# Cardify: The Future of Learning

## **Startup Business**

Cardify is an educational website that incorporates AI to be able to personalize study materials that focuses on flashcards and mock tests for students. With the use of AI, students will be able to upload their lecture notes, slides, and other materials that are needed and with the press of a button, flashcards and mock tests will be generated.

Cardify's motion is to enhance student productivity through different learning methods. This new learning technology will be available through both a website and a mobile application on both the Google Play Store and Apple App Store, allowing students to access their learning materials across various devices. Cardify will allow students to choose individual flashcards through the deck that they want to revise, make comments on each flashcard, as well as the ability to share the card decks though different profiles of other students taking the same course. The website/app will also have a chatbot incorporated that will allow students to time themselves on mock tests, have someone to respond to questions when they need further clarification, and an interactive screen pet that will remind one to study after a certain amount of time is wasted on different social media apps. This will allow students to stay on track with their learning materials by using their screen pet to win prizes that are redeemable. Having someone to create study materials as well as motivating one to complete their work with result in higher productivity and grades.

# **Incorporation of Artificial Intelligence**

Artificial Intelligence is the backbone behind Cardify and the reason that it operates. Cardify uses AI through different functions and operations in order to deliver an elevated experience.

Natural Language Processing (NLP): Allows the systems to read and understand the users files that are being uploaded, whether they are lecture notes, slides, or assignments. This allows for the content generation to be meaningful and precise when creating flashcards and mock tests.

Machine Learning Algorithms: Advanced learning system that is constantly learning from different data, and making decisions and predictions based on what they know. It is able to recognize patterns that allow it to make predictions or decisions based on what it knows, leading to an algorithm that is more accurate and efficient over time.

*Chatbot Functionality:* With 24/7 assistance, the chatbot is able to provide instant feedback to various questions, explanation about topics, and even study assistance when necessary. Having the assistance of the Chatbot, consumers are able to receive instant help without having to wait on the phone or sending emails.

**AI-Driven Motivation System:** Having to care for someone else leads to higher levels of motivation, this is why a "study pet" uses behavioral tracking to encourage productivity and leads to less procrastination. Having this AI generated pet, it encourages you to continue studying as you are able to unlock different accessories the more you study.

*Analytics and Insights:* Cardify is able to highlight areas where the user needs improvement, as well as areas that have been memories. AI is able to monitor these study habits and suggest new study habits, best times to study, and even when it's time to take a break.

With the use of these features working alongside AI, Cardify is able to automate study materials for consumers that leads to higher learning quality and engagement.

## Who is Cardify Serving?

Cardify primarily serves high school and college students from ages 15-25, who need additional support with study material creation and are looking for a more efficient method.

### Demographics:

- Students in high school and higher education.
- Individuals who are tech-savvy who know how to operate mobile and web-based tools.
- Ages 15-26, who know English (other language tracks are currently being developed).

### Psychographics:

- Learners who want to continue excelling academically.
- Someone who enjoys being motivated by digital interactions.
- Users who value their study time and want unique experiences.

#### **Behavioral Characteristics:**

- Those willing to pay for an enhanced learning experience with personalized features.
- Use of study apps with educational resources.

## **Attracting Customers**

In the age of social media, Cardify will focus on using various platforms to attract and retain customers. It will also focus on partnerships with different articles, collaborating with influences, as well as incentivizing the promotion of the company.

**Social Media Marketing:** Creating ads on platforms like TikTok, Instagram, Snapchat, Facebook, and Youtube that showcase the brand. With the use of both short and long content,

Cardify will be able to target the age group of 15-25 since they are the "Tech-Savy" generation that use social media constantly.

**SEO Optimization:** By researching and identifying the search terms that Cardify's target audience uses allows for Cardify to use it through the website to increase engagement. A company's reputation is a main way of growth. By using backlinks from different websites and blogs, people will feel more comfortable using Cardify for the first time. Without having to pay for ads, Cardify is able to increase website traffic leading to more users.

*Influencer Partnerships:* Paid Collaborations with influencers popular on social media for their study content and advice will reach the direct consumer. People are easily influenced when they know that their favorite content creators are using different products and services, collaboration with these creators will help reach potential customers.

**Personalized Emails:** AI will be able to send personalized suggestions or promotions throughout the year when customers use Cardify. Being able to personalize something as simple as an email makes the customer feel valued.

# Creating and Maintaining a Competitive Advantage

Cardify's competitive edge lies on the use of AI learning personalization and motivation, that is not found in different study platforms. Unlike other apps that offer similar services, Cardify reduces the creation times and increases relevance the more the service is used, with the help of adaptive study material unique to each user. Competitors like Quizlet and Anki offer flashcard creation, but lack the AI component and motivation features. With the reward system and "study pet" Cardify is leading to a new and transformed way of learning. Allowing students to maintain consistent and healthy habits that lead to higher academic achievement. Cardify is a learning

platform that offers free and monthly plans. The free plan offers unlimited upload documentation and flashcard creation, with unlimited flash card review. Compared to competitors that only offer 3-4 flash card reviews per month unless the plan is upgraded. Cardify stands out compared to its competitors as its main focus are its customers and not the monthly profit. This makes Cardify a more supportive and engaging learning system.

### Day-to-Day

Day-to-day operations will involve human and AI processes. It's crucial to maintain human interaction although Cardity is an AI-driven platform.

### **Human Components**

- Customer support with account and billing issues over the chatbot, email, and phone
  number. Knowing that a company is mainly run by AI, but still hires and gives humans a
  job allows for higher credibility.
- An IT department that deals with technical maintenance and software update. AI is a
  software that is able to perform tasks at a speed that humans are not able to complete.
  However, AI is not able to replicate software and technical maintenance that humans are
  able to create.
- Content creation and marketing will be run by a human that is producing quality content
  that will reach different audiences. Being in the age of social media, a business is able to
  reach potential consumers, and large audiences without having to spend thousands of
  dollars advertising.

Having a human resources team allows for management of employees throughout the
entire lifecycle. They will handle various tasks like, payroll, hiring, recruiting, and
ensuing legal compliance. HR is responsible for creating a compliant work environment
that encourages its employees and resolves conflicts as they are presented.

#### AI Components

- Generation of flashcards and mock tests. AI is able to work at speeds never recorded before, with its help, it is able to meet the needs of customers without having to wait hours for humans to create the flashcards.
- Real-time chatbot tutoring and question responses. Having a chatbot allows for all
  questions to be answered without having to wait for an email response or call back. This
  allows for students to spend more time studying and less waiting around.
- User progress tracking and analytics. Knowing what topics have been memorized and what areas still need improvement allows for higher results.
- Automated subscription renewals. With a company that serves thousands of customers per month, having AI help with subscription renewals helps be more productive at work.

# **Business Expansion**

Cardify is working on expanding to new markings and audiences as well as improving its technology.

*New Markets:* Joining the multilingual space that helps support international students. Since Cardify is a new business, it is only using English as its language. In the future, Cardify hopes to offer its services to international students that are not native Spanish speakers. Diversity and

inclusivity is Cardify's mission, being able to include all students no matter their background helps increase diversity.

*More Features:* In the future Cardify would like to add AI based essay feedback and study plan scheduling. This would allow Cardify to stand out compared to its competitors and offer more features all in one platform. Constantly improving and releasing new features allows maintaining customer retention.

**Revenue Streams:** Offering institution licenses for university tutoring centers will help bring in new revenue streams and connections with different institutions. Being able to offer this amazing program directly to school will help gain more opportunities.

*Franchising:* Working alongside educational organizations allows to integrate Cardiff into new student areas, helping connect students to new opportunities.

*Corporate Learning:* Expanding beyond student learning into new areas like professional development that will help business and employees. As Cardify expands and joins new areas, being able to help not only students, but professionals is a goal.

#### **Business and Revenue Models**

#### E-commerce Business Models

Cardify is a service provider that sells a subscription based service to customers through a digital platform. Cardify offers an AI-powered study service, not a tangible product. Users are able to use the free plan or upgrade to the business, premium, or standard plan for an enhanced experience that offers different features. The website and mobile apps function as a digital interface to interact with these services. Cardify provides continuous online services that improve the user's experience, productivity, and learning outcomes.

#### E-Commerce Revenue Models

Although Cardify offers a free plan, it also offers a monthly subscription plan. By using the free features, it requires you to sign into your account making you a part of the subscription as each month Cardify releases new features. For those who want more advanced features, there is the ability to pay for plans starting as low as \$7.99/month for the standard plan to \$45.00/month for the business plan. A subscription revenue model focuses on recurring monthly payments, predictable revenue stream, as well as access to digital services, which is what Cardify offers. Cardify is also classified as a freemium model as it offers a free tier with basic features.

## **Information Systems**

## Short-Term Systems (First 1-2 Years):

- Customer Relationship Management (CRM): Used to track users intersections, manager subscription, and improve customer retention.
- Transaction Process System (TPS): For secure billing, payments, and subscription handling.
- Collaboration Tools: For internal team communication and project management.
- Intranet: Used for organization within internal operations, documentation, and HR information.

### Long-Term Systems (3-5 Years):

- Enterprise Resource Planning (ERP): To integrate marketing, sales, and financial data across departments.
- Business Intelligence (BI) Systems: Used to analyze performance metrics, user engagement, and sales trends.

- Knowledge Management System (KMS): For storing AI learning models and research data.
- Supply Chain Management (SCM): If Cardify partners with external content providers or textbook publishers.
- Extranet: Ability to collaborate with partner institutions securely.

## **Social and Ethical Implications**

Cardify is a company that ensures that addresses ethical considerations surrounding data privacy and AI transparency. AI is a new concept for a majority of individuals, this leads to uncertainty with using programs that use AI. Privacy is the baseline of Cardify, all of the material that is uploaded and the data of each user will be encrypted and never shared to third parties without the consent from everyone. Strong cybersecurity measles will be in place to protect user content preventing access from unauthorized individuals. The algorithms that will be designed will avoid bias and will ensure that everyone receives the same content and information from the Cardify team. Cardify will encourage and motivate you to build healthy study habits, but will never promote overworking and burnout. Cardify is working towards creating an inclusive and diverse educational/learning platform for students from all platforms. Cardify is a learning platform with advanced technology that aims to empower students, by making education better accessible, more engaging, and equitable.

### Appendix



















