# PrivacyU

**Business Proposal** 

## **Business Summary**

Business Name PrivacyU

Contact josh.cannons@gmail.com

Business Model Direct Retailer/Subscription

Product Name Privacy Box

Concept A small, inexpensive device powered by battery

and/or USB that links between devices and the internet to provide a completely anonymous, secure and encrypted connection with no user

experience or configuration

Product Price \$65.00, \$5.00 monthly subscription

Average Net Margin \$67.50

Average Operating Margin \$46.98

Average Gross Margin \$32.86

Business Type Partnership

Sabina Criniti

Jennifer Jones

Target Demographic Internet users aged 35-49 making \$120,000+

Current Assets \$20,000

Proposed Stakeholder Investment \$20,000

Projected 1<sup>st</sup> Year Revenue \$216,100

Projected 1st Year Expenditure \$64,931

Projected 1<sup>st</sup> Year Gross Profit \$151,169

Projected 1<sup>st</sup> Year ROI 84.30%

## **Executive Summary**

This document presents the concept and idea behind the Privacy Box as well as the combined market research, financial analysis, business operations and marketing planning.

Market research has shown that an ever growing number of internet users are becoming concerned with the scope of data collection and the misuse of their data. Unfortunately the largest group of people expressing concern and a desire to act are also some of least technical internet users.

The Privacy Box combines the research of several talented individuals and will allow people to surf the internet with the assurance that their information is kept private, secure and anonymous. By designing a "No Configuration" interface, people with no technical experience can implement the same security measures used by large enterprises and employ techniques that keep their identity completely private.

We have developed a business model that combines direct product sales via our online store and a subscription based service. Our figures estimate that we can expect a 50% conversion on subscriptions from product sales which will provide a continuing residual income from customers. Our pricing structure aims to place our product as a high-end portable router and due to our inexpensive and scalable infrastructure we will provide competitively priced subscription model to retain customers.

An aggressive public relation campaign will help launch the product in its initial phases. Social media sites and online blogs will be engaged heavily to ensure exposure and gather interest. Early models and press kits will be sent to suitable reviewers and media outlets to gather press coverage. The option of online pre-order close to launch offering a 12 months of free VPN usage will further entice users and gather pre-release interest. Targeted advertising using Facebook, Google and Bing will feature heavy close to product release and will continue during the lifecycle to ensure an ongoing interest and growing customer base.

A review of the projected sales figures show a very positive return on stakeholder capital and a high level of positive cash flow throughout the first year. By keeping business expenditure low, we can retain a high level of liquidity averaging operating ratio of \$3.64 and an 84.3% ROI over the first year. Sales projections over the first year indicate a gross revenue of \$216,000 and an expenditure of \$65,000 resulting in a gross first year profit of \$151,000.

The reliance on internet technology for everyday task is growing, as is the occurrences of data breech, identity theft and the misuse of personal information. Research has shown that there is indeed a marketplace for devices offering users online security and in response have developed a profitable product that will fill this role.

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#### **Business Objectives**

As more and more of our day to day lives are managed online concerns for security and privacy have quickly been moving out of the domain of the IT professional and into the minds of everyday users. Online identity theft, exposure of sensitive information and the ever growing complexity of phishing attempts can make simple web browsing a dangerous prospect, especially with the proliferation of public Wi-Fi services. Additionally, the global scope of online tracking made evident by information released by whistle-blowers combined with recent changes to Australian laws regarding the compulsory collection, storage and analysis of all online behaviour has forced consumer to rethink how they access online services.

While there are methods advanced users can piece together to provide security, configuring an array of services to work seamlessly together is not within the scope of a casual internet user. Even worse, misconfiguration could leave the user more vulnerable. We developed the Privacy Box to provide security and privacy to everyone. By abstracting the complexities and technologies involved, users can implement levels of security and privacy previously only implemented at enterprise level within seconds and with absolutely no technical knowledge or experience.

#### **Product Concept**

The Privacy Box is a small, inexpensive device powered by battery and/or USB that effortlessly connects between your computers or mobile devices and the internet. It allows a person to make their internet usage anonymous, encrypted and private. It can be used at home, in the office or while using a public Wi-Fi access point to prevent data theft from a multitude of attacks, remove online advertisements, browse the web in complete privacy or use location restricted online content like Hulu and Netflix unrestricted.

#### **Features**

- Uses industry standard encryption techniques combined with open source tools like DNS security, VPN
  access and TOR to ensure the greatest security and privacy
- Powered by USB or on-board battery with up to 8 hours of use
- · Very simple web based interface used to configure services in a few mouse clicks
- Easy one-click options can implement enterprise grade security to ensure your devices are protected from nefarious hackers and suspicious internet traffic

#### **Business Model**

From the demographic analysis performed below, the Privacy Box will be focused at 35-49 year old non-technical minded internet users earning over \$120,000. We currently have a well-developed online blog which covers topics on online privacy and security that targets non-technical users. This will provide a Launchpad for the Privacy Box via direct sale from an online store-front. We have secured offshore manufacturers that provide

production, branding, packaging and shipping and because of this, we will be able to provide the Privacy Box direct from manufacturer to customer.

The Privacy Box will retail for \$65 with an additional optional monthly subscription of \$5 for the premium VPN service with subscribers receiving much greater bandwidth than non-subscribers. Our infrastructure allows us to provide a monthly subscription at a very competitive rate and our research we estimates a 50% capture rate on premium VPN subscribers.

#### Market Overview

#### Market Positioning

The success of recent crowd-funding projects similar to the Privacy Box show that there is indeed a consumer desire for online privacy appliances but so far products have fallen short of promises or failed to deliver. Those that have been successful have provided very little actual protection or have ultimately been focused at the technical minded or experienced user. There are currently no devices that can effectively provide security, anonymity and privacy to people at browsing at home, public Wi-Fi users, regular travellers or non-technical internet users. Developing a product that allows for a realistic development schedule combined with affordable hardware and an exceedingly simple user interface would provide a desirable and marketable product.

#### Demographic Analysis

A study conducted by the Pew Research Centre in July of 2013¹ analysing the people's actions concerning anonymity and privacy online found that 86% of internet users have taken some kind of action to avoid data collection and tracking with 55% of people taken direct steps to avoid observation. 54% of people survey expressed that is was 'very important' that only those they allow have access to their physical location while browsing the internet, 46% expressed that it was 'very important' that only the people they allow have access to the websites they have been browsing and 44% of people expressed that it was 'very important' that only those they allow have access to the internet search's they perform. Research found that the age demographic of 30-49 bracket closely followed by the 50-64 bracket expressed some of the greatest concerns over online privacy with a strong willingness to take measures themselves to ensure greater control. An additional study by Pew performed in 2014 concerning attitudes over online privacy concluded that "nine-in-ten adults feel various dimensions of control over personal information collection is very important to them." 2

A more recent study performed by US research firm GFK<sup>3</sup> revealed that 88% of people surveyed expressed some level of concern with the state of online privacy and security, with roughly 33% claiming to have been affected personally by an attack or breech of privacy. While a large percentage of people put the onus onto corporations or government legislation, almost half had made adjustments to their online habits in order to protect their digital

See <a href="http://www.pewinternet.org/~/media//Files/Reports/2013/PIP\_AnonymityOnline\_090513.pdf">http://www.pewinternet.org/~/media//Files/Reports/2013/PIP\_AnonymityOnline\_090513.pdf</a>

See http://www.pewinternet.org/files/2015/05/Privacy-and-Security-Attitudes-5.19.15\_FINAL.pdf

<sup>&</sup>lt;sup>3</sup> See <a href="http://www.gfk.com/insights/press-release/new-gfk-us-survey-reveals-growing-concerns-over-data-privacy-desire-for-corporate-and-government-action-1/">http://www.gfk.com/insights/press-release/new-gfk-us-survey-reveals-growing-concerns-over-data-privacy-desire-for-corporate-and-government-action-1/</a>

life with over 50% claiming they would be willing to pay more for a service or product that valued their privacy. Similar to the previous study by Pew, it was found that the largest generation demographic expressing concern and taking active measures to ensure online privacy and security were the 50-68 bracket followed closely by the 35-49 bracket. The study indicated that an average of 26.5% of people between the age brackets of 35-68 had a significant increase in concern over online privacy over the past 12 months and another 20% expressed a moderate concern<sup>4</sup>.

#### Customer Analysis

The latest available data from the Australian Bureau of Statistics<sup>5</sup> indicate that percentage of internet users between the age brackets of 25-34 (95% usage), 35-44 (92% usage), 45-54 (88% usage), 55-64 (80% usage) and 65+ (46% usage). Statistics showed that people with a higher income (greater than \$120,000) are more likely to use the internet than lower income earners (less than \$40,000) with a comparative percentage of 97% to 77%. People mostly accessed the internet at home (97%), followed by work (47%) with 25% of people regularly using publicly available Wi-Fi.

The above research shows that the age bracket most concerned with online privacy and security is the 35-49 bracket and while not most likely to act on that concern, they follow the highest group by less than 10% differential with an average of 43% likelihood of taking action. It can be seen that 90% of this demographic regularly spend time online, with the majority of these people making over \$120,000 pa. It should be noted that while not mentioned in the earlier statistics the differential between male and female exceeded no more than 4% with males being more interested in privacy on average but a slightly lower online presence. From this analysis, the main target demographic for this product has been found to be 35-49 year old internet users earning over \$120,000.

#### Competitor Analysis

Currently our competitors appear in two formats, Online VPN services and hardware based products. While the VPN market is rife with competitors, the setup is often complicated. The average price per month was found to be \$5.40 USD for the most popular VPN services on the market which falls slightly above over proposed monthly fee of \$5.00 AUD. Of all the services investigated, only 'Private Internet Access' offered true privacy to the user with anonymous access and a 'No Logging' policy. It is felt that while not true competitors in terms of services offered compared to the Privacy Box, the VPN subscription service we offer needs to be competitive in the marketplace and offers an avenue of growth to attract additional customers.

From the perspective of existing hardware based competitors, it would appear that the preferred platform for launch is crowd funding with only 1 product being launched via self-funded methods from an existing company. While all were successful at raising the funds requested, all but 4 of these have yet to deliver a product 12 months after expected shipping date. On all counts this resulted in doubt and concern from the backers. Only the

<sup>4</sup> See http://www.emarketer.com/Article/Consumers-of-All-Ages-More-Concerned-About-Online-Data-Privacy/1010815

See http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/8146.0Chapter32012-13

InvisiBox at 135.00 + \$8.00 p/m offered a similar range of services in a similar hardware device but only offered a prohibitively technical user experience through the web interface and lacks upgradability. An earlier iteration of the device also suffered from performance issues. None of the products investigated are currently available in Australian stores.

## **Business Operations**

#### Company Structure

PrivacyU is partnership between Josh Cannons, Jennifer Jones, and Sabina Criniti formed in November 2015 to provide internet security products and services to the general public. We are all personally invested and have contributed greatly in the development of the Privacy Box as out debut product release. It is our opinion that a business partnership is the most effective option initially and best reflects our current interests and contributions. While this would leave us personally liable, it removes a lot of the initial complexities and costs involved with maintaining a company and would allow us to control and focus on our goal. As the business grows, the option to restructure the partnership to a company is always open.

#### Additional Staff

It is our goal that the Privacy Box be as easy to use as possible and to facilitate this, have developed a comprehensive support website in written in plain English, with the option to contact us with a support request. To assist in provide swift responses and quality support we have identified a need for customer support once the product reaches public release. This will initially be handled by the partners due to the knowledge requirements. After the second quarter the time requirements of this will be reassessed and we will determine if we require dedicated support staff. We have looked at the option of using an outsourced support company but feel our users would be better served by in-house support. Depending on the amount of support requests, we will initially seek to employ staff part-time or on a temporary basis. Employment organisations will be used to find suitable candidates.

#### **Business Premises**

Due to the production, packaging and shipping being outsourced, and the VPN infrastructure hosted on virtual servers our location requirements are currently minimal. Currently we are operating in an office space based at one of the partner's residence close to the city. This is ideal for our current needs and both product development and business planning are done from this location. In addition, it has the facilities to accommodate 2-3 addition support workstations when we launch. When the need comes to expand our office, we will look to lease a suitably equipped premises in a central location.

#### **Business Assets**

To ensure effective business continuity, it has been identified that we require the following assets; Support and development workstations, prototyping tools, a reliable public facing VoIP system, redundant business grade

internet connectivity, domain names and intellectual property protection, general office supplies and a suitable collaboration space. Currently, the assets owned by the business satisfy these requirements for the initial development and release of the Privacy Box and have additional physical resources prepared for maintaining ongoing support and development. As the business grows and expands to larger premises, a further review of the requirements will be done and additional equipment will be purchased by the partners.

#### IT Infrastructure

The VPN services we provide will be hosted on virtual servers managed by us. Digital Ocean has been selected for this role due to their reliability, performance and competitive pricing. This service allows us to scale our infrastructure to meet demand automatically allows us to minimise costs. Using this service we can reduce the average operating cost to less than \$5.00 per 10 premium VPN customers per month.

Business information, financial data, customer information and company web-site are managed by us also on Digital Ocean infrastructure. This follows the same scalable principle as the VPN infrastructure and is scalable to meet our needs well into the future. The operating service for this is currently \$20 per month. The local internet connectivity and VoIP communication is handled by Optus with an ongoing business contract.

## Suppliers

We have been in regular communication with two large manufacturing houses in China, Shenzhen Hwnet Times Tech Co. and Shenzhen X Hong Industrial Co. Both manufactures have identical hardware devices that would be suitable for re-branding as the Privacy Box. Shenzhen X Hong Industrial has the additional benefit of offering a finishing and packaging service. This would reduce the amount of reliance on multiple companies and increase the amount of control we have on the entire production process.

Initial hardware prototypes have been received from suppliers for software development and all initial beta testing has been successful. The suppliers will be provided with a completed firmware image for the device that will be copied onto the device during production. Artwork for the packaging and included documentation will be sent to Shenzhen X Hong Industrial Co. once finalised for printing and packaging.

Supplier	Min qty	Units per month	\$ per base unit	\$ per packed unit	\$ per shipped unit
Shenzhen Hwnet Times Tech Co.	1000	50,000	12	N/A	N/A
Shenzhen X Hong Industrial Co.	5	30,000	13	16	20

## **Business Challenges**

#### Product Development

Although aimed at the non-technical audience, the device needs to be seen trustworthy and withstand scrutiny from the technical reviews and community testing. Market research revealed several financially successful crowd funding endeavours that were quickly debunked and negatively reviewed on the very sites they needed for public relations marketing. To avoid this it is important that programming adhere to industry recognised best-practises and additionally as much of the software development as possible be release under an open-source license. This will allow the code-base to be received for bugs and security issues. Proprietary elements such as the user interface shall remain closed to protect intellectual property. Additionally, all beta testing of the user interface will need to occur within the demographics of the identified target audience to ensure accuracy in feedback.

The most common identified reason for delayed crowd funded hardware-based technology products are hardware supply and production issues. To avoid this, we chose a pre-built hardware option running our custom software as our initial product. Additionally, two separate suppliers have been sourced.

## Legal and regulatory considerations

The following regulatory requirements have been identified and need to be fulfilled;

- Business Name Registration
- ABN Registration
- GST Registration
- Business Bank Accounts
- Partnership Registration
- Co-founder agreements
- Domain Name Registration
- Trademark and Patent Registration for Product and Business IP
- Establishment of Supply Contracts
- IEEE Standards compliance
- Ethical Code of Conduct
- FCC Compliance for product export

## Market Adoption

Migrating a new product into an existing market is one of the initial challenges identified with the Privacy Box. Although there is presently low saturation in this market segment, as concerns for anonymity and online privacy grow we are expecting to see an influx of similar concepts and devices being developed. When this occurs, the market and competitor analysis will be revised to reflect the changes. The risk analysis for the Privacy Box will also be re-visited to ensure any new factors are identified and mitigated.

# Risk Analysis

Effect	Mitigation	Likelihood	Impact
Each partner provides a critical element to the project. Delays in product development, Increase in budget	All partners are committed to the ideology behind the product and have personally invested large amounts into the product. All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.	Low	High
Could leave certain services of the product unlawful to use or could prohibit distribution.	All technologies implemented have ubiquitous widespread usage and are most likely immune from legislation. In any case, all elements of the device can be updated online to reflect changes in legislation	Low	Medium
Reduction in project control. Could lead to a substantial delay in shipping times and instil feelings of doubt in consumer	Maintain constant communication with hardware suppliers through every phase of development. Ensure accurate prototypes have been developed and tested. Keep consumers informed of any issues that present themselves	Medium	High
Could lead to returned products and greatly diminished consumer trust	Ensure market research has thoroughly to ensure product maintains consumer need. Ensure proper beta testing is performed of initial prototype versions using target demographic audience. Listen to feedback and respond.	Low	High
Increase in development time, product delays and budget overstretch	Ensure all initial hardware development is tested and verified before prototyping. Develop accurate prototypes and test rigorously.	High	Low
Consumers may feel cheated or product rendered useless. May reduce product effectiveness	Technologies used have been in use for some time due to robustness and upgradability. Product design allows for services to be updated to keep relevant.	Low	Low
May lead to time overstretch or errors in programming	Keep to all relevant programming standards and best practices to avoid errors. Ensure rigours test of code is done at all phases of development to eliminate bugs as they occur.	Medium	Medium
Slow market adoption and lack of consumer trust	Ensure market research reflects actual target audience. Implement appropriate marketing methods to garner consumer interest and trust.	Low	Medium
Delay in product production and shipping. Possible budget increase.	Ensure products used are widely available and keep communication open with suppliers. Develop alternate product supplier communication in advent of unavailability.	Low	Medium
	Each partner provides a critical element to the project. Delays in product development, Increase in budget  Could leave certain services of the product unlawful to use or could prohibit distribution.  Reduction in project control. Could lead to a substantial delay in shipping times and instil feelings of doubt in consumer  Could lead to returned products and greatly diminished consumer trust  Increase in development time, product delays and budget overstretch  Consumers may feel cheated or product rendered useless. May reduce product effectiveness  May lead to time overstretch or errors in programming  Slow market adoption and lack of consumer trust  Delay in product production and	Each partner provides a critical element to the project. Delays in product development, Increase in budget  All partners are committed to the ideology behind the product and have personally invested large amounts into the product. All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  Could leave certain services of the product unlawful to use or could prohibit distribution.  Reduction in project control. Could lead to a substantial delay in shipping times and instil feelings of doubt in consumer  Could lead to returned products and greatly diminished consumer trust  Could lead to returned products and greatly diminished consumer trust  Consumers may feel cheated or product rendered useless. May reduce product effectiveness  May lead to time overstretch or errors in programming  Technologies used have been in use for some time due to robustness and upgradability. Product design allows for services to be updated to keep relevant.  Delay in product production and shipping. Possible budget increase.  All partners are committed to the ideology behind the product. All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  All partners are committed to the product. All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  All partners are committed to the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  All partners are committed to kenduct allows for skill and knowledge overlap.  All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  All partners are comulated knowledge overlap.  All perhoest allows for skill and knowledge overlap.  All perhoest days and are most likely immune from legislation. In any case, all element	Each partner provides a critical element to the project. Delays in product development, Increase in budget  Could leave certain services of the product unlawful to use or could prohibit distribution.  Reduction in project control. Could lead to returned products and greatly diminished consumer trust  Consumers may feel cheated or product rendered useless. May reduce product effectiveness  May lead to time overstretch  All partners are committed to the ideology behind the product. All partners work closely together to ensure the project stays on a unified path. Constant collaboration allows for skill and knowledge overlap.  All technologies implemented have ubiquitous widespread usage and are most likely immune from legislation. In any case, all elements of the device can be updated online to reflect changes in legislation  Maintain constant communication with hardware suppliers through every phase of development. Ensure accurate prototypes have been developed and tested. Keep consumers informed of any issues that present themselves  Ensure market research has thoroughly to ensure product maintains consumer need. Ensure proper beta testing is performed of initial prototype versions using target demographic audience. Listen to feedback and respond.  Ensure all initial hardware development is tested and verified before prototyping. Develop accurate prototypes and test rigorously.  Ensure all initial hardware development is tested and verified before prototyping. Develop accurate prototypes and test rigorously.  Technologies used have been in use for some time due to robustness and upgradability. Product design allows for services to be updated to keep relevant.  Keep to all relevant programming standards and best practices to avoid errors. Ensure rigours test of code is done at all phases of development to eliminate bugs as they occur.  Slow market adoption and lack of consumer trust  Ensure products used are widely available and keep communication in advent with suppliers. Develop alternate product supplier commu

## Marketing Plan

#### Marketing Analysis

In order to ensure the Privacy Box will gain the best exposure and attract its customers, it is important to understand consumer behaviour within the market environment. By studying consumer behaviour it will enable us to understand how and why consumers choose to either purchase or not purchase the product<sup>6</sup>.

As there are currently no equivalent competitor products in the Australian marketplace, it is could be identified that the consumers within Australia have limited knowledge regarding devices that can assist with online privacy and security. It is widely understood that interest in a product only tends to arise when the need for the product arises<sup>6</sup>. In order to make the Australian market aware of the Privacy Box product, it is important to generate problem recognition within the consumers<sup>7</sup>. By generating problem recognition it will increase the awareness amongst the demographic of the privacy risks when using public WIFI hotspots and how the Privacy Box will be able to ensure online privacy and security. In order to ensure the consumers will purchase the product, the acceptance marketing strategy will be implemented. This strategy will use the technique of providing long term advertising campaigns to help ensure low learning involvement is achieve in order to help gain acceptance of the product<sup>6</sup>.

As the Privacy Box is the first product that is being launch by PrivacyU, the product will initially only be available through our online storefront. This will ensure that the initial release of the product be within our full control and ensure minimal initial overhead. Tracking every purchase this way will assist in developing accurate customer metrics and provide the option for follow up marketing campaigns. After a proven successful launch of the Privacy Box we will determine a schedule for store-front release. Two potential retailers include The Good Guys and Officeworks as they have a history selling electrical office and home appliances to a wide audience.

#### Target Audience

As presented in the market research, it is revealed that the target market is the age bracket group of 30 – 49 years with an average annual income of or above \$120,000. This demographic is also one of the largest users of online services including banking, shopping and social media and continues to provide a growing marketplace. While appearing to be a large demographic, we initially aim to target a smaller subset of this group that can be identified by the following traits;

- Use online services several times per week, possibly from more than one locations
- Have little technical knowledge beyond basic computer usage
- Are concerned about the misuse or theft of their or their families information
- Want to have more control over their online freedom

#### Market Positioning and Branding

PrivacyU currently run a popular online blog trusted by less technically minded individuals to provide relevant information on online security and privacy. We provide a simple breakdown of the current topics and easy to

<sup>&</sup>lt;sup>6</sup>Quester, P, Pettigrew, S, Kopanidis, F, Hill, S & Hawkins, D 2014, Consumer behaviour: implications for marketing strategy, 7<sup>th</sup> edn, McGraw Hill Education, North Ryde, Australia.

<sup>&</sup>lt;sup>7</sup> Bruner, I & Gordon C 1986, 'Problem recognition styles and search patterns: an empirical investigation', *Journal of Retailing*, vol.62, no.3, pp.281-298

understand tutorials. By releasing our first product through our blog, we hope to capture our current user base and generate a greater amount of word of mouth advertising through similar social sites.

The Privacy Box has no current market equivalent and to ensure consumer trust the focus must be placed on simplicity and openness. Rather than focus on creating a new marketplace or identifying the product as a "security device", the device will aim to capture the popularity of portable/travel routers. These devices are small and inexpensive Wi-Fi devices used to power or extend home networks, connect to public Wi-Fi or provide a powerful Wi-Fi hotspot to several devices while on the go. As the Privacy Box is based on existing travel router hardware, our product provides a familiar device with the addition of our simple user interface combined with far greater privacy, anonymity and security.

#### **Product Pricing**

Initial pricing models have been hard to develop due to the lack of existing successful competitors with the InvisiBox found to be the only similar product on the market. The InvisiBox is priced at \$135 + \$8 per month for the premium VPN service and while successful, failed to capture our demographic. From our research it would appear that while people were concerned about privacy, they were unwilling to invest potentially over \$200 in the first year for something as intangible as a digital promise. Several travel routers that provide no security or privacy exist from major hardware manufacturers all that retail for an average of \$50 and have similar hardware specifications.

The Privacy Box will be available at the sale price of \$65 which consists of the device, battery and USB cable. There will also an optional premium VPN service that increases bandwidth at an extra monthly cost of \$5. While well below the current competitor, the Privacy Box is only slightly more expensive than the standard portable Wi-Fi device that it aims to replace, providing a more secure and attractive option.

As the product will be available at a price less than the similar InvisiBox, it may cause a portion consumers to be adverse towards the Privacy Box as many consumers compare the quality of the product with it's price<sup>8</sup>. To prevent the Privacy Box from being seen as not providing as serious protection compared to more expensive devices, all technologies used and underlying non-proprietary code written will be released under the open source GPLv3 License. While this serves the general public very little on it's own, it will allow technical reviewers and blog writers to audit and review the device. By garnering the trust of the online tech community, less technical blogs are more likely to support the product as high quality and filter down the information.

## Direct Marketing

Readers of our online blog will be the initial source of contact with our customers, and it is important to provide up-to-date and accurate information about the device development as it presents itself. Initially all blog and newsletter subscribers will receive promotional information offering a pre-order deal that includes the first year free of premium VPN as a draw card. This will help gather initial funds, engage with the community and get an idea of market desirability.

As we are selling the product online, customer details can be easily collected for further marketing purposes.

Through this we can offer special offers on services, notify users of important updates and continue market research for the development of further products.

 $<sup>^8</sup>$ Solomon, Hughes, Chitty, Fripp, Marshall, Stuart 2011, Marketing 2 Real People Real Choices, Pearson, Frenchs Forest, NSW.

#### **Public Relations**

We will make heavy use of both social media and online blogs. To ensure the device receives attention the following has been planned;

- An initial lead-up of articles on our online blog focusing on the current lack on online privacy and the misuse of personal data
- Press releases and media kits will be sent to a large multitude of blogs and online news sites including several prewritten articles on the importance of privacy and online security aimed at non-technical users
- An initial batch of devices will be provided to social sites like Life hacker, Gawker, Mashable along with major Australia media outlets for testing and review
- A YouTube channel devoted to showcasing the products features and providing support and instructional videos
- Facebook, Reddit, Twitter and Google+ pages dedicated to the Privacy Box to develop a community around
  the device. This allows consumers to 'like' and share updates regarding the product features, usage tips and
  request support.
- Using the our own online blog and the aforementioned external resources to provide regular product updates for the community and customer base to keep product interest

These techniques will help to raise consumer awareness of online privacy and security and draw attention towards the Privacy Box and its benefits while minimising expenditure.

#### Advertising

We currently have an initial budget \$11,500 for advertising. While a portion of this will be used to provide online news and blog websites with pre-release Privacy Box devices for review, the majority will be spent on targeted online marketing. An online advertising campaign will take place using the Facebook, Google and Bing paid services that will place advertisements in a variety of web-sites and search results. Using the services combined with the research we have done on demographics will allow us to directly target the demographic that our product will appeal to, providing the most efficient use of the allocated budget. We project a quarterly budget of \$2500 to continue with this method of advertising, this will be assessed on a regular basis. Currently we feel that print and television advertising fall short on cost-effectiveness considering our initial budget. As the product gains popularity, this option will be reassessed.

# Financial Analysis

# Initial Assets

Asset	Cost
Computer Equipment	\$9,500.00
Website and Infrastructure	\$6,500.00
Intellectual Property and Designs	\$4,000.00
Total Start-Up Costs	\$20,000.00

# Start-up Costs

Expense	Cost
Artwork and Design	\$3,500.00
Initial Marketing and Promotional Budget	\$11,500.00
Business Registration, IP management and Legal Fees	\$3,500.00
Consultancy Fees	\$1,500.00
Total Start-Up Costs	\$20,000.00

# Projected 1st Year Cash Flow

Sales	Q1	Q2	Q3	Q4	Year
Product Sales	1000	1100	1200	1300	4600
VPN Subscriptions, based on 50% conversion	500	550	600	650	2300
Product Income	\$65,000.00	\$71,500.00	\$78,000.00	\$84,500.00	\$299,000.00
VPN Income (\$5 per subscription)	\$2,500.00	\$2,750.00	\$3,000.00	\$3,250.00	\$11,500.00
Product Cost at \$20 shipped	\$20,000.00	\$22,000.00	\$24,000.00	\$26,000.00	\$92,000.00
VPN Infrastructure	\$525.00	\$575.00	\$625.00	\$675.00	\$2,400.00
Income Total	\$46,975.00	\$51,675.00	\$56,375.00	\$61,075.00	\$216,100.00
Overheads	Q1	Q2	Q3	Q4	Year
Accounting Fees	\$800.00	\$800.00	\$800.00	\$800.00	\$3,200.00
Bank Fees	\$300.00	\$300.00	\$300.00	\$300.00	\$1,200.00
GST	\$5,167.25	\$5,684.25	\$6,201.25	\$6,718.25	\$23,771.00
Business IT Infrastructure	\$60.00	\$60.00	\$100.00	\$100.00	\$320.00
Marketing and Advertising	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$10,000.00
Phone, Internet and Power	\$750.00	\$750.00	\$750.00	\$750.00	\$3,000.00
Equipment Maintenance	\$500.00	\$500.00	\$500.00	\$500.00	\$2,000.00
Office Supplies	\$300.00	\$300.00	\$300.00	\$300.00	\$1,200.00
Domain Registration and Online Maintenance	\$60.00	\$60.00	\$60.00	\$60.00	\$240.00
Start-up Cost Recovery over 1yr	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$20,000.00
Unknown Expense	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Expense Total	\$15,437.25	\$15,954.25	\$16,511.25	\$17,028.25	\$64,931.00
Profit Total	\$31,537.75	\$35,720.75	\$39,863.75	\$44,046.75	\$151,169.00

## Projected 1st Year Business Metrics

Metric	Q1	Q2	Q3	Q4	Year
Net Profit Margin	\$67.50	\$67.50	\$67.50	\$67.50	\$67.50
Operating Income Margin	\$46.98	\$46.98	\$46.98	\$46.98	\$46.98
Gross Profit Margin	\$31.54	\$32.47	\$33.22	\$33.88	\$32.86
Acid Test	3.04	3.24	3.41	3.59	3.33
Current Ratio	4.34	4.49	4.63	4.76	3.64
ROI	56.36%	61.03%	65.20%	69.14%	84.30%

#### **Projection Analysis**

PrivacyU currently has an existing portfolio of \$20,000 consisting of online and physical assets to put towards the development of the Privacy Box. We have initially budgeted \$20,000 of extra capital required to realise product development, fulfil legal requirements and fund our promotional campaign. In the forecasted figures, we account for a return on this initial \$20,000 investment over the first year of sales at a rate of \$5,000 per quarter.

From the metrics above, we can see that the business retains a profitable margin. Each sale generates a fixed net income of \$67.50 and retains an operating income of \$46.98 after product costs. Due to the low cost, scalable nature of our VPN infrastructure, our average gross profit per sale increases with the number of sales and captive VPN subscribers. Income from the VPN rises faster than VPN overheads, providing a trickle effect of increasing profits rising from \$31.54 per unit in the first quarter to \$33.88 in the fourth quarter.

When we look at forecasted ratios over the next 12 months, we can see a positive level of cash flow. The current ratio is a measure of business liquidity that factors business assets and equity against current liabilities and from above we can see that we retain an average of \$3.64 worth of business assets for every \$1.00 of immediate liability. Even when using the more conservative acid test ratio that omits everything except the most immediately liquid assets, in this case we omitted the partners initial capital and business assets, we retain an average of \$3.33 per \$1.00 of immediate liability.

The Return on Investment (ROI) shows a similar positive outcome, with an average return of 84.3% for the first year. This figure factors in business gross profit against product wholesale cost, VPN infrastructure cost, business expenditure and partner capital. It reflects a high level of gross return compared to business outgoings. Although these figures are based on a project level of sale, all identifiable initial expenditure encountered over the first year has been factored into account.

As the business grows, our demands on these factors will increase but it is our belief that our expenditure will remain low as our client base grows due to the scalability of our infrastructure. As we look towards the future and the prospect of developing further products becomes a reality, the scalable infrastructure developed for the Privacy Box will retain a key point in minimising overheads and increasing the profitability of new ventures. The projections show that if we capture the right demographic with an appealing product, PrivacyU and the Privacy Box provide a viable and profitable business model.

## Appendix A - Management Team

#### Sabina Criniti

Sabina is a marketing executive who specialises in coordinating marketing campaigns for organisations who are implementing first time product launches. She has achieved a diploma of Information Technology and a Bachelor of Business (Management / Marketing). Sabina manages all aspects of PrivacyU's marketing campaigns by communicating with target markets, organises promotional material for product launches and manages customer service, feedback and support requirements.

#### Jennifer Jones

Jennifer is a project manager who has worked on numerous technical and developmental projects. She has achieved a Diploma of Information Technology (Networking), a Bachelor of Information Technology (Business Analysis) and is a certified associate in project management (CAPM). Jennifer is responsible for all of PrivacyU's business operations including risk management and legal and regulatory requirements.

#### **Josh Cannons**

Josh is PrivacyU's CTO and runs the security research company, Privata. With confusingly strong support for both privacy and openness, Josh explains it best with his quote, "I have nothing to hide, from people I trust". Josh provides market and financial research and analysis for PrivacyU and is in charge of technical development and product design. He has attained Diploma of Information Technology (Networking), a Bachelor of Information Technology (Network Security) and is a registered Private Investigator.

# Appendix B - Competitor Metrics

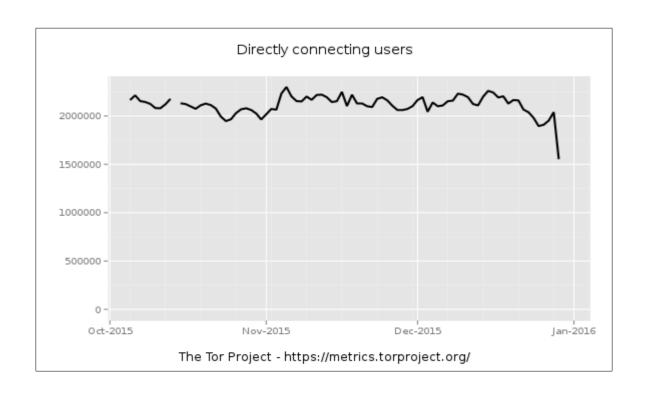
Name	Price	Ongoing	Ease of use	VPN	TOR	DNS	HTTPS	Ad Blocking	Upgradable	Portable	Website
InvisiBox	\$135.00	\$8.00	Easy	Yes	Yes	Yes	Yes	Yes	No	Yes	https://www.invizBox.io
SurfEasy	\$96.00	None	Easy	Yes	No	No	Yes	No	No	Yes	https://www.surfeasy.com/private_browser/
Wemagin	\$402.00	\$8.50	Easy	Yes	No	No	No	No	Yes	Yes	http://wemagin.com/
iCloak	\$68.00	None	Difficult	No	Yes	Yes	Yes	No	No	Yes	https://icloak.org
Webcloak	\$99.00	None	Average	No	No	Yes	Yes	No	Yes	Yes	https://www.webcloak.com/index.php
eBlocker	\$273.00	\$7.50	Average	Yes	Yes	Yes	Yes	Yes	No	No	https://www.eblocker.com/en/
Cujo	\$135.00	\$12.50	Easy	No	No	No	No	No	Yes	No	https://www.getcujo.com/
SafePlug	\$67.00	None	Easy	No	Yes	No	No	Yes	No	No	https://pogoplug.com/safeplug
Shellfire Box	\$95.00	\$7.50	Easy	Yes	No	No	No	No	No	No	https://www.shellfire.net/Box/
incognIt	\$53.00	\$7.50	Easy	Yes	No	No	No	No	No	Yes	https://www.incogniteam.com/en/

VPN	Monthly Price	Yearly Price	Performance	Servers	Locations	Secure	Log Data	Website
HideMyAss	\$4.99	\$59.88	70%	340	190	No	Some	http://hidemyass.com
Express VPN	\$8.32	\$99.84	58%	97	78	No	Yes	https://www.expressvpn.com/
VyprVPN	\$5.00	\$60.00	90%	56	47	Yes	Some	http://www.goldenfrog.com/vyprvpn/
IpVanish	\$6.49	\$77.88	83%	79	60	No	None	https://ipvanish.com/
PureVPN	\$3.75	\$45.00	91%	180	141	Yes	Yes	https://purevpn.com/
Private Internet Access	\$3.33	\$39.96	64%	23	15	Yes	None	https://www.privateinternetaccess.com/
SaferVPN	\$5.99	\$71.88	86%	30	22	No	None	https://www.safervpn.com/
RapidVPN	\$7.90	\$94.80	89%	16	8	No	Yes	http://www.rapidvpn.com/
EarthVPN	\$3.33	\$39.96	65%	150	32	No	None	https://www.earthvpn.com/
StrongVPN	\$4.58	\$54.96	71%	44	22	No	Yes	http://strongvpn.com/

# Appendix C - TOR Metrics

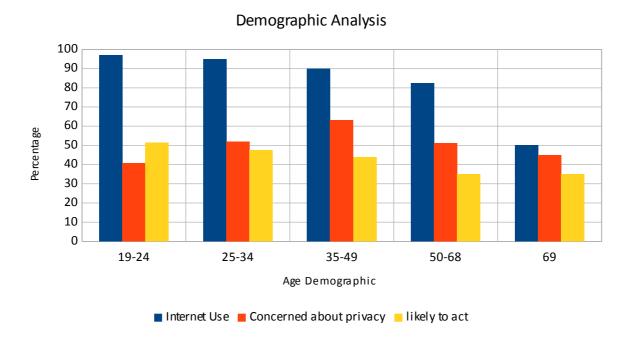
# Average Daily Users of TOR

Country	Average daily users <sup>9</sup>
United States	383692
Russia	235552
Germany	203623
France	137293
United Kingdom	93528
Spain	63410
Italy	63157
Brazil	60122
Japan	51310
Netherlands	47335
Australia	11464



<sup>9</sup> See https://metrics.torproject.org/

# Appendix D - Customer Metrics



Age	Internet Use	Concerned about privacy	likely to act
19-24	97	40.75	51.37
25-34	95	52	47.62
35-49	90	63.25	43.87
50-68	82.5	51.25	35.12
69	50	44.87	35.12