain portions of potential customers. For example, older generations may be more likely to consume traditional media channels, making them a valuable target audience for traditional marketing efforts. Additionally, certain industries or businesses may still benefit from traditional marketing, such as local businesses looking to reach a specific geographic area. By

using a combination of traditional and digital marketing strategies, businesses and organizations can reach a wider audience and maximize their marketing efforts.

CHAPTER 3. Key Resources

3.1. Partnership

Partnerships can play an important role in developing and expanding an educational game startup. Here are some examples of potential partners that could collaborate with an educational game startup:

- Educational publishers: Educational publishers can collaborate with an educational game startup to develop educational games and provide educational content for these games. Examples include Pearson, McGraw-Hill Education, or Houghton Mifflin Harcourt.
- Educational organizations: Educational organizations, such as schools or non-profit organizations, can collaborate with an educational game startup to develop educational games or use these games to support teaching and learning. Examples include Khan Academy, Teach for America, or TERC.
- Investors and startup programs: Investors and startup programs can provide investment funds and financial support for educational game startups. Examples include Reach Capital, LearnLaunch, or Imagine K12.
- Game developers: Game developers can collaborate with educational game startups to develop educational games or provide game development services. Examples include Filament Games, Schell Games, or BrainPOP.
- Hardware manufacturers: Hardware manufacturers, such as educational equipment manufacturers or computer manufacturing companies, can collaborate with educational game startups to provide hardware for educational games or support product development. Examples include Microsoft, Dell, or Lenovo.

Of course, partnering with these entities requires careful consideration of the benefits and risks, ensuring that the partnerships contribute to the development and

success of the educational game startup.

3.2. Technology

On the technology side, here are some key resources that can be helpful for an educational game startup:

- Game engines: Game engines, such as Unity or Unreal Engine, provide a framework and tools to develop and deploy games across different platforms. These engines offer various features, such as graphics rendering, physics simulation, or audio management, and support programming languages like C# or C++. Some game engines, like Construct or GameMaker Studio, are specifically designed for creating 2D games, which may be suitable for certain educational game projects.
- Educational game development tools: There are also specialized tools and platforms that cater to educational game development, such as BrainPOP, Quizlet, or Kahoot!. These tools offer pre-built templates, game mechanics, or learning analytics that can streamline the development process and enhance the educational value of the games.
- Cloud computing services: Cloud computing services, such as Amazon Web Services or Microsoft Azure, provide scalable and cost-effective infrastructure for hosting, storage, and processing of game data and assets. These services offer features like content delivery networks, databases, or machine learning algorithms that can improve the performance and user experience of the games.
- Virtual and augmented reality: Virtual and augmented reality technologies, such as Oculus VR or HoloLens, can provide immersive and interactive learning experiences that enhance the engagement and retention of the learners. These technologies require specialized hardware and software development, but they can offer unique opportunities for educational game startups to differentiate

themselves and create innovative products.

- Mobile and web development: Mobile and web development technologies, such as React Native or TypeScript, can enable educational game startups to reach wider audiences and provide accessible and convenient learning experiences. These technologies offer cross-platform compatibility, responsive design, and integration with various APIs and services that can enhance the functionality and usability of the games.

In addition to these technologies, it's important for educational game startups to stay up-to-date with emerging trends and innovations in the field, such as machine learning, natural language processing, or blockchain. Keeping an eye on the latest research and developments can help educational game startups to incorporate cutting-edge features and stay competitive in the market.

3.3. Human resources

Regarding human resources, here are some considerations for an educational game startup:

- Skill sets: An educational game startup may require a diverse set of skills, including game design, programming, educational content development, graphic design, user experience design, project management, and marketing. Depending on the scope and complexity of the game projects, the startup may need to hire full-time employees or contractors with relevant expertise or outsource some tasks to external agencies or freelancers.
- Team size: The size of the team can vary depending on the stage and goals of the startup. In the early stages, the team may consist of a small group of co-founders or collaborators who handle multiple roles and tasks. As the startup grows and secures funding, the team may expand to include specialized roles and departments, such as a content team, a development team, a marketing team, or an operations team.
- Company culture: An educational game startup should establish a company culture that aligns with its mission and values and fosters creativity, innovation,

and collaboration. The startup should prioritize diversity, equity, and inclusion in its hiring practices and workplace policies and ensure that all employees and stakeholders feel respected and empowered.

- Training and development: An educational game startup should invest in the continuous training and development of its employees to keep up with the changing technology and education landscape and to enhance their skills and knowledge. The startup can provide opportunities for professional development, mentorship, peer learning, or attending industry events and conferences.
- Work-life balance: An educational game startup should prioritize the well-being and work-life balance of its employees and avoid overworking or burning out the team. The startup can offer flexible work arrangements, adequate compensation and benefits, and a supportive work environment that promotes mental and physical health.

In addition to these considerations, an educational game startup should also establish clear communication channels and performance metrics, foster a sense of ownership and accountability among the team, and cultivate a customer-centric mindset that puts the learners' needs and feedback at the center of the product development process.

3.4. Finance

On the financial side, here are some important considerations for an educational game startup:

- Funding sources: Educational game startups may need to secure funding from various sources to cover the costs of product development, marketing, and operations. These sources may include angel investors, venture capitalists, crowdfunding platforms, grants from government or non-profit organizations, or revenue from early sales or partnerships. The startup should prepare a detailed business plan and financial projections to demonstrate its potential for growth and profitability and to attract investors and partners.
- Budgeting and cost control: An educational game startup should establish a

budget and cost control system that tracks and controls expenses and ensures that the company stays within its financial limits. The startup should prioritize spending on essential and high-impact areas, such as product development and user acquisition, and avoid unnecessary or low-priority expenses. The startup should also regularly review and adjust the budget based on the changing market conditions and business goals.

- Revenue models: An educational game startup can generate revenue from various sources, such as subscription fees, in-app purchases, advertising, or licensing. The startup should choose a revenue model that aligns with its target audience, value proposition, and competitive landscape and that provides a sustainable and scalable income stream. The startup should also test and refine the revenue model based on user feedback and market data and explore new revenue opportunities as the company grows.
- Financial management: An educational game startup should establish a financial management system that tracks and analyzes key financial metrics, such as revenue, expenses, cash flow, and profitability. The startup should use financial software or tools that automate and streamline the financial processes and provide real-time insights and reports. The startup should also hire or consult with a financial expert or accountant who can provide guidance and support on financial planning, reporting, and compliance.
- Risk management: An educational game startup should identify and mitigate financial risks that may affect the company's performance and sustainability. These risks may include market volatility, competition, regulatory changes, or unexpected events like natural disasters or pandemics. The startup should prepare a risk management plan that assesses the likelihood and impact of various risks and outlines strategies and contingencies to address them.

Overall, an educational game startup should maintain a healthy and sustainable financial position that supports its long-term goals and mission and that provides value to its stakeholders, including investors, employees, partners, and customers.

3.5. Academic resources

On the academic resources side, here are some key considerations for an educational game startup:

- Educational research: Educational game startups should stay informed about the latest research and best practices in education and game-based learning. This can help the startup to design games that align with the educational objectives and that are effective and engaging for the learners. The startup can leverage academic journals, conferences, and online communities to access and contribute to educational research.
- Pedagogical expertise: Educational game startups should collaborate with educators and subject matter experts who can provide pedagogical guidance and feedback on the educational content and design of the games. These experts can ensure that the games align with the curriculum standards, the learning goals, and the diversity and inclusiveness principles. The startup can recruit educators and experts from schools, universities, non-profit organizations, or online platforms.
- Learning analytics: Educational game startups should use learning analytics and data-driven approaches to monitor and evaluate the effectiveness and impact of the games on the learners' performance and engagement. The startup can collect and analyze data on various metrics, such as the time spent on the game, the completion rate, the quiz scores, or the feedback from the users. The startup can use these insights to improve the game design, the educational content, and the user experience.
- Open educational resources: Educational game startups can leverage open educational resources (OER) to access and reuse educational content and assets that are available under open licenses. OER can include textbooks, videos, images, or software that can complement or enhance the game-based learning experience. The startup can also contribute to the OER community by creating and sharing educational game assets that others can use and adapt.
- Partnerships with educational institutions: Educational game startups can partner with educational institutions, such as schools, universities, or libraries, to pilot and test the games and to receive feedback and support from the educators and learners. These partnerships can also help the startup to showcase its products and to build a reputation and credibility in the education sector. The startup can reach out to educational institutions through networking events, conferences, or online platforms.

CHAPTER 4. VALUE PROPOSITION

4.1. Core Value

The core value the company provides is educational entertainment for children. The company is trying to give children a fun and engaging mobile game experience while also imparting useful knowledge and skills.

4.2. Problem

Currently, many children have access to smart devices and the internet from a very young age. There are many cases where adults, parents often give their children phones to play with so that they don't cry or get bored. And because of their young age, they cannot clearly perceive what they are exposed to, cannot distinguish between positive and harmful things, and adults are sometimes too busy to control these issues. Children can inadvertently expose themselves to things that are useless, harmful, and not suitable for their age. Instead, they should be exposed to healthy experiences that are both entertaining, fun, and educational, suitable for their age.

4.3. Solution

To solve the above problem, we will provide a mobile game that can help children both satisfy their entertainment needs, relax, and have fun. We will also integrate educational content, especially suitable for the age of those children.

4.4. Unique Feature

- Educational content: Our game includes many educational questions and puzzles to provide additional knowledge for children, or situational questions to help improve the problem-solving skills of those children.

- Engaging gameplay: It features beloved and well-known cartoon characters such as Tom, Jerry, Donald Duck, Mickey Mouse, with beautiful graphics,

lively sound effects, and interactive gameplay, which helps children become interested.

- Safe and age-appropriate: Our game is designed to be safe and age-appropriate for young children. We will filter out any content or advertisements that are not suitable for the age of those children.

CHAPTER 5. CUSTOMER SEGMENT

5.1 Value proposition targets

Children from 3 to 10 years old.

5.2 Interest

- Children often enjoy beautiful graphics, lively sound effects, smooth animations, and bright colors, as well as beloved cartoon characters such as Mickey Mouse, more…

- In essence, our game is a magical haven designed to capture the interests of children and transport them to a world of endless possibilities, where learning, laughter, and cherished memories intertwine. The amalgamation of stunning visuals, delightful sounds, seamless animations, vivid colors, and beloved characters ensures an experience that will capture the attention and imagination of our young audience, making our game an irresistible and cherished companion in their joyful journey of discovery.

5.3 Platform

We choose the mobile game platform, because:

- The popularity of smartphones, iPad, the internet, everyone's home uses these devices.
- Most of our target audience uses devices such as smartphones, iPad. This age has almost little contact with PCs, so mobile is the most crowded, easy to

access.

- The phone is very convenient, can be used anywhere, in the car, at home, outside, ...

5.4 Market

- To establish a strong brand presence and foster widespread popularity, we adopt a strategic approach by initially focusing on the niche market. By captivating teaching centers for children and charming their neighborhoods, we create a devoted community before gradually expanding to reach a broader audience.

- Our game's journey commences with a deliberate focus on the niche market. This astute choice allows us to craft a compelling brand identity and ignite a wave of popularity that resonates within teaching centers for children and ripples throughout their neighborhoods, paving the way for seamless growth into larger markets.

CHAPTER 6. CUSTOMER RELATIONSHIPS

Introduction

The channels for a game project that provides knowledge about Maths and English for children from 4-10 years old are critical to the success of the project. In this section, we will discuss the different channels that can be used to distribute the game to the target audience.

Online App Stores

One of the most important channels for distributing the game would be online app stores like the Apple App Store and Google Play Store. These app stores have a massive user base, and parents can easily download and install the game on their devices. To ensure that the game is visible to potential customers, it is essential to optimize the game's listing on these app stores. This can be achieved by using relevant keywords in the game's title and description, including high-quality screenshots and videos, and encouraging positive reviews from existing users.

Developer Website

Another channel for distributing the game would be through the developer's website. The website could include a landing page for the game, where parents can learn more about the game's features and benefits. To encourage downloads, the website could offer a free trial of the game or a discount for first-time users. Additionally, the website could include a blog section, where the developer can share updates on the game's development and provide tips for parents on how to use the game to help their children learn.

Online Marketplace

Online marketplaces like Steam could also be used to distribute the game. While Steam is primarily known for distributing PC games, it has recently started to expand its offerings to include mobile games as well. By distributing the game through Steam, the developer can tap into its massive user base and benefit from its built-in marketing tools, such as Steam Curators and Steam Reviews.

Social Media Channels

Social media channels like Facebook, Twitter, and Instagram are also critical channels for promoting the game and reaching potential customers. These channels can be used to build awareness of the game, share updates on its development, and engage with parents and children. To build a strong social media presence, the developer should post regularly and respond to comments and questions from followers. Additionally, social media ads can be used to target specific demographics and increase the game's visibility.

Conclusion

In conclusion, the channels for distributing a game that provides knowledge about Math and English for children from 4-10 years old are critical to the success of the project. By leveraging online app stores, the developer's website, online marketplaces, and social media channels, the game can reach a wide audience and generate positive word-of-mouth recommendations.

CHAPTER 7. CHANNELS

Introduction

Building strong customer relationships is essential for the success of a game project that provides knowledge about Maths and English for children from 4-10 years old. In this section, we will discuss the different customer relationships that can be developed to ensure a positive and engaging experience for both children and their parents.

Child-Friendly Design

The game should be designed in a way that is easy for children to use and understand. This can be achieved by using bright colors, clear fonts, and simple navigation. Additionally, the game should include engaging animations and sound effects to keep children motivated and interested.

Educational Content

To build trust with parents, the game should provide valuable educational content. This can be achieved by incorporating lessons on Maths and English into the game's mechanics. For example, the game could include spelling challenges, Maths quizzes, and vocabulary-building exercises. To ensure that the game is aligned with the school curriculum, the developer should consult with educators and subject matter experts.

Progress Tracking

To provide parents with peace of mind, the game should include progress tracking and detailed reports on the child's learning. This can be achieved by incorporating a dashboard that shows the child's progress and identifies areas where they may need additional help. Additionally, the game could include features like Maths learning plans and adaptive difficulty, which would help to keep children engaged and motivated.

Social Media Engagement

The developer can engage with parents and children on social media channels by responding to feedback and questions and providing updates on the game's development. By building a community around the game, the developer can establish a loyal user base and generate positive word-of-mouth recommendations. Additionally, the developer could use social media to run contests and promotions, which would help to increase engagement and drive downloads.

Conclusion

In conclusion, building strong customer relationships is critical for the success of a game project that provides knowledge about Maths and English for children from 4-10 years old. By incorporating child-friendly design, educational content, progress tracking, and social media engagement, the developer can establish a positive and engaging experience for both children and their parents.

CHAPTER 8. COST STRUCTURE

1. Opening

This startup project is a Game Development project, more specifically, it is an Education Focused Game Development . So some cost variables will not be used in this report. The variables are more applicable for a Game Development Company.

With the growth of the company, the cost structure will be altered due to increment of employees, change of developing teams, or focused market.

Specific numbers will be listed along with the Revenue stream in 9.3

2. Fixed Cost

There will be 2 types of fixed costs: “One time” and “periodic”

The one time cost is the cost paid for services or licenses that are life-time subscriptions. This type of cost includes Game Engine Extended Packages, IDE plugins, OS key, one-time expensed equipment, intellectual property protection fees, office furniture,… These payments are all necessary for increasing the performance of games and reducing development time.

Monthly fixed cost includes salaries and bonus for employees, rent, utilities (such as networking, electricity, …), insurances, software licenses (included Unity pro, Game maker, Unreal Engine, Cocos, smartgit, Rider IDE, Click-up, github pro, …), equipment (equipment depreciation), services (servers, vpn, dns, …) and irrelevant cost (equipment upgrade, more OS keys,...).

3. Variable Cost

The variable cost for a hyper-casual game developing process is quite a few, both in number of costs and value of each type. Some games can use similar assets and codes, and the variable cost can be deducted a little bit.

The variable cost included game assets (unique art, audio, model, animation…), level design, programming, marketing and promotion.

4. Specific numbers

Here is the paid amount in detail of One-time expense Fixed cost

- One-time expensed equipment : 5000$ (redundant)
- OS key : 500$ (redundant, ~20$ each)
- IDE plugins : 150$

- Game engine packages (included assets packages): 1000$ (redundant)
- Legal fees for intellectual property protection : 2500$ (estimated)

Total : 9150$

CHAPTER 9. REVENUE STREAM

1. Opening

Earning of the company comes from 4 main sources : game sales, in-app purchases, advertising and signed contracts (outsource).

In the start stage (first one or half year), most of the revenue comes from advertising and outsource projects. Advertising earning focused games have low development costs and short time in developing while they potentially bring in substantial revenue.

In the middle stage (first to third year), games will be implemented in-app purchases services. The focused bundles are ads-free packages which improve user experience in playing, premium bundles (life-time, annually and monthly) which open new features, unlock more educational content. During this stage, the revenue will be saved for mid-core games development and to build a fully inhouse company.

In the late stage (from third year on), mid-core game development will be launched. The hyper-casual games and outsource projects will still keep their position for a safe long-run. The revenue from mid-core games comes primarily from IAP and game sales.

2. Revenue calculation

The potential revenue of a game can be determined by its DAU (Daily active users), retention rate, conversion rate, session length, lifetime value (LTV). Other data that may affect the revenue but not too much such as user feedback, reviews and ratings, player engagement, … can be skipped in calculating revenue of first-stage games.

To calculate the raw revenue, Average Revenue Per User (ARPU), Monthly recurring revenue (MRR) or Average daily recurring revenue (DRR ~ MRR/30) , and active users (in a period), total users, number of downloads are needed.

3. Table of cost and revenue

One-time Expense Fixed cost = 9150$

First year
Fixed cost (quarterly):

- Rent : 2000$ monthly
- Salaries and bonus : 0$ monthly
- Utilities : 500$ monthly
- Insurance : 300$ monthly
- Software license : 1500$ monthly
- Equipment Depreciation : 100$ monthly
- Irrelevant : 300$ monthly

Total : 4700$ * 3 = 14100$;

Period	First Year (2023)			
	Quarter1	Quarter2	Quarter3	Quarter4
Game published count				
			3	10
Development Cost (Average per game)				
Assets			7$	5.9$
Design			30$	25$
Program			0$	0$
Publishing			40% (raw revenue)	40%
Variable cost			7787$	2355.9$
Raw Revenue (Average per game)				
DAU			2	2.3
ARPU			0.6	0.87
Total users			12000	8000
Total			7200$	6960$
Revenue (per game)				
			-3467$	1820.1
Oursource				

			15000$	10000$

Total earning in first year = -3467 * 3 + 1820.1 * 10 + 15000 + 10000= 32800$

Second Year

Fixed cost (quarterly):

- Rent : 2000$ monthly
- Salaries and bonus : 10000$ monthly
- Utilities : 500$ monthly
- Insurance : 300$ monthly
- Software license : 1500$ monthly
- Equipment Depreciation : 100$ monthly
- Irrelevant : 300$ monthly

Total : 14700$ * 12 = 44100$;

Period	Second Year (2024)			
	Quarter1	Quarter2	Quarter3	Quarter4
Game published count				
	23	37	27	30
Development Cost (Average per game)				
Assets	2.57	1.43	0.9	0.5
Design	0	0	0	0
Program	0	0	0	0
Publishing	40%	35%	0%	0%
Marketing	0	0	4000	5000
Variable cost	2317	1440	5973	6775.5
Raw Revenue (Average per game)				
DAU	2.5	3.4	2.3	3.1
ARPU	0.73	0.89	1.01	0.82
Total users	6800	7600	6500	9600
Total	2978.4	4396.6	6565	7872
Revenue (per game)				

	661.4	2956.6	592	1096.5
Oursource				
	21000	14000	18000	18000

Total earning in second year = 71000 + 15212.2 +109394.2 + 15984 + 32895 = 244485.4 $

<u>Third Year</u>
Fixed cost (quarterly):

- Rent : 2000$ monthly
- Salaries and bonus : 18000$ monthly
- Utilities : 500$ monthly
- Insurance : 300$ monthly
- Software license : 1500$ monthly
- Equipment Depreciation : 100$ monthly
- Irrelevant : 300$ monthly

Total : 22700$ * 12 = 68100$;

Period	Third Year (2025)
	Whole year
Game published count	
	1
Development Cost (Average per game)	
Assets	52000
Design	28000
Program	50000
Marketing	80000
Platform	10%
Variable cost	287250
Raw Revenue (Average per game)	
DAU	1752
Sale price	0

ARPU	2.1
Total users	1’000’000
Total	2’100’000$
Revenue (per game)	
	2177250
Oursource	
	0

Total earning in third year = 2’177’250$