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Non-asset digital platforms for the personal care industry in South Africa

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Non-asset digital platforms for the personal care industry in South Africa

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A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business

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ABSTRACT

This research project was conducted to examine if the South African personal care industry will adopt a non-asset based digital platform business model on creating more economic opportunities for graduate students within the personal care industry in South Africa.

The research was done through two sets of data collection through quantitative survey questionnaires. The one set at understanding the supply-side characteristics necessary for a successful non-asset based digital platform within the personal care industry in South Africa and if the proposed platform business model could be successfully adopted by the supply-side, meaning personal care service providers who deliver services such as beauty, nail treatments, make-up treatments etc.

The second quantitative questionnaire was to understand the characteristics the consumers of personal care services within South Africa would value to adopt the proposed new business model.

Both sets of research revealed that the market is favourable for the adoption of the proposed new business model and will adopt it if it creates more economic benefit for both sides of the platform as well as convenience.

To conclude, the research and frameworks used throughout this research project have highlighted critical characteristics from a platform design as well as the necessary facilitating conditions and characteristics needed for a successful implementation of the proposed transformative business model.

KEY WORDS

Exponential organisations, multisided platforms, personal care services, sharing economy, transformative business model, big data, technology adoption models

DECLARATION

I, Anton van den Berg, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Name: Anton van den Berg Signature: 

Signed at Pretoria, South Africa on the 24th Day of February 2020.

DEDICATION

Not only this paper but the past three years of me pursuing my dream of completing my master's degree in business can only be dedicated to the two most influential and special people in my life. Lindi-Lee, my wife and Amalia my daughter.

Lindi-Lee you are an absolute pillar of strength and motivation, without your support, love and kindness I would not have been able to achieve this. You are my motivation and inspiration always to achieve the best I can, which encourages me always to strive to be a good example and the best person I can be. This achievement is not mine but ours, and I promise to utilise the skills I have acquired through this always to set an example and make a positive impact on our lives as well as the people around us.

I love you and Amalia with every ounce of my being. Words cannot thank the two of you enough.

ACKNOWLEDGEMENTS

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Mr Laurence Beder, my supervisor who guided me and mentored me through this process.

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CHAPTER 1. **INTRODUCTION**

1.1 Purpose of the study

The purpose of this research is to test a new transformative non-asset based digital platform business model in the South African personal care industry. It is to eliminate barriers to college graduates within this profession to enter the workforce. This research will investigate the evolution of the standard business model in the personal care industry.

1.2 Context of the study

The personal care industry in South Africa refers to personal care professionals who deliver personal care services such as hairdressers, nail technicians, barbers, massage therapists and beauty therapists. The traditional business model of this industry was focussed around sole proprietary and businesses ran as a small-medium enterprise or as a micro-enterprise. Hairdressing was one of the first professions in this industry that evolved into a retail model whereby branded hairdressing salons became the norm across malls and retail centres.

In the mid two thousands, the entire beauty industry's business model transformed into the retail model, whereby consumers of these services can walk into any chain outlet across the country and expect precisely the same treatment. This moved the relationship away from being between the consumer and specific personal care professional, to the consumer entering into a long term relationship with the brand. The retail business model also improved the convenience factor for consumers as well as the loyalty programs that were on offer to retain consumers to the brand.

This research is to determine the next phase of the business model transformation by introducing how technology can further improve the convenience factor by changing the model from a "go-to salon" model into a "come to" business model for the consumer.

The transformative business model within this research is to focus exclusively on the personal care service professionals and how to democratise the retail model which is currently dominating the industry, by monopolising the non-asset based digital platform which will allow more freedom to personal care professionals and allowing them to participate as a self-employed service provider on the platform.

Non-asset multisided platforms (Hagiu, 2014) have disrupted many industries in the past decade across the world. Most notably, Uber Technologies (Ross, 2015) which has democratised the taxi industry across the world by using a digital non-asset based platform to allow anyone with a vehicle to sign up and become a ride-hailing taxi driver. The platform acts as an aggregator that connects drivers on the one side of the platform called the supply side, to taxi users on the other side of the platform, which creates the demand side. The key ingredient of the non-asset based digital platform is that it creates a network effect (Hein, Schreieck, Wiesche, Böhm, & Krcmar, 2019), which creates a vast area that can be served. The business model allows for the platform to take a percentage from the profit of each trip that has been made.

Another example which will be referenced throughout this study is Airbnb (Guttentag, 2015) who have significantly impacted the hotel and hospitality industry by using the same business model as the one described for Uber Technologies above.

1.3 Research Problem

This study will investigate how the business model of non-asset based digital platforms can be utilised within the personal care industry in South Africa to conquer the high unemployment rate of 29, 1 percent ("South African unemployment rate," 2019).

Traditionally the personal care service industry is operated through a physical brick and mortar business model; this could be formal through renting a shopfront from a shopping mall or retail centre or running the business from a home-based office. The personal care industry in South Africa changed dramatically when the

Sorbet beauty group (Hawarden & Sutherland, 2012) was launched in 2005 by Ian Fuhr who introduced a new business model in the personal care service industry by creating a national retail chain of beauty salons. Previously the personal care industry was very disparate with small salons which each drove their own value propositions, by running independent businesses.

The Sorbet business model turned the industry around by creating over two hundred retail stores across South Africa, which all deliver precisely the same service at any of the franchises. The value proposition focussed on closing the gap in that independent therapists were good at what they do but did not have the business acumen to grow their businesses (Hawarden & Sutherland, 2012). The Sorbet business model focussed on using technology for an advance marketing information system from which they drove loyalty through analysing their consumer behaviours and drive propositions based on the data to their customer base. This business model had a significant impact on the personal care industry in South Africa and has created thousands of jobs for individuals who wanted to pursue a career in personal care.

The purpose of this research is to investigate the extension and evolvement of a non-asset based digital platform to democratise the large personal care organisations who can only employ a certain number of personal care professionals at a given time, due to limitations created by a retail environment as well as provide personal care professionals an opportunity to become self-employed, self-sufficient and maximise their opportunity to earn. Furthermore, the investigation into the behaviour of the millennial consumer and the millennial worker who are digitally native and entrenched in consuming digital platforms in there every day lives as well as investigating how successfully digital immigrants will accept consuming services in the personal care industry through a non-asset based digital platform.

The research into a new business model based on non-asset based digital platforms is to ensure that the platform creates an environment where it allows personal care professionals to be able to earn from anywhere by being available through the platform to service customers anywhere in a specific proximity area,

without necessarily having access to a physical establishment to deliver the services.

The importance of this study and its significance to employment creation is that every month, between two hundred and five hundred students, graduate from many different personal care colleges across South Africa. These groups find themselves waiting to be employed at a personal care retail chain or independent salon according to the owner of one of the most recognised personal care colleges in South Africa. By creating a platform that is endorsed by the accreditation colleges, graduates can start earning from their trade straight after graduation.

1.4 Research objectives

The objectives for this research is to build a new transformative business model for the personal care industry in South Africa that eliminates the barrier to entry for graduated personal care professionals by implementing a non-asset based digital platform.

Sub Objectives:

1. Determine the characteristics required to ensure the proposed non-asset based digital platform is successful and sustainable.
2. Investigate the willingness to adopt the proposed non-asset based digital platform by the supply side of the platform.
3. Investigate the willingness to utilise the non-asset based digital platform from the consumer/demand side of the platform.

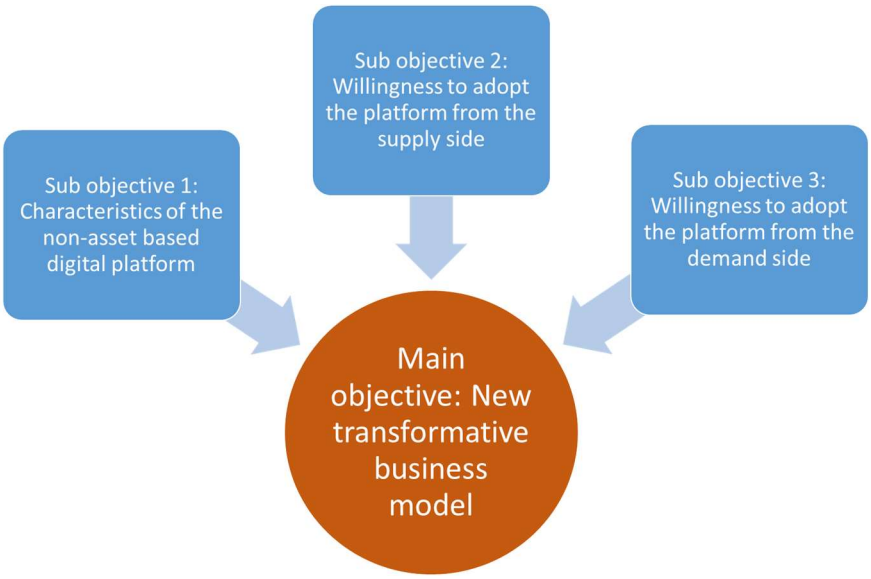


Figure 1: Objective map of this research study

1.5 Significance of the study

The significance of this study is to assess if the personal care services industry in South Africa can benefit from what the fourth industrial revolution (Schwab, 2017) hype has created by stimulating rapid job creation within South Africa allowing qualified personal care professionals the opportunity to earn an income by extending convenience to consumers of this industry.

The strategic framework that will be investigated and used is based on the exponential organisation (Ismail, 2014) which has identified the key concepts unicorn companies such as Uber Technologies and Airbnb used as a business model and succeeded. In the literature review, there will be a significant focus on each of the components in creating the non-asset digital platform business model for the personal care services industry within South Africa.

The impact of the sharing economy on the traditional industries after disruption, and the economic growth it creates in specific industries. The correlation to net employment gain or loss through the introduction of disruptive platforms built on the sharing economy model (Zervas, Proserpio, & Byers, 2017).

Consumer behaviour in the gig economy (De Stefano, 2015) and the environment of the workforce of the future. The consumer behaviour patterns of specifically millennials and what their preferred way of consumption is in the personal care services.

The four areas above are to create the market context of the personal care industry in the fourth industrial revolution and to build a sustainable business model for this industry by understanding both the supply side as well as the demand side of the need for a digital platform in this industry.

There are hundreds of successful non-asset based platforms that are successful globally in many different industries. The purpose of this study is to contribute and stimulate more research in this field to determine if non-asset based digital platforms can be successfully created in South Africa within the personal care industry.

1.6 Delimitations of the study

This research study is aimed at the personal care services industry only where the platform acts as the orchestration between personal care professionals and consumers in this market. Furthermore this research report excludes business inhibitors such as venture funding and leadership.

The study will be focussed on investigating the following four areas:

i. Supply-side of the platform, meaning the personal care service professionals.
ii. Demand-side of the platform, meaning consumers of personal care services.
iii. The non-asset based digital platform, meaning the creation of a sustainable sharing economy business model
iv. Ethical governance of the platform, meaning investigating what fair conditions will be for the platform to operate.

This research project will not investigate other business models alternative to the current and the proposed topic.

1.7 Definition of terms

Big Data refers to information technology solutions that use algorithms to analyse vital information and data sets. The analysed data then creates business intelligence insights that are used to better understand customer behaviour, for example (Chen, Chiang, & Storey, 2012).

Exponential Organisations are organisations whose impact is at least ten times that of the of other organisations within their industry by delivering the value proposition in new ways through using new organisational techniques and technology (Ismail, 2014).

Gig Economy refers to crowd work and "work on demand through an app". This means that in contrast of traditional employment which is based on standard employment by a company with an employer/employee relationship, the internet or a digital application/platform allows for workers to offer their services to a broad community and on-demand. This allows for employees to have no employer, thus self-employed, but benefit from the platform that creates the environment and conditions to sell their services (De Stefano, 2015).

Multisided platforms refer to a platform business which connects third party suppliers to offer goods or services to consumers who purchase these goods through the platform which is independent on both sides (Hagiu & Wright, 2015).

Sharing economy refers to the use of a platform to service broad segments of the community by becoming a market place where on the supply side, individuals can supply their services or assets that are not utilised at all times and on the demand side, individuals that can utilise these services and assets (Zervas et al., 2017).

Transformative business model refers to the transformation of a standard industry business model being transformed by linking new technologies to an industry need in an emerging market (Kavadias, Ladas, & Loch, 2016).

1.8 Assumptions

The following assumptions have been made in this research study:

- The respondents to the research will answer the questions honestly.
- The participants of the study will have easy access to the internet.
- All respondents are proficient in English and understand the concepts described.
- The participants from the supply side are all students or graduates in the personal care services industry.
- The participants from the demand side are all consumers of personal care services.

CHAPTER 2. **LITERATURE REVIEW**

2.1 Introduction

The approach taken for the literature review for this topic will be primarily based on seminal articles, which will include peer-reviewed journals, professional journals, statistics and case studies. Further to this, the geographical reach will be to gain insights from a global perspective on the characteristics of what successful non-asset based digital platform business models are made up of. It is to identify the critical success factors and to test it within the South African market then to understand which aspects need to be adapted to suit this specific market.

The focus of the literature review will be structured in assessing how successful non-asset based digital platforms stimulated the supply side of the business model firstly, followed by the demand side and identify the critical tangible characteristics of the platform that made it a success.

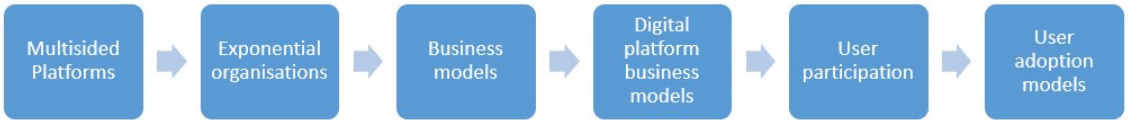


Figure 2: Theoretical model

The theoretical framework is to utilise the various frameworks that will be reviewed in this chapter as per figure above to utilise it and take a data-led approach when gathering the data from the research and identify the key characteristics that would lead to a sustainable new transformative business model for the personal care industry within South Africa.

2.2 Multisided platforms

Multisided platforms are platform businesses that use technology to link suppliers that are affiliated to the platform, with consumers who are affiliated with the platform, directly with each other to consume and supply various goods and services (Hagiu, 2014).

Hagiu argues that both the suppliers and consumers are customers of the multisided platform, as depicted in the figure below.

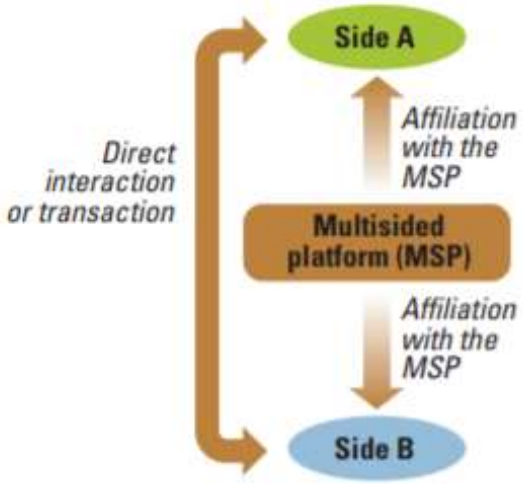


Figure 3: Multisided platform (Hagiu, 2014).

Hagiu argues that successful multisided platform businesses are the exception to the rule. There are four fundamental strategic challenges that need to be considered when building a multisided platform business.

Firstly, is to decide how many sides need to form part of the platform business. When assessing the proposed business model for this research paper, it is a service delivery platform business, and the proposed multisided platform will only serve two sides initially to ensure that the operating model of being a service delivery platform is not cluttered by additional complexity.

Secondly, the actual multisided platform design. The design decisions need to be developed to create value and convenience to both sides of the platform. If

the cost of developing a feature outweighs the proposed benefit, then it should not be developed. The design of successful multisided platforms is simple, easy and quick to use.

Thirdly, is to decide on what type of pricing model to adopt for the multisided platform that will allow the platform to be sustainable, but at the same time create more value to both sides of the platform than what would have been achieved through operating in the current business model.

Lastly, is to look at the governance rules and policies for multisided platforms. Hagiu describes two non-price categories. Rules around who is allowed to join and rules regulating the interactions between the two sides of the platform while consuming the platform.

In the report by Hagiu, three obstacles were identified as barriers to successful multisided platforms:

- The platform needs suppliers as well as consumers affiliated to the platform for any interaction to work. The obstacle is who needs to be added first, the supplier or the consumer.
  Evans (D. S. Evans, 2003) argues that this first obstacle can be overcome by investing from the multisided platform into one side of the platform by offering enough value to that side that it will allow them to participate. In the proposed solution in this research paper, the assumption is made that there is already an incentive for the supply side, being able to participate in the personal care industry through the non-asset based digital platform directly upon completion of their certification — eliminating the barriers such as high start-up costs and the barrier to employment through existing salons.

- The second obstacle is the willingness to adopt the new multisided platform, which addressed more to the consumer or demand side of the platform. Again the motivation for the willingness of consumers to adopt the multisided platform and consume traditional services in an entirely new

way, it is pivotal that convenience and grater value is delivered to the consumer as a vital driver of the multisided platform (Piscicelli, Ludden, & Cooper, 2018).

- The complexity of running a multisided platform. This is because the platform needs to satisfy two different types of customers, which are dependent on each other and the success of the platform. Big data technologies can be used to understand both sides individually as well as comparing causation of what happens in the one side of the platform and how it has an effect on the other side (Keskin & Kennedy, 2015).

Evans and Schmalensee argue that when participation into a multisided platform business is easily reversible, the high volatility puts the existence of the multisided platform business at risk due to the critical success factor of network effects created to allow the platform business to reach critical mass (D. S. Evans & Schmalensee, 2010). From the research done by them, the quality of products and or services need to be of high quality to ensure the continued participation from the demand-side of the multisided platform.

In the proposed transformative business model in this research project, ensuring that the service providers on the supply-side are qualified and openly rated to conform to transparency, the assumption is that this obstacle will be overcome.

2.3 Exponential organisational framework

This portion of the literature review is to highlight and explain the characteristics model that was created by Salim Ismail et al., who have done extensive research within start-up organisations that achieved a one billion dollar market cap in a significantly short amount of time. They have come up with eleven critical areas within these successful businesses and have found the higher the scores are out the eleven distinguishing factors, the greater success these companies have (Ismail, 2014).

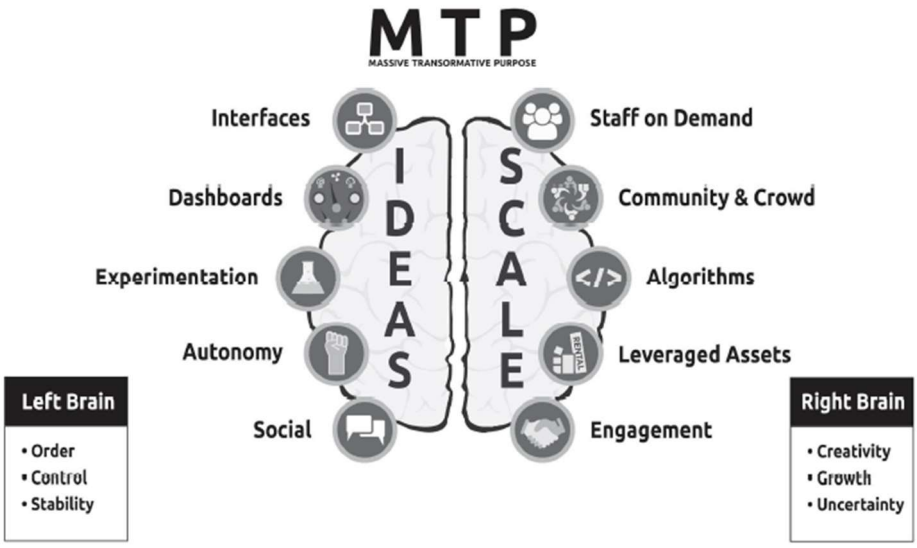


Figure 4: (Ismail, 2014) Exponential organisational business characteristics

2.3.1 *Massive Transformative Purpose (MTP)*

This characteristic is aligned to the traditional vision statement of an organisation, how ether Ismail et al. claim that successful exponential organisations differ in this statement in the way that is shorter but aims to be very aspirational into making a significant impact or disruption in the industries' current format.

Once the MTP is established Ismail et al. divide the remaining characteristics into two separate sets of success criteria, the internal-facing characteristics as described in there a framework in figure 1 as the left brain and the external characteristics referred to as the right brain in the figure. The ten characteristics for successful exponential organisations will be interrogated against the successful non-asset digital platform business such as Uber Technologies who have achieved global success and critical mass by using the same platform globally. The outcome of this exercise is to establish if the same characteristics that apply for global success are the same within the South African context and if there are any additional characteristics or factors that could have a fundamental impact on the success of a non-asset digital platform in South Africa.

2.3.2 *Staff on demand*

In an exponential organisation, staff on demand is a necessity as it gives speed, functionality and agility as it is needed to respond to a fast-changing environment.

2.3.3 *Community and crowd*

This characteristic is focussed on organically reaching critical mass through the attractiveness of the offer. The MTP is a critical component in what the organisation stand for.

2.3.4 *Algorithms*

Algorithms allow for exponential organisations to use big data to aggregate and analyse it to grow and innovate the organisation to favourable customer fit; it allows for a data-led market segment of one.

2.3.5 *Leveraged assets*

This characteristic refers to what extent assets are owned. In ExO's the focus is on only owning scarce resources and leveraging everting else externally.

2.3.6 *Engagement*

Engagement is critical as it refers to how the organisation engage with its users; it amplifies the reach of critical mass and provides feedback.

2.3.7 *Interfaces*

The interface refers to the automation of workflow that is triggered by the algorithm externality, which automates and match the supply side with the demand side. Big Data is a driver that improves the interface over time due to the high volume, variety and velocity of data being processed.

2.3.8 *Dashboards*

Due to the high processing of data in exponential organisations, dashboards refer to the key performance indicators (KPI) and the organisational objectives and key results (OKR) which is able to be measured in real-time. Thus decisions and objectives for where the organisation is going are measured in real-time, and OKR's can be set and tracked on a daily basis which allows the organisation to adapt if needed to ensure the overall OKR's are achieved.

2.3.9 *Experimentation*

Experimentation is defined as using the lean start-up methodology of testing ideas with potentials customers to test the assumptions that the organisational will attract consumers in as well as testing different approaches to ensure success is achieved based on the positive feedback from testing with proposed value with users on both sides of the platform (Blank, 2013).

2.3.10 *Autonomy*

This characteristic refers to the exponential organisation's design being focussed on a flat organisational structure where agile work methodologies are implemented whereby fast reaction is needed, and decision making is time-sensitive to respond to changes that could have a significant effect on the business. The organisational culture and design focus on a bottom-up, self-organising design.

2.3.11 *Social technologies*

This characteristic refers to the use of crowdsourcing and testing ideas using social platforms. Examples of social platforms are Facebook, Twitter and Instagram.

2.4 Business models

2.4.1 *Definition*

The traditional components of a business model comprised of three components. Firstly, the customer value proposition, which is what an organisation offers customers more value, actual or perceived compared to their competition. Secondly, the profit formula which creates value for the organisation through revenue generation and ensuring positive net returns in for-profit organisations and the third element is the crucial resources and elements needed to perform the organisation's activities such as IT-systems, people, technology, equipment etc. (Johnson, Christensen, & Kagermann, 2008).

2.4.2 *Transformative business models*

Transformative business models are associated with technological advancements that allow the business to operate in a way that was not possible before the technology was available, how ether technology on its own does not transform industries on its own. Business model transformation is achieved when the business model is re-engineered to link the use of technology to customer needs; in other words, create more value for the customer.

According to a study done by the University of Cambridge's Judge Business School, they identified six features that are present in a transformative business model, and when the new business model includes more than three of these features, it is classified as a transformative business model (Kavadias et al., 2016).

The six features are:

1. **Personalisation** which refers to the ability to shape a value proposition to the specific need of a customer. An example would be the use of Big Data to drive focussed advertising to consumers on the internet based on their previous search histories.

2. **A closed-loop process** which refers to products that can be recycled and reused, which drives down overall resource costs.
3. **Asset sharing,** which refers to the sharing of costly assets; for example, Airbnb allows owners to rent out there properties or portions of their properties. This allows benefit for the owner who receives money that previously would not have received and the consumer saves on costs and convenience. This is synonymous with non-asset based digital platforms.
4. **Usage-based pricing** which refers to customers only paying for the service when it is consumed rather than paying for an asset or product which are not utilised one hundred percent of the time.
5. **Collaborative ecosystem,** this refers to the platform which allows for different suppliers to interlock with the ecosystem, as well as customers being able to interlock from the demand side into the same ecosystem. The ecosystem connects the supply side and the demand side of the platform.
6. **Agility,** there has been a significant shift in organisational structures in recent years where organisations abandon the hierarchical model and adopt flatter structures that allow for more autonomy to speed up decision making and adapt to the ever-changing market environment.

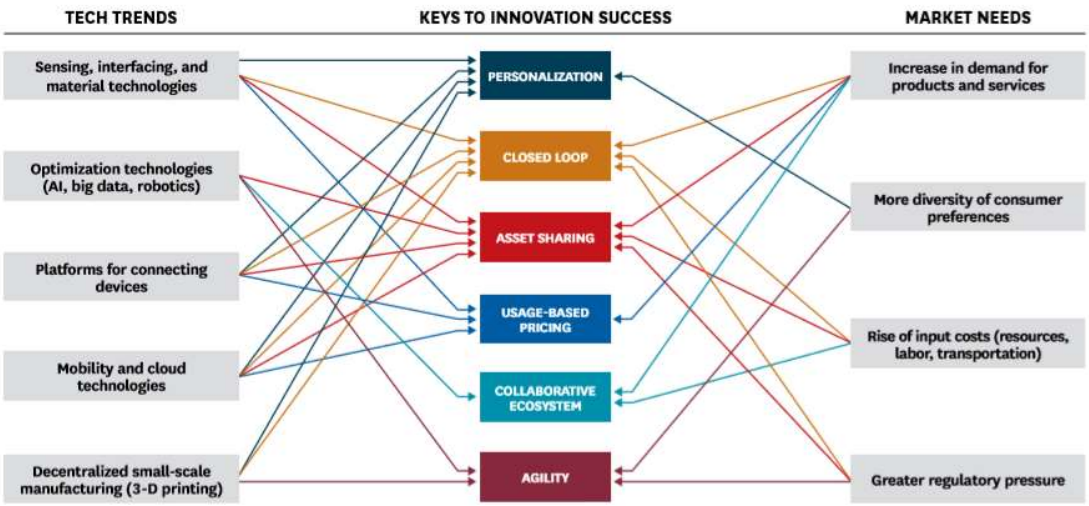


Figure 5: (Kavadias et al., 2016) Transformative business model features

2.5 Non-asset based digital platform business model

In this section, the research is focussed on what a non-asset based digital platform business models are, the rise of this concept and the factors that create the success of these businesses. The key concepts being reviewed and critiqued will be focused on the sharing economy, more specifically peer to peer platform economies (Sundararajan, 2014).

2.5.1 *Platform economy*

The platform economy has taken off due to significant advancements in technology, for example, big data, the internet, cloud computing and software-as-a-service consumption models have significantly broken down barriers to enter specific markets. Amazon is an example of a platform market place that has become the largest retail organisation globally by operating an e-commerce platform which utilises big data to understand their customers better and target their customers with only relevant marketing material to the specific consumer, achieving a customer segment called the segment of one. Amazon has achieved great retail success by transforming the traditional retail model of bricks and retail mortar setups, which is synonymous with high start-up costs.

Similarly, the rise of platform businesses such as Airbnb, where traditionally the business model needed a high capital input through the building and owning property alongside the high maintenance costs of facility management. The Airbnb platform owns no physical property but created a platform where anyone who owns holiday homes, guesthouses or even have spare rooms can advertise and sell accommodation on the platform, whereby the platform takes a small percentage on the transaction fees. The benefit to the supply side of the platform is that the platform gives them global exposure, which in their capacity they would never have been able to afford the marketing costs to have such a broad reach. For the demand side of the platform, the benefits are that they can book anytime from anywhere accommodation through the platform directly with the owner making the experience convenient, as well as having access to a broader range

of accommodation options based on the location they want to visit, creating a competitive market which allows lower prices to the consumer (Zervas et al., 2017).

For the non-asset based digital platform business model, Walker-Smith argues that two fundamental and critical elements contribute to the success of this platform-based business model. Firstly is personal service, whereby goods such as vehicles can be transformed into a personal service in the Uber business model which drives higher utilisation of assets and creating value for both the owner of the asset as well as the users. The second critical success factor is that this platform model is an on-demand, always available and "everywhere" service, which is possible through digital technology (Smith, 2016).

Walker-Smith phrase non-asset based digital platform business as the "uber-all" business model whereby any industry can be transformed into this model where the traditional model of a "go-to" one where consumers went to the suppliers of goods and services re now changing to the "come to" model where consumers demand suppliers to bring their goods and services to them.

2.5.2 *Data-led business models*

A data-led business model is a caveat to successful non-asset based digital platform businesses whereby big data and algorithms are used to better serve the market of the platform by basing decisions on the analysis of the captured data. Being a data-led organisation refer to the ability to rapidly be able to collect, analyse and utilise data to drive decisions, this is another fundamental element of non-asset based digital platform businesses as it is the platform's sustainable competitive advantage and dynamic capability (Shuen, 2018).

Data-led tactics are not new to the internet revolution, as successful organisations, even before the technology age were in majority organisations who understood their markets through continuous research. Technology has enabled more organisations to use data by the various sources of data that can

be purchased or software solutions that are implemented into traditional data storage systems that allow for quicker analysis of data to inform decision making.

Big data as a dynamic capability focus on the volume of the data, the velocity of capturing the data and the variety of the data to assist non-asset based digital platforms in creating sustainable competitive advantage. This is critical to the survival of such a platform business, as initially, the platform will have first-mover advantage, but if the platform does not evolve or a second platform start-up to compete and have a better understanding of the captured market, it could threaten the existence of the first to market platform business (McAfee, Brynjolfsson, Davenport, Patil, & Barton, 2012).

2.6 User participation

The success of the proposed transformative business model in this research paper is dependent on the user adoption from both the supply-side as well as the demand side. Successful non-asset based digital platforms such as Airbnb and Uber Technologies have utilised social media and new digital and IT technologies to successfully reach critical mass through network effects that are created on the platform. The consumption of the platform from both the demand- as well as the supply-side is referred to as collaborative consumption (Lee, Chan, Balaji, & Chong, 2016).

In a “research in progress paper” by Lee, Chan, Balaji and Chong, they argue that there are three themes that stimulate the intention to participate in collaborative consumption based on the benefit-cost framework as researched by Krasnova et al. (Krasnova, Spiekermann, Koroleva, & Hildebrand, 2010).

The framework consists of:

2.6.1 *Benefits of participation in collaborative consumption*

There are two factors under the perceived benefits.

- Firstly, the **enjoyment** of participation in the platform, which is referred to as an intangible benefit.
- Secondly, **economic reward** that refers to the tangible benefits.

2.6.2 *Costs of participation in collaborative consumption*

There are two factors under perceived costs:

- **Privacy risk**, which refers to the participant's data security of personal information that could be maliciously obtained and abused should the platform be attacked by cybercriminals.
- **Security risk**, which refers to participants of the platform on either side falls victim to physical harm or damage to physical assets.

2.6.3 *Technology factor*

- Platform quality, which refers to the physical aspects of the actual platform and the platform features that will be utilised by the participants thereof. The DeLone and McLean model of information system success identifies three success areas (Delone & McLean, 2003):
  - **Information quality**, which in the proposed non-asset based digital platform refer to accurate and up to date information on the availability of personal care service providers, the location-based services to identify which providers in the closest proximity are of the potential consumer of the services.
  - **System quality,** which refers to the actual platform and technology being always on and available to ensure the integrity and reputation f the platform is maintained.
  - **Service quality,** which refers to how the platform business responds and manage queries, incidents and transparency.

Krasnova et al. utilised focus groups to understand why participants in non-asset based digital platforms utilise them and what is identified as the perceived benefits, perceived costs and risks. The outcome of data gathered from the qualitative studies revealed that users find enjoyment through belonging and convenience as the most notable benefits, followed by the economic benefits through which multisided platforms democratises industries which allow for fair competition.

The research has also revealed that the potential privacy and security risks are essential to participants. Thus by mitigation of these risks, the chances of the non-asset based digital platform to succeed become greater.

2.7 User adoption model

In this section, the researcher looked at the most adopted technology adoption model which will be utilised to understand and determine if the proposed non-asset based digital platform will be adopted on the demand side from the users. This is critical to reach critical mass and leverage the network effect to ensure that a thriving market can be created for the supply side, being the personal care service providers.

2.7.1 *Technology acceptance model (TAM)*

The technology adoption model was created by

The TAM framework focusses in two areas of the technology platform. Firstly, the **perceived usefulness** of the technology platform, which is aimed at understanding why users on the demand side would adopt the new non-asset based digital platform in the personal care industry within South Africa. Secondly, it focusses on the **perceived ease of using** the platform. The ease of using the platform has to do with the design and the user experience (UX) which is crucial to the successful adoption of the new non-asset based digital platform business model (Davis, 1993).

2.7.2 *The unified theory of acceptance and use of technology (UTAUT)*

The UTAUT framework focusses on four areas as identified by Venkatesh et al. (Venkatesh, Morris, Davis, & Davis, 2003). Firstly, **effort expectancy** which focusses on the ease of using the platform as was the case under the perceived ease of use construct in the TAM model. Secondly, **performance expectancy** which focusses on the usefulness of the platform. This aligns to the perceived usefulness construct in the TAM model. Thirdly, a **social influence** which refers to the social pressures from friends and family that convinces new participants to use the technology platform. Lastly, **facilitating conditions** which refer to the perception the user has over the supporting resources available to ensure the technology will work and perform as promised.

Venkatesh et al. further argues that certain other factors will have an impact on the four areas of the constructs. Age, gender, experience and voluntariness of use as demonstrated in the figure below illustrating the UTAUT adoption model.

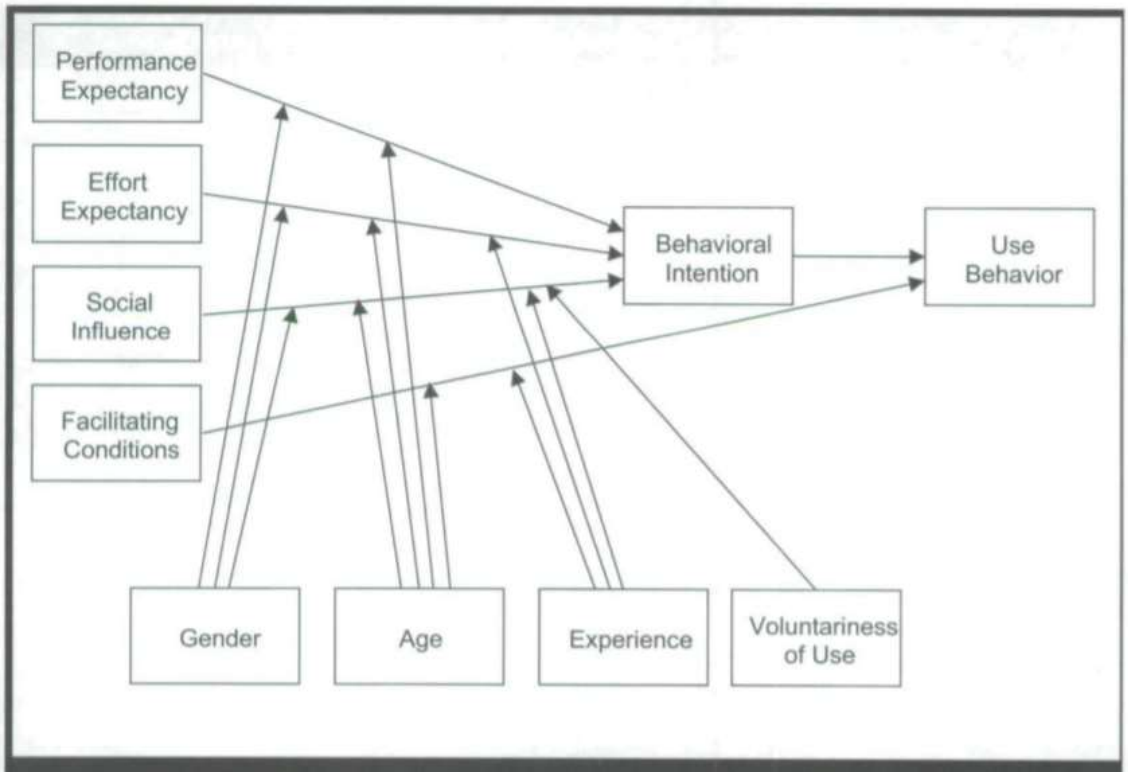


Figure 6: UTAUT model (Venkatesh et al., 2003)

2.7.3 *UTAUT –TAM model*

This model was combined in a research study into nearfield communication-based payments by Khalilzadeh et al. (Khalilzadeh, Ozturk, & Bilgihan, 2017) whereby they combined the UTAUT technology adoption model with the TAM model as discussed in the previous two sections. The key areas that were added were focussed around adding a security construct which focussed on:

- **Perceived risk -** In a research study that was conducted into the prediction of e-services adoption, Featherman and Pavlou (Featherman & Pavlou, 2003) argued that the technology adoption model (TAM) only focussed on the positive impact of technology and not the negative areas. The research conducted by them focussed on the perceived risk factor. The research delivered an outcome that indicated that users of e-services which are closely related to the proposed new business model within this research study and they concluded that performance-based risk and ease

of use are the two key elements to focus on when creating the proposed non-asset based digital platform.

- **Perceived security –** In a research study, that was done by Dong-Hee Shin (Shin, 2009), in an understanding of consumer acceptance within the mobile wallet industry. The study delivered an outcome that relates to privacy security as well as the physical security that is determined to be a vital construct within the adoption of technology.
- **Trust –** the research by Shin outlines that the trust construct is as important as the perceived security in relation to the adoption of the new proposed technology.

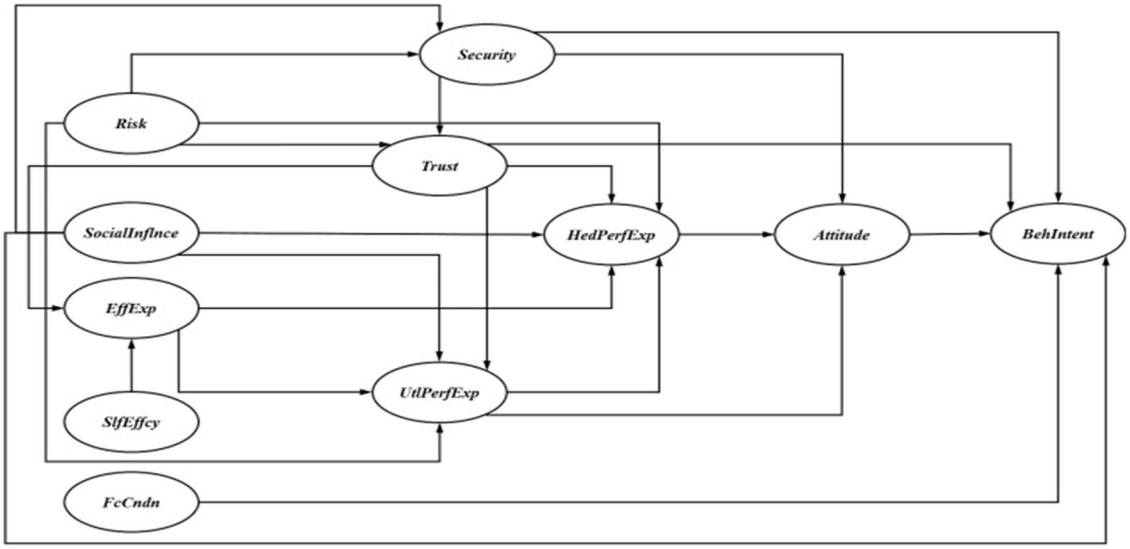


Figure 7 - UTAUT-TAM model (Khalilzadeh et al., 2017)

For this research project, the additional constructs of risk, security and trust form a significant portion to be understood from potential users of the proposed non-asset based digital platform business for the personal care industry within South Africa and will be utilised to conduct the demand-side research.

2.8 Research propositions

The aim of the research is to establish a new transformative business model based on a non-asset based digital platform and the components necessary to allow the proposed new business model to be successful.

Based on the research in this section, the researcher aims to determine that non-asset based digital platforms can transform and disrupt the personal care industry with South Africa, through the use of technological advancements. The platform will be creating additional value for the users in the supply side as well as demand side. This then would be compared to the current method of service consumption in the personal care industry within South Africa.

2.8.1 *Proposition 1*

The researcher aims to prove that the adoption of a multisided non-asset based digital platform within the personal care industry in South Africa will create more value to the supply side on the platform, through eliminating significant operating costs incurred by utilising the traditional business model through bricks and mortar.

2.8.2 *Proposition 2*

The researcher aims to prove that the adoption of a multisided non-asset based digital platform within the personal care industry in South Africa will create more value to the consumers of personal care services in South Africa, through convenience consumption and competitive market pricing created by the proposed non-asset based digital platform compared to the traditional business model utilized within the industry.

2.8.3 *Proposition 3*

The researchers aims to identify specific platform characteristics that will increase the success rate and adoption of implementing the new transformative business model, furthermore the identified characteristics will allow the platform to evolve and become sustainable over time to create greater benefits through the consumption of the supply side as well as the demand side of the proposed new non-asset based digital platform.

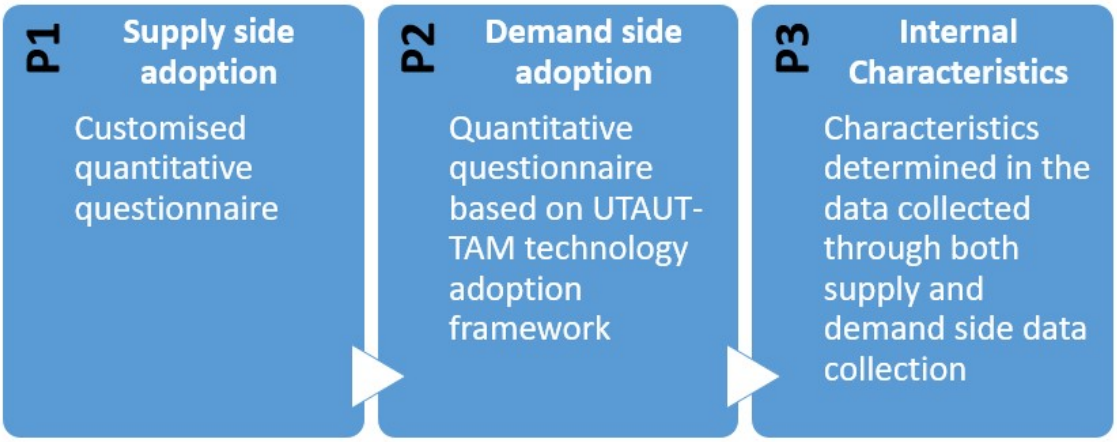


Figure 8: Conceptual framework of this research study

2.9 Conclusion of Literature review

Global start-up organisations have been able to disrupt traditional industries through the combination of using technology trends and successfully mapping them to customer requirements. New technological trends such as Big Data has allowed organisations to use data to drive more informed decision making and react to market disruptions and changes quicker than in the past.

Through assessing various schools of thought on the characteristics and features needed for non-asset based digital platforms to succeed in the sharing economy, these platform businesses need to be agile, focus on only owning the scarce resources such as intellectual property like algorithms and the data generated through the platform. Non-scarce resources should be outsourced.

Key focus areas around the new business model, which is driven through technology is a focussed on creating or adding more value to customers than the previous model offered.

With non-asset based digital platforms, it is fundamentally important to ensure that the actual platform will be adopted by both the demand side as well as the supply side. If only one side or no sides adopt the platform, the platform will fail and create no value.

CHAPTER 3. **RESEARCH METHODOLOGY**

The objective of this chapter is to describe the research methodology employed to test the hypothesis regarding the implementation of a transformative business model within the personal care industry in South Africa. This chapter will also explain the research design, the instrument that will be utilised to gather the research data. Lastly, this chapter will discuss the validity, both external and internal, as well as the reliability to ensure the accuracy of the results.

3.1 Research approach

The research method that will be used to gather the results is a quantitative approach. This approach will be based on a post-positivism knowledge claim, that according to Creswell (Creswell & Creswell, 2017) challenges the traditional notion and that we cannot be positive about our claims when studying the behaviour of humans. The following assumptions anchor this approach:

- Focusses not on proving the hypothesis, but rather “failure to reject”.
- The research is to test the assumptions made by the researcher and then test it to understand which of the assumptions fair true and which need to be removed.
- The collection and analysis of the data collected through the instruments from participants’ shapes knowledge within the area of research.

The researcher will conduct two sets of research:

- Firstly, the supply side of the non-asset based digital platform
- Secondly, the demand side of the non-asset based digital platform.

3.2 Survey design

3.2.1 *Supply-side survey design*

The research design taken in this section of the study is based on a survey that will be utilising a questionnaire format to test a transformative business model grounded by a non-asset based digital platform business model within the personal care industry in South Africa. The quantitative strategy will be case study based as the researcher is exploring the willingness to adopt a new business model in an industry with more than one respondent (Creswell & Creswell, 2017).

3.2.2 *Demand-side survey design*

The research design taken in this section of the research study will be utilising a quantitative research method based on the combination of two technology acceptance models, the unified theory of acceptance and use of technology (UTAUT model) and the technology acceptance model (TAM model) models, thus the UTAUT-TAM model. The questionnaire will be based on the foundation of social research (Bryman, 2016) to understand how participants of the proposed non-asset based digital platform will adopt or fail to adopt the new business model.

3.3 Data collection methods

The data collection method will be done through the use of a web-based questionnaire. The questionnaire will be distributed to potential personal care service providers who would consume the non-asset based digital platform business model.

The main advantages and weaknesses for the use of a web-based survey questionnaire, according to Evans and Mathur (J. R. Evans & Mathur, 2005):

3.3.1 *Advantages*

- To reach a relative sized sample to ensure the credibility of the research
- Provide easy access to potential respondents
- Data is automatically captured, time-stamped which creates data in a format ready to be processed, rather than having to manually capture the data results that could lead to human error.
- The research topic is about the use of a digital platform, which makes a digital survey tool appropriate for the study.
- The sample is controlled to a designated sample only.
- Completeness of the survey, as online survey tools allow for forced responses to ensure error rate is kept to a minimum.

3.3.2 *Weaknesses*

- The sample size can view the survey as junk mail or spam, which will result in a lower response rate, which could jeopardise the sample size.
- The respondents' lack of technical knowledge or experience with web-based surveys to complete the survey.
- The privacy and security issues around storing of data.

Taking the above advantages and weaknesses into consideration, the weaknesses can be overcome by ensuring that the survey link is distributed from a reputable sender. Secondly, it can be argued that the lack of experience is no longer as daunting and valid as a decade ago, due to an exponential increase in digital usage. Finally, to overcome the issues around cybersecurity, the web-based tool Qualtrics (Vijayasarathy & Butler, 2015) will be utilised and the data results will be stored in a secure cloud environment and will be password protected.

3.4 Sample

The sample for this study will be focussed on males and females who are first, qualified service providers within the personal care industry in South Africa. Secondly, in the process of qualifying to enter the personal care industry in South Africa currently attending the Beauty Therapy Institute, which is headquartered in Gauteng but has colleges within the rest of South Africa and Africa.

The Sample as described above is selected based on the judgmental sampling technique (Fogelman & Comber, 2002) which focusses on selecting a specific sample which is actively involved in the personal care industry within South Africa.

The strategy taken in deciding the population is a probability strategy where the population members have a known probability that they will be part of the research study.

3.4.1 *Population*

The population of this study is focussed on the personal care service industry with South Africa, which will include service providers as well as consumers of the services.

3.4.2 *Sample and sampling method*

For this study, the sample will be focussed on South African participation only. The sample of the survey will be distributed with consent from the Beauty Therapy Institute to students' current and past who have agreed to receive information regarding the overall industry and trends.

The sample size for the supply side portion of the research project will be determined based on a mathematical formula with the following three criteria identified by Israel (Israel, 1992):

- The level of precision, also known as the sampling error, which refers to the range in which the actual value of the population is estimated to be. For example and relevance to this research paper, if the level of the precision range is set at 5%, and the respondents' feedback attributes to 70% that will adopt the new business model, the researcher can conclude that between 65% and 75% of personal care service providers will adopt the new business model.
- The confidence level, which refers to the Central Limit Theorem (Kwak & Kim, 2017) that will be used to determine the accuracy of the sample size towards the population as it is not possible to survey everyone in the personal care industry. For this study, the confidence level will be set at 95%.
- The degree of variability, which refers to the distribution in the population. The more homogeneous the population. For this study and in determining the sample size, the researcher will use 0.5 as the maximum variability in the population.

The researcher will use a simplified formula of $\mathrm{n} = \frac{N}{1+N(e)^2}$ where **n** is the sample size, **N** is the population size, and ***e*** is the precision level.

The sample size based on the simplified formula will be:

$$\mathrm{n} = \frac{150}{1 + 150(0.05)^2}$$

$$\mathrm{n} = 109$$

For the sample size to be representative of the population, a total minimum number of 109 participants are required.

The sample size of the demand side will be distributed to students of the University of the Witwatersrand with a minimum response rate of at least one

hundred and twenty respondents. The assumption is that the majority of the students from the university access personal care services in their daily lives.

3.5 The research instrument

3.5.1 *The supply-side*

As discussed previously, the instrument selected will be a web-based questionnaire with multiple choice answers for each question. The construct of the questionnaire has been set up in eight different categories:

- **Category one** focusses on the demographics of the responded and determining how they are relevant to the personal care industry.
- **Category two** focusses on the broad understanding of what a non-asset based digital platform is
- **Category three** is directed dynamically to ask questions related to self-employed salon owners to understand their business characteristics in the environment they operate in.
- **Category four** is directed dynamically to participants who are employed by a small-medium enterprise (SME) salon to understand the characteristics surrounding their place in the personal care industry.
- **Category Five** is directed dynamically to participants who are employed in a large Salon retail group to understand the characteristics of how they are employed in the personal care industry.
- **Category six** refers to identified questions to test specific characteristics the newly proposed business model will have based on a non-asset based digital platform. This is a critical part of understanding the success criteria of transforming the current business model into a non-asset based digital platform.
- **Category seven** focusses on statements by fair.work (Fairwork, 2019) which is a research project based on identifying and rating platform business out of ten to determine the ethicality and fair treatment of platform participants.

- **Category eight** is the completion section which asks for further research participation in the future, which is voluntary.

Based on the research done by Lohrke, Holloway and Woolley in the field of using conjoint analysis to test ideas in entrepreneurial research (Lohrke, Holloway, & Woolley, 2010) the researcher has decided to use a conjoint analysis approach to conduct the collection of a decompositional research data. This technique allows the researcher to test characteristics unique to the new non-asset based digital platform business model within the personal care services industry in South Africa.

Before the questionnaire is distributed to the selected sample within the population, it will be tested in a pilot project with ten participants with the opportunity for the selected pilot participants to pose questions based on the understanding of the statements and content of the questionnaire. This will assist in ensuring the questionnaire content will be refined to be understandable by all the participants.

Upon the successful approval of this research proposal, the web-based questionnaire will be distributed to the selected sample within the selected population by latest 1 September 2019, and the respondents will be required to respond by no later than 15 October 2019. This is to allow enough time for the analysis and interpretation of the results.

3.5.2 *The demand side*

The research instrument that will be utilised for the demand side data gathering will be in the form of a web-based questionnaire that will measure the propensity to adopt the proposed non-asset based digital platform business model as proposed for the personal care industry within South Africa. The various constructs of the UTAUT and TAM model will be utilised based on a seven-point Likert scale (Allen & Seaman, 2007).

3.6 Procedure for data collection

The data will be gathered by distributing the web-based survey questionnaire on the Qualtrics platform to respondents using email by the selected colleges who was approached and agreed to distribute amongst their internal community of students past and present.

The reason for this approach is that that the college in itself is reputable within the personal care industry and that the researcher believes that the chances of successful respondents will be higher when the distribution is done through the professional body. Furthermore, with the permission of the professional institutions to distribute the web-based survey questionnaire on campuses to create awareness and greater reach.

3.7 Data analysis and interpretation

The data will be analysed using data analytics techniques to interpret the responses. The output of the questionnaire will be exported from Qualtrics into a Microsoft Excel spreadsheet, and the analytical platform that will be utilised will be the IBM SPSS software.

The techniques that will be used is descriptive statistics to analyse and summarise the data. Within the descriptive analysis (Williams, 2007), the questionnaire has been designed to utilise correlation methods in sections three, four and five to compare the different characteristics of how personal care professionals interact with the personal care industry.

Furthermore, the Chi-square technique (Sharpe, 2015) will also be used to determine the comparison of the expected outcome that will be determined through the hypothesis development to determine which group of respondents will be more likely to adopt the new transformative business model.

The ANOVA (Miller Jr, 1997) test will be utilised to determine the significance of the survey for the supply-side survey to establish if there is an acceptable

variance between how they consume digital services to then establish if the null hypothesis is rejected or accept the alternative hypothesis.

3.8 Limitations of the study

The following limitations are anticipated:

- Inaccuracy could occur due to participants not completing the questionnaire.
- If questions are misinterpreted, it could lead to the data being compromised and inaccurate analysis and interpretation of the data. The limitations will be addressed by the use of the pilot questionnaire.

3.9 Validity and reliability

The validity of the questionnaire is measured into how well the outcomes of the responses answer the research objective. The reliability of the results of the questionnaire refers to the consistency of the responses from the questionnaire (Golafshani, 2003).

3.9.1 *External validity*

External validity refers to the application of research in other research contexts (Bracht & Glass, 1968). The factors identified that could have an impact on the external validity of this research are the time lapse between when the data the technology paradigm is ever-changing.

This factor has been overcome, as stated earlier that the data will be collected over six weeks and analysed within ninety days after the collection of the data.

A further factor is to identify if this research could be utilised in other contexts outside the personal care industry within South Africa. The researcher argues that the research obtained in this project is identifying a new transformative business model based on a non-asset based digital platform, which is believed

to identify the business model within other industries outside of the personal care industry.

3.9.2 *Internal validity*

The internal validity deals with factors that influence the degree of control of the study, such as the actual instrument used and the design of the research instrument (Slack & Draugalis Jr, 2001). Factors that could affect the internal validity are the experimental mortality that addresses the dropout rate of participants who do not complete the questionnaire.

This factor is overcome by utilising a mathematical approach to determine the minimum required responses to meet the criteria of representing the population. Another factor is focussed around the selection threat, which refers to how the sample of the population has been selected, which could cause the results to be inaccurate. This factor has been overcome by choosing an intended probable and specific population within the personal care industry in South Africa.

3.9.3 *Reliability*

The reliability is referred to how strongly the questionnaire is designed to ensure that consistent results are captured (Golafshani, 2003) with a specific reference to the personal care industry in South Africa. Cronbach's Alpha will be utilised as the instrument to measure the reliability of the data collected.

3.10 Ethical considerations

According to Resnik (Resnik, 2011), principles such as honesty, objectivity, integrity, openness and confidentiality are essential in research to ensure that the research is conducted ethically. This is the foundations of this research project in collecting and interpreting the data to ensure accurate analysis and recommendations can be derived without compromising the confidentiality of participants and to share the results of this research study openly.

- Honesty and integrity in this research study refer to the researcher's work, whereby all literature review, interpretation, collection of data and recommendations are to be the own work of the researcher and will be confirmed by the utilisation of the Turnitin instrument that measures for plagiarism.
- Objectivity in this research study is achieved through the use of multiple analytical instruments to ensure the data is not skewed to drive a specific narrative (Buchanan, Henig, & Henig, 1998).
- The integrity and openness of this research study will be adhered to by the instrument tool used to collect the data, which will research data will be made available to any participant who requests for the results of this study.
- Lastly, the confidentiality of this research study will be adhered to by choice of the research instrument which is set up to collect the data anonymously and the data collected in this research study will be stored on a private computer which is password protected.

This research report will also adhere to the ethical guidelines as set out by the University of the Witwatersrand to ensure that the researcher complies with the rigours ethical requirements as set out by the university.

CHAPTER 4. **PRESENTATION OF RESULTS / FINDINGS**

4.1 Introduction

This chapter is to present the results obtained from the data collected through two sets of quantitative research questionnaires by using the analysis techniques as described in the previous chapter.

The questionnaires were distributed through the Qualtrics online distribution tool that allowed for anonymous responses to ensure that the privacy of the participants was well protected. The data can only be accessed through a password known only to the researcher, and the results are stored on a personal computer with a copy of the data in the Qualtrics cloud environment.

The current study is focused on digital platforms with the aim of understanding the digital usage of people residing in South Africa, whether citizens or not. The researcher empirically investigates factors and perception of digital platforms from both the demand side as well as the supply side for a transformative business model in the personal care services within South Africa.

The study was quantitative in nature and used an exploratory research design. Data collected through questionnaires were stored in SPSS awaiting data analysis. Data were analysed through descriptive statistics, correlation tests, chi-square test and ANOVA tests.

Descriptive statistics were used to understand the data variables to facilitate further analysis, while correlation analysis was used to check for significant relations between variables. Chi-square test was used to examine whether categorical variables are independent or dependent on each other. ANOVA test was used to examine the difference between the variables.

The results of the analysis were presented in well-labelled tables and discussed in the results section below.

4.2 Results pertaining to Proposition 1 – Supply-side

4.2.1 *Category 1: Descriptive statistics*

Table 1 below gives the summary statistics of some of the demographic information of the respondents. It can be observed that 46.8% were between 18 and 24 years, 33% were between 25 and 34 years, 17.4% were between 35 and 44 years and 2.8% were between 45 and 54 years. Majority of the respondents were female (96.3%) while the rest (3.7%) were male. Further, the majority (44%) of the respondents had grade 12 as their highest level of education. Majority of the respondents were white in race (37.6%).

Table 1 – Respondent's demographics

Age		
	Frequency	**Percent**
18 -24	51	46.8
25 - 34	36	33
35 - 44	19	17.4
45 - 54	3	2.8
Gender		
	Frequency	**Percent**
Male	4	3.7
Female	105	96.3
Highest Education		
	Frequency	**Percent**
Grade 0 - 7	2	1.8
Grade 8 - 11	11	10.1
Grade 12	48	44
University degree	12	11
Other	36	33

Population group		
	Frequency	**Percent**
African	36	33.0
White	41	37.6
Indian	10	9.2
Asian	1	.9
Coloured	21	19.3

4.2.1 *Category 2 - Understanding of non-asset based digital platforms*

a. *To hire a taxi ride on demand*

From table 2.1 below it can be observed that majority of the respondents (84.6%) have used digital platforms to hire a taxi ride. Only 15.4% have not used digital platforms to hire a taxi ride

Table 2: Hire a taxi ride

	Frequency	**Percent**
Yes	88	84.6
No	16	15.4

b. *To book accommodation on demand*

61.5% have used digital platforms to book an accommodation on demand while 36.5% have no used the digital platforms to make such a booking.1.9% of the respondents did not know what the booking service was.

Table 3: Use of digital platforms to book accommodation

	Frequency	Percent
Yes	64	61.5
No	38	36.5
Don't know what this service is	2	1.9

c. ***Frequency of using digital platforms***

10.6% of the respondents use digital platforms daily,1.9% use them at least 4 to 6 times a week,4.8% use them 2 to 3 times a week and 6.7% use digital platforms only once a week. Majority of the respondents (62.5%) use digital platforms occasionally while 13.5% never use digital platforms.

Table 4: Frequency of usage

	Frequency	Percent
Daily	11	10.6
4-6 times a week	2	1.9
2-3 times a week	5	4.8
Once a week	7	6.7
Occasionally	65	62.5
Never	14	13.5

d. *Use of social media to follow news and trends*

We live in a modern world today, and hence almost everyone has either a phone or a computer. Results in Table 2.4 below show that majority (72.1%) of the respondents use social media daily to follows news and trends while the minority (19%) use social media once a week for this purpose.4.8% and 11.5% use social media to follow news 4 to 6 times a day and 2 to 3 times a day respectively.

Table 5: Using social media platforms to follow *the* news

	Frequency	**Percent**
Daily	75	72.1
4-6 times a week	5	4.8
2-3 times a week	12	11.5
Once a week	2	1.9
Occasionally	10	9.6

e. *Online shopping*

This research item was used to capture the percentage of online shopping done by the respondents. From the results in table 2.5 below, it can be observed that 26.9% of the respondents do not do online shopping. 0-25% shopping of 53.8% of the respondents is done online, while 26 to 50% shopping of 11.5% of the respondents is done online. The percentage of shopping done online for 5.8% and 1.9% of the respondents is between 51-69% and 70% and above respectively.

Table 6: Percentage of shopping done online by respondents

	Frequency	Percent
0%	28	26.9
0 - 25%	56	53.8
26 - 50%	12	11.5
51 - 69%	6	5.8
70% +	2	1.9

4.2.2 *Likelihood consider utilizing a digital platform as a business model to sell your personal care services (Characteristics)*

From table 2.6 below it can be observed that 72% were very likely, 21.5% were likely, 5.4% were not that likely, and 1.1% were not at all likely to consider utilizing a digital platform as a business model to sell your personal care services.

Table 7: Likelihood to use the platform to sell personal care services

	Frequency	Percent
Very likely	67	72
Likely	20	21.5
Not that likely	5	5.4
Not at all	1	1.1

a. ***Likelihood to use a platform if it is accredited or endorsed by a professional institution***

From table 2.7 below it can be observed that 59.1% were very likely, 32.3% were likely, and 8.6% were not that likely to use the platform in question even if it was accredited by a professional institutional.

Table 8: Likelihood to use *the* platform if accredited only

	Frequency	**Percent**
Very likely	55	59.1
Likely	30	32.3
Not that likely	8	8.6

b. ***Likelihood to use a platform that connects customers to services based on location proximity***

From table 2.8 below it can be observed that 61.3% were very likely, 33.3% were likely, 3.2% were not that likely, and 2.2% were not at all likely to use platform that connects customers to services based on location proximity.

Table 9: Likelihood to use *the* platform to connect to customers

	Frequency	**Valid Percent**
Very likely	57	61.3
Likely	31	33.3
Not that likely	3	3.2
Not at all	2	2.2

c. *Barriers inhibiting the utilization of the platform*

There were 3 main barriers that were discussed to hinder the usage of the platform, which were transport, security, technology and data usage. From table 2.9 below it was observed that for the majority of the respondents (50.5%),security was the barrier hindering them from using the platfrom.24.5%, 15.1% and 9.7% had transport, technology and data usage as the barriers hindering them from utilizing the platform.

Table 10: Barriers hindering utilization of the platform

	Frequency	**Percent**
Transport	23	24.7
Security	47	50.5
Technology	14	15.1
Data usage	9	9.7

d. *Likelihood to abandon traditional business operations and focus on trade*

Based on the descriptive statistics below, it is clear that on average, approximately 64 respondents were likely to abandon the traditional business model and focus on their trade as per the prescribed platform business model.

Table 11: Likelihood to focus only on trade

Minimum	**Maximum**	**Mean**	**Std. Deviation**
3.00	100.00	64.2872	25.56149

e. ***Acceptable payment structure***

A commission that would be fair towards the platform if it takes care of all the business operations and respondents only have to accept bookings and execute the bookings.

From table 2.11 below it can be observed that majority of the respondents would give 15% commission to the platform (27.7%) of it took care of their business operations. Further, 19.1%, 20.2%, 10.6% and 22.3% of the respondents thought that it would be fair to give commission worth 10%, 20%, 25% and 30% to the platform if it would handle their business operations then they would handle the rest.

Table 12: Frequency distributions of commissions

	Frequency	**Percent**
10%	18	19.1
15%	26	27.7
20%	19	20.2
25%	10	10.6
30%	21	22.3

4.2.3 *Fair working conditions of the platform*

Based on the results in table 2.12 below, it can be observed that majority of the respondents agree (44%) that workers, irrespective of their employment classification, should earn a decent income in their home jurisdiction after taking account of work-related costs. Additionally, the majority of the respondents strongly agree (51.6%) that platforms should have policies in place to protect workers from physical, reputation and financial risks arising from the processes of work. Further, most of the respondents strongly agree (62.6%) that terms and

conditions of the platform should be transparent, concise, and provided to workers in an accessible form. 61.5% (Majority) of the respondents strongly agree that there should be a documented process through which workers can be heard, can appeal decisions affecting them, and be informed of the reasons behind those decisions. Most of the respondents (47.3%) strongly agree that platforms should provide a documented process through which worker voice can be expressed. Irrespective of their employment classification, workers should have the right to organize in collective bodies, and platforms should be prepared to cooperate and negotiate with them.

Table 13: Summary statistics of fair working conditions of the platform

	Earn decently	**Protection policies**	**Terms and Conditions**	**Workers heard**	**Voices expressed**
	Percent				
Strongly agree	42.9	51.6	62.6	61.5	47.3
Agree	44.0	41.8	30.8	33.0	39.6
Somewhat agree	11.0	4.4	5.5	3.3	8.8
Neither agree nor disagree	1.1	2.2	1.1	1.1	3.3
Disagree	1.1				
Somewhat disagree				1.1	1.1

4.2.4 *Correlation Analysis*

Correlation analysis is a statistical technique used to examine the nature of the relationship between two or more variables in terms of size and direction. In the current study, correlation analysis was used to examine the relationship between the use of digital platforms to book accommodation and hire a tax and age and gender of the respondents. The correlation results are as shown in table 3 below.

From the correlation analysis below it can be observed that using digital platforms to hail a taxi ride correlates positively, weakly and significantly with using digital platforms to book accommodation (330,p=0.001) and frequency of using digital platforms(339,p<.001).Further, the use of digital platforms to book an accommodation correlates negatively, weakly and significantly with online shopping(0.319,p=0.024).Frequency of using digital platforms correlates negative, moderately weak and significantly with online shopping(-0.360,p<.001).Use of digital platforms to follows news and trends correlates negatively, weakly and significantly with online shopping (-0.228,p=0.020).Capacity did not correlate significantly with any variable.

Table 14: Correlation analysis results

		1	2	3	4	5	6	7
Taxi	Pearson Correlation	1						
	N	104						
Accommodation	Pearson Correlation	.330	1					
	Sig. (2-tailed)	.001						
	N	104	104					

		1	2	3	4	5	6	7
Frequency	Pearson Correlation	.399	.185	1				
	Sig. (2-tailed)	.000	.060					
	N	104	104	104				
News and trends	Pearson Correlation	.050	.122	.131	1			
	Sig. (2-tailed)	.612	.219	.183				
	N	104	104	104	104			
Online shopping	Pearson Correlation	-.099	-.222	-.360	-.228	1		
	Sig. (2-tailed)	.316	.024	.000	.020			
	N	104	104	104	104	104		
Capacity	Pearson Correlation	.001	-.162	.087	.002	.072	1	
	Sig. (2-tailed)	.996	.103	.387	.988	.472		
	N	102	102	102	102	102	103	
Fair Conditions	Pearson Correlation	.027	-.017	.064	.105	-.088	.035	1
	Sig. (2-tailed)	.800	.870	.549	.323	.405	.745	
	N	91	91	91	91	91	91	91

4.2.5 *Chi-Square tests*

Chi-square test is a statistical technique used to explore whether there is an association between categorical variables. In the current study, chi-square statistics were used to examine whether there was an association between the usage of social media to follow news and trends and age of the respondents. The null hypothesis for the test was that there is no association between the usage of social media and age. The results of the analysis are as shown below. The Pearson chi-square test statistic was 16.008 and had a P-value of 0.191.These results were computed using 12 degrees of freedom. Since the P-value was more significant than 0.05, the null hypothesis failed to be rejected hence independence between the usage of social media and age was assumed.

Table 15: Chi-square test results

	Value	**df**	**Asymp. Sig(2-sided)**
Pearson Chi-Square	16.008[a]	12	.191
Likelihood Ratio	13.806	12	.313
Linear-by-Linear Association	1.399	1	.237
N of Valid Cases	102		

4.2.6 *ANOVA Test*

ANOVA test was used to examine whether there is a difference in the percentage of online shopping done online and the employment status of the respondents. The null hypothesis for the test was: There is no difference in the percentage of shopping done online across the employment status of the respondents. From table 5 below, it can be observed that the ANOVA F test statistic was 1.737 with

a P-value of 0.164.Since the P-value was more significant than 0.05, the null hypothesis failed to be rejected.

Table 16: ANOVA test results

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.887	3	1.296	1.737	.164
Within Groups	73.103	98	.746		
Total	76.990	101			

4.3 Results pertaining to Proposition 2 – Demand-side

4.3.1 *Descriptive Statistics II*

Table 6 below gives the demographic information of the study sample. It can be observed that majority of the respondents were between the ages of 18 and 24 years (61.1%) and were female (61.1%).Further, 0.3%, 46.9% and 46.4% of the respondents had grade 0-7, grade 12, and university degree as their highest level of education.39.8% of the respondents were self-employed, 13.5% has a small business, and 46.7% were in the corporate sector.

Table 17: Summary statistics of the sample demographics

Age		
	Frequency	**Percent**
18 -24	700	61.1
25 - 34	268	23.4
35 - 44	121	10.6
45 - 54	46	4.0
55+	10	0.9
Gender		
	Frequency	**Percent**
Male	445	38.9
Female	700	61.1
Education		

	Frequency	Percent
Grade 0 - 7	3	.0.3
Grade 12	536	46.9
University degree	531	46.4
Other	74	6.5
Employment		
	Frequency	**Percent**
Self-employed	265	39.8
Small business	90	13.5
Corporate	311	46.7

4.3.2 *Rating the Platform*

a. *Expected Performance*

From table 7.1 below, it can be observed that majority of the respondents agree that they would use the platform as an alternative to traditional platforms (38.4%), find it useful (50.4%), will increase accessibility to personal care (44.9%) and will offer a variety of personal care services (48.8%).There on them overall, respondents agree that the platform will be a good one.

Table 18: Expected performance of platforms

	Alternative	Usefulness	Accessibility	Variety
	Percent			

	Alternative	Usefulness	Accessibility	Variety
Strongly disagree	2.5	2.2	1.8	1.6
Disagree	2.9	1.4	2.6	1.6
Somewhat disagree	3.7	2.0	2.0	1.6
Neither agree nor disagree	14.9	10.1	8.2	10.7
Somewhat agree	25.7	17.4	2.3	17.5
Agree	38.4	50.4	44.9	48.8
Strongly agree	11.8	16.6	17.3	18.1

b. ***The effort of Using the Platform***

Majority of the respondents agree that the learning to use the application would be easy for them (38.1%) and would help them find the information they are looking for (42.2%).40.2% of the respondents find the user interface clear and intuitive and think it would be easy to use (45%).

Table 19: Ratings on using the platform

	Easy to operate	Sufficient Info	User interface	Ease to use
	Percent			
Strongly disagree	1.0	1.2	1.6	1.7
Disagree	1.2	.4	.8	1.0
Somewhat disagree	2.4	1.8	.8	1.2
Neither agree nor disagree	10.7	13.8	18.2	13.7
Somewhat agree	21.8	25.1	25.4	20.1
Agree	38.1	42.2	40.2	45.0
Strongly agree	24.8	15.5	12.9	17.2

c. ***Social Influence***

From the results in table 7.3 below, it can be observed that people who are essential to the majority (30.6%) of the respondents neither agree nor disagree that they should use an application that is convenience. Additionally, people who influence the behaviour of the majority of the respondents neither agree nor disagree that respondents should use an application that is convenient

(30.7%).For the majority of the respondents (31.6%) people whose opinion they value agree that they should use a convenient application.

Table 20: Rating on the convenience of application

	Important	**Influence Behaviour**	**Valued Opinions**
	Percent		
Strongly disagree	3.0	3.7	3.1
Disagree	6.7	6.6	5.8
Somewhat disagree	3.2	4.5	6.0
Neither agree nor disagree	30.6	30.7	27.7
Somewhat agree	18.1	17.7	17.3
Agree	29.6	28.9	31.6
Strongly agree	8.7	7.8	8.5

d. ***Facilitating conditions to use the application***

Majority of the respondents strongly agreed that they have all the necessary resource to use the application (47.2%) while the minority disagreed with this claim (1%).Majority of the respondents(38.4%) agreed that they have sufficient knowledge to use the application while 2.1% strongly disagreed that they are knowledgeable enough to use the application.

Table 21: Facilitating conditions to use the application ratings

	Necessary Resources	**Knowledgeable**

	Percent	
Strongly disagree	1.9	2.1
Disagree	1.0	3.4
Somewhat disagree	2.1	2.3
Neither agree nor disagree	4.2	8.2
Somewhat agree	6.7	13.0
Agree	37.0	38.4
Strongly agree	47.2	32.6

e. ***Security and risk***

Security and risk were measured using 7 items (Q29_1 to Q29_7).In order to analyse the variable, the average of the items was used, and the results are as shown in table 7.5 below. From this table, it is clear the on average the respondents agree (5.6449) that they go for an app that is secure and free of risk.

Table 22: Summary statistics of overall security and risk of platform

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Overall Security	465	1.00	7.00	5.6449	1.03442

f. ***Experience***

From the results in table 7.6 below, it can be observed that majority of the respondents agree that using the platform is fun (29.6%) and enjoyable (31.1%).Majority of the respondents neither agree nor disagree (32.1%) than using the app will be very entertaining

Table 23: Experience of using the platform

	Fun	**Enjoyable**	**Entertaining**
	Percent		
Strongly disagree	.8	.6	1.7
Disagree	2.3	1.3	1.9
Somewhat disagree	4.8	4.2	6.5
Neither agree nor disagree	28.4	27.3	32.1
Somewhat agree	24.4	25.8	24.9
Agree	29.6	31.1	24.9
Strongly agree	9.6	9.7	8.0

g. ***Price***

Price is always the key issues that customers look at first when purchasing either goods or services. From the results in table 7.7 below, it can be observed that majority of the respondents agree (38.6%) that the application allows for more competitive pricing and is worth their money (40.8%).

Table 24: Price of the application

	Competitive price	**Worth**
	Percent	
Strongly disagree	1.7	1.3

	Competitive price	Worth
Disagree	2.7	.6
Somewhat disagree	3.7	4.0
Neither agree nor disagree	15.9	15.7
Somewhat agree	20.2	17.8
Agree	38.6	40.8
Strongly agree	17.1	19.9

h. ***Habit***

From table 7.8 below, it can be observed that majority of the respondents somewhat agree that they would let the usage of the application be a habit (27.8%).Most of the respondents agree that using mobile phone applications is something they do without thinking (30.8%).

Table 25: Habitual usage of the application

	Habit	Without thinking
	Percent	
Strongly disagree	2.1	3.6
Disagree	3.1	4.6
Somewhat disagree	5.6	6.3
Neither agree nor disagree	17.1	11.5

Somewhat agree	27.8	19.3
Agree	32.7	30.8
Strongly agree	11.7	23.9

4.3.3 *Correlation analysis*

From table 8 below, it can be observed that the majority of the features of the platform were significantly related to each other. Security and risk were positively, strongly/highly and significantly correlated with all other features except social influence (0.284).Further, the expected performance was positively, strongly/highly and significantly correlated with all other features except social influence (0.364).Additionally, effort, facilitating conditions, experience, habit and price were strongly/highly, positively and significantly (all p values were less than 0.05, p<.001) correlated with each other.

Table 26: Correlation analysis

		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Security	Pearson Correlation	1							
	N	465							
Expected Performance	Pearson Correlation	.546	1						
	Sig. (2-tailed)	.000							
	N	450	488						

		1	2	3	4	5	6	7	8
Effort	Pearson Correlation	.574	.516	1					
	Sig. (2-tailed)	.000	.000						
	N	447	461	476					
Influence	Pearson Correlation	.284	.364	.353	1				
	Sig. (2-tailed)	.000	.000	.000					
	N	457	462	462	478				
Facilitating Conditions	Pearson Correlation	.555	.423	.630	.243	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	N	453	456	457	466	473			
Experience	Pearson Correlation	.463	.439	.388	.426	.289	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	N	454	453	450	458	455	470		
Price	Pearson Correlation	.516	.474	.432	.317	.466	.428	1	

		1	2	3	4	5	6	7	8
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
	N	458	459	456	463	461	465	476	
Habit	Pearson Correlation	.404	.483	.460	.416	.423	.430	.480	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	458	459	457	465	460	464	472	477

4.4 Results pertaining to Proposition 3 – Characteristics of the internal non-asset based digital platform for the personal care industry within South Africa

Through the two sets of data collection and analysis, the various characteristics are identified based on positive responses from respondents and will be discussed in the following chapter.

4.5 Summary of the results/findings

The data analysis above was conducted to shed light on the demand and supply side of a proposed non-asset based digital platform business model for the personal care industry within South Africa.

The data was analysed empirically with the aim of understanding what triggers the demand and supply of digital platforms among different types of people such as characteristics that will attract personal care services providers as well as consumers who will adopt the proposed platform as an alternative to the

traditional retail and bricks and mortar business model currently being in place. Demographic information such as age, education and employment status were incorporated into the current study. Based on the data analysis conducted, it was concluded that people would adopt a digital platform that they perceive to be secure, risk-free, worth their money, convenient and that is easy to use.

There exists a significant statistical relationship between the usages of digital platforms to book accommodation and hire a taxi on-demand, which were used in the research to determine the adoption in the South African market to use non-asset based digital platforms.

All the respondents used were adults (above 18 years old) and hence the responses were considered mature, age-specific and gender-specific.

Additionally, the findings proved that age, gender and employment status have no influence on the usage of digital platforms to either hire a taxi or book accommodation. Majority of the respondents would choose to use the proposed non-asset based digital platform as a preferred business model in the personal care industry, especially for services such as nails, hands and feet treatments.

The two sets of data revealed a transparent target market, characteristics that will exponentially trigger the adoption of the platform that will allow for the platform to be successful.

CHAPTER 5. **Discussion on the results and findings**

5.1 Introduction

The aim of this chapter is to discuss the results of the two sets of research for the three propositions being evaluated to determine if the proposed new transformative business model will be successful, should it be developed and introduces into the personal care industry within South Africa.

The outcome of this study is directed at summarising the new proposed business model into a business model canvas developed by Osterwalder and Pigneur (Osterwalder & Pigneur, 2010) based on the lean start-up approach (Ries, 2011) as developed by Eric Ries, whereby a lean innovation approach is taken to create a minimum viable product and test it in the market to determine what will increase adoption and to ensure that the delivered solution is aligned with the market requirements. The approach developed by Eric Ries is aimed at predominantly the internet, e-commerce and ICT start-ups.

Furthermore, the business model will be developed based on the ten characteristics discussed in chapter two relating to the exponential organisation framework, which as discussed focusses on the more aligned your business model is to the ten characteristics described, the higher the chances of success will be.

5.2 Demographic profile of respondents

5.2.1 *Demographics – Supply-side.*

a. ***Age***

Four age groups were identified for respondents to select from, whereby two age groups stood out, being the ages between 18 – 24 (46,8%) and 25 – 34 (33%) which in combined make up almost eighty percent of the respondents.

The majority age group (18 – 24) are classified as generation Z, which is known as the children of the internet and digital natives. This is a significant positive outcome, as it relates to them becoming the new workforce and will be more likely to instead trade and operate as a personal care service provider via a non-asset based digital platform as proposed (Berkup, 2014).

The age group (25 – 34) are referred to as Generation Y, who are referred to as the first technology and global generation of the world. This generation is seen as the pioneers of the internet and the inventors of the internet age, although not the whole group can be classified as digital natives, the older part of this generation who had been lagers in the adoption of the various technologies and later on adapted and started to participate in the digital economy can be referred to as digital migrants (Berkup, 2014).

b. ***Gender***

96,3 percent of the sample size respondents are female, which is was anticipated in accordance with the targeted sample size and signifies the growth in the personal care industry are female-driven. The sample was conducted with a closed group of students who were in their last month before graduating and entering the industry.

c. ***Education***

The majority of the respondents at the personal care college had a minimum qualification of grade 12 or higher. This relates positively to the ability to quickly learn and adapt the usage of a digital platform as proposed.

d. ***Population group***

The three most significant population groups were 37, 6 % being white, 33 % African and 19, 3 % being coloured. The significance in this result is that there is a close balance in the three groups which signifies the industry being diverse.

5.2.2 *Demographics – Demand-side*

a. ***Age***

The majority of the respondents are made up of two groups being 18 – 24 (61, 1 %) and 25 – 34 (23, 4 %). This correlates in line with the results of the supply-side. The outcome is that the demand-side is more open to adopting the technology and a digital platform, being digital natives and digital migrants.

b. ***Gender***

The majority gender is classified female (61, 1%) which signifies a good split from respondents and reveals that an unbiased outcome was achieved in the research.

c. ***Education***

The results indicated that 93.3 % of respondents had at least grade 12 as a qualification with a close even split of university degree vs grade 12 being 46, 9% vs 46, 4% respectively. This signifies a high ability of literacy and would be able to adopt the technology of using a non-asset based digital platform with ease.

d. ***Employment***

The majority group of the respondents are corporate workers at 46, 7%, followed by self-employment at 39, 8 %. The significance is that these two groups are career-driven with assumed little time to be able to consume personal care services. Thus the proposed platform will allow flexibility and an opportunity of convenience consumption of personal care services.

5.3 Discussion pertaining to Proposition 1

P1: The willingness to adopt the multisided non-asset based digital platform within the personal care industry in South Africa by the supply-side of the platform and identified characteristics to establish a successful platform business model for the personal care industry within South Africa.

5.3.1 *P1 results will be aligned and discussed under the five categories of the exponential organisation framework that focusses on the external characteristics of the business model.*

a. ***Staff on demand***

The purpose of this research study proved that the majority of the respondents would adopt the proposed business model and practise their trade through the proposed platform. Table 7 refers to the likelihood of the willingness to trade personal care services over the proposed platform. 93, 5 % expressed that they would prefer the proposed new business model to sell their personal care services in South Africa.

91,4 % of respondents, as depicted in table 8, will abandon the traditional business models and practise their trade over the proposed platform if the platform only allows for accredited personal care providers. This indicates that the industry is ripe for a business model transformation to allow and create ease of participation and earning an income.

b. ***Community and crowd***

This characteristic is one of the foundation characteristics this study had to proof through creating a community and crowd on the supply side adoption of the platform to understand if critical mass can be achieved by the proposed non-asset based digital platform for the personal care industry. Table 7, 8 and table 11 has proved that critical mass will be achieved as more than 90 % of respondents has shown intend to adopt the platform as a primary business model to practise their trade and abandon traditional business models in the industry.

c. ***Algorithms***

For the context of creating a disruptive business model for the personal care industry, algorithms are vital to the success of this platform, as there are many variances of services offered. For user adoption and the success of the platform, it is critical that the platform back-end use smart proprietary algorithms that are integrated into the various accreditation bodies in the personal care industry as it will create a quality platform that allows only certified and accredited practitioners to be able to participate on the supply side as a service provider.

Big data and analytical algorithms will also form a fundamental characteristic to ensure continuous evolvement of the platform to create more opportunities to enhance the value proposition of the platform to the personal care service providers.

d. ***Leveraged assets***

As in the case of Uber Technologies, the non-asset based digital platform business model which is being investigated are based on the same principals as Uber Technologies. How ether a critical asset which is identified is the accreditation integration into professional institutions to ensure only qualified personal care providers are on the supply side of the platform.

Table 8 proves these statements with 91, 4 % confirming that it is an essential characteristic for the proposed platform to be successful.

e. *Engagement*

Engagement is critical as it refers to how the organisation engage with its users; it amplifies the reach of critical mass and provides feedback. For the proposed non-asset based digital platform on being successful within the personal care industry, engagement is even more critical, as reputation and quality are fundamental to success in this industry. This interlocks with owning the asset of accreditation from professional bodies to ensure only qualified service providers can utilise the platform from the supply side.

The research proves, as displayed in table 13 that five engagements methods that allow transparency and provide confidence for potential personal care service providers to sign up and utilise the platform are:

i. Earn decency

Table 12 of the research proves that the majority (27, 7%) of the respondents will participate in the industry utilising the proposed new business model at a percentage commission to the platform of 15 %, followed by 20, 2% of respondents willing to offer up 20% commission on services rendered to the platform and 19, 1 % are willing to offer 10% as commission to the platform.

The outcome is that a 15% commission fee to the platform will be accepted by the personal care service providers.

ii. Protection policies

The majority of respondents, as depicted in table 12, feel strongly that the platform should have clear policies in place to protect their individual reputational, financial and safety concerns.

This will form part of the necessary legal agreements to ensure peace of mind is offered to the participants of the proposed platform.

iii. Terms and Conditions

The majority of the respondents as illustrated in table 12 agree that the terms and conditions need to be transparent and clear at initial engagements to ensure that upon sign up, the platform can't change any terms and conditions that will reflect negatively to the personal care provider. This correlates with the previous discussion around protection policies.

iv. Workers heard

The majority of respondents as illustrated in table 12 feel strongly that a clear and concise process is mapped and document in the contractual obligations for participants of the platform to be heard and allowed to challenge or make recommendations to improve or dispute issues between the participant and the platform.

v. Unionisation

The majority of respondents as depicted in table 12 agree that they should be allowed to establish an independent body or union which can act as a vehicle to between the platform and the participants on the supply-side.

5.3.2 *Conclusion of findings relating to proposition 1*

To conclude the feedback received in the data collection of the supply side, the proposed platform is a likely replacement to traditional business models within the personal care industry as it will allow newly graduated students to be able to earn an income and practise their trade at any location their proposed customers request them to be, this is illustrated in table 9.

Furthermore, the research proves that the platform will have an adoption rate of more than 90 % of personal service providers in the age group between 18 and 34, which is proven to be generations who adopt technology quickly.

Barriers to utilising the platform stated in table 10 refer to the majority of respondents were most concerned about security at 50, 5 % and transport at 24,

7 %, these barriers will be addressed and mitigated in the next chapter under recommendations.

5.4 Discussion pertaining to Proposition 2

5.4.1 *P2: The willingness to adopt the multisided non-asset based digital platform within the personal care industry in South Africa, based on higher perceived value created to the demand side by the platform, both tangible as well as intangible.*

P2 focussed on the adoption of the platform from the demand-side of the platform, meaning the potential users of the platform. The research was quantitative and utilised the UTAUT-TAM framework as discussed in chapter 2 to understand both the positive as well as the negative factors that could be critical to the success of the proposed transformative business model within the personal care industry in South Africa.

The outcome of the research conducted in the demand side is well represented in the previous chapter under the various constructs tested confirmed that an overwhelming amount of respondents find the implementation of a platform in the personal care industry within South Africa will be adopted, and previous business models, i.e. the retail model would be abandoned if the platform delivers on creating more value, financial benefit and more convenience by offering the services in various forms such as on-demand, at own premises and more cost-effective.

The overwhelming majority has agreed that the proposed platform will create more convenience and value, as well as a more competitive landscape within the personal care industry which will ensure that users on the demand-side are always getting the most value at the best price for the services.

5.4.2 *Conclusion of findings relating to proposition 2*

To conclude, the main objective for P2 was to prove that adoption of the newly proposed transformative business model in the personal care industry within South Africa will be adopted and that the collaborative consumption approach will be able to create a network effect to drive exponential growth and adoption to the proposed model.

5.5 Discussion pertaining to Proposition 3

Proposition 3 focusses on utilising the data recorded from both sets of the quantitative datasets to determine the internal characteristics of the actual platform. This will allow for the platform to be created based on the characteristics for a successful transformational business model concept as discussed in chapter 2 whereby key customer value propositions are designed based on the feedback and data collected from the market.

5.5.1 *P3: A non-asset based digital platform for the personal care industry within South Africa can increase its success rate by adhering to specific internal characteristics and features that can allow the platform to evolve in accordance with the customers on both the supply as well as the demand side. This is critical to the sustainability of the proposed platform.*

a. ***Personalisation***

This aspect was depicted very clearly in the data that the platform needs to be shaped to the specific need of the users of the proposed non-asset based digital platform in the personal care industry within South Africa. The data is utilised to build the value proposition clearly speaks to this point.

b. ***Closed-loop process***

The loop is closed as the services of the platform is not product-based, but rather pure services being performed or delivered which drives down the costs with every additional consumer of the service and additional personal care service provider that on boards and utilises the platform.

c. ***Asset sharing***

The concept of the proposed platform is to eliminate the high operating costs of owning and running a personal care business from either retail premises or home-based salon/work premises. The platform creates a market and concept that connects the supply side with the demand side for services to be performed at the consumer's choice of place, thus their home, place of work or neutral premises that allow for the services to be delivered.

d. ***Usage-based pricing***

The proposed platform will allow for free sign up to the demand-side, and supply-side of the platform and services will be paid for through the platform for the specific service delivered at a rate that calculated and proposed to the consumer of the service upon request of the service.

The data indicated that the majority of the supply-side is comfortable to give up 15% of the revenue charged to customers/consumers to the platform, which will also form a critical part of the commercial model.

e. ***Collaborative ecosystem***

The business model of the proposed platform will be built fundamentally on this principle to ensure that the network effect can be utilised to create exponential growth and coverage to serve benefits to both ends of the platform.

The essential characteristic of both sides agrees that the accreditation and affiliation to a professional personal care institution from the supplier are vital to creating a piece of mind and security to adopt the platform. Thus the platform will

need to be integrated into the personal institutions to validate credentials and formal training by the personal care practitioners.

f. ***Agility***

Agility is a fundamental element as the platform need to use the feedback and data collected from the users of both sides of the platform to ensure that the platform is updated and features added or removed as well as ensuring the user interface is easy and convenient to use as trends in the market emerges.

5.5.2 *Conclusion of findings relating to proposition 3*

P3 was a combination of the data collected to ensure that the data conforms to the vital internal characteristics that need to be incorporated into the platform to ensure a sustainable business model can be created. The results of the research have provided concrete evidence that all six characteristics are met and that the platform will be sustainable with great potential to grow exponentially and disrupt the current business model within the personal care industry in South Africa.

5.6 Conclusion

P1: The researcher set out to gather data through a quantitative approach to determine if the supply side, meaning the personal care industry professionals will be willing to adopt the proposed transformative business model through the utilisation of a digital non-asset based digital platform, and what the key characteristics would be relevant to assist in adopting the proposed model.

The research results have proven that the over ninety percent would adopt the platform as it creates an immediate opportunity for them to earn from their trade especially as the traditional start-up costs to their industry will be eliminated by the proposed platform.

Over ninety percent agreed that for the proposed platform to be successful and have credibility, it needs to be controlled and affiliated to the personal care

industry colleges and governing bodies. This will ensure that only qualified personal care providers will be able to participate in the proposed platform.

Security and risk were identified as a concern from both a physical as well as a privacy perspective.

P2: The researcher utilised the UTAUT-TAM technology adoption model and received over one thousand five hundred responses. Over seventy-five percent agreed to adopt the platform if it creates more perceived value and economic benefit to them. One of the critical constructs which were identified was the facilitating conditions necessary for the demand side to adopt the platform, which was proven that the overwhelming majority agreed that they have the knowledge and resources to utilise the proposed non-asset based digital platform.

Security and risk were also identified as a potential risk to the success of the proposed platform for the industry.

P3: The researcher utilised the extensive research done in chapter two around the various critical characteristics and proposed approach used in various similar proposed business models in other industries around the world. This was investigated from both the supply-side and demand-side data that was captured through the data collection process. The researcher proved what internal platform characteristics and features found to be necessary for the proposed new business model to be successful.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This chapter will describe the overall findings from the research surveys along with the literature review in relation to the objectives that were set out in chapter 1, being to determine if the proposed new transformative business model based on a non-asset based digital platform within the personal care industry in South Africa is feasible.

Recommendations will then be made towards each of the propositions that were tested in the two surveys that were used for the data collection.

6.2 Conclusions regarding the research objective

The research objective was to determine a new transformative business model through a non-asset based digital platform approach to the personal care industry within South Africa.

Through the evidence provided throughout the literature review as well as the findings from the research surveys that were conducted, the researcher has proven a robust theoretical framework that will be both adopted from the supply-side as well as the demand of the proposed platform.

The barriers to entry for a personal care professional whom has qualified eliminated through the platform, as the proposed platform is set out to create a market for qualified personal care professionals whereby they can practise their trade on-demand and not necessarily have to own, rent or wait to be placed in a physical salon setup. New barriers associated with the proposed new business model has emerged, such as security, both physical and cyber, being the most significant barrier on both sides of the platform.

Another barrier, especially significant to the supply-side was transport, the reason being that the business platform is focussed on an on-demand model which required getting to and from customers and consumers of the platform.

The demand-side research has delivered favourable reaction towards the adoption of the proposed platform within the personal care services industry. The critical benefits sought out by the demand-side were convenience as well as an economic benefit. These are clear value propositions the platform needs to deliver to create disruption and an exponential adoption of the model. Furthermore, as in the supply-side, accreditation of the supply-side is critically vital for the platform to be utilised.

To conclude, the researcher has proved that the proposed transformative business model will allow for more economic benefits to both sides of the platform as well as creating more economic value for the supply-side through the opportunity to earn a higher percentage of their service fees and only focus on delivering their services. For the demand-side, economic value is created through the ease of access to the services as well as the platform creating an even playing ground in the various subsections of the personal care industry.

6.3 Recommendations

6.3.1 *Recommendations to proposition 1*

The researcher has identified a vital and critical concern that needs to be addressed to create a sense of safety for the participants of the supply-side of the platform. The security relates to physical as well as cybersecurity. The physical security can be mitigated through adjusting the model to allow for the utilisation of neutral premises in specific areas, either at underutilised spaces within the retail environment or at corporate wellness centres which already have dedicated spaces for their employees. This will have to be investigated and contractually bound with various spaces from the platform owner. The economic impact will be that if the supply-side service providers utilise these spaces that

the percentage offered to the platform be higher than in the case of the standard on-demand approach being proposed for the new business model.

Another mitigating factor to the physical security concern could be to allow same-gender providers on the supply-side to be connected through the platform to same-gender providers on the demand-side.

The cybersecurity concern will be mitigated through the implementation at platform development of a stringent cybersecurity framework that was developed as a risk-based cybersecurity framework by the National Institute of Standards and Technology also known as the NIST framework (Sedgewick, 2014) which focusses on a strategy to protect the CIA triad (Pub, 2004) of data and information security; being confidentiality, integrity and availability of the platform and the data and information on the platform.

Transport was also highlighted as the second most critical concern. The recommendation is to partner and integrate with ride-hailing services such as Uber to mitigate the transport barrier, whereby the platform business negotiates preferred rates which can automatically be worked into the consumer of the services account upon payment.

6.3.2 *Recommendations to proposition 2*

The descriptive portion of the research collected on the demand-side survey has revealed that over ninety percent of the respondents were between the ages of 18 and 44 years, and over sixty percent was female. The conclusion is that the target market would have to be segmented and the platform proposition should be positioned to these age groups as they form part of either digital natives or early millennials that could be classified as digital migrants as discussed earlier in this paper.

Security has also been highlighted as an area that needs to be addressed, and the same discussion point mentioned around this topic in proposition 1, will be applied for both sides of the platform.

6.3.3 *Recommendations to proposition 3*

The overall recommendation to the actual platform and its characteristics is that the platform strategy should be based on a data-led approach that uses constant scanning of the environment through integrations into the various social media platforms as well as data collected through usage by the supply-side and demand-side users of the platform to continuously update and align the platform to ensure the platform and end-user applications for both sides are abreast with market trends to ensure business sustainability.

Both sides of the proposed platform agreed that one of the vital attributes that will create credibility and success would be the comfort of knowing that the supply-side participants are all qualified and accredited. The recommendation is for the platform to integrate into the various personal care colleges and governing bodies to ensure only supply-side participants who are qualified can register. This will be done through direct API integration (Arora & Garg, 2018) into the qualification records to ensure the data is always in near real-time and relevant.

6.4 Suggestions for further research

Further suggestions for research regarding transformative business models through utilising a non-asset based digital platform approach can be expanded in other industries where services are offered both to consumers or corporate customers through traditional business models which creates monopoly industries in the mark and reap most of the economic benefit in relation to the actual employees. It will also create a broader coverage of specialised skills on offer in South Africa, which could stimulate more entrepreneurial behaviour as the barriers to participate are reduced or eliminated.

Another area of research should in the actual consumer and supplier behaviour who participate on non-asset based digital platforms as proposed in this research paper to identify and track further characteristics that allow industry non-asset based platforms to democratise industries, as this model lower the barriers of

entry and become economically active in society whereby service providers are not bound by their area of living.

Furthermore, research into the various security factors that can create barriers to the success of non-asset based digital platforms needs to be explored through more rooted research to understand the concerns at a granular level. This will allow creating a standard framework to mitigate the security risks or perceptions thereof.

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CHAPTER 8. **Appendices**

Appendix A – Information sheet for respondents

Dear Participant

My name is Anton van den Berg, and I am a Masters in Management student in the field of Digital Business at the University of the Witwatersrand in Johannesburg. As part of my studies, I have to undertake a research project, and I am investigating a transformative business model based on a non-asset based digital platform in the personal care industry in South Africa. This research project aims to find out if a transformative business model based on a digital platform will break down the entry barriers of high start-up costs related to entering the personal care industry as a qualified professional personal care service provider.

As part of this project, I would like to invite you to take part in answering a questionnaire. This activity will involve answering a web-based survey type questionnaire and will take around 15 minutes.

You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The data collected in this survey will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely and not disclosed to anyone else. I will be using a pseudonym (false name) to represent your participation in my final research report. If you experience any distress or discomfort at any point in this process, you will be able to stop the survey participation completely or resume another time.

If you have any questions during or afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you have any concerns or complaints regarding the ethical procedures of this study,

you are welcome to contact the University Human Research Ethics, telephone +27(0) 11 717 1408, email Shaun.Schoeman@wits.ac.za

Yours sincerely,

Anton van den Berg

Anton van den Berg, antonvdb84@gmail.com, 083 252 8537

Mr Laurence Beder, Laurence.Beder@wits.ac.za, (011) 717 3557

Appendix B – Survey questionnaire – supply side

Survey Flow

Standard: SURVEY INSTRUCTION (0 Questions)
Standard: Informed Consent (1 Question)
Standard: Consent (4 Questions)
Standard: Demographics (5 Questions)
Standard: Understanding of non-asset based digital platforms (6 Questions)
Standard: Block 12 (1 Question)
Block: Current Business model characteristics - self-employed salon owners (5 Questions)
Standard: Current Business model characteristics - employed by a small salon (6 Questions)
Standard: Student questionnaire (3 Questions)
Standard: Current Business model characteristics - employed by a salon chain group, i.e. So (6 Questions)
Standard: New Business model characteristics (8 Questions)
Standard: Fair work conditions and ethics of a non-asset based digital platform (1 Question)
Standard: Completion of Questionnaire (2 Questions)

Page Break

Start of Block: SURVEY INSTRUCTION

Start of Block: Informed Consent

Q1

Welcome to the research study!

Dear Participant My name is Anton van den Berg, and I am a Masters in Management student in the field of Digital Business at the University of the Witwatersrand in Johannesburg. As part of my studies, I have to undertake a research project, and I am investigating a transformative business model based on a non-asset based digital platform in the personal care industry in South Africa. This research project aims to find out if a transformative business model based on a digital platform will break down the entry barriers of high start-up costs related to entering the personal care industry as a qualified professional personal care service provider. As part of this project, I would like to invite you to take part in answering a questionnaire. This activity will involve answering a web-based survey type questionnaire and will take around 15 minutes. You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The data collected in this survey will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely and not disclosed to anyone else. I will be using a pseudonym (false name) to represent your participation in my final research report. If you experience any distress or discomfort at any point in this process, you will be able to stop the survey participation completely or resume another time. If you have any questions during or afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you have any concerns or complaints regarding the ethical procedures of this study, you are

welcome to contact the University Human Research Ethics, telephone +27(0) 11 717 1408, email Shaun.Schoeman@wits.ac.za Yours sincerely, Anton van den Berg Anton van den Berg, antonvdb84@gmail.com, 083 252 8537

End of Block: Informed Consent

Start of Block: Consent

Q3 As a selected participant, I agree to participate in this research project

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If As a selected participant, I agree to participate in this research project = No

Q4 I agree that my participation will remain anonymous

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If I agree that my participation will remain anonymous != Yes

Q5 I agree that the researcher may use anonymous quotes in his / her research report

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If I agree that the researcher may use anonymous quotes in his / her research report = No

Q6 I agree that the information I provide may be used anonymously by other researchers following this project

- ○ Yes (1)
- ○ No (2)

Skip To: End of Survey If I agree that the information I provide may be used anonymously by other researchers following this... = No

End of Block: Consent

Start of Block: Demographics

Q11 Are you currently a student or practitioner in the personal care industry

- ○ Student (1)
- ○ Practitioner (2)
- ○ I am not involved in the personal care industry (3)

Skip To: End of Survey If Are you currently a student or practitioner in the personal care industry = I am not involved within the personal care industry

Q7 What is your age

- ○ 18 -24 (1)
- ○ 25 - 34 (2)
- ○ 35 - 44 (3)
- ○ 45 - 54 (4)
- ○ 55+ (5)

Q8 What is your gender

- Male (1)
- Female (2)

Q9 What is your population group

- African (1)
- White (2)
- Indian (3)
- Asian (4)
- Coloured (5)

Q10 Please indicate your highest level of qualification

- ○ Grade 0 - 7 (1)
- ○ Grade 8 - 11 (2)
- ○ Grade 12 (3)
- ○ University degree (4)
- ○ Other (5)

End of Block: Demographics

Start of Block: Understanding of non-asset based digital platforms

Q15 Have you ever used a digital platform to hail a taxi ride on-demand, i.e. Uber

- ○ Yes (1)
- ○ No (2)
- ○ Don't know what this service is (3)

Q16 Have you ever used a digital platform to book accommodation on-demand, i.e. Airbnb

- ○ Yes (1)
- ○ No (2)
- ○ Don't know what this service is (3)

Q17 How often do you use digital platforms such as Uber and Airbnb

- ○ Daily (1)
- ○ 4-6 times a week (2)
- ○ 2-3 times a week (3)
- ○ Once a week (4)
- ○ Occasionally (5)
- ○ Never (6)

Q18 How often do you use social media platforms to follow news and new trends

- ○ Daily (1)
- ○ 4-6 times a week (2)
- ○ 2-3 times a week (3)
- ○ Once a week (4)
- ○ Occasionally (5)
- ○ Never (6)

Q19 What percentage of your shopping is done through online platforms i.e. Takelot

- ○ 0% (1)
- ○ 0 - 25% (2)
- ○ 26 - 50% (3)
- ○ 51 - 69% (4)
- ○ 70% + (5)

Q12 In what capacity are you participating in the personal care industry within South Africa

- ○ student (1)
- ○ self-employed (2)
- ○ employed by a small salon (3)
- ○ employed by a chain of salons (4)

End of Block: Understanding of non-asset based digital platforms

Start of Block: Block 12

Q48 In which area do you practice in the personal care industry

- ○ Skincare (1)
- ○ Makeup (2)
- ○ Hair removal (3)
- ○ Nails, hands and feet (4)
- ○ Massages/Body treatment (5)
- ○ Hairdressing/Barber (6)

End of Block: Block 12

Start of Block: Current Business model characteristics - self-employed salon owners

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = self-employed

Q21 If self employed, what percentage of revenue accounts as profit after all expenses have been deducted

- 0 - 5% (1)
- 6% - 10% (2)
- 11% - 15% (3)
- 16% - 20 % (4)
- above 20% (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = self-employed

Q22 If self-employed, what is the highest fixed costs of operating your business

- Salon premises (1)
- Water and Electricity (2)
- Marketing (3)
- Personnel (4)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = self-employed

Q23 How constant is the business activity in your Salon vs capacity daily

- ○ 20% (1)
- ○ 40% (2)
- ○ 60% (3)
- ○ 80% (4)
- ○ 100% (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = self-employed

Q24 How many appointments is being serviced a week in your salon

- ○ 10 - 20 (1)
- ○ 20 - 40 (2)
- ○ 41 - 60 (3)
- ○ 61 - 80 (4)
- ○ 81 - 100 (5)
- ○ 100+ (6)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = self-employed

Q25 How long did it take for your business to break even and build a customer base

- 0 - 3 months (1)
- 3 - 6 months (2)
- 6 - 12 months (3)
- 1 - 2 years (4)
- 2 years + (5)

End of Block: Current Business model characteristics - self-employed salon owners

Start of Block: Current Business model characteristics - employed by a small salon

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q23 How you are currently remunerated

- Base salary only (1)
- Base salary + commission (2)
- Commission only (3)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q24 If employed on a base salary plus commission, what percentage of services rendered are commission based

- ○ 10% (1)
- ○ 20% (2)
- ○ 30% (3)
- ○ 40% (4)
- ○ 50% + (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q25 If employed on commission only, what percentage of services rendered are commission based

- ○ 10% (1)
- ○ 20% (2)
- ○ 30% (3)
- ○ 40% (4)
- ○ 50% + (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q26 What is your desired working conditions

- ○ Self-employed (1)
- ○ Employed by a small salon (2)
- ○ Employed by a personal care retail group (3)
- ○ Not sure (4)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q27 What is the main reason for not being self-employed

- ○ High start-up costs (1)
- ○ Marketing of the business (2)
- ○ Geographic location (3)
- ○ Prefer working for an employer (4)
- ○ Running of the business (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a small salon

Q28 How long have you waited after graduating to be employed by a salon

- 0 - 3 months (1)
- 4 - 6 months (2)
- 7 - 12 months (3)
- More than a year (4)

End of Block: Current Business model characteristics - employed by a small salon

Start of Block: a Student questionnaire

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = student

Q45 How do you want to participate in the personal care industry after graduating

- Be self-employed (1)
- Work for a small salon (2)
- Work for a chain salon (3)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = student

Q46 How likely would it be for you to be self-employed if you could immediately start practising your trade after graduation through utilising a digital platform such as Uber

- Very likely (1)
- Likely (2)
- Not that likely (3)
- Not at all (4)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = student

Q47 How would you like to practice your trade

- From static premises (1)
- Go to customer's premises (2)
- Use communal salon venues, i.e. beauty institute/college facilities (3)

End of Block: a Student questionnaire

Start of Block: Current Business model characteristics - employed by a salon chain group, i.e. So

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q30 How are you currently remunerated

- ○ Base salary only (1)
- ○ Base salary + commission (2)
- ○ Commission only (3)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q31 If employed on a base salary plus commission, what percentage of services rendered are commission based

- ○ 10% (1)
- ○ 20% (2)
- ○ 30% (3)
- ○ 40% (4)
- ○ 50% + (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q32 If employed on commission only, what percentage of services rendered are commission based

- ○ 10% (1)
- ○ 20% (2)
- ○ 30% (3)
- ○ 40% (4)
- ○ 50% + (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q33 What is your desired working conditions

- Self-employed (1)
- Employed by a small salon (2)
- Employed by a personal care retail group (3)
- Not sure (4)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q34 What is the main reason for not being self-employed

- High start-up costs (1)
- Marketing of the business (2)
- Geographic location (3)
- Prefer working for an employer (4)
- Running of the business (5)

Display This Question:

If In what capacity are you participating in the personal care industry within South Africa = employed by a chain of salons

Q35 How long have you waited after graduation to be employed by a retail salon group

- ○ 0 - 3 months (1)
- ○ 4 - 6 months (2)
- ○ 7 - 12 months (3)
- ○ more than a year (4)

End of Block: Current Business model characteristics - employed by a salon chain group, i.e. So

Start of Block: New Business model characteristics

Q37 How outstanding is reputation and ratings in the personal care industry

- ○ Very important (1)
- ○ Important (2)
- ○ Slightly important (3)
- ○ Not talented at all (4)

Q38 How likely are you to consider utilising a digital platform as a business model to sell your personal care services

- ○ Very likely (1)
- ○ Likely (2)
- ○ Not that likely (3)
- ○ Not at all (4)

Q39 How likely are you to use a platform as stated in the previous question, if it is accredited or endorsed by a professional institution

- ○ Very likely (1)
- ○ Likely (2)
- ○ Not that likely (3)
- ○ Not at all (4)

Q40 How likely are you to use a digital platform that connects customers to your services based on location proximity

- Very likely (1)
- Likely (2)
- Not that likely (3)
- Not at all (4)

Q41 How likely are you to go to customer's location to perform services to gain more business

- Very likely (1)
- Likely (2)
- Not that likely (3)
- Not at all (4)

Q42 What would be barriers inhibiting you from utilising a platform as described in this section

- ○ Transport (1)
- ○ Security (2)
- ○ Technology (3)
- ○ Data usage (4)

Q43 If a platform business model as described in this section allow you to only focus on your trade and not of the traditional business operations, On a scale of 1 to 10 (10 being very unlikely and 100 being very likely)

0 10 20 30 40 50 60 70 80 90 100

Likely ()	

Q44 If the platform takes care of all the business operations, and you only have to accept bookings and execute the bookings, how much commission do you believe would be fair towards the platform?

- ○ 10% (1)
- ○ 15% (2)
- ○ 20% (3)
- ○ 25% (4)
- ○ 30% (5)

End of Block: New Business model characteristics

Start of Block: Fair work conditions and ethics of a non-asset based digital platform

Q45 How strongly do you agree or disagree with the statements below according to the fair.work principles

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Fair Pay: Workers, irrespective of their employment classification, should earn a decent income in their home jurisdiction after taking account of work-related costs. (1)	○	○	○	○	○	○	○

Fair Conditions: Platforms should have policies in place to protect workers from physical, reputation and financial risks arising from the processes of work. (2)	○	○	○	○	○	○	○
Fair Contracts: Terms and conditions should be transparent, concise, and provided to workers in an accessible form. (3)	○	○	○	○	○	○	○

Fair Management: There should be a documented process through which workers can be heard, can appeal decisions affecting them, and be informed of the reasons behind those decisions. (4)	○	○	○	○	○	○	○

Fair representation: Platforms should provide a documented process through which worker voice can be expressed. Irrespective of their employment classification, workers should have the right to organise in collective bodies, and platforms should be prepared to cooperate and negotiate with them. (5)	○	○	○	○	○	○	○

End of Block: Fair work conditions and ethics of a non-asset based digital platform

Start of Block: Completion of Questionnaire

Q47 Would you like to participate in any further research regarding this topic

- ○ Yes (1)
- ○ No (2)

Skip To: Q48 If Would you like to participate in any further research regarding this topic = Yes

Skip To: End of Survey If Would you like to participate in any further research regarding this topic = No

Q48 If answered Yes to the previous question then direct to field to enter email address and submit

_____

End of Block: Completion of Questionnaire

Appendix C – Survey questionnaire – demand side

demand-side

Survey Flow

Block: Default Question Block (1 Question)
Standard: Block 3 (4 Questions)
Standard: Demographics (6 Questions)
Standard: Block 2 (8 Questions)

Page Break

Start of Block: Default Question Block

Q1

Welcome to the research study!

Dear Participant My name is Anton van den Berg, and I am a Masters in Management student in the field of Digital Business at the University of the Witwatersrand in Johannesburg. As part of my studies, I have to undertake a research project, and I am investigating a transformative business model based on a non-asset based digital platform in the personal care industry in South Africa. This research project aims to find out if a transformative business model based on a digital platform will break down the entry barriers of high start-up costs related to entering the personal care industry as a qualified professional personal care service provider. As part of this project, I would like to invite you to take part in answering a questionnaire. This activity will involve answering a web-based survey type questionnaire and will take around 15 minutes. You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The data collected in this survey will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely and not disclosed to anyone else. I will be using a pseudonym (false name) to represent your participation in my final research report. If you experience any distress or discomfort at any point in this process, you will be able to stop the survey participation completely or resume another time. If you have any questions during or afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you have any concerns or complaints regarding the ethical procedures of this study, you

are welcome to contact the University Human Research Ethics, telephone +27(0) 11 717 1408, email Shaun.Schoeman@wits.ac.za Yours sincerely, Anton van den Berg Anton van den Berg, antonvdb84@gmail.com, 083 252 8537

End of Block: Default Question Block

Start of Block: Block 3

Q34 As a selected participant, I agree to participate in this research project

- Yes (1)
- No (2)

Skip To: End of Survey If As a selected participant, I agree to participate in this research project = No

Q36 I agree that my participation will remain anonymous

- Yes (1)
- No (2)

Skip To: End of Survey If I agree that my participation will remain anonymous = No

Q38 I agree that the researcher may use anonymous quotes in his / her research report

- Yes (1)
- No (2)

Skip To: End of Survey If I agree that the researcher may use anonymous quotes in his / her research report = No

Q40 I agree that the information I provide may be used anonymously by other researchers following this project

- Yes (1)
- No (2)

Skip To: End of Survey If I agree that the information I provide may be used anonymously by other researchers following this... = No

End of Block: Block 3

Start of Block: Demographics

Q16 What is your age

- 18 -24 (1)
- 25 - 34 (2)
- 35 - 44 (3)
- 45 - 54 (4)
- 55+ (5)

Q18 What is your gender

- Male (1)
- Female (2)

Q20 What is your population group

- African (1)
- White (2)
- Indian (3)
- Asian (4)
- Coloured (5)

Q22 Please indicate your highest level of qualification

- Grade 0 - 7 (1)
- Grade 8 - 11 (2)
- Grade 12 (3)
- University degree (4)
- Other (5)

Q23 How are you employed

- Self-employed (1)
- Small business (2)
- Corporate (3)

Q24 In which province do you reside

- Gauteng (1)
- Freestate (2)
- Northwest (3)
- Mpumalanga (4)
- Limpopo (5)
- Western Cape (6)
- Eastern Cape (7)
- Northern Cape (8)
- Kwazulu Natal (9)

End of Block: Demographics

Start of Block: Block 2

Q25 Rate the following statements in accordance with an expected performance from the platform described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I would use the application as an alternative to the traditional personal care service experience (1)	•	•	•	•	•	•	•

I would find the application useful as it makes consuming personal care services convenient (2)	

This application will assist me to have access anywhere in South Africa to personal care services of the same quality (3)



This application would be useful to me to have a variety of personal care services on one platform (4)



Q26 Rate the following statements in relation to the effort of using a platform application as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Learning to operate the application would be easy for me (1)	•	•	•	•	•	•	•

I would quickly find the information I am looking for using the application (2)	
I would find the user interface of the application manifest and intuitive (3)	

I would find the application easy to use (4)	

Q27 Rate the following statements in relation to the social influence of using a platform application as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
People who are important to me think that I should use convenience applications like the one described (1)							

People who influence my behaviour think that I should use convenience applications like the one described (2)



People whose opinions that I value prefer that I use convenience applications like the one described (3)



Q28 Rate the following statements in relation to facilitating conditions of using a platform application as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I have the necessary resources to use the application (i.e. internet, smartphone) (1)	•	•	•	•	•	•	•

I have the knowledge to use the application (2)	

Q29 Rate the following statements in relation to security, risk and trust of using a platform application as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
If I have a clear understanding of the functionality of the application (1)	•	•	•	•	•	•	•

If the service provider is widely acknowledged and linked to professional accreditation (2)	
If the system protects the privacy of its users (3)	

If I feel confident that I can keep the application under control (4)	
If I feel confident that the data returned by the application is reliable (5)	

If I believe it is risk-free to use the application (6)	
If it is safe to use the system (7)	

Q30 Rate the following statements in relation to the joy experienced when using platform applications as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Using the application as described is fun (1)	•	•	•	•	•	•	•
Using an application as described is enjoyable (2)	•	•	•	•	•	•	•

Using an application as described is very entertaining (3)	

Q31 Rate the following statements in relation to price value (App is free) when using platform applications as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
The application allows for more competitive pricing in the personal care industry (1)							

Application is a good value for money and increased service delivery (2)	

Q32 Rate the following statements in relation to habit when using platform applications as described as an alternative to the traditional personal care industry

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Would the use of an application as described become a habit for me (1)	•	•	•	•	•	•	•

Using mobile applications is something I do without thinking (2)	

End of Block: Block 2

On Qualtrics after acceptance to complete the questionnaire, a brief description of the platform will be given for context.

Appendix D – Consent Form

Non-asset digital platforms for the personal care industry in South Africa

Anton van den Berg

As a selected participant, I agree to participate in this research project.

- I agree that my participation will remain anonymous YES NO
- I agree that the researcher may use anonymous quotes in his / her research report YES NO
- I agree that the information I provide may be used anonymously by other researchers following this project YES NO

(Acceptance of consent will be given on the first screen of the web-based questionnaire before the actual questionnaire begins)