Flight Entertainment System

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Overview

Zeus tablets aim to make air travel an entertaining journey. Zeus tablets would provide air travelers with a revolutionary & compelling personalized entertainment experience. Air travelers will be able to rent on Zeus tablets preloaded with movies, videos, games, eBooks, or other content of their choice on pay per use basis.

Need

Parents traveling with kids are always worried about keeping their kids occupied (and well-behaved) for the hours. While many airlines provide In-Flight entertainment but available content does not satisfy everyone's needs and that's why only a few relish the thought of flying with kids.

As of today, there are few airlines like Hawaiian which have decided to have no inflight entertainment and on the other side, there are few airlines that provide the content but it has other problems too like outdated technology or user interface which travelers are not familiar with or content which is not as per travelers choice.

| Limited and repeated content, no choice; outdated games | Outdated technology, screen size | Out of luck! Screen missing |

Figure 1

The Popularity of smartphones/tablets has enabled travelers to download the content offline but it often hits the roadblock as everyone in the family has their own needs.

All these above considerations are the motivation behind Zeus

Approach

Zeus R&D team will set up a web portal and mobile app for travelers. Travelers will be able to quickly set up their online account, browse all the content available, select the contents for their flights, and pay for their tablet rental.

Zeus R&D team will use AWS to host computer infrastructure. All Zeus and customer data will be secured using industry-standard best practice, Customers will have a choice of multiple payment methods such as credit card and Paypal, etc. Zeus will set up merchant accounts and payment integration with credit processing companies.

The R&D team will develop a Zeus admin module (Zam) to be used by Zeus Airport Representative (Zar). Zams will be a combination of hardware and software connected with the Zeus cloud. Zams will be set up at airports, Zam will have details of all customers listed in order of the rental requested. Zam will be a fully automated system allowing Zars to plug in a Zeus tablet and prepare it for rentals with a few clicks.

Zars will pick up the returned devices from Zeus kiosks. Zeus expects to partner with kiosk suppliers. Travelers will be able to return devices using these kiosks at arriving airports.

1. Choose your contents on Zeus app

2. Pick up at departing airport

3. Enjoy Zeus inflight

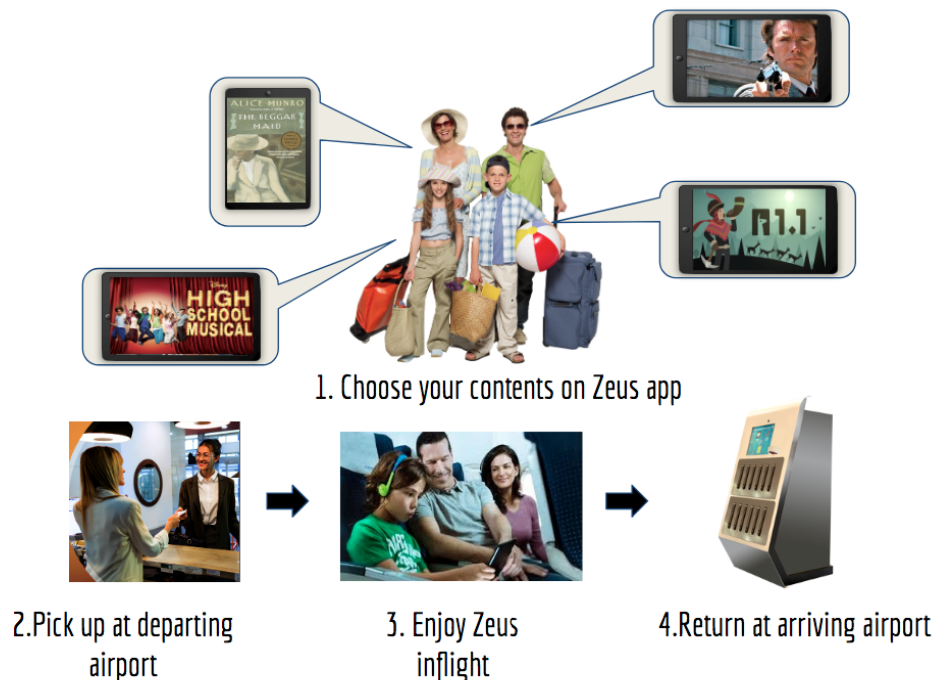4. Return at arriving airport

Figure 2

Zeus plans to partner with major film studios and content providers to provide a wide range of content to customers allowing them to choose from, Ad-free videos, Offline videos, Access to HD videos, or Access to "Originals" content. Zeus plans to partner with content providers not just in entertainment but also in other areas such as education, fitness, etc. Zeus plans to partner with offline and online content providers such as YouTube, Netflix and Internet service provides for additional capabilities (See Appendix)

Zeus will set up a business entity in the state of California. Zeus will hire appropriate law and account firms for legal and accounting needs.

Market Research

Primary Research

As part of the primary research, a survey was conducted. In this survey, 65 people of the age group (30-65) participated and we asked several questions related to their experience related to In-Flight Entertainment experience. Below are the highlights of the survey.

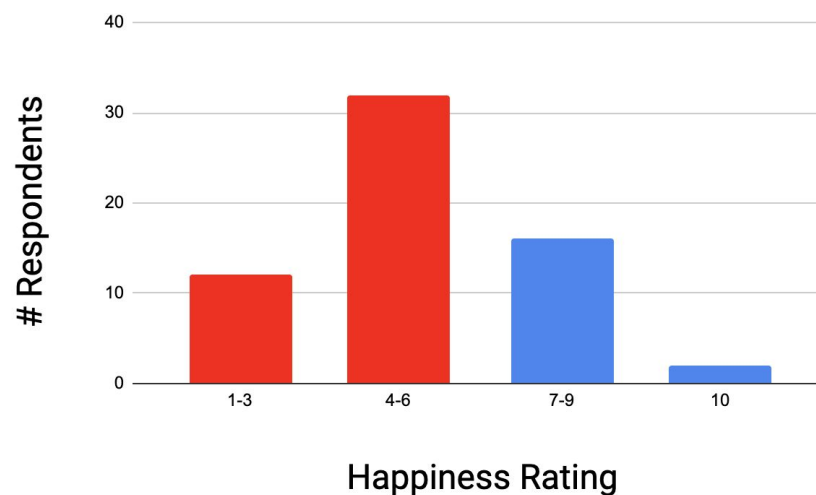1. 2/3 of the flyers are not happy with inflight entertainment

Figure 3

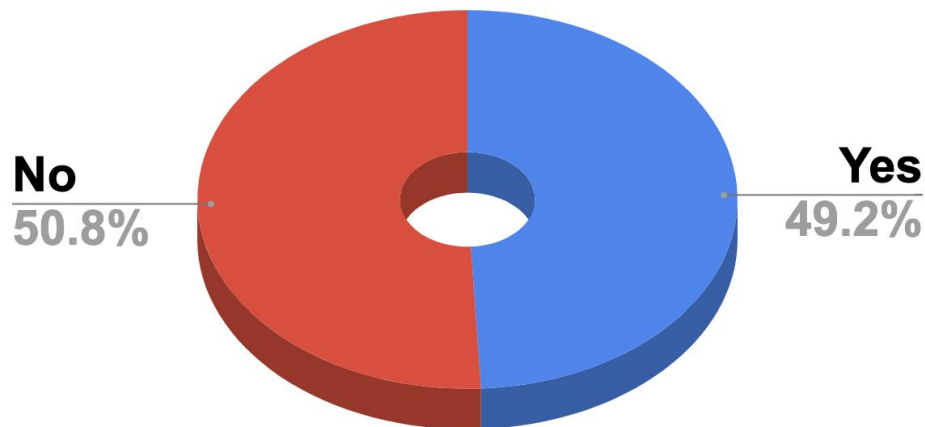2. Half of the flyers are ready to pay for a better experience.

Figure 4

Market Landscape

In today's market, there are many companies like Amazon, Netflix, Hulu, and Disney that provide streaming services. They are providing a variety of content with subscription-based. Initially, they started their services for streaming so that customers needed to have a wifi connection. Later on, they provide download services as well. Thus their customers are able to download their favorite content on their own devices. These companies are not directly targeting the inflight entertainment market. However, with the downloading service enabled, their presence in the inflight entertainment market is huge.

There is another category of companies, which are airline companies such as United, Delta, and American airlines which provide inflight entertainment services to their customers. Airlines companies are adopting tablet services with additional fees and bring-your-own-devices (BYOD) systems that allow passengers to enjoy the contents. However, the pool of content is not as large as one of the streaming companies. Also, tablets are not enabled to connect to inflight wi-fi and are only limited to preloaded by airline companies.
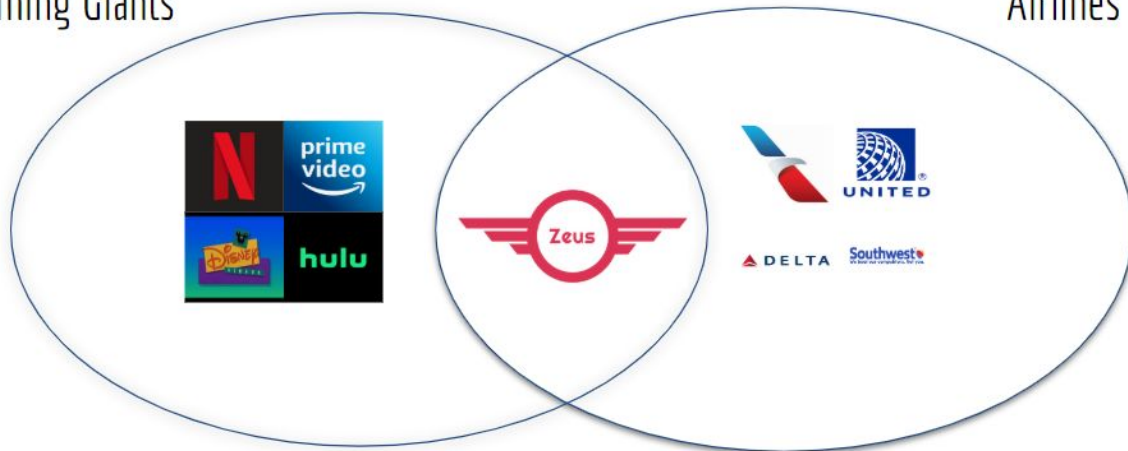
Figure 5

Market Size

Entertainment is one crucial aspect of everyone's life. According to the research done by marketsandmarkets.com The in-flight entertainment & connectivity market is projected to reach USD 7.65 billion by 2023, at a CAGR of 8.72% from 2018 to 2023. This growth can be attributed to the increase in the number of airlines and passengers. In the year 2019 alone the US had 800M passengers who traveled in domestic airlines.
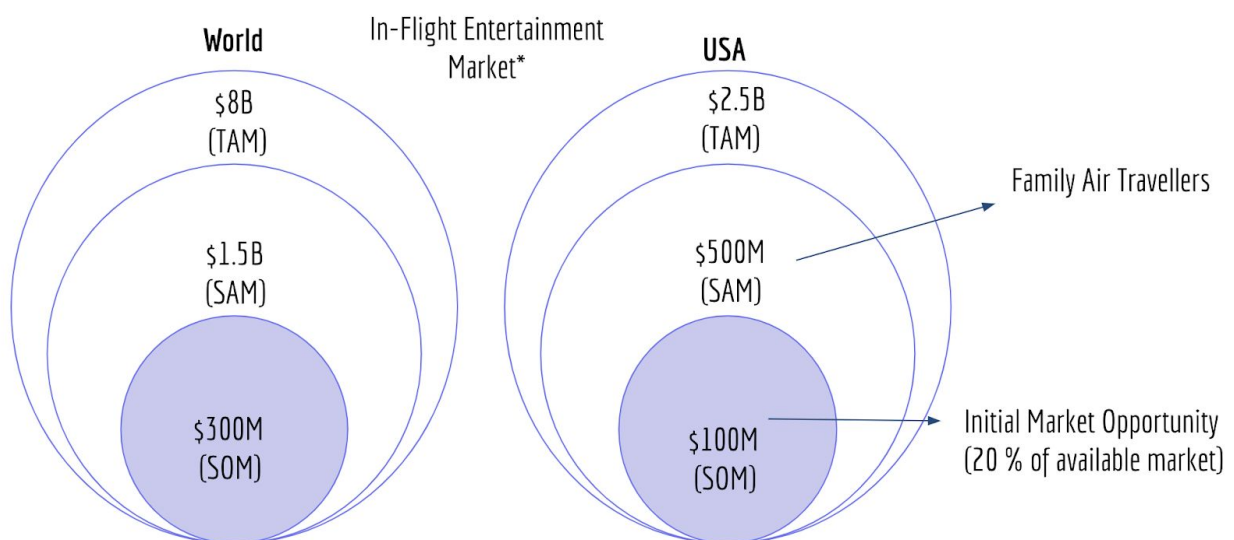

Figure 6

In the US market alone Total Addressable Market(TAM) is estimated to be around $2.5 B and as we are targeting family passengers our Service Accessible Market(SAM) is estimated to be around $500M and considering penetration rate of 20% our initial market opportunity is around $100M.

Business Model

In the first phase of the launch, the business will offer the Rent-and-Return option to the consumer. Under this model, consumers can pick the device on departure and return it on arrival at the airport. A one-way use of the device shall be charged at $10, while consumers shall have the option to book it for the return trip for an additional charge of $7. To promote adoption and reduce friction, no charges will be levied for delays or cancellation.

The option to enjoy premium content and onboard wifi shall be made available to the consumers in the later phase of the business. These will be offered under a transactional model, where consumers can pick and choose the content and services they would like to enjoy during the flight. The charges will be levied only for the offering selected by the consumer per trip. This model will not only provide a deeply personalized experience to the consumer but also give them the full transparency of the associated cost.

Competitive advantage

As explained in the previous section, there are multiple players like Amazon/Netflix and airline companies. Even though Zeus is seeking to compete with those companies directly, Zeus can be uniquely positioned in the market to offer complete service to the end-users with competitive advantages below.

The first advantage is "customization". This is one of the competitive advantages over the airline's inflight companies. While airline companies provide the same content for their customers through inflight entertainment systems or tablets, Zeus can provide personalized content based upon customers' requests before the flight.
Second, Zeus provides various content based upon the "Pay-Per-Use" model. All streaming companies are providing services based upon subscription regardless of the number of content customers enjoy. In addition, some of them ask additional monthly fees for multiple devices support.

Third, Zeus prepares content for you. By preparing customers' favorite content based upon customer selection, Zeus makes customers hassle-free for entertainment in the flight.
Fourth, the Zeus portal will provide various contents. This will be discussed in detail in the latter part, but with Zeus' contents acquisition strategy Zeus is able to acquire contents from various independent distributors through licensing.

Finally, Zeus uses the latest tablets of IOS or Android OS, which customers are already getting used to. This allows customers to enjoy the content without any difficulties.

Company Structure

Content Acquisition

Content Acquisition is going to be the key area where Zeus wanted to focus. It requires to get licensing content from independent distributors, producers, and mini-major studios for Zeus services. Content strategy for acquisition also involves negotiating deals and managing external relationships with key partners. As Zeus won't be generating its original content initially it will be relying on content providers and the Content Acquisition Division will participate in all aspects of negotiation (financial analysis and forecasting, contract drafting, security requirements, amendments). This Division also has to communicate market trends and industry shifts, including implications for programming strategy and the overall business.
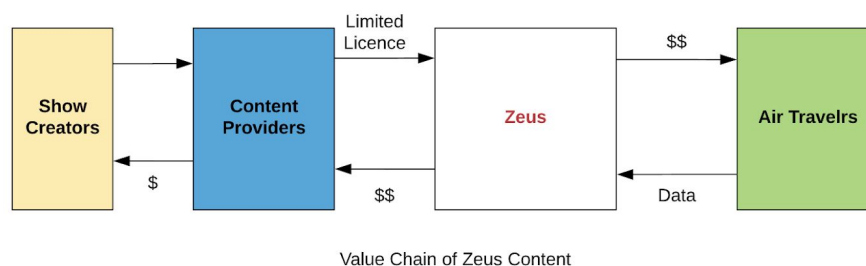

Value Chain of Zeus Content

Figure 7

Airport

Zeus will lease retail space in five airports, to set up kiosks and station staff to manage and assist with the pick-up and drop of the device. In the early phase, the company will lease space up to 200 sq ft and shall grow in the later phases. Since the space requirement is limited and small, the lease will be executed via Concessionaire groups at each airport. This will help ease the entry process and keep the cost low.

- SFO - $20K - $30K per retail unit
- Orlando - max ($30K, 15% of generated revenue)
- Hawaii - research in progress
  - Hawaii
  - Maui

○ Oahu

Device

To serve the enhanced and delightful experience to travelers, Zeus will launch with two of the latest devices
- [Apple IPad Air](#) - $499
- [Samsung Galaxy S6](#) - $649

In this era of digital evolution, the above devices (and their predecessors) are dominant leaders in the market. These devices will not only provide convenience but also keep them delighted throughout the journey. To protect the device loss and damage, the company will go for
- OEM protection plan - This will help protect the loss in the early phase, and provide the insight for long term plan
- Absorb the loss - Largely depending on the insurance cost vs the loss, the company may choose to absorb the loss
- Security deposit - The least preferred choice as this can potentially drive away from the consumers, the company may offer this plan to consumers based on location and loss history

Roadmap

- The product will be developed in 2020 which is for End User HW, SW for Contents loader, Kiosk HW, etc. Other major work at 1st year is to finalize contracts for the contents of movies, music, game and novel.
- Promotion for target family travelers will be started in 2021. A detailed approach will be shown on the next slide. In parallel, HW and SW should be ready for public use.
- Small pilot in 2022 will be executed including the established plan for family and heavy user, advertised special contents in selection site, start to analysis trending data
- In 2022, the business should be stable to gain profit for the company. At this stage, Phase 2 plans will be considered for the next step.

Go to Market

- Collaborate with Airline company: We can collaborate with Airline company which flight doesn't have the latest and greatest inflight entertainment system. No need to spend money on Airline company is a major advantage.
- Bundle deal with travel company:"Hotel + Flight + Premium Contents Device" can be offered by Travel company for their competitive opportunity
- Exclusive Contents: Latest and Greatest contents can be provided to users only this service. If a customer likes it, a customer can buy it later. So contents provider can utilize our service as promotion methodology

● Free for 1st 1000 customers: As one promotion effort, Free is for 1st 1000 customers. Promoted via Social media, Web and Airport, etc

Financial Project

The business has a tremendous opportunity to not only grow the consumer offerings but also expand to different markets in the future. As mentioned in the business model section, the company plans to offer multiple offerings in different phases through the next five years. It also has the opportunity to expand it to the bus, train travelers as well as families going on car trips.

With the current plans, the company would invest the first year in developing the prototype for content ingestion and uploading to the device. The marketing will take off in the next year when the company will reach out to consumers through various channels and avenues. In the same year, the plan is to start a pilot program between SFO and Orlando airports, further expanding to Hawaii next year. Following years, the investment will grow to expand the business portfolio to include Premium Content and Onboard Wifi offerings for the consumers.

	Prototype Development	Marketing / Early Pilot	Pilot Expansion / Aggresive Marketing / Partnerships	First Growth Phase / Premium Content	Wifi + Streaming
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Target Passengers		10K	50K	650K	3.5M
Avg Rev /passenger		$13.50	$13.50	$15.90	$18.40
Revenue		**$135K**	**$675K**	**$10.3M**	**$64M**
Airports Cost		$50K	$150K	$450K	$1.2M
Device Cost	$5K	$100K	$250K	$2.5M	$10M
R&D	$300K	$200K	$200K	$300K	$300K
Content Licensing			$500K	$1M	$4M
Wifi (Gogo inflight)					$2M
Marketing		$500K	$500K	$1.5M	$2M
Expenses	**$305K**	**$850K**	**$1.6M**	**$5.75M**	**$19.5M**
Profit	**($305K)**	**($715K)**	**($925K)**	**$4.55M**	**$44.9M**

Figure 8

Appendix

1. Market Size -
   https://www.marketsandmarkets.com/Market-Reports/in-flight-entertainment-communications-market-860.html

2. Partnership Opportunities

   Youtube
   https://developers.google.com/youtube/v3

   Netflix
   https://partnerhelp.netflixstudios.com/hc/en-us/sections/205641408-API-Developer-s-Toolkit

   Gogo -Inflight Internet service providers
   https://techcrunch.com/2014/05/20/gogo-opens-up-its-apis-to-allow-developers-to-build-better-in-flight-apps/

3. Blog Posts

   Hackernoon
   https://hackernoon.com/how-to-start-an-online-video-streaming-business-3-profitable-ideas-for-video-content-creators-e1332fde35d2

   Apex
   https://apex.aero/2016/09/30/s mart-design-shake-up-inflight-entertainment-next

4. Airport retail space

   Doing Business at SFO
   https://www.flysfo.com/business-at-sfo/doing-business-sfo

   Airport Business - Orlando International Airport
   https://www.orlandoairports.net/airport-business/

   Concessions and Other offerings - Hawaii
   https://hidot.hawaii.gov/airports/doing-business/concession-notices/

5. Kiosk Supplier
   https://laptopsanytime.com/.

6. Market Research
   https://www.united.com/ual/en/us/fly/travel/inflight/entertainment/tablet-rental.html