

# Applying Jobs-To-Be-Done theory by gathering unmet customer needs to inform new food product development strategy

21853704

A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfilment of the requirements of the degree of
Master of Business Administration.

1 November 2022

#### **ABSTRACT**

Product development and innovation are considered vital for business success. The rate of failure of new launches is very high, particularly in the food and beverage industry. This research study investigated how best to inform product development strategy through the use of Jobs-To-Be-Done theory. A review of customer co-creation theory and new product development was undertaken.

This qualitative study attained insights, through voice of the customer, by 12 semi-structured interviews. All participants were women, and the study was conducted in South Africa. The aim was to ascertain underserved beverage needs through customer job mapping. Data were analyses revealing themes that were turned in to jobs and desired outcomes were revealed. A core functional job showcasing the unmet beverage needs was revealed: A healthy on-the-go beverage created with desired, functional and well-liked ingredients consumed daily for health increments. The packaging has the price prominently displayed, has key messaging promoting its benefits, and the bottle is reusable.

The findings indicated that the jobs-to-be-done framework, along with customer co-creation practices, were successful. The research and study add to the literature and provides compelling results. Further innovation and opportunity that using the Jobs-To-Be-Done in the managerial context can enhance new product development success.

# **KEYWORDS**

Jobs-To-Be-Done; customer co-creation; new product development; beverages.

# **DECLARATION**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Uriel Filiba

01 November 2022

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# 1. INTRODUCTION TO THE RESEARCH PROBLEM

The objective of this study is to address the insufficient and unsuccessful approaches to new product development strategies and launches; in order to better understand why beverages are purchased and what purpose they serve. Beverages satisfy varied physiological and psychological needs for consumers beyond quenching thirst. On various levels, food brands and marketers are aware of this. Interesting and innovative beverages and foods are created to fulfil these needs (Grieger et al., 2022). Specifically, for this study, the research is to understand how to inform a product development strategy based on underserved customer needs. Using and applying this information to assist developers of new products in creating beverages that are better suited to market requirements.

This research utilises the Jobs-To-Be-Done framework, a disruptive innovation theory. Using this framework, unmet needs among female beverage consumers in South Africa are identified. From this, a relevant strategy pertaining to product and market is suggested. Jobs-To-Be-Done is founded on "... a collection of principles that help uncover and comprehend the interactions between customers, their motivations, and the products they use." (Lucassen et al., 2018, p. 2). Another definition mentioned that, "a job is a fundamental problem that a customer needs to resolve in a given situation." (Christensen, Anthony, Berstell, & Nitterhouse, 2007, p. 2).

The process entails gaining insights during the pre-strategy and pre-ideation phase in order to determine whether customer involvement improves product development strategy. The premise of the study was determining if involving customers does, indeed, inform which products to produce and to further understand how these insights inform the correct innovation and product development strategy, and how to pursue it.

The process was successful in generating 'jobs' that informed specific outcomes. A job is essentially the idea that customers hire products to fulfil functional, social and/or emotional needs (Ulwick, 2002; Ulwick & Osterwalder, 2016). Furthermore, the framework helped identify which opportunities exist and how these were framed from jobs. It is a useful tool that product developers can use to improve innovation practices.

The study also reviews current new product development strategies; the 'Voice of the Customer; the roles in co-creation and reasons for new product development success amongst consumers: all with a focus on the food and beverage industry. Ultimately, this study argues how and why customer involvement improves the success of new product development. It examines how and where to involve the customer in the product development process, as well as the effects of doing so. The research focused on women consumers in the beverage segment in South Africa.

# 1.1. Context of the Study: Beverages - Opportunity and Failure

Food manufacturers count the opportunity, financial and management cost of failed new food product development strategies, with three quarters of new products failing within the first year of their launch (Dijksterhuis, 2016; Ulwick, 2017; Winger & Wall, 2006). Spieth and Heidenreich (2013) suggest the range of failure to be between 50 – 90 % of new innovations. There are limitless records of innovation failure rates - a clear problem in multiple industries, and pertinent to the food industry, too (Dijksterhuis, 2016; van Kleef, Van Trijp, Luning, Jongen, 2002).

Thorough technical knowledge, marketing adeptness and commercial acumen are needed for product development. Companies depend on and need these criteria for successful product development launches (Ronquest-Ross, Vink, Sigge, 2018). However, the criterion which is often missing is the customer

voice: a strategic and tactical asset that is underutilized by industry (Melander, 2020; Pienaar, van der Lingen, Preis, 2019). The most commonly used method for involving customers is through the use of consumer panels. This approach is conducted informally and in an unstructured way; and mostly not at all for new product development (Zahay, Hajli, Sihi, 2018).

The leading reasons why new food products fail are (1) a lack of knowledge of the purchaser's choice, (2) not meeting a consumer demand and (3) misunderstanding the inherent reason for purchasing the product (Christensen, Hall, Dillon, Duncan, 2016; Dijksterhuis, 2016; van Kleef, 2002). These three points are the critical reasons for the lack of success and provide a compelling case for research. These points all highlight one key theme – the needs of the customer were not adequately considered nor fully understood by the innovators. The result is the creation of product (in this study a beverage), that fails in the lucrative beverage market.

The beverage industry in South Africa is worth 60 billion ZAR per annum according to the Beverage Association of South Africa, contributing 18 billion ZAR per annum in taxes and employing nearly 300 000 people (BevSA, n.d.). The industry is projected to grow at a compounded annual growth rate of 5% from 2022 -2027 (*South Africa Beverages Market (2022 - 27)*, n.d.). Globally, the size of the industry is estimated at US \$1 trillion, growing to \$1.4 trillion by 2027, with a compounded annual growth rate of 8.20 % (*Non-Alcoholic Beverages Market Size, Share | Industry Analysis [2027]*, n.d.).

This is a highly competitive industry, dominated by global brands such as Coca Cola, Pepsico and Abinbev (a producer of alcohol, which is important to note as alcohol beverages are out of scope of this study). Local behemoths Tiger Brands, Agro-Vaal Industries and Clover manufacture and distribute beverages throughout Southern-Africa (Ronquest-Ross et al., 2018). The business that the author owns is a small cold-pressed juice business called One-Juice. Recently rebranded as One Co., it has repositioned itself as an innovative beverage

company. With monthly sales of roughly only 40 000 units, the business has scope for enormous growth. However, it is underperforming with negative revenue growth and no ongoing profitability as shown the trends show in <a href="Appendix 1">Appendix 1</a>. It has failed to successfully launch a series of new products, with extremely meagre sales and high product development costs. Figure 1 presents an example of a failed product (One Co., 2022). Evidently, there is an urgent need for management action and this study has real-world managerial and industry relevance.

Figure 1

Hydration Water Launched by One-Juice: An Example of a Failed Product



The key reason the author is undertaking the research is it understand how to launch a product more in tune with customer's needs. Additionally, to be able to provide a customer-needs gathering framework to apply in industry. Furthermore, the aim is to be able to create beverage products that appeal to women in South Africa, ultimately improving new product development success

rates. The aim is to achieve this by lowering the product development costs and improving the firm's innovation output, revenue and profits.

Jobs-To-Be-Done is introduced next: it examines how involving customers at the outset of product development can make a material impact on improving new product development success rates. The theory is also relevant to academic spheres. The findings may assist future academics replicate the results and showcase disruptive innovation learnings.

# 1.2. Jobs-To-Be-Done - A Brief Introduction

A creative approach and innovation strategies assist in creating value for long-term business success. Establishing and building on successful products for customers is a worthwhile endeavour that will spur on business growth. This can be achieved by involving customers at certain times in the new product development process (Cooper, 2019; Greer & Lei, 2017). Jobs-To-Be-Done is based on "... a collection of principles that help discover and understand the interactions between customers, their motivations and the products they use" (Lucassen et al., 2018, p. 2). Christiansen was notable for describing the theory as, "... when people find themselves needing to get a job done, they essentially hire products to do that job for them" (Christensen, Cook, Hall, 2005). Klement (2016) simply states that Jobs-To-Be-Done is improving a struggle that people have every day and to improve one's life.

Essentially, the idea is that a customer has - at a very specific point in time - a need or desire to fulfil, and will hire the job to fulfil the need (Ulwick & Osterwalder, 2016). The theory and framework are then utilized to unearth and understand customers' needs. To use this data to inform strategy by serving different needs in the market. By positioning the product and approach to the market as either disruptive, discrete differentiated and/or dominant strategies (Ulwick & Hamilton, 2016; Ulwick & Osterwalder, 2016). The aim of the research is to understand if this framework can be adapted to understanding beverage needs among consumers in South Africa.

#### 1.3. Problem Statement

The summary of the problem statement is to better understand consumer needs. To apply a framework that will inform new product development strategy. As highlighted above, the current problem is that a large proportion of innovations fail, with up to 90 % being unsuccessful (Heidenreich & Spieth, 2013). The problem was investigated by applying Jobs-To-Be-Done framework in a qualitative study to gather customer needs. These needs were assessed to understand if they could adequately inform product development strategy for women beverage drinkers in South Africa.

# 1.4. Significance of the Study

This section of the study argues the significance of the study and its relevance. An example is provided through the recent Coronavirus pandemic. A pertinent, relevant, and recent global phenomenon. It impacted businesses and consumers alike. This section uses this as context, since it was an interesting example of the shifts in industry and company behaviour. Management response was not always as expected, nor leading to the expected success.

The world has changed tremendously in recent years, exacerbated by the global Coronavirus pandemic. The subsequent lockdowns and the manner in which people lived their lives had a tremendous impact on multiple industries (Craven et al., 2020). In South Africa, the economy contracted by 1,5 % in 2021 (Stats SA, 2021). This had a lasting impact on companies which lead to a change in the way in which products were created. This was done by companies believing that there would be big shifts in consumer behaviour. Both in how they purchase products and how they consumed them. Moreover, the marketing and positioning of these products - both new and existing - changed (Park, Lee, Yaroch, Blanck, 2022). A key focus over the years was on wellness, healthy and immune-boosting products, as companies directed many resources to filling a subsequent gap (Saini & Chaudhari, 2021).

The lockdowns have been lifted in most countries around the world, and entirely in South Africa (Somaroo, 2022). This remains a demonstration - and a compelling case - of the changing environment which companies and strategists must respond to, especially in order to ensure continued growth. In most respects, company executives, product developers and marketers react to a changing environment and expect to take action (Saini & Chaudhari, 2021). Simply due to the rapid change in the environment, management assumed there would be a huge drive to health and wellness. However, this is not always seen in reality and the results were not as expected, since customer behaviour does not always reflect the environment. The consumers actually reverted to less healthy products during this time (Grieger et al., 2022; Park et al., 2022). Consumers did not necessarily gravitate to healthy, immune-boosting products. This was due to higher anxiety, uncertainty and stress during the Covid-19 pandemic lockdowns. The insecurity and uncertainly of the time led to consumers reverting to food products that provided a different sort of comfort, which, paradoxically, was less healthy food and beverages (Grieger et al., 2022; Park et al., 2022). The behavioural changes as a result of the lockdown also meant that consumers were sitting for longer periods. They were spending more time at home and this resulted in consumers being less active and consuming higher amounts of sugary beverages: not healthy beverages as expected (Grieger et al., 2022).

The problem is that the businesses did not fully understand or appreciate what the customer wanted or needed, or how they were feeling. There was a disconnect between what management believed consumers desired and what they were actually desiring. One of the key findings was that psychological stress should have been considered before promoting healthy eating and foods to the public (Grieger et al., 2022). This argument showcases that there is real-world academic and business relevance to this problem. This leads to the role that Jobs-To-Be-Done framework has, in unearthing and fulfilling customers' needs. It is achieved by understanding, at a deeper level, what they need to

'hire' to get a job done in their lives (Christensen, Anthony, Berstell, et al., 2007; Ulwick & Osterwalder, 2016).

The need for the research is clear and relevant, as this particular issue is isolated in literature. There is not a uniform approach to product development nor to gathering customer feedback in industry. Furthermore, the Jobs-To-Be-Done theory has hardly been applied to food innovation in research. There is a handful of mini-case studies - one of which is Christensen's - where it was found that consumers were 'hiring' milkshakes for satiety and – most interestingly – for something to do while driving to fill the time, as they were bored. The solution to the problem was simple, effective and crucially cost effective. Christensen advised the outlet to decrease the size of the straw and make the milkshake slightly thicker. The result was that the consumers had a longer time with the milkshake, enhancing the experience. This led to a double-digit growth of milkshakes (Nobel C, 2011).

From a practitioner point of view, the research aims to address a fundamental part of the new food product development process: addressing key needs before commencement of technical new product development trials and piloting. The research paper also reviews the various product development processes to understand when and how the Jobs-To-Be-Done framework may be used. This will be achieved by evaluating the research and theory of customer co-creation, product development and Jobs-To-Be-Done. Creating a Jobs-To-Be-Done framework to assist in collecting deeper insights will be an output of the study. These insights and a framework relevant to the food industry can be applied to the new product development strategies and marketing process, resulting in more successful launches and products.

The evidence that backs why the research topic was chosen is, as described above, the high percentage of new product development failures. In reducing this, management time, resources and funds will be saved (Cooper, 2019). The food and agro-processing industries in South Africa are highly developed, with

a market size of 40 billion USD (~ 622 billion ZAR) through retail alone, in 2021 (Ntloedibe & Woody, 2021). By developing new products and innovations, the business increases the basket size of its offering, leveraging brands to appeal to more customers. More than 80% of management executives stated that innovation was vital to the strategy of the business, with more than 90% of them unhappy with the results of the company's innovation output (Christensen et al., 2016).

The leading reason why the research topic was selected is ultimately to improve the success rates for new product development in the commercial space. A new contribution has been identified with the Jobs-To-Be-Done theory not widely being applied to food business practices and industry. This provided a compelling case for research to apply academic theory and rigour, and added to the literature.

# 1.5. Research Scope

The study conducted was qualitative and exploratory in nature. Jobs-To-Be-Done has been studied and shown in multiple industries. The theory has been applied in automation, engineering, travel, software, the airplane industry, medical fields and consulting (Bettencourt & Ulwick, 2008; Christensen, 1997; Christensen, Anthony, Berstell, et al., 2007; Ulwick, 2002; Ulwick & Osterwalder, 2016). However, it has not been applied in the food industry in great detail. The research was aimed at understanding how Jobs-To-Be-Done can be used to unearth customer needs, and how it can inform product development strategy. Women were the focus, in order to narrow the research.

The research had three key themes presented and argued. The first theme argued the customer's voice with an exploration of co-creation. The second theme examined how involving the customer can impact the product development process, with a review of product development. Lastly, the latest and seminal Jobs-To-Be-Done theories are reviewed.

The researcher's view is that involving customers in product development processes can have a tremendous impact on improving product development success. The cost of product development failures has been shown quite comprehensively in this introduction. The review aims to convince the reader that immediate action is necessary for product developers from all industries to in using this approach to improve processes and success. In particular, a focus on - and a viewpoint of - the food industry will be presented and assessed.

The next chapter argues the various viewpoints of the theories discussed thus far in the literature review, aiming to integrate the various theories to lead to a research-worthy question.

#### 2. LITERATURE REVIEW

#### 2.1. Introduction

The topic was introduced in the previous section, with a brief introduction to the theory, showing relevance. It was highlighted how there is a need for research, with companies recording high rates of failure of innovations. One of the key reasons is the lack of insight into customer needs prior to the research commencement. A literature review was conducted on the research topic to better understand the view of the topics in academia and literature. The literature review is presented in this chapter.

The literature review was argued from a wide scope, narrowing to the main theory, Jobs-To-Be-Done, after which the research question was posed. The research literature had three major parts. Firstly, customer involvement as a process and underlying theory; secondly, product development and its value to the firm and - in addition to this - it was shown that involving customers at various stages and methods, using specific tools, improved new product development success. Lastly, it presented and argued disruptive innovation briefly, as Jobs-To-Be-Done branched from this theory (Christensen, 1997). In conclusion, Jobs-To-Be-Done was described and argued. The most relevant and recent research and literature was presented, while also recognising history and seminal papers.

# 2.2. Customer's Voice and Co-Creation Involvement

Undergoing process improvement initiatives has been widely debated with regards to whether it can improve product development success. An argument is presented that listening to the customer and gaining insights through this, improves product development success. Receiving the customer input at various parts of the project will be discussed, and in particular highlight that, where customers were involved from the beginning of the project, the research and development were the most worthwhile.

The 'Voice of the Customer' was one of the most well-known theories in the field of customer involvement. It was defined as designating the marketing and quality departments to collect information and then using this knowledge to collect information, and this knowledge was used to inform management decisions. The most notable way in which Voice of the Customer was differentiated was by asking customers about future trends, along with present and past experiences. More specially, the key focus was on gathering insights into future trends (Melander, 2020; Timoshenko & Hauser, 2019). Voice of the Customer has its drawbacks, as there was not a sufficient process for implementation. Consequently, customer insights were being gathered with no way in which to implement the findings (Melander, 2020).

Voice of the Customer was a precursor to the Jobs-To-Be-Done theory and shared similar characteristics. The customers' needs were divided into three main categories in which customers were being suggestive: these were strategic needs, tactical needs and operational needs. Additionally, understanding what competitors were doing is another tool used in this approach (Melander, 2020). In spite of this, companies who have not 'heard' the voice of the customer saw an increased failure rate – particularly food manufacturers (Barone et al., 2021).

Voice of the Customer was not the only method through which products were co-created with customers. Numerous novel methods have been used to involve customers in the new product development process. Commonly used methods have been crowdsourcing, the lean user method, market research and insights. Whichever method was used, the consistent feedback that was received improved the success of new product development projects (Zahay et al., 2018). In contrast, it was also argued that in spite of the methods used, the impact of the success of new products was proving more successful. In addition, traditional marketing approaches were arguably not sufficient in understanding how best to make improvements to products. This is due to the passive nature of traditional marketing (Perttunen, Jung, Kirjavainen, Bjorklund, Kim, 2021).

One of the more successful approaches in co-creation was crowdsourcing. This process entailed outsourcing a specific job to a large group of people, managed by a company representative. In contrast, it was argued that the stage-gate go-or-no-go process was the most effective approach in involving customers (Liu, Moultrie, Ye, 2019). Interestingly, the author uses the term "job" with the early introduction of this term in the literature review, which highlights the merit of the theory and framework (Liu et al., 2019; Zahay et al., 2018). To summarise, crowdsourcing, on some level, has been shown to improve customer involvement and new product success. However, operationally it is a challenge, as large groups of people were usually required (Liu et al., 2019).

More specifically in the new product development process, the Voice of the Customer and crowdsourcing took advantage of the 'wisdom of the crowd'. An argument about the approach was that this was not enough to ensure the success of new products (Liu et al., 2019; Zahay et al., 2018). Additional processes and different, novel ways for involving customers have been required. It was not only about interviewing the participant, while noting commentary, but the involvement of the customer in the process. The previous methods mentioned were merely gathering insights and not involving the customer, which was necessary for new product success (Liu et al., 2019; Timoshenko & Hauser, 2019). Other procedures in which customers were involved included surveys, interviews, focus groups and observations (Melander, 2020; Roberts, Palmer, Hughes, 2021). There was substantial debate as to the level of involvement or gathering of insights from consumers, how often to involve and when to involve. This will be debated in this literature review and then discussed. Importantly, Jobs-To-Be-Done was not a customer-involvement process but a needsgathering exercise and considered one of the first steps to involving customers in the new product development process (Bettencourt et al., 2021; Ulwick & Osterwalder, 2016). Therefore, in a summarised note of the argument, it was necessary to involve the customer at a much deeper level in the product development process. It was not sufficient to only receive commentary on their needs and desires, which contradicts Jobs-To-Be-Done framework.

While out of scope of this research, the literature review briefly argues the merit that not just the liaising with customers was crucial for success: by involving a larger group of partners with a collaborative approach, success was seen to improve (Roberts et al., 2021). There was evidence to recommend to firms that it is not just the involvement of the customer that is crucial to success of new products. In fact, it was vital that firms take a stakeholder approach to new product development with the customers too (Roberts et al., 2021). To define a stakeholder: a stakeholder is considered a group of people who may have vested interest in a project or business (Buchholtz & Carroll, 2018). It was shown, too, by Melander (2020), that universities, suppliers and public servants may also play a vital role in a company's new product development processes and ought not to be disregarded.

Co-creating with customers is a costly process, as infrastructure and processes must be built to accommodate the innovation space (Zahay et al., 2018). A risk is that it has prolonged the development process (Melander, 2020). Technology has made this easier, and companies have looked at using digital means for improving customer involvement (Liu et al., 2019; Zahay et al., 2018). Technology has myriad uses and can provide different resources. Companies that have used these advantageously were able to leverage it against those who do not (Liu et al., 2019; Melander, 2020). Particularly, those who have used the internet have helped to grow customer interest and involvement in new product development. Other key benefits of using digital technologies are the ease of penetration to customer knowledge and lower costs (Liu et al., 2019).

It was argued by Palmer et al. (2021), that simply having these technologies did not always allow for easier implementation of new product development process improvement. Caution was applied as the software, process and involvement was still seen as a challenge – for the food industry in particular.

As briefly highlighted, a key issue in the implementation of customer involvement processes was the lack of resources and tools for involving customers (Zahay et al., 2018). It was described as challenging and of increased complexity for firms with no surety of success (Dwivedi et al., 2021). To set up the infrastructure and protocols has been described as a major barrier to success. Furthermore, it was highlighted quite comprehensively as a key and important point that involving customers did not improve capacity for innovation. Products that are produced in this way were not better, or unique, in any sense (Dwivedi et al., 2021). The major benefit in involving the customer was the transfer of knowledge in understanding customer's need (Barone et al., 2021; Melander, 2020).

# 2.3. New Product Development

New product development strategies have provided companies with growth and profitability. It was - and continues to be - crucial to ongoing firm growth and success (Cooper, 2019; Dijksterhuis, 2016; Dwivedi et al., 2021). New product development was defined as "... a collection of related activities that begin with recognizing a market opportunity, and proceeds with converting it into a new product" (Dwivedi et al., 2021, p. 2). Clearly, a broad definition, but it captured the essence of the study in that there are numerous and debated ways in which marketing opportunities were recognised. As with most processes, new product development had inputs and outputs as shown in table 1 (Kazimierska & Grębosz-Krawczyk, 2017). The inputs to the new product development clearly showcase that there was a missing component that was critical to this study. There were no way in which customers were involved, therefore idea generation proceeded without any feedback from customers or understanding what needs they required to be fulfilled (Kazimierska & Grębosz-Krawczyk, 2017).

The new product development process

Table 1

Inputs	Process	Outputs
Idea generation	New product	Manufacturing
Idea screening	development	Pricing
Feasibility studies		Commercialization

Linking back to the customer involvement and relating it to product development processes: it was previously argued that digital technologies performed crucial functions for new product development teams. It was also shown that using digital technologies lowered the barriers to involving customers (Liu et al., 2019; Melander, 2020). However, it was not the only method used. Companies tended to store a significant amount of customer data, already. This data could have been turned into crucial insights for product development. The data that companies had on record included customer complaints, appraisals and communications (Liu et al., 2019; Melander, 2020). These were considered "streams of ideas" and ought to be unearthed and worked with, as they were able to assist new product development strategists understand what the needs of customers were (Melander, 2020, p. 3). To summarise, it was argued that while it was costly to set up processes and infrastructure for customer involvement, the outcome was that firms tended to have ample data on hand to assist in turning insights into success for improving the product development process (Liu et al., 2019; Melander, 2020).

There were numerous approaches that innovators have used to improve new product development success over the years. Popular methods for management included 5S, Stage Gate, 5 Whys and Value Stream Mapping (al Hasan & Micheli, 2022). One critical component of success for these processes tended

to be one which required behavioural intuition, in that the tools were used in a deliberate way requiring specific outcomes, rather than the usage of the tool and process itself (al Hasan & Micheli, 2022). In other words, simply having a process or a tool may have been a hindrance, as it may have veered from overall goal of the project, with undesirable outcomes. It was also not a cause for success. The result of this was that management tended to proceed as they saw fit for the project. This had an adverse impact on the strategic objectives of the company, as it could have been proceeding in contradictory direction to the stated plans of the business (al Hasan & Micheli, 2022). To conclude, management was not always aligned with the product outcomes, due to not targeting the fulfilment of strategic business objectives. This led to creating products that were absolutely not fulfilling customer's needs (al Hasan & Micheli, 2022).

As assistance for lack of focus on strategic objectives, involving customers helped to mitigate the unidirectional and incorrect focus of management. One of the key aspects to this is when to involve the customers. The new product development process has numerous stages. The possibilities to involve customers have occurred at various stages, independently or together. (Liu et al., 2019; Melander, 2020). There was not consensus among scholars as to when best to involve the customer. There was argument as to whether the involvement of customers should occur throughout the process, or only at certain stages. It was shown that the stage when customers assisted was typically at ideation (see table 1) and before trials (al Hasan & Micheli, 2022; Kazimierska & Grębosz-Krawczyk, 2017; Liu et al., 2019; Zahay et al., 2018).

Zahay et al. (2018) argue that to increase the success of new product development launches, customers must be involved at the beginning stages of a project, at the idea-generation phase rather than pilot and launch parts of the project. This has a bigger impact on profitability and success. This is in direct contrast to Jobs-To-Be-Done theory, as idea generation is largely dropped from the process. Furthermore, simply involving customers at all stages is argued to lead to success. This approach was known as Customer-Dominated Innovation.

The roles that customers performed in the product development process were important, interesting and varied. It was shown that customer roles included designers, consumer panels and developers (Liu et al., 2019). These roles were quite specific in their designation and naturally occurred. Both the business and consumer were not aware they were fulfilling it. Barone et al. (2021), in contrast, argued that consumers were more likely to adopt specific roles in the new food product development process. Consumers were shown to provide novel solutions to packaging design specifically (Barone et al., 2021). In the intersection of these approaches, Melander (2020) highlighted that the roles the customer were involved in were more fluid. At times, the consumer may be specific in their approach. Often the roles were transformed from a specific role to another role — or even multiple roles — as the project commenced and continued. Melander (2020) further asserted that customers are far more technical in their approach in testing than what was previously given credit for. Consumers knew far more about processes, product and output.

The various approaches highlighted above showcase the roles that consumers subscribed to when working on new product development initiatives. Clearly, there was not a specific way in which it worked, and research was not empirically clear on which was the most successful approach. To further elaborate on the roles, Liu (2019) contended that involving customers deeply in the journey is necessary for ensured success. However, Melander (2020) asserted that management has only needed to receive verbal feedback, early and late in the process. Furthermore, customers entered and exited into and out of projects far more than what was recognised by management. It was further shown that the earlier the customers are involved, the more innovative the product with greater commercial success and acceptance (Barone et al., 2021). Interesting to note that Melander (2020) highlighted too that the Jobs-To-Be-Done provided a thorough and successful framework for the process of obtaining customer feedback early. Jobs-To-Be-Done is typically performed early in the new product development process (Partanen, 2021).

A brief introduction on the impact on expense by co-creating products with customers was discussed earlier. This was mainly due to the need for setting up new structures and processes. It was argued that a lack of resources for involving customers may impede the project before it has started. With the lack of support and infrastructure for management to follow, costs and complexity increased. Furthermore, it has previously led to draining management time. This ultimately leads to an incorrect plan being followed and resulted in projects being placed in doubt (Liu et al., 2019). Interestingly, it was also countered that involving customers may reduce costs (Perttunen et al., 2021). Typically, these costs are more downstream and long term, as the new product was less likely to fail. A criticism in this research was that a process by which to follow to reduce costs was not provided (Perttunen et al., 2021).

The analysis time has also been described as a time sink. However, digital technologies assisted in reducing the financial outlay for such projects. Furthermore, management has over-emphasized the importance of new product development, as it was seeking growth and opportunities (Dwivedi et al., 2021; Perttunen et al., 2021). Resultantly, greater (with some describing maximum) resources and costs were attributed to new product development strategies: greater than what was necessary, incurring further hopes on ensuring success. Evidently, the significance of ensuring success supersedes the failures and what was required (Dwivedi et al., 2021; Perttunen et al., 2021). Furthermore, the costs of deliberating and proceeding with new product development strategy were high: higher than what management budgeted. As a result, ensuring that new products were successful was paramount. Simply by working with customers, it provided an added advantage (Asioli et al., 2017; Kazimierska & Grębosz-Krawczyk, 2017).

To conclude, there was ample evidence that involving customers infers an advantage in improving new product development success. This has been conclusively established (al Hasan & Micheli, 2022; Asioli et al., 2017; Dwivedi et al., 2021; Kazimierska & Grębosz-Krawczyk, 2017; Liu et al., 2019; Melander, 2020; Perttunen et al., 2021; Roberts et al., 2021; Zahay et al., 2018).

Liu et al. (2019) concurred that it is critical to success. Involving customers by understanding their needs performed a greater role in new product launches. The cost of failure was very high as competitors gained advantages by entering market first, with products. It has been shown quite comprehensively in the literature that not involving the customers increases failure too (Asioli et al., 2017; Kazimierska & Grębosz-Krawczyk, 2017; Melander, 2020; Perttunen et al., 2021). A risk was also created as management focus shifts to new innovations, with current products not being focused on (Si & Chen, 2020).

#### 2.4. Food Focused Innovation

This research was based on understanding consumer needs in the beverage industry, which broadly is a part of the food industry. Resultantly, a review of the literature of understanding customers' needs in the food industry was undertaken. As was the key theme of this research, the failure to meet the food and beverage needs of the consumer led, as expected, to failure of new food product development successes (Barone et al., 2021; Dijksterhuis, 2016; Perttunen et al., 2021; Ronquest-Ross et al., 2018). Unsurprisingly, the literature on food customer involvement processes and needs gathering in the food product development innovation, were also shown to improve success of new product development (Perttunen et al., 2021).

The manner in which this has been applied was by generating ideas and cocreation - a process of collective creativity (Barone et al., 2021; Perttunen et al., 2021). For the co-creation avenue, the way in which customers were involved was to highlight to the developers which specific facets of the food product was liked and not liked.

Furthermore, co-creation in the food industry depended on consumers being heavily involved and systematic in the process, almost akin to a partner and key stakeholder in the project (Perttunen et al., 2021). Ultimately, the narrative of the customer being involved was consistent with most industries – and was the key theme of the research. It was about understanding customer needs at an

inherent level and fulfilling those needs. Barone et al. (2021) argued that the co-creation is necessary for involvement earlier in the process in particular within the food development context (Barone et al., 2021).

Pertunnen et al. (2021) reported that the outcome of their study was not as expected. Linked to the earlier argument in the literature review, the reason was the infrastructure, systems and costs required to implement customer involvement impeded the process. In addition, it was a particular challenge for small businesses who do not have access to these resources to be successful. It was reported, however, that co-creation did lead to greater satisfaction of the product and the overall customer experience. It was recognised that the innovative aspect of the product was not as expected with the product not particularly being more innovative. The products tended to have better marketing cues, design attributes and marginally better flavour profiles (Asioli et al., 2017; Barone et al., 2021). Interestingly, it was also shown that the challenge could be attributed to management changing perception from closed innovation process to open innovation processes (Roberts et al., 2021). Thus, the managers are more open-minded and inclined to innovate and create new processes.

Significant commitment both from consumers and the company to create the products together were needed for success. The customer involvement led to small and incremental improvements to the products and the process itself. Crucially, the customers were only involved in the latter stages of the project and there was opportunity that was missed in this study (Perttunen et al., 2021). The key challenge for the company management was the interpretation of the data that was received. The Jobs-To-Be-Done theory and process aimed to address these concerns, firstly by gathering key insights from the customer early in the process to understand their needs (Ulwick & Osterwalder, 2016). Before the commencement of the project, it was necessary to understand what it was that the customer was needing and wanting (Perttunen et al., 2021). Secondly, the Jobs-To-Be-Done framework was well established, with decades of work on the theory and the framework by a multitude of academics and practitioners

(Christensen, Anthony, Berstell, et al., 2007; Lance et al., 2008; Partanen, 2021; Ulwick, 2017).

#### 2.4.1. South African Context

The South African food industry has changed tremendously in the past three decades. There is limited research on the topic over the past five years, but the key papers were regarded and will be argued in this paper.

The industry is dominated by large international corporates who have established value networks across the food supply chain (Greenberg, 2017; Ronquest-Ross et al., 2018). These value networks have impacted on the innovation capability of the firms and their access to customers in South Africa (Greenberg, 2017). The process by which new products were developed for greater success within the South African context, was broken into six themes. These themes include strategy; market research; new product development process; commercialisation; culture and performance management. As part of the process, it was highlighted that provision must be created for understanding customer needs. If necessary, projects were changed to better create a product that better suited customer needs: a topic that confirmed the key topics within this research paper on the topic. It further concluded that ascertaining customer needs is relevant within the South African context, too (Pienaar et al., 2019). This showcased the relevance of the theories to the local context. A summary of all the related arguments is showcased in Table 2.

Consolidation of the Theories and Frameworks Relating to Customer Co-Creation for New Product Development

Table 2

Topic	Key finding	Reference
Voice of the Customer	The Voice of the Customer was obtained through crowd sourcing – which was particularly successful but neededlarge groups. Also known as wisdom of crowd.	(Liu et al., 2019; Zahay et al., 2018)
Co-creation: how have customers been involved in the process?	Crowd source, lean, focus groups, observation Stage Gate processes, 5S, value steam mapping, verbally.	(al Hasan & Micheli, 2022; Liu et al., 2019; Melander, 2020; Zahay et al., 2018)
·	Heavily involved and systematic in the process, almost akin to a partner and key stakeholder in the project.	(Perttunen et al., 2021)
What do	Provide trends and experience of use. Needs (strategic, operational and tactical)	(Liu et al., 2019; Melander, 2020)
customers provide?	Small incremental improvements	(Perttunen et al., 2021)
	Penetrate customer knowledge	(Melander, 2020)
	Provide 'jobs' to customers	(Liu et al., 2019; Zahay et al., 2018)
	Collaborative stakeholder approach.	(Roberts et al., 2021)
Which processes	Not just listening to the customer, but involving throughput the process	(Liu et al., 2019; Zahay et al., 2018)
have led to successful launches?	Improve effectiveness and efficiency in the process of creating the new product	(Melander, 2020)
	Incremental improvements on existing products	(Perttunen et al., 2021)
	Use data that the company already has on hand already for product insights.	(Asioli et al., 2017; Kazimierska & Grębosz-Krawcz).

	Gathering customer needs	(Barone et al., 2021)
	Not hearing customers and using their insights.	(Barone et al., 2021)
	No guarantee that involving customers will improve success.	(al Hasan & Micheli, 2022)
Which process have impeded led	Companies that do not have dedicated new product development teams generally less successful.  Tools, processes and systems can inhibit success.	(Barone et al., 2021; Perttunen et al., 2021)
successful launches?	Resource needs are quite high and can be problematic. processes, infrastructure. Costs of digital and internet lower costs. Setting up infrastructure and process may impede progress.	(Liu et al., 2019; Roberts et al., 2021; Zahay et al., 2018)
	Traditional marketing practices impedes success	(Roberts et al., 2021; Zahay et al., 2018)
	Does not improve capacity innovation – simply about informing needs.	(Melander, 2020)
	Not more innovative, but open minded. Customer dominated strategies and approach.	(Roberts et al., 2021)
Innovation capacity	Co-creation leads to greater satisfaction.	(Perttunen et al., 2021)
	Value networks have impacted on the innovation capability of the firms and their access to customers in South Africa	(Greenberg, 2017)

# 2.5. Jobs-To-Be-Done Theory

The value that improving new product development strategies was introduced with the implication of failing strategies assessed, particularly around the various ways of involving customers. The use of the Jobs-To-Be-Done theory to mitigate the failures of new product development launches by gathering customer needs, pre-ideation phase, is presented in this section. It provides a compelling argument as to how it was used to involve customers in the process with limited resources.

The current literature, as well as the seminal works on the topic, are reviewed. There was, and is, a real world need for this research, especially and interestingly in the South African context for a small business. The Jobs-To-Be-Done theory was defined with the key promoters of the theory introduced. A review of what has - and has not - been studied, was considered.

Jobs-To-Be-Done has its origins in Schumpeter's 1942 'Capitalism, Socialism and Democracy', which started questioning competition, and introduced the "Creative Destruction" of new innovations and the impact this would have on companies in the future (Klement, 2016).

This was further iterated on by Drucker, in Innovation and Entrepreneurship. He first used the phrase 'job to be done' (Kalbach, 2019). Drucker further described the intersection of what a company is producing and selling, and the actual desired need of the customer (Partanen, 2021). Deming, in his 1994 book, The New Economics, introduced the notion that products perform jobs. Additionally, Deming describes that companies focus on improving on their existing innovations, while not understanding that the competition may introduce a new innovation that performs the job better (Klement, 2016).

The seminal work on Jobs-To-Be-Done was Christiansen's The Innovators Dilemma: When New Technologies Cause Great Firms to Fail, published in 1997, which introduced the topic of 'disruptive innovation' to the wider public. The core premise of the book's highlights was that firms failed much more often at innovating

and creating new, disruptive technology and products than succeeding: a common and decades age-old theme (Christensen, 1997). Companies that were able garner customer feedback and use this feedback to assist in creating products that the customers wanted, improved chances of success: success that was especially relevant to new product development processes and innovations, leading to disruptive innovations. Furthermore, there were five principles introduced which argued the importance of scale, supply and demand, financial resources, management resource allocation, and market dynamics (Christensen, 1997).

Over the years the theory has fragmented with the accuracy being lost on what it entailed (Si & Chen, 2020). There is dispute on the level of maturity on the theory, with it described as being in its infancy (Rasool, Koomsap, Afsar, Panezai, 2018). The term has been used loosely across various industries, business models and product launches. Disruptive innovation was process-driven and not outcome-focused. It was focused on creating new markets or targeted the lower end markets, fulfilled a need for good value and considered good enough for its purpose, did not depend on existing technologies and improved until it met the needs of the mainstream market (Petzold, Landinez, Baaken, 2019; Si & Chen, 2020).

A key criticism of the theory was that it was not properly understood and seemed expensive to implement (Si & Chen, 2020). It was further criticised as not being empirical and being hard to measure in terms of success or to benchmark against competitors (Rasool et al., 2018). Disruptive innovation was not a panacea for product development and innovation. A buzz word for many years, management ought to have been more selective about which strategies to pursue. This has, in fact, impeded the company's efforts as the process and entrants were time-sensitive (Petzold et al., 2019).

Within the disruptive innovation view, gathering latent needs was considered a key step in the innovation process. Similar to Jobs-To-Be-Done, it was about fulfilling

needs that were not being fulfilled by anyone else in the market (Rasool et al., 2018).

Jobs-To-Be-Done, has been comprehensively studied, with Anthony Ulwick and Clayton Christiansen being the two major proponents of the theory in the past 20-plus years (Partanen, 2021). It has dissected from disruptive innovation. The major issue with disruptive innovation was that it was impractical, with no framework or 'what do we do now' to action for management executives. Disruptive Innovation was typically focused on the outcome and subsequent impact of the product being launched on the industry rather than fulfilling needs (Christensen et al., 2016; Petzold et al., 2019). Jobs-To-Be-Done has come about as one of the most practical uses. It has shown pertinence and use in industries such as FMCG, travel, services, apparel, health and technology (Gavin, 2020).

Innovation is fundamental for strategic growth and this opportunity is evident across companies, industries and continents (Christensen, McDonald, Altman, Palmer, 2018; Hopp, Antons, Kaminski, Salge, 2018). Jobs-To-Be-Done theory was claimed to increase success of innovations by as much as 5-fold and provides a compelling research problem with real-world applicability (Ulwick, 2017; Ulwick & Hamilton, 2016). Involving, collaborating and working with customers early in the new product development journey has been shown to improve customer uptake and success of new products (Cooper, 2019; Gruner & Homburg, 2000; Perttunen et al., 2021; Timoshenko & Hauser, 2019).

A customer need is a self-described inherent longing, desire, benefit or "abstract context-dependant statement" that the customer requires from a product or service (Timoshenko & Hauser, 2019, pg. 3). In Jobs-To-Be-Done: Theory to Practice, Ulwick & Osterwalder (2016) describe customer needs as 'desired outcomes' and have identified six types of customer needs.

A leading issue with current management practices is that management depends on practices that do not have the core customer need at the beginning of the project. There are also other causes of the high failure rates. These include management working in silos with lack of communication, lack of product quality and outdated management beliefs (Dijksterhuis, 2016). Successes for product launches were compromised, especially those that did not include customer needs analysis in a product development process, with a well-executed launch and a product that is high quality (Cooper, 2019).

To further showcase the practical applicability of Jobs-To-Be-Done theory, it was also transferable across various industries. Jobs-To-Be-Done has generally been used as a customer needs data-gathering and market research tool to guide strategic decisions to assist with product success pre-launch (Christensen et al., 2007; Partanen, 2021; Ulwick, 2017). The theory has been described, as a "collection of principles that help discover and understand the interactions between customers, their motivations and the products they use" (Lucassen et al., 2018, p. 2).

Christiansen was notable for describing the theory as, "... when people find themselves needing to get a job done, they essentially hire products to do that job for them" (Christensen et al., 2005). Klement (2016) simply stated that Jobs-To-Be-Done was improving a struggle that people have every day and to improve one's life. Essentially, the core idea was that a customer has, at a very specific point in time, a need or desired to fulfil, and hire the job to fulfil the need (Hankammer et al., 2019). Ulwick's definition of Jobs-To-Be-Done highlighted the more practical and industry-relevant approach to his work, "Jobs-To-Be-Done theory provided a framework for (i) categorizing, defining, capturing, and organizing all your customer's needs, and (ii) tying customer-defined performance metrics (in the form of desired outcome statements) to the job-to-be-done" (Ulwick & Osterwalder, 2016, p. 48)

There was limited research on Jobs-To-Be-Done theory applied in the food industry. Furthermore, there was also lack of studies showcasing the success of the theory in the various industries. It is mostly theoretical, and consultancy-driven. One paper was reviewed whereby Jobs-To-Be-Done was applied to a rural food pantry (shelter) and a dietician, to determine applicability and success. It was found that the theory was not useful in capturing the needs of the customer in this case (Vaterlaus et al., 2018). The study by Vaterlaus et al. was limited with only 12 participants. The practical application of the theory has also been described as impractical in the software sphere too. Physical products are described as being far easier to apply the theory to (Lucassen et al., 2018).

A shortfall of the Jobs-To-Be-Done process it that it merely involved the commentary of the customer. The customer was only involved right at the beginning of the process, too. It was necessary to determine what needs the customer has and how best to serve those needs (Liu et al., 2019). Greater involvement of the customer was needed. Furthermore, Jobs-To-Be-Done focuses on extracting the exact needs of the customers and fulfilling, while they were not necessarily solutions-focused needs (Liu et al., 2019).

As is shown, there are limitations to Jobs-To-Be-Done: there have been insufficient studies on the applicability of the theory to the food Industry. Furthermore, there has been limited academic research and literature on the topic in the past five years. The few papers which have been published have focused on the user design experience and software development. This does, however, provide a compelling research topic for a small food business in South Africa to understand what 'jobs' are out there for customers to hire in the beverage industry. Table 3 summarises the latest research from the past five years.

The Latest Research on Jobs-To-Be-Done Theory from the Last Five Years

Table 3

Research	Key Finding	
The gap between providing items that	Too often, an incorrect strategy is pursued whereby a	
customers desire versus what is offered by	product is abundant in features is marketed to	
companies.	overserved customers (Christensen et al., 2018)	
A highly analytical approach was taken with	Taking from the customers' needs point of view	
the Jobs-To-Be-Done framework to assist	rather than resource-based company offerings.	
with decision making. The theses related to	The research findings showed that it was best to	
customer value creation and firm value. An	maximise the value of the product offering rather than	
analytical model was built to assist in	seek new markets. Achieving this by evaluating the	
identifying the specific target group,	ideal customer segments to target with the correct	
attributes of a specific product, and the ideal	price point in relation with competitors (Diderich,	
price point.	2022).	
Applied the Jobs-To-Be-Done framework in	Finding was that unserved customer outcomes were	
a hospital and service-orientated	identified and can be used for improving customer	
environment. Aim was to understand if	care. Furthermore, that Jobs-To-Be-Done was an	
Jobs-To-Be-Done is applicable to inform	appropriate theory and framework to assist in	
strategy.	uncovering unmet needs (Partanen, 2021).	
Applied Jobs-To-Be-Done framework and a	User experience was able to provide technical	
user experience toolbox to improve the	feedback on the design.	
design of a digital product.	Jobs-to-be done provided overarching goals and	
	desired customer outcomes when 'hiring' the service	
	(Jeanette & Vélez, 2021).	
Within the engineering environment, the	Showcased the practical use with benefits and	
universal job maps were used to ascertain	shortfalls of the universal job map within engineering	
effectiveness and to realise in practice.	context (Lucassen et al., 2018).	
Showcased the use of the Jobs-To-Be-	A limited study. Key themes were revealed to assist	
Done theory within a food charity context.	in better fulfilling needs. The study was not able to	
	reveal emotional and social needs as required.	
A study was conducted within the circular	Unmet needs were realised with opportunities for TV	
economy whereby Jobs-To-Be-Done was	sets to be repurchased. A recommendation for	
used to reveal unmet needs.	further value proposition strategy was advised for	
	with a contribution of to a methodological	
	(Hankammer et al., 2019).	

### 3. RESEARCH QUESTION

Literature relating to customer co-creation, new product development and Jobs-To-Be-Done were reviewed in the previous chapter. Numerous ways in which customers may be involved in the process were assessed. Meanwhile, new product development was shown to be important to growth and success. It tied off with a review of Jobs-To-Be-Done theory.

The research was based on understanding how involving customer could improve product development success. It was argued that there were numerous approaches on when to involve the customer. In particular, success was seen involving customers earlier in the journey – especially for new food product innovations products (Barone et al., 2021; Cooper, 2019; Gruner & Homburg, 2000; Melander, 2020; Perttunen et al., 2021; Timoshenko & Hauser, 2019; Ulwick & Osterwalder, 2016). Furthermore, for the research scope, which will be discussed in the next chapter, it was aimed to test a particular theory in a part of the new product development process, and it was not viable to test all the theories. The Jobs-To-Be-Done theory was considered ideal for this scenario.

This theory was applied to beverage consumers aiming to determine why the consumer purchased a particular beverage. It was further aimed to understand which particular 'job' the products were fulfilling. In essence, what was the customer wanting to achieve and did the product fulfil this need? The problem addressed a fundamental challenge in new product development in the food industry — understanding the customer need before the new product development process, thus increasing the success of new product development launches. The research study also considered which segments of customers to conduct the research on. It was decided to narrow the research and focus on women only.

The key gap in understanding was creating a product that will be successful in a wider market and in tune with customer needs (Foulds, 2019; Rasool et al., 2018; Si & Chen, 2020). The impact of COVID-19 on businesses and the economy in South Africa was devastating with a 1.5 % contraction in the GDP in 2021 (Stats SA, 2021). Businesses urgently need new strategic innovations to remain relevant with a new contribution to the literature (Cooper, 2019). Theoretically, there was also a need for the study as there is a limited amount of research on innovation success, with empirical results in all aspects of academia and geography (Baregheh, Rowley, Sambrook, Davies, 2012). Additionally, the amount of research on new product development success in the beverage sector is particularly shallow globally, and especially in South Africa. Currently, there is limited literature on the use of Jobs-To-Be-Done theory for the food industry and its purported success.

There was a compelling opportunity to understand its use in this context in South Africa: an opportunity to design a framework and process for future use - and across segments and categories - further cements the relevance of the study. This led to the research question:

### **Research Question:**

How well does the Jobs-To-Be-Done theory inform product development strategy, by fulfilling underserved beverage needs amongst women in South Africa?

The next chapter details the research design and methodology to answer the research questions: an opportunity to understand, through academic rigour, how to realise unmet beverage needs.

### 4. RESEARCH METHODOLOGY

#### 4.1. Introduction

This section details how the study was conducted. The research applied the Jobs-To-Be-Done framework to gather customer feedback and needs, proceeded to uncover unmet needs, and then moved to the inform product development strategy.

This chapter highlights how the research methodology universe was drawn up to facilitate this qualitative study. It was also aimed at providing direction to determine which jobs the particular beverage fulfilled for consumers, ultimately informing the core functional job. This was achieved by answering the research question and applying the Jobs-To-Be-Done framework.

The industry relevant to this study is the food industry and the objective was to assist informing new food product development strategies, especially within the South African context. As previously stated, a qualitative method was followed, with interviews being conducted using a semi-structured approach. Subsequently, coding and categorisation of the data were conducted using Atlas.ti software and customer 'jobs' were obtained (Saunders et al., 2016).

The outcome of the study was unknown prior to beginning the project. The theory and framework were applied in the beverage sector, and only among women, to understand if it is adequate to inform strategy. Once the insights were obtained, they were turned into 'jobs' applying the Jobs-To-Be-Done theory and framework. Since the theory has previously been scantily applied to food innovation processes in academia and literature, the methodology was applied with open-ended questions. Insights into the problem were therefore gained and this indicated that an explorative research design was needed (Saunders et al., 2016).

There was risk prior to the project commencement of the reliability of the data. Specifically, data saturation was a concern. To mitigate this, validity and reliability of the data were planned. The limitations of the research were also discussed. Furthermore, the ethical committee of the research institution (Gordon Institute of Business at the University of Pretoria) to which this paper was submitted, was presented with the interview guide and the research methodology. The Ethics Committee approved the ethical approach of the study, see <u>Appendix 3</u>.

# 4.2. Research Design and Methodology

The key theme of the research was focused on realising customer jobs relating to beverages. Consequently, a qualitative approach was followed. This was due to the nature of the research itself whereby insights, words, or terms, would be gathered, consolidated and analysed. 'Jobs' are ordinarily words and customer needs are qualitative and most suitable to the approach in this study (Hankammer et al., 2019). A number of authors that are leading practitioners in the field followed a qualitative approach (Klement, Christiansen and Ulwick) with Jobs-To-Be-Done frameworks (Hankammer et al., 2019; Lucassen et al., 2018a). In defence of the usage of qualitative for this study, most practitioners studied and continue to expound the theory provided.

### 4.2.1. Research Philosophy

A qualitative approach in research typically led to an interpretive philosophy (Chowdhury, 2014). An interpretive philosophy allowed the topic and research question to be studied in the user's environment, and from their perspective. Moreover, ideas of how the trends and key data were uncovered further cemented the Interpretivist philosophy (Saunders et al., 2016). The researcher aimed to capture the essence of what customers were saying about beverage purchases and consumption behaviour in their day-to-day lives. It sought to understand the meaning behind why the choices were made. Further defence on why an Interpretivist philosophy was the correct angle, was that it determined to understand the meaning and choices behind people actions and behaviours

– particularly in how people relate to each other. This was in accordance with Jobs-To-Be-Done theory, as it assisted in understanding how phenomena occurred (Chowdhury, 2014).

Relating to the Research Question and in further defence of a qualitative study, a theoretical framework was used and provided as part of the findings. This is generally a key output in a qualitative study. This framework was applied to gather jobs, as well as evaluated to understand its applicability to inform strategy in the food industry (Saunders et al., 2016). The research provided an opportunity for sense-making on a social level (Chowdhury, 2014). A key to the Jobs-To-Be-Done framework was revealing the functional jobs the product were performing, from which customer outcomes were revealed (Christensen, Anthony, Berstell, et al., 2007; Christensen et al., 2016; Ulwick & Osterwalder, 2016). Furthermore, the data were gathered in a real-world setting, and within the context of the lives of the participants. Consumers were questioned on their beverage behaviour at the point of purchase, consumption and post-consumption (Lance et al., 2008; Saunders et al., 2016; Ulwick & Osterwalder, 2016).

An Interpretivist philosophy was about seeing the manner in which the participants view the world. Their attitudes towards certain phenomena, which was evidently appropriate for this study are evaluated (Chowdhury, 2014; Saunders et al., 2016). A drawback of the Interpretivist approach was assigning experiences and needs common to groups of people which were universal. Assigning a specific population sample aimed to counter this (Saunders et al., 2016). This is described in the next sub-section of the paper.

### 4.2.2. Research Design

The approach to the theory development was inductive. An inductive approach was used as data were generated to inform themes. These themes would then be applied via code generation to theory with qualitative methods. From this, a framework was taken from literature and this framework was applied in a real-world study. These are all key facets of an inductive theory (Saunders et al., 2016). From this, a Jobs-To-Be-Done framework was applied which was taken

from literature. The major aim of the study was to show that this theory is appropriate for the purpose of extracting jobs hence the inductive approach. Lastly, and in defence of this approach, an inductive approach focused on using data gathered to test against the theory (Saunders et al., 2016). The major aim of this research was to show that this theory was appropriate for the purpose.

An explorative design was used, since a standard semi-structured interview guide was used to garner information from a population. An explorative design study sets to 'explore' the phenomena surrounding the research which was done with this topic.

The final answer was not known prior to the commencement of the study (Christensen, Anthony, Berstell, et al., 2007; Saunders et al., 2016). In this case it was to understand if the Jobs-To-Be-Done framework can assist in informing product development strategy. A criticism, or source of confusion of the Jobs-To-Be-Done theory is that there have been a few major proponents of the theory such as Christensen, Klement and Ulwick. As a result, each author introduced his own interpretation of the theory and framework (Partanen, 2021).

The aim was for all interviews to be conducted online, which are considered 'e'-interviews. Care was taken in ensuring that the interviews ran smoothly and there was adequate power and reception. The interviewer / researcher prepared by remembering to pause after each sentence and wait for a response due to delays. Further preparation included ensuring all questions were easily available and upfront before starting, and to detect interview fatigue (Bampton & Cowton, 2002).

A suitable strategy was used to ensure that data gathering techniques were sound. Jobs-To-Be-Done is based on gathering data from customers at various points in the customer's journey and collating the insights (Christensen et al., 2007; Ulwick & Osterwalder, 2016). Evidently, one approach was used to gather data and was reviewed. It was then applied through the Jobs-To-Be-Done framework to understand the customer jobs. The methodological choice is

therefore Mono in nature. The aim was to gather high quality data with relevant interview questions (Saunders et al., 2016).

The time horizon of the study was cross sectional. Data were gathered within a slice of time in 2022. The study involved a semi-structured interview approach which was also a component of a cross sectional time span (Saunders et al., 2016). Due to the nature of Jobs-To-Be-Done theory, the feedback and insights that generated the jobs and informed strategy were universal, meaning that a cross-sectional study is appropriate for the theory as these insights can be used in the future as long as it is within the industry (Saunders et al., 2016). The data uncovered ought to provide 'jobs' that needed fulfilling on a frequent basis, such that the provided data may be used for ongoing product development strategies. Consequently - and in defence of the cross-sectional approach - it was appropriate for this study. Furthermore, the researcher had limited time in which to conduct the research and therefore it was necessary to follow this approach.

Next the population of the research study will be presented.

## 4.3. Population

The population used for this qualitative study was a group of beverage drinkers. To narrow in on the research to the target population, only women were interviewed. The age range of the women was 25 to 60. This was deliberate in order to further focus the population sample. The sample was then made up of twelve women who were interviewed in a semi-structured interview manner. A Living Standard Measurement, while difficult to apply to the interviewees, was of a standard that the interviewee had access to the internet and was able to utilise media programs. As a result, the assumption the researcher is making on the population sample was middle-to-upper class. Once more, this was a deliberate tactic.

The call for interviews was directed to women only. Rather than focusing on the whole population, and to learn what they would prefer to drink, the study aimed to understand the desires that female shoppers experience. It was to

understand why the female shopper was buying a beverage and what job this beverage was doing.

In defence of this population choice, a wide scope of buyers was not chosen in order to narrow the research. The sampling was made of simple random within the probability sampling technique (Saunders et al., 2016). The aim was to interview twelve women, covering the full beverage experience, so as to ascertain the buyers' ultimate needs according to the research question. Recognising, and in defence, that this could have been seen as convenience sampling and be open to bias and influence, the technique fulfilled the research question aims (Saunders et al., 2016). Furthermore, it was entirely possible that the buyer may have provide wholly insignificant and irrelevant feedback, such as "I am thirsty." This may have disproved the applicability of Jobs-To-Be-Done as a theory to assist in data gathering and use for strategic product development. There was homogeneity in the sample population (Saunders et al., 2016). This due to the use of women within a specific age group.

## 4.4. Unit of Analysis

The unit of analysis of the study was a women beverage buyer and consumer. In defence of this, the needs of the female buyer were determined. In the next section the sample measurement instruments are discussed.

### 4.5. Sampling

Sample framing was not necessary for this project, as non-probability sampling was chosen. Due to the size and scope of the target population, it was not possible to advertise the research and interviews with the full population. A more focused approach was desired with a set of interviewees. In defence of this approach, this manner worked best with semi-structured interview approach which was used for this study (Saunders et al., 2016). It is also the most useful approach to use with available resources. Researchers recommend that validity on how the data will be process is particularly important (Saunders et al., 2016).

To gather the data, an interview was conducted with the sample population of twelve women. Twelve fulfilled these criteria adequately. Saunders et al. recommend semi-structured interviews with range of sample from 5-25 (2016). A consent letter was sent to all participants before the interview. It was read to the interviewee before commencement of the interview. The interviews were created to be 40 minutes in length and are shown in Appendix 2 (Bettencourt et al., 2021; Bettencourt & Ulwick, 2008; Valchanov, 2022). It was directed to extract key information on beverages behaviour – the full journey. The questions were as simple as, "Why are you buying the product? What purpose is the product fulfilling for you now and when you consume it? How do you feel when you consume the product? What job is the product fulfilling?" Care was taken in ensuring that the interviews were successful, and the right insights were gathered. Lastly, quota sampling was used as the strategy for determining the correct approach. It is a fair measure in representing the target population and assisted in acquiring the correct profile for the study (Saunders et al., 2016).

### 4.5.1. Measurement Instrument

In a qualitative study the measurement instrument will be the interviewer, which is conducted by the researcher. These will be conducted to unlock the needs of the buyer. Interview guides were used to guide the interview process for the researcher. It was also used to ensure that each of the participants was asked the same questions. This was also done to alleviate differences in the data received (Maxwell, 2013; Saunders et al., 2016).

#### 4.6. Data Collection

Jobs-To-Be-Done has highly developed approaches to data gathering and handling. Christensen and Ulwick provided a qualitative approach to Jobs-To-Be-Done and was the main focus for this research (Christensen, 1997; Partanen, 2021; Ulwick & Osterwalder, 2016). The approach was described as entailing a progress-led view, meaning that the consumer was provided with the input on social, emotional and functional aspects through interviews. The everyday

needs and goal the consumer were uncovered (Christensen et al., 2007). After the data were gathered, the answer whether this process and the Jobs-To-Be-Done framework can be used to guide new product development innovation strategy. Recognising that there were limited studies on food applicability, and in defence of the theory itself, the aim was to show transferability of the framework. A white paper was presented by Ulwick (2017) showcasing step-by-step processes the researcher or manager should follow in realising Jobs-To-Be-Done. This is shown in figure 2.

Gathering data for the project was by means of interviews. The interviewees were invited to participate via email with a consent letter. The interview extracted key information as to why they are buying the product. Lastly, simple demographic questions were ascertained (only age and gender), to report the different population sample. The data were gathered by the researcher. The interviews were transcribed using Descript transcriber and deleted from program once attained. Data saturation was mitigated by aiming to interview as wide a group of buyers as possible in terms of demographics and age but still within the same gender.

The data, raw and final, pertaining to the study, will be kept for a minimum of ten years in a secure and accessible online format, G-drive. No names will be requested nor stored. The data will be stored without identifiers and only age and gender will be provided. No names of individuals or organisations will be reported. Only aggregated information to be provided.

To lower the risk of biases, the researcher undertook various schemes and preparation. Firstly, the researcher asked neutral questions. The researcher did not ask leading questions that might sway the recipients' answers, rather to ask the interviewees to explain more or elaborate on their discourse(Chenail, 2011). Furthermore, the questions were thoroughly prepared to ensure no discomfort. If a question was unnecessary in the course of the interview, it was discarded (Chenail, 2011).

Figure 2

Jobs-To-Be-Done Process



*Note.* An example and adaptation of the step-by-step process to realise the Jobs-To-Be-Done framework. From "Whitepaper Outcome-Driven Innovation (ODI): Jobs-to-be-Done Theory in Practice,". by A. Ulwick, 2017, *Strategyn*, p. 5. Copyright 2017 by Strategyn.

To gather the data, three domains will be used to realise the full spectrum of Jobs-To-Be-Done theory (Partanen, 2021). Firstly, customer jobs and the outcomes the customers are aiming to achieve will be evaluated. Secondly, the realisation of innovation areas will be uncovered (Ulwick & Osterwalder, 2016). Lastly, the current struggles the user has with opportunity for improvement will be shown (Christensen et al., 2016). Next, the paper highlights the analysis approach.

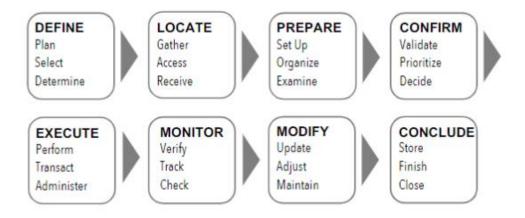
## 4.7. Data Analysis

The author has used and consolidated key research from the major proponents of the theory. However, Ulwick & Osterwalder (2016) have created a framework to determine customer needs and to create a strategy from the data obtained. Ulwick provided a comprehensive step-by-step process and was the main focus for the study approach (Ulwick, 2017; Ulwick & Hamilton, 2016). Partanen (2021) has provided a comprehensive framework for the analysing the Jobs-To-Be-Done framework gathered from the first two segments of Design Theory. The author has used key research from the major proponents of the theory. However, Partanen (2021) is creating a framework to determine customer needs in a service industry. Therefore, it was decided to use a combination of Partanen's approach with the process provided by Ulwick. This was shown in figure 3.

The data were gathered and consolidated with constructs using the Atlas.ti qualitative data gathering and consolidating program. The data were then categorised and gathered according to the certain job segment it is filling, which is known as the universal job map, Figure 3 (Bettencourt et al., 2021; Bettencourt & Ulwick, 2008; Lucassen et al., 2018).

Figure 3

Universal Job Map



*Note.* The universal job map, a process used to break down the customer journey and analysis each step in the process. From "Jobs to be done: theory to practice". by A. Ulwick & A. Osterwalder, 2016, *Idea Bite Press*, p. 93. Copyright 2018 by Strategyn LLC.

After the Jobs had been identified, they were reworked as customer outcomes. The customer outcomes were provided back to the interviewees, and they were asked to place them in an Opportunity Landscape. This showed the different segments of the market to determine if it was appropriately served. The data were placed in a table that determined if the job is overserved, underserved or is appropriately served, after which there were ample data to inform NPD strategy. The overarching study through which the process the researcher followed was shown in Figure 2.

Next, the quality controls are discussed.

## 4.8. Quality controls

#### 4.8.1. Trustworthiness

The study aimed to showcase various elements of Trustworthiness through credibility, transferability, dependability and confirmability (Lincoln & Gubam, 1985). In Qualitaive research it is critical to showcase rigour of methods and data to ensure that proper processes were followed. This is to ensure a trustworthy and valid paper. Correctly interpreting the data were crucial to this qualitative study. Furthermore, inferences about the observations were needed and care was taken to ensure it was correct.

### 4.8.2. Credibility

#### 4.8.2.1. Bias Check

Researcher biases were considered throughout the interview journey. Notes were made post-interviews to compare to what was discovered through the interviews; compared with what was heard by the researcher (Chenail, 2011a).

#### 4.8.2.2. Persistent Observation

Twelve interviews were conducted with participants. Interviews proceeded to a point were no more questions could have been asked. Additionally, care was taken to focus on only the most important aspects of the study related to the topic (Korstjens & Moser, 2018; Lincoln & Gubam, 1985; Morse, 2015)

### 4.8.2.3. Referential Adequacy

As part of the second round of feedback from customers, they were due to measure the importance and satisfaction the customer outcomes. One of the participants reverted late with her data. It was too late to include in the aggregated opportunity landscape. As a result, it provided an opportunity to compare through referential adequacy. It was found that six out of the eight customer outcomes fulfilled this role (Lincoln & Gubam, 1985). This is displayed in <u>Appendix 4</u>.

# 4.8.3. Transferability

## 4.8.3.1. Thick Description

An important note - while transferability aimed to be achieved through thick description, more research is needed to confirm this. In addition, it would have been useful to showcase this criterion for two reasons. Firstly, to provide the cultural context in which the interviewees lived and compare differences in terms of the beverage needs. Secondly, to see if the Jobs-To-Be-Done framework can be applied in other settings. The researcher believes that transferability through this avenue is possible, as it was shown that the framework can be applied in an emerging market context, as well as within the food industry (Korstjens & Moser, 2018).

## 4.8.4. Confirmability

#### 4.8.4.1. Audit trail

An audit trail will be possible as all the data are presented in the paper. The data consists of interviews, transcribes, frameworks, sources, reworking data and journals. The data were also kept in a secure password-protected folder.

# 4.8.5. Confirmability & Credibility

### 4.8.5.1. Triangulation

Two types of Triangulation were provided for this study. Firstly, there was Methods Triangulation. This was due to the usage of three authors for the use of the Jobs-To-Be-Done framework (Ulwick, Partanen, and Christensen). The second form of is the Triangulation of sources with multiple uses of sources for the framework throughout the research study (Korstjens & Moser, 2018; Williams & Kimmons, 2022).

#### 4.9. Limitations

There are limitations that were considered and addressed throughout the process. As described, there was scant research on Jobs-To-Be-Done in the food industry. Consumers may provide irrelevant, abstract and shallow responses to the survey. The researcher showcased that the framework was, indeed, possible to gather customer needs and feedback. Another possible limitation was the quality of data with the responses from the unit of analysis. To mitigate the, we will aim to reexamine the interview process and questions. The online respondents may have been difficult to appraise as it is difficult to observe an online community (Saunders et al., 2016).

The size of the sample may have been proven to be a limitation in the study as it may be difficult to derive enough decent data. In response, the research may increase the sample size as the research progresses, if the data gathered is insufficient (Saunders et al., 2016). It was recognised that this is a cross-sectional study and the time horizon was limited. This may have provided scant, trend-dependant responses. In defence, the aim of this paper was to showcase that the Jobs-To-Be-Done framework was useful for informing new product development strategy only.

### 5. RESULTS

#### 5.1. Introduction

Chapter Four highlighted how the study would unfold. This chapter presents the results of the 12 semi-structured interviews and how this data were applied with the Jobs-To-Be-Done framework. From this, the results of the jobs to be done were evaluated on how it can inform product development strategy, if at all. The aim was to answer the research question asked in Chapter Three.

The process followed the Jobs-To-Be-Done framework outlined by the key authors of the theory. It starts with the creation of the strategy, allowing to set up the customer needs gathering process. Next the framework which is made up of six steps was followed and shown in figure 2 (Bettencourt & Ulwick, 2008; Christensen, Anthony, Berstell, et al., 2007; Christensen et al., 2016; Ulwick, 2017; Ulwick & Osterwalder, 2016).

## 5.2. Defining the Customer and Interviews

The customer was known as the core job executor and decision maker who makes the purchase in the context of Jobs-To-Be-Done (Ulwick, 2002; Ulwick & Osterwalder, 2016). The customer was defined as exclusively female, ranging in age from 25 years old to 55 years old. Table 4 provides a summary of the interviewees. The names of the interviewees were anonymised. Since most people drink beverages of some sort it was easy to find willing and qualified sample population for the study. It was emphasised to the participants that the study excluded alcohol as a theme for the research.

A Summary of the Interviewees

Table 4

Interviewee	Age	Geographic	Race		
	Location				
Int 1	50 – 59	Cape Town	White		
Int 2	50 – 59	Johannesburg	Indian		
Int 3	20 – 29	Durban	White		
Int 4	40 – 49	Johannesburg	White		
Int 5	20 – 29	Johannesburg	Coloured		
Int 6	30 – 39	Johannesburg	Black		
Int 7	40 – 49	Cape Town	White		
Int 8	30 – 39	Johannesburg	White		
Int 9	20 – 29	Cape Town	Black		
Int 10	30 – 39	Johannesburg	Black		
Int 11	30 – 39	Polokwane	Black		
Int 12	50 – 59	Johannesburg	Black		

Prior to commencement of the interview, age range, race and location were noted or asked. The aim was to spread the sample as much as possible across age and locations. The interviews were successfully obtained via email and message requests. Emails were sent out to 30-plus random women who fulfilled the criteria for the study. The emails were attained from previous scant interactions and through second order relations. The response rate for the interview request was low. Following up with the potential participants was helpful but very few respondents reverted with only three accepting the interview. The most successful approach was requesting interview requests with acquaintances of colleagues and friends. First order relations were not interviewed, but it was possible to request interviews with people whom they knew and who would be willing to be interviewed. It was emphasized that it was imperative that I did not know, or had very limited interaction with the prospective

interviewees. First order relations were excluded due to not wanting to be influenced through the relationship.

Three of the interviews were conducted face-to-face, while the nine others were conducted online, all in English. Care was taken in ensuring that the interviews ran smoothly and there was adequate power and reception. The interviewer / researcher prepared by remembering to pause after each sentence and wait for a response due to delays. Further preparation included ensuring all questions were easily available and upfront before starting, and to detect interview fatigue (Bampton & Cowton, 2002). The interview guide is shown in <a href="Appendix 2">Appendix 2</a>. The interview questions were based on following the universal job map as shown in figure 3.

After the interview process was complete, all the data were transcribed using Descript software. The data were then imported into the Atlas.ti program to analyse the codes. Many codes repeated numerous times in the same study and at times in the same paragraph. The result shows the distribution of codes through the interviews which is displayed in <a href="Appendix 5">Appendix 5</a>. As can be seen, data saturation was reached early. However, to ensure that the codes were well grounded throughout the various interviews, the codes continued to be applied at relevant junctures. The number of codes generated numbered 86 in total. Three codes were merged due to similar terms and three codes were deleted as they were not relevant and nonsensical in hindsight.

### 5.3. Emergent themes

The themes that emerged out of the data will be discussed in the next section. The data were not presented in order of importance or relevance. The interview process revealed various topics around the beverage drinking behaviour. The research question was about revealing whether the Jobs-To-Be-Done theory was useful in informing product development strategy. Before determining this, the customer jobs need to be identified through interviewing, coding and revealing the relevant themes. This was the first theme of the paper which

argued customer co-creation. The codes were grouped according to similarity, resulting in 8 themes discovered, which will be discussed in the next section.

First the key themes around the beverage consumptions was presented. It is important to note that before Jobs-To-Be-Done was applied, this data would be used by product development teams to as a springboard for innovation. After the data is presented, a link is made to the research question.

#### 5.3.1. Definition

The interviewees were asked to define the term 'beverage'. This was done to gain an understanding of how this was perceived. It also assisted with comparing the various answers, aiming to ensure that there was consensus for the researcher. If the answers were varied, then it would have been trickier to find assimilations in the data. The interviewees regarded beverages and the feedback was comparable, as expected. The overriding response was one which explained that it is a liquid of some sort that is drunk. A pick of the definitions is shown below.

"it would be something that you drink when you're thirsty."

"Beverage is a liquid that you can consume safely."

"A beverage is anything that we can drink that is not alcohol."

## 5.3.2. Theme 1: Consumption Experience and Place

The first theme that is presented is 'consumption experience and place.' Throughout the interviews, the participants made reference to feelings and how they related to the whole experience. Beverages provided satisfaction and benefits, among other feelings, to the drinker at specific times during the day.

- "... that was very, very nice. They made me feel very, very good."
- "... ice coffee is just the ... feeling of, 'Ooh, this is hitting the spot of, um, kind of a bit of decadence'... the other beverages that I'd reach for it's I feel like for me, it's doing the hydration ... but also feel like I'm giving my body something like good for me."

The products were also consumed at different locations for specific reasons. Consumers mentioned that they felt either good, energised, calmed, annoyed, and satisfied by the consumption experience. The outcome and desired feeling dictated the beverage choice. Consumers also bought beverage for later use, anticipating the desired feeling and state of being. Consumers bought beverages to fulfil that future need and forecasted state of being. Furthermore, the participants mentioned that the beverages were a key part of day-to-day experiences.

The products were consumed in a variety of settings, and for a variety of different reasons. The experience of consumption can leave the consumer feeling either satisfied, energised, calmed, or annoyed. The outcome and sensation that the consumers wanted to achieve directed the choice of beverage. In addition, customers purchased a beverage in the hope of experiencing the desired sensation and feeling after consuming them. Drinks are purchased by customers in order to satiate this need. Moreover, participants have mentioned that beverages were an essential component of their day-to-day routines.

- "... it is very much like a once- in-a-while treat. And I think it maybe can, it's almost like, you know, sometimes will have to mark an occasion."
- "... a long hike or something, that kind of like feeling ... result in me really wanting like an ice-cold cordial."

"So when I go to gym, I try and have only if I'm not doing yoga."

"... plan to just put it in the fridge and use it when I feel like using it."

"I'm very mindful ... that the beverage stays in my hand while everything else goes in the packets. And then as soon as I get in the car, taking that sip to be like calm myself before having to go to the next location."

Reusing the packaging was, interestingly, cited by a large number of interviewees as a key conclusion of the beverage experience. It was surprising to hear about this part of the experience's significance, interest, and overlooked aspect.

"Sometimes, if it's a bottle, I actually keep the bottle and don't throw it away because I use it for ... storing something else."

"The outcome would be health and thirst ... and I can reuse my bottle"

## 5.3.3. Theme 2: Desire New Products

The next theme that was identified was the desire for new products. Interviewees spoke about seeking new product experiences, flavour extensions, or simply that a change was wanted.

"... want to have a change and then you look for new products, see if it fits ... your budget. But otherwise I'm just happy with normal products that I usually buy."

"I like the novelty of a different flavour tea. So I think, um, novelty is probably ... that's what the beverages answer like I do. When I look on the menu, I see someone drinking something. If it looks unusual, then I'm drawn to it and I'll order."

Seeking alternatives was a definite part of the consumer shopping experience. An interesting and repeating mention was creating one's own product. In the interviews, the participants made reference to feelings and how making one's own product led to satisfaction.

"... and it looks because you've made it yourself. And then when you put it in the, in the bottle, it looks very nice in the fridge."

"... so it's kind of the beverages of fulfilling the need of, um, satisfying this craving while you know, not feeling bad about it."

# 5.3.4. Theme 3: Taste, Sensations and Flavours (Product Attributes)

The product attributes were a key theme in the research. Consumers fulfilled their needs and bought products through expecting desired attributes. Loosely linked to the consumption experience, this theme is more specific to the product. The key sensations that the products provided were linked to the energy, refreshment and the actual temperature of the product.

"... during the day I don't have, but I think it does give you your energy or your boost for the day."

"... the reason I do is because it's refreshing, it's - it diminishes, thirst."

"I get a great feeling from feeling healthy by drinking it. It's just refreshing. The taste is good."

Providing taste was one of the most highly coded items. Taste was significant in the purchase of the beverage and desired sensations. Over and above the benefits that products could provide, just having a product that was tasty was seen as fulfilling a need: the need to satisfy blandness but also provide comfort. Furthermore, sweetness was mentioned as a wanted flavour. Taste was also seen as a reason to not pursue – or pursue – a particular beverage.

"... it's not like it's got any mood enhancing stuff in it, but. There's something tasty about it. It's tasty and, and I love it."

"... you know what sweetener they're using..., some sweeteners just don't have a nice taste."

"I wouldn't go for ... I don't like fizzy drinks. Um, like I don't like the, the taste of them or like the fizziness mm-hmm."

Specific ingredients were key to the choice of beverages. Certain ingredients enhanced taste and therefore likability. Ingredients also fulfilled satisfaction.

"That's number one. So, I don't think it's about the price. I think it's more like I would always look for quality ingredients."

## 5.3.5. Theme 4: Budget Dependant

The next theme that was shown consistently was 'budget-dependant.' A key response throughout the interview process was the limitations of budget. Customers were not always able to fulfil their beverage desires due to the expense of the products and funds available. Nearly all interviewees mentioned that budget was a barrier to obtaining the actual desired products: compromises were made between what is desired compared to what is purchased.

"... and sometimes we spend a little bit of money to buy designer smoothies or juices or shots, which is healthy, but they're expensive. So that's a real treat."

"If the ingredients are to my liking, then I look at the price.

If I can afford that, then I will buy."

The product was seen as a key part of the shopper experience.

"... sometimes you just want to have a change and then you look for new products, see if it fits you or your budget. But otherwise I'm just happy with normal products that I usually buy."

"Okay. I think what's missing from the kombucha type of products. Um, coz there are like a couple, you know, so like kombuchas and um, you know, press use and all of that can be the accessibility and like affordability. So if I'm not thinking about the actual content of the product, but more the whole package."

## 5.3.6. Theme 5: Purchase Experience

The purchase experience was a noted part of the beverage journey. It was the means for acquiring the product. The experience in store was discussed by all participants. Consumers described how, in most instances, walking through the store and either seeking beverages directly or stumbling upon it.

"Just walking in the shop and looking at different beverages and then making comparisons."

"...sometimes you're shopping and just like looking at something new that's sitting there or you've known about something."

The intimate moments, pre-purchase, were particularly revealing. There was a high degree of information searching, seeking and comparing. Consumers noted an overwhelming number of beverages on shelves. The information that consumer sought predominantly related to the labels. The design of label drew the attention of the shoppers. The key information that was searched were the ingredients list. Lastly, the price is the final component of the information search, just before the consumer decides to pick up the product and proceed with the purchase.

"... and if I see an interesting beverage, I look at it, read the label. Like it, I like it. Otherwise, I just go for my normal things. My juice and the milk.

"... the difficulty for me at the moment is having to read labels in stores, which really lengthens the time of the shopping experience. But if you don't do it, then you you're going to consume nonsense."

"If I read the ingredient, if the ingredients are good, I will buy the product if it's not excessively expensive."

It is interesting to note that some of the respondents noted that they were happy once the product was bought. They were excited to consume the product later or almost immediately after it was bought.

"...because the product is really good, and I was happy too that I purchased it and it was tasty."

"I was happy. Bought the drink and I drank it... I drank half of it in the store and the other half I put in the fridge."

# 5.3.7. Theme 6: Satisfying Thirst

One of the most frequently mentioned ideas was the need to quench thirst. This was noted as the key purpose for purchasing the beverage. Not a surprising finding as the main reason beverages are consumed is to quench thirst. The researcher was extremely worried that all interviews would only note this aspect in relation to beverage. Leading to an uninspiring study. Interesting to note that interviewees mentioned thirst quench along with other attributes that the beverage provided - as if it was the primary reason for consuming the product; while the benefits and other attributes are a value add.

"... thirst, quenching more. Like, I guess satisfying like craving for a specific taste."

"... it ranges between, you know, just like, like, oh, I'm, I'm thirsty or like I'm cold and I'm so excited for, I think. I think actually excitement will be the, the one word for all, because I know that what I've selected is going to kind of fulfil like this, you know, this need or, make me feel a certain way or whatever, you know?"

"Glad that I was finally going to get rid of that dry sensation in my throat.

Linked to this was the desire for satisfaction and a longing to actually consume the product. Interviewees described how they searched for and scoped specific products that help. Availability of products in the location in which the interviewee found themselves, was elaborated on. The product ought to be readily available.

"... not thirst, quenching more. Um, Like, I guess satisfying, like craving for a specific taste."

. "Satisfying, um, satisfying a. Um, kind of a, a desire. That's the job that I would fulfil."

"I think major outcomes would be kind of that, like that relief or that satisfaction."

#### 5.3.8. Theme 7: Health Benefits

Consuming beverages for health benefits was the most frequently mentioned premise throughout the research. Consumers expected and desired beverages to fulfil health needs and improve on health.

"The outcome would be health and thirst quench and I can reuse my bottle."

"... started reading labels and seeing how much sugar there is in this beverage, just that oh, advertised as healthy and they're not healthy.".

Beverages were drunk due to specific ingredients. Consumers went out of their way to only drink beverages that had for the benefit they were seeking.

"I don't really have these...beverages. Only personally consume is orange juices and we like the benefit of the vitamin C and that it's made from farmers that's organic"

"...that are also good for your health. I don't know, like all of them, but they're quite immune boosting. I know I use like ginger and all of that."

There were also functional benefits that were presented as to why consuming beverages was important:

"How do you know that it has that benefit? Uh, well, I do read things and, you know, like mean, I do know, like vitamin C, that inflammation because we used to make in our cooking as well all the time. Sometimes I have to make water warm water."

# 5.3.9. Theme 8: Frequency of Use

The final theme that was identified was the frequency of use. Participants highlighted the times in the day they drink products, and when they will next drink the product. As expected, there was frequent mention of daily use of products. The most interesting aspect of this theme was the interviewees mentioning that rewarding themselves was a key contributor to drinking beverages.

"...just use beverages on a daily basis. It's ... it's not something that I think of. It's just part of life."

"I think there's different. So there are different moments for the different beverages. So if I sort of give, you know, the iced coffee example, it was, you know, yesterday was treat day and I got back and it was really hard and I was sitting and I drinking water, like, no. Today's treat day."

## 5.4. Linking to Research Question

The research question is presented to remind the reader of the key question of the study.

### Research Question:

How well does the Jobs-To-Be-Done theory inform product development strategy, by fulfilling underserved beverage needs amongst women in South Africa?

A summary of the key themes identified so far are shown in table 5. At this point this data would be used by product developments strategists. This is the first result of co-creation through the Voice of the Customer. Clearly, the reported and discussed themes do not provide assistance for informing product development strategy. This will be discussed and elaborated on in the discussion chapter. What is clear at this stage is that a significant amount of interesting and key data were obtained from the interviews. However, it would be challenging for a product development team to peruse all this data to find meaning, and to proceed with creating products that fulfilled all these needs.

Number of Codes and Identified Themes

Table 5

Number of codes ap	oplied Themes identified
29	Consumption experience and place
18	Taste, sensation and flavours (product attributes)
5	Budget dependant
11	Desire new products
15	Satisfying thirst
7	Health benefit
6	Frequency of use

The next part of the study showcases the Jobs-To-Be-Done theory. It reveals how the themes were turned into jobs. Further, the Jobs-To-Be-Done framework is followed with the aim to provide a strategy for new product developers and determined if applicable to inform strategy.

## 5.5. Jobs To Be Done Framework

# 5.5.1. Step 1: Define the Customers Jobs-To-Be-Done

The following section details how the themes were turned into jobs and customer outcomes through, and how the framework unfolded. The aim was to understand how relevant the Jobs-To-Be-Done framework can answer why consumers are buying beverages.

The codes placed into themes as was shown. This data had to be reworked and created into core functional jobs. A job is created with a verb and an object of

the verb (noun) with a contextual clarifier (Ulwick & Osterwalder, 2016). The universal job map was used to fit the various categories or themes that were obtained from the various codes. The universal job map has eight distinct steps to ensure that the customer journey was well captured (Ulwick, 2002). As such, a core functional job was discerned for each of the steps in the job map. These were obtained through working through the key categories or themes discovered. It was quite striking how well the various categories fit into the universal job map and it was a natural coincidence that eight categories were established. The universal job map is displayed in figure 3; table 6 displays the eight core functional jobs identified through the themes.

### 5.5.2. Step 2: Uncover Customers' Unmet Needs

The next step in the process further showcased the various related jobs according to each core functional job from the job map. Fifty-four related jobs were found. A similar approach was used to determine related jobs. A related job was created by staring with a verb, followed by an object to the verb (noun) and ending with a context clarifier. However, these were influenced by the context of the core functional jobs from the universal job map. The codes and quotes were reviewed in detail and parsed out. These can be viewed in Appendix 6.

### 5.5.3. Step 3: Establish Customer Outcomes

Following this, the unmet customer needs or desired outcomes were discovered. This was obtained by using variable language that infers growth or decay. These are related to the specific desired outcome such as maximise, minimise, add, remove, increase or decrease (Partanen, 2021; Ulwick, 2017). Each functional job was turned into a desired customer outcome. For each of the 54 related functional jobs, a customer outcome was created, displayed in <a href="Appendix 7">Appendix 7</a>. There were similar customer outcomes, and these were merged settling on 41 customer outcomes.

Table 6

Identified Job-To-Be-Done for Each Step Identified in the Universal Job Map

Universal Job	Job to be-done	
Мар	Job to be-done	
Define	Plan beverage consumption experience and place	
Locate	Gather product attributes desired for flavours, taste and sensation	
Prepare	Seek information regarding the health benefits	
Confirm	Confirm the beverage fulfils budget dependencies	
Execute	Experience of purchasing at the 'purchase experience'	
Monitor	Quench thirst and feel satisfaction of the product attributes	
Modify	Consider if the beverage satisfied needs or if new beverage is desired	
Conclude	Finish the produce and determine frequency of use	

# 5.5.4. Step 4: Discover Hidden Segments of Opportunity

Table 7

The next step in the process determines the hidden segments of opportunity. The interviewees were sent the questionnaire and rated each of the customer outcomes against satisfaction and importance, shown in table 7. To elaborate, the following questions were asked for level of satisfaction: "How satisfied are you with the current offerings on the market relating to this outcome?" and for importance, "How important is this particular outcome to you?" Only six of the 12 interviewees responded. One of the interviewees responded late and the data were excluded but was used to validate the results as described in Chapter 5.

Rating Scale for Level of Importance and Degree of Satisfaction for each Customer Outcome

Rating	Level of Importance	Degree of Satisfaction
100%	Extremely important	Extremely satisfied
80%	Very important	Very satisfied
60%	Important	Satisfied
40%	Somewhat important	Somewhat satisfied
20%	Not at all important	Not at all satisfied

The Jobs-To-Be-Done framework necessitated the use of an opportunity score matrix, or opportunity algorithm, to reveal unmet needs. The opportunity score was determined by using the following calculation for each of the customer outcomes, = 10 x (Importance (%) + (Importance (%) - Satisfaction (%))). This opportunity score assisted the researcher to determine the underserved, well-served and overserved segments of the market. The aggregated and complied data of the six interviewees' feedback is shown in <a href="Appendix 8">Appendix 8</a>. The consolidated feedback was then tabulated in an Opportunity Matrix. This displayed the overserved, underserved and well-served customer outcomes (Ulwick, 2017;

Ulwick & Osterwalder, 2016). As is displayed in figure 4 there were eight points on the matrix that revealed unserved outcomes.

# 5.5.5. Step 5 Align Products with Market Opportunities

The Jobs-To-Be-Done framework has various growth strategies per customer need, as shown. The opportunity matrix infers that any number above 10 has solid opportunity (Ulwick & Osterwalder, 2016). As a result, table 8 demonstrates unmet and underserved customer needs for beverages among women in South Africa.

Figure 4

Opportunity matrix



*Note.* The results of the opportunity matrix. A process used to qualify overserved, well-served and underserved customer outcomes. From "Jobs to be done: theory to practice". by A. Ulwick & A. Osterwalder, 2016, *Idea Bite Press*, p. 111. Copyright 2018 by Strategyn LLC.

Unmet and Underserved Customer Needs for Beverages Among Women in South Africa.

Table 8

Opportunity	Opportunity Score
Increase healthy beverage products that are consumed on-the-go	11.7
Increase use of desired and well- liked ingredients	11.7
Add known functional ingredients to products that provide known benefits	11.7
Improve display of the price for ease of purchase	11.3
Add functional reusable packaging for later use	11.0
Maximise satisfaction around current product offering	11.0
Maximise key messaging on the product label	11.0
Add beverages that provide daily increments of health	10.3

# 5.5.6. Step 6 Market and Product Development Strategy

The final step in the process showcases which strategy to follow. Since the research was aimed at targeting underserved customers only, it suggests that Differentiated Strategy must be pursued. The strategy to pursue once the core functional job has been realised is displayed in figure 5. The innovator may decide which strategy to target. The matrix informed how well to do the job and amount to charge relative to competing products. This study suggests through the Jobs-To-Be-Done growth strategy that the job must be performed better, and a premium can be charged (Ulwick, 2017; Ulwick & Osterwalder, 2016).

product development brief is provided that is assigned the core functional Job-To-Be-Done. The final step in the process is creating a product that fulfils the need.

# Product development brief – **Core functional Job-To-Be-Done:**

A healthy on-the-go beverage created with desired, functional and well-liked ingredients consumed daily for health increments. The packaging has the price prominently displayed, has key messaging promoting its benefits, and the bottle is reusable.

Figure 5

Strategy to Pursue for New Product Development



Strategy to pursue once the core functional job has been realised. The innovator may decide which strategy to target. The matrix informs how well to do the job and amount to charge relative to competing products. From "Whitepaper Outcome-Driven Innovation (ODI): Jobs-to-be-Done Theory in Practice,". by A. Ulwick, 2017, *Strategyn*, p. 19. Copyright 2017 by Strategyn.

# 5.6. Conclusion of Results

In this chapter, the research findings were displayed answering the research question which is displayed below. The findings confirm that the Jobs-To-Be-Done framework was suitable in helping to identify underserved beverage needs among women in South Africa. It was further shown that co-creation and hearing the customer's voice can, indeed, provide a wealth of knowledge and innovation impetus. Improving product development processes was also a contribution of the findings. The following chapter discusses the results, relating findings with the relevant theory.

# 6. DISCUSSION

## 6.1. Introduction

This chapter discusses the findings that were obtained in Chapter 6, beginning with the interviews and continuing all the way through the application of the Jobs-To-Be-Done framework. The findings of the study are going to be compared to previous research in the field. To determine how the results compare against the previous research and to the review of the relevant literature prepared in Chapter 2.

# 6.2. Discussion: Research Question and Answer

How well does the Jobs-To-Be-Done theory inform product development strategy, by fulfilling underserved beverage needs among women in South Africa?

The research question aimed to determine how relevant the Jobs-To-Be-Done framework was in determining underserved and unmet beverage needs amongst women in South Africa, through co-creation activities and the subsequent use of the Jobs-To-Be-Done framework.

A strategic framework was created that would allow product developers to create products better suited to customer needs as shown in Table 9. The strategic framework was devised by the author, drawing from the various literature sources. This provides a compelling summation of this research and the literature (Christensen, Anthony, Berstell, et al., 2007; Christensen, Anthony, Nitterhouse, et al., 2007; Ulwick, 2002; Ulwick & Osterwalder, 2016).

Table 9

Strategic Framework Informing New Product Development Devised from Jobs-To-Be-Done

Function	Result		
Chrotomy	Differentiated strategy		
Strategy	Perform a better job and charge more		
Target Market	Women aged 25-60.		
	Increase healthy beverage products that are		
	consumed on-the-go		
	Increase use of desired and well-liked		
	ingredients		
	Add known functional ingredients to products		
	that provide known benefits		
Underserved needs	Improve display of the price for ease of purchase		
	Add functional, reusable packaging for later use		
	Maximise satisfaction around current product		
	offering		
	Maximise key messaging on the product label		
	Add beverages that provide daily increments of		
	health		
	A healthy on-the-go beverage created with		
	desired, functional and well-liked ingredients		
Product	consumed daily for health increments. The		
development brief	packaging has the price prominently displayed,		
	has key messaging promoting its benefits, and		
	the bottle is reusable.		

# 6.3. Customer Co-creation

Co-creation was the term for customer participation in the development of new products (Perttunen et al., 2021; Zahay et al., 2018). There was a variety of ways in which customers participated in co-creation. Insights were required to inform the Jobs-To-Be-Done framework for this study. Through the framework for job-to-be-done, it was unclear how to acquire this feedback. There were numerous methods for customer engagement. These included crowdsourcing, focus groups and observation, among others (Zahay et al., 2018).

For the purposes of this study, it was shown that the customer can be involved only verbally as the customer's voice (Melander, 2020). The semi-structured interview procedure yielded the necessary insights, but not the anticipated future trends. As a foundation for the Job-To-Be-Done framework, the customer's voice was required to inform the insights into how to unlock unmet beverage needs - and it was successful in doing so (Melander, 2020).

Customers have participated by supplying trends and experiences (Liu et al., 2019; Melander, 2020). It was demonstrated exhaustively that customers were able to articulate the primary motivations for purchasing beverages. According to the Jobs-To-Be-Done theory, numerous needs were already being met (Christensen, 1997; Timoshenko & Hauser, 2019). The key roles that consumers fill can either be varied or specific, and to varying degrees. Perttunen et al. (2021) argue that customers must be a key stakeholder and partner in a project. It was not necessary for consumers to be heavily involved for this study. A fluid and varied role with key feedback attained showed sufficiency (Melander, 2020). Customers involved within a food context were also shown to provide key information regarding the packaging. This was one of the key underserved needs of the customer: "Add functional reusable packaging for later use". In confirmation of the importance of customer co-creation, Barone et al. (2021) highlighted the high failure rate of not involving consumer, in the food context.

Co-creation did not guarantee success but gathering key customer needs to inform product development has been shown to improve success (Christensen, Anthony, Nitterhouse, et al., 2007; Dwivedi et al., 2021; Perttunen et al., 2021). This study was able to identify key needs, ascertain the underserved needs and inform a strategy successfully. Other ways in which success has been increased for launches is by using data on hand that companies already have (Dwivedi et al., 2021). This was not done for this study and ought to be used to aid product development. Furthermore, behavioural intuition was not attained and understanding behaviour is key to Jobs-To-Be-Done. The results further indicate that product developers use existing products rather than creating new ones (Dwivedi et al., 2021; Grieger et al., 2022).

Innovation capabilities were not impacted by the process. As such, the process did not increase the researchers (or for future reference a product developers) inclination to be more innovative, nor was the process innovative in itself (Melander, 2020). Open-mindedness and capacity for creating new products improved as a result of going through co-creation activities (Cooper, 2019; Roberts et al., 2021). Furthermore, co-creation improves the willingness of management to innovate, as co-creation has an impact on satisfaction. Obtaining the needs and key product information will ultimately create an innovative product. However, caution is given as it is incremental (Perttunen et al., 2021).

Evidently, for this study, it was shown that further work is needed to ensure that a product resonating with the unmet needs of the consumer is created. In contrast, Jobs-To-Be-Done was not a customer involvement process but a need-gathering exercise which is considered one of the first steps to involving customers in the new product development process (Bettencourt et al., 2021; Ulwick & Osterwalder, 2016).

A key consideration in the literature was the costs of co-creation. This study has shown that for the purpose of obtaining customer needs pre-ideation, limited costs were incurred. Furthermore, the utilisation of the Jobs-To-Be-Done framework did not need additional resources and infrastructures (Liu et al., 2019; Melander, 2020; Zahay et al., 2018). The only potential cost is the time it would take management to learn the process and implement it. It was argued that the downstream expenses were also minimised as a result of co-creation. This shows greater probability of success in involving customers (Perttunen et al., 2021; Roberts et al., 2021).

To summarise, the research question determined if involving customers would assist in developing strategies by gaining insights into unmet customer need within the beverage industry among women in South Africa. It has been confirmed that customer co-creation through the Voice of the Customer helped identify needs. While the study only involved customers at the pre-ideation phase, this was sufficient for informing strategy. However, the themes provided in Table 10 alone would be challenging for a new product developer to follow, while customer co-creation has shown value.

# Table 10

# Key Themes Identified

# Theme Consumption experience and place Taste, sensation and flavours (product attributes) Budget-dependant Desire new products Satisfying thirst Health benefit Frequency of use

# 6.4. New Product Development

While thorough technical knowledge and consumer panels are needed, and should be used for new product development, the leading reason why new food products fail is due to (1) a lack of knowledge of the purchaser's choice, (2) not meeting a consumer demand, and (3) misunderstanding the inherent reason for purchasing the product (Dijksterhuis, 2016; Ulwick, 2017; van Kleef et al., 2002). Caution ought to be exercised, as the study and using the Jobs-To-Be-Done framework has showcased inherent, unmet needs in the market. The product would not necessarily be innovative. The results highlighted that existing products were improved. Furthermore, through the manner in which it was improved, the products tended to have better marketing cues, design attributes and marginally better flavour profiles (Asioli et al., 2017; Barone et al., 2021). This was further confirmed and was discussed above, so only incremental improvements were generally made (Perttunen et al., 2021).

The key themes identified in the study (Table 10), is a result of the Voice of the Customer and initial involvement would not be sufficient for product development. This is in contradiction to the literature, as simply hearing the customer at the beginning of the project did not mean that the product would be successful (Melander, 2020; Perttunen et al., 2021). It would be a significant challenge for product development teams to use the data obtained to inform which products to develop. Evidently, what was required was further strategy and a process for turning these insights into workable solutions for product development. Involving customers within the food product development sphere provided similar results. Both significant commitment both from consumers and the company to create the products were needed for success (Perttunen et al., 2021). In this study the customer involvement would assume to lead to small and incremental improvements to the products and the process itself.

A review of the product development processes (in table 1) confirmed that customers are generally not involved in co-creation. This presents a reason for failure and opportunity for success. Pre-ideation gathering customer feedback

on the customer needs, presents opportunities for improvement (Dijksterhuis, 2016; Kazimierska & Grebosz-Krawczyk, 2017).

Within the South African context, it was argued that six criteria were necessary for product development success. These included strategy, market research, new product development process, commercialisation, culture, and performance management (Greenberg, 2017). Evidently, the research touches on three of the key themes presented - strategy, market research (through Voice of the Customer), and new product development process. There was no specificity for obtaining customer needs, but it was shown that within the South African context, the process would be helped to inform new products (Pienaar et al., 2019; Ronquest-Ross et al., 2018).

# 6.5. Jobs-To-Be-Done

As a result of the Jobs-To-Be-Done framework, it was concluded that consumers wanted a healthy on-the-go beverage created with desired, functional and well-liked ingredients consumed daily for health increments. The packaging has the price prominently displayed, has key messaging promoting its benefits, it was able to discover unmet needs among women beverage consumers.

The intersection and application of two themes of the study - co-creation and Jobs-To-Be-Done -, were applied sufficiently. The process was successful in unearthing feedback on the customer jobs. This which was achieved by using the customer voice early in the process and using the universal jobs map (Bettencourt & Ulwick, 2008; Liu et al., 2019; Zahay et al., 2018).

Functional jobs were positively converted to customer outcomes, and this helped to inform the relevant strategy to pursue (Ulwick & Osterwalder, 2016). The job mapping was created to showcase what the customer is trying to achieve through each point in the experience (Bettencourt & Ulwick, 2008; Lucas Sen et al., 2018). The job map revealed the journey that the customer underwent in

purchasing and consuming beverages. Customer job mapping was particularly success in creating up the interviews and assigning the relevant functional jobs post-coding and theming. The approach was not about understanding why the product was being bought but rather what job it fulfilled (Christensen et al., 2016).

Relating to the research question, Jobs-To-Be-Done framework has shown companies that focus on the customer journey, particularly with the use of universal job maps, can assist in revealing unmet needs (Bettencourt & Ulwick, 2008; C. Christensen et al., 2016; Lucas Sen et al., 2018). Arising from this, opportunity segmentation of the relevant customer outcomes is the natural next step.

As previously discussed, the usage of the Jobs-To-Be-Done framework was not a precursor to success, neither to the type of product that can be created nor the launch thereof. Furthermore, it was not a process that would improve the level of innovation of the firm (Christensen et al., 2016; Melander, 2020). However, it does increase open-mindedness and being more receptive to innovation and new ideas (Roberts et al., 2021).

To enhance the launch, it was argued that using data on hand, in conjunction with the brief and strategy may assist in revealing the strategic intent (Dwivedi et al., 2021). Simply using the customer data without clear intention can misdirect strategic intent. In the digital age, companies are awash with customer data (Liu et al., 2019). It is however not correctly used by companies, leading to incorrect products being created for the wrong markets (Ulwick, 2002; Ulwick & Osterwalder, 2016). At the outset, this was due to behaviours of the products and jobs that the products ought to be fulfil. This was shown comprehensively in this study. Companies tend to segment customers according to psychographic, demographic and ethnic parameters, which does not fulfil needs adequately (Christensen et al., 2016). The outcome-based behaviours of the customers

were ascertained, ranked according to opportunity and consolidated in a brief (Ulwick & Osterwalder, 2016).

In determining the correct opportunity segment, it further disregarded the above-mentioned traditional marketing segments. The process was able to identify specific customer outcomes which was highly valuable in informing strategy, since seven opportunities were identified with a score greater than 10. An opportunity score greater than 10 indicates good opportunity for innovation (while scores of 12 and higher showcase very good innovation opportunity) (Lucassen et al., 2018; Ulwick & Osterwalder, 2016). The universal job map was not created for the use of providing the researcher (or innovation team) with solutions. It was apparent that solutions were not provided by either interviewees or the job mapping process. Often, companies have marketed products to overserved segments of the market, unwittingly (Christensen et al., 2005).

In comparing to the most recent literature, it was shown that there is a disparity between what companies provide the market and what fulfils needs adequately. Not having an understanding of the different needs of particular markets, leads an incorrect strategy. A product abundant in features is marketed to overserved customers (Christensen et al., 2018).

This study has shown the value in pursuing a particular market upfront – meeting unmet needs. Out of this, a brief may be developed which highlights the specific outcomes that customers want to pursue. Further, it is indicated that a differentiated strategy ought to be used, which highlights the need for Job-To-Be-Done better than other companies, with a premium possibly to be charged. If that is, indeed, the strategy that the company wants to pursue. The value that the Jobs-To-Be-Done framework is that any customer needs segment may be targeted based on the company and product offering (Christensen et al., 2016; Ulwick, 2017; Ulwick & Osterwalder, 2016; Ulwick & Hamilton, 2016).

Confirming the notion that it is more difficult to pursue new products, Diderich (2022) built a model that highlighted that pursuing new markets would not maximise value. Rather, it would be useful to maximise current offering and value chain for a certain segment of customers. This is in contradiction to the general Jobs-To-Be-Done framework, where customer segmentation is not advised (Christensen et al., 2005, 2016).

In conclusion, the relevance of the Jobs-To-Be-Done framework has been shown to realise unmet customer outcomes, while being able to inform the correct strategy for product developers.

# 7. CONCLUSION

The study evaluated the usefulness of applying the Jobs-To-Be-Done framework to determine if it was applicable for realising unmet customer needs. The research then determined if the framework was useful in informing product development strategy.

Identifying ideal strategies for improving new product development success was the reason for the study. It was reported that innovation and new product development failures are very high across multiple industries — with up to 90 % of new products failing (Heidenreich & Spieth, 2013; van Kleef et al., 2002; Winger & Wall, 2006). Within the food industry, it was reported and generally shown that up to 75 % of new food products fail. Usually, it is new products that fail rather than tweaks to existing product. This costs companies and management — particularly research and development teams, dearly (Dijksterhuis, 2016). It was concluded that the customers' core behaviours were not understood relative to the product being created, and the needs it was fulfilling. This was conclusively shown and reported on throughout the research paper (Asioli et al., 2017; Barone et al., 2021; Dijksterhuis, 2016; Dwivedi et al., 2021; Kazimierska & Grębosz-Krawczyk, 2017; Pienaar et al., 2019; Ulwick & Osterwalder, 2016).

A clear articulation of the project is provided. The research question sought to interrogate the phenomenon of customer involvement through the Jobs-To-Be-Done framework; to understand if it was a valuable tool for realising unmet customer needs within the beverage industry in South Africa. The study was successful, and this was shown to provide strategic direction to product development. This was achieved with the use of an opportunity matrix to highlight what customers were dissatisfied with, and desiring, through their beverage purchase and consumption. It was found that customer participation or co-creation was a valuable in answering the research question.

To conclude, the major finding was that the Jobs-To-Be-Done framework was applicable in unearthing unmet needs and in using this data to inform the strategy successfully. The answer to the research question is shown below.

A healthy on-the-go beverage created with desired, functional and well-liked ingredients consumed daily for health increments. The packaging has the price prominently displayed, has key messaging promoting its benefits and the bottle is reusable.

The project has shown that co-creation was able to reveal some useful data as themes. These alone were insufficient for informing strategy. It would be highly challenging for a product development team to create a new product or tweak existing products based on this information alone. Clearly, another method was needed to turn this coded and thematic data into more useful insights. By converting the themes into needs via a universal job map, then turning the needs into customer outcomes. It was comprehensively shown how useful the Jobs-To-Done Framework can be to turn nearly useless feedback into actionable and highly effective unfulfilled customer needs. In between that, a review of current and past product development practices showed where and how the Jobs-To-Be-Done framework can be applied.

The research study has implications for management in industry and academia.

# 7.1. Contributions to Scientific Knowledge

This study contributes to the Jobs-To-Be-Done literature by offering further uses of the theory in the unique context of South Africa. It showcased a qualitative approach to the framework. Furthermore, the study was conducted within the food industry which is under-researched within the Jobs-To-Be-Done theory, and more widely disruptive innovation (Greenberg, 2017; Ronquest-Ross et al., 2018). The Jobs-To-Be-Done framework was described as being adaptable and transferable across multiple industries which was shown.

# 7.2. Limitations and Suggestions for Future Study

This research study had several limitations with implications for both academia, industry and this research paper. Firstly, there is not a universal definition of Jobs-To-Be-Done. Various papers have provided their own interpretation of the theory with their own definitions.

Ulwick's theory development required the use of a minimum of 150 people for the customer-orientated feedback. Due to the scope of this research paper and time, it was decided to only focus on the qualitative aspect and not conduct quantitative research too (Ulwick & Osterwalder, 2016). It would have been useful to determine the full extent of customer feedback with 150 participants. However, data saturation was reached relatively early and easily in the process.

Furthermore, the study was conducted within the food industry. While the usefulness of the study across various industry segments has been described. More research is needed to understand where these limits exist. Moreover, there are limitations both in this study and in academia in general, on the success of the approach. There are limitations in the research on an absolute definition of success. However, it is noted that Jobs-To-Be-Done is a framework for realising underserved customer needs and preconfiguring it as opportunity. This was successfully shown.

A key limitation of the framework was absolute success of new products versus tweaking new products. It was noted that increasing customers and undergoing innovative process is in itself going to improve innovation success. This is due to reframing and having an open mind towards innovation (Barone et al., 2021; Dijksterhuis, 2016; Perttunen et al., 2021). A key recommendation would be to A/B test the theory with both new and existing products to see if the uptake is greater for the product that underwent the improvement.

It would be valuable to conduct more research of the framework across multiple industries, and specifically to provide usefulness across multiple food and beverage cases - this in order to showcase the success of the literature and framework (Christensen, 1997; Christensen et al., 2016; Diderich, 2022; Ulwick

& Osterwalder, 2016). Additionally, a peer review paper would be useful to consult on the topic. However, since there is limited research on the theme a consolidation would assist with future studies. Additionally, a review of how the various disruptive innovation theories – their success, outputs and processes would be useful to review. This was attempted by Partanen, but it was conducted within the health care and service industry. Nevertheless, it provides a solid framework for future research (Partanen, 2021).

Additional suggestions for future research would be to further interrogate Christensen's theories around Jobs-To-Be-Done and compare with Ulwick's. The comparison, argument and application of the two slightly differing frameworks would assist future scholars (Partanen, 2021). Better yet, a consolidation of the two theories would ensure watertight execution for future researchers and practitioners. Ulwick's theories, while more practical in nature, may be highly beneficial to be applied within an academic context, particularly quantitatively. Since more than 150 customers ought to be surveyed for the customer outcomes (Ulwick, 2017; Ulwick & Osterwalder, 2016). Christensen's theory around Jobs-To-Be-Done was highly theory driven (Christensen et al., 2016; Christensen, Anthony, Nitterhouse, et al., 2007). In both cases, it would be useful to apply the theories through to product development launch, and sometime after that, to evaluate if indeed, a customer-orientated approach improves product success, since products fail years after launch, and profitability is only realised years later (Liu et al., 2019; Melander, 2020; Timoshenko & Hauser, 2019).

Reviewing the success of the model with multiple case studies in a literature review would aid future research: in particular, a comparison of customer needs-based innovation versus a product-focused innovation and a review. Moreover, the research has shown that the process improves products incrementally (Perttunen et al., 2021). The innovation is more successful to existing products and there is still not enough research on Jobs-To-Be-Done to determine its efficacy in realising new product development launches and success.

# 7.3. Management Implications

More research is needed to understand – specifically for Jobs-To-Be-Done – if involving the customer through additional touch points in the new product development journey would be useful. It was also shown that there can be a tremendous cost as infrastructure must be set up. From a managerial perspective this is critical to understand (Bettencourt et al., 2021; Ulwick & Osterwalder, 2016; Zahay et al., 2018).

There is also enormous scope for involving more data in the Jobs-To-Be-Done process. It was argued that companies are already highly saturated with all forms of data: from emails, complaints, website information and analytics, to call registers and more. This data is highly valuable and if used correctly can inform far more than just surveys and interviews. By inserting this data into the universal job map, there may be significant advantages to innovators (Christensen et al., 2018; Roberts et al., 2021; Zahay et al., 2018).

An argument was presented on the merit of involving value chains and stakeholders in the product development process. While it was shown that co-creation with customers helps fulfil unmet needs, involving core stakeholders such as suppliers, employees and others in this process, provides huge scope for innovation.

A definition of what constitutes success for this framework has also not been firmly established. Success for one company or industry may be completely different for another, specifically in relation to the success of the new products.

In further defence of the theory, it must is appreciated that the aim of the Jobs-To-Be-Done framework is not necessarily to increase success of new products but to unearth unmet customer needs. Additionally, to provide adequate strategies for the positioning and creation of the product. As with many strategies, it must be argued that management execution and management ability is critical to its success (Diderich, 2022; Ulwick & Osterwalder, 2016).

The study also argued when best to involve the customer. There are differing views if involving the customer at the beginning, throughout or in the middle is

most useful for product development. The degree and extent of involvement is also worth reviewing. It was shown that involving customers throughout the journey, as partners, brings success. Alternatively, researchers showcased that customer ought to be involved early in the process and lightly. More research is needed to understand – specifically for Jobs-To-Be-Done – if involving the customer through additional touch points in the new product development journey would be useful. It was also shown that there can be a tremendous cost as infrastructure may be set up. From a managerial perspective this is critical to understand (Barone et al., 2021; Cooper, 2019; Melander, 2020; Ulwick & Osterwalder, 2016).

Ulwick & Osterwalder (2016) proposes seven additional practical steps to follow post-strategy. While not academically relevant, Ulwick suggests that once a product value proposition is created, the execution of the strategy is key. The seven recommendations for management would be to create a new product that borrows ideas from other entities; accelerate R&D processes; partner with stakeholders; merger and acquisition; expand product offering; devise a new subsystem as a component of the core product and visualise the final solution and how it is fulfilling the customer needs.

There are also valid and useful implications for the researcher of the study. In Chapter 1, it was described how new products and innovations have been a failure. Immediately, the brief provides useful direction for future innovations. Moreover, the Jobs-To-Be-Done process was highly creative, enjoyable and provided important insights. This process may be used for future innovations. The value of the beverage industry in South Africa is 18 billion ZAR per annum. There is tremendous scope for innovating and realising a slice of this large industry.

The research answer (brief, strategy, target market and product attributes) will be used as a template for innovation in the forthcoming year. The aim is to turn around the business that the researcher owns: to move it from loss-making to profitable by successfully fulfilling unserved needs.

# 7.4. Conclusion to the Research Study

This study has enlightened the research surrounding Jobs-To-Be-Done. It explored the subject with arguments surrounding co-creation and customer voice, with a review of product development within the South African context.

The researcher conducted 12 valuable semi-structured interviews. The results were then analysed, coded, grouped and themed in order to assimilate the views of the participants. This data were then applied through the Jobs-To-Be Done-framework.

The results showcased the breadth and importance of hearing customers to understand how to fulfil their needs. A strategic direction and framework was provided by combining these results. This process is transferable and may be used by food manufacturers, as well as innovators in other industries. It can assist by gathering customer feedback and converting them into customer needs; ultimately crafting a core functional job to direct innovation and strategy.

From a managerial perspective, it was shown to be cost-effective and highly informative. This research also contributes to academia by applying the framework in two under-researched areas. Firstly, showcasing relevance in a developing country, South Africa; and second within the food industry. The research and study provides compelling results, with further innovation and opportunity to...

"...just use beverages on a daily basis. It's ... it's not something that I think of. It's just part of life."

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# **APPENDIX 1: NET INCOME PROFIT TRENDS OF ONE-JUICE**



# **APPENDIX 2: CONSENT LETTER & INTERVIEW GUIDE**



**Consent Letter** 

DATE

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research on how Jobs-To-Be-Done theory to determine why people are buying beverage drinks. From this data, it will be used to determine if it is suitable for new product development strategy in the food industry. To that end, you are asked to be interviewed to understand why you are buying beverages. This will help us better understand on the industry and be no more than 40 minutes of your time. Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name: Uriel Filiba

Email: 21853704@mygibs.co.za

Phone: 0799736833

Research Supervisor: Chris Osakwe Email: <a href="mailto:chris.osakwe12@outlook.com">chris.osakwe12@outlook.com</a>

Phone: 0117714000

# **START**

How would you describe beverages to a friend or co-worker in your own words?

## **PREVIOUS PRODUCTS**

Before telling me about how the solution fits into your life: what resources did you utilise for completing such tasks?

What was their strengths?

What was wrong with them?

What was not present?

What were your difficulties in using the previous solution?

When was the last time you used the previous beverage?

Why did you stop using the previous beverage?

# **INITIAL USAGE**

When did you first realise that you required a beverage to your problem?

What problem does it solve?

Where have you been or where were you when you decided to use the products?

Were you with a companion or were you alone?

What were you doing or attempting when this occurred?

Did someone introduce the beverages to you?

Was the solution advertised to you?

How did it make you feel?

## **ACTIVELY LOOKING**

What circumstances in your life prompted you to seek an alternative and ultimately buy a beverage?

What occurred prior to this moment?

What occurred that prompted you to suggest I find a new solution?

Where were you?

Were you with a companion or were you alone?

How did you begin searching for solutions to this problem?

What types of solutions have you attempted?

What solutions did you not attempt?

What alternatives were there?

What brought you to the final decision?

How did you feel when you first saw the product solution?

## **DECIDING**

What made you feel confident that your choice would work?

What convinced you to use the services?

Did the packaging draw you to it?

Who or what influenced your choice?

What nearly prevented you from (purchasing, enrolling, or subscribing)?

Describe the price point of the product?

How did you pay for it?

How did you feel once it was bought?

At the point of purchase, when did you plan to use the product solution?

In that critical moment before deciding to purchase the drink, what tipped you into confirming that you indeed would like to purchase?

## THE PURCHASE

What were you doing at the precise time you decided to purchase the solution product?

When did you purchase the product solution?

Where were when you saw it?

What time of day is it? (daytime/ night time)

What was the temperature?

Who else was present with you at the time?

How did you acquire the item?

You were about to make a major purchase. Did you ask anyone else for their opinion?

What was the nature of the discussion?

Before you purchased it, did you consider what it would be like to use it?

Where were you when you had this thought?

Did you make any other purchases at the same time?

Did you experience any emotions regarding the purchase?

Did you hear anything concerning the product solution that made you anxious?

What happened?

Why did it make you feel the way you did?

What almost prevented you from purchasing?

What convinced you to purchase?

Anything I haven't asked you about that you'd like to discuss so far?

# **CONSUMPTION**

What did you do with the product solution as soon as you purchase it?

When did you think of the product solution again after purchase?

When did you plan to consume it?

How were you feeling before you consumed it?

Where did you consume it?

Why did you consume the product solution when you decided to?

Who were you with, or were you alone?

When purchasing, how did you feel?

What sensations did the product provide?

Why do you say that?

Was it value for your money?

What value did you derive from the product?

What did you do with the packaging after consumption?

#### POST-CONSUMPTION

When did you think of the product solution again?

When will you purchase it again?

How did it make you feel not having the product solution?

Where were you?

Were you with anyone?

At which point after consuming, did you consider the product would be nice to have again with or near you?

Why do you say that?

What outcome were you expecting?

Did you achieve that outcome?

# **APPENDIX 3: ETHICAL CLEARANCE**



University of Pretoria

# Ethical Clearance Approved

Dear Uriel Filiba,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

# **Masters Research**

Gordon Institute of Business Science, University of Pretoria

Main Tel: +27 11 771 4000

Direct Tel:

Email: mastersresearch@gibs.co.za

Web: www.gibs.co.za.

Physical Address: 26 Melville Road, Illovo, Johannesburg

# **APPENDIX 4: REFERENTIAL CHECK**

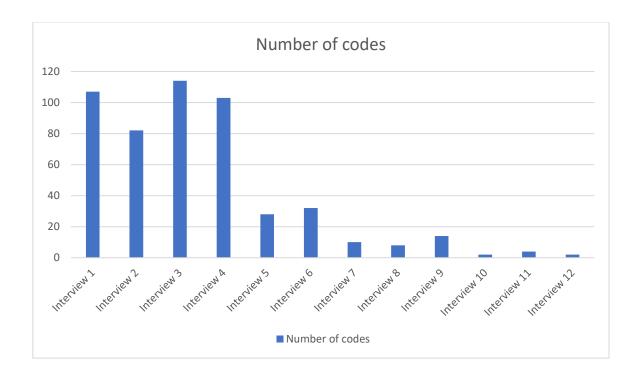
One of the participants reverted late with her data. It was too late to include in the aggregated opportunity landscape. This is displayed below.

JTBD Name	Importance (Top 2 box)	Satisfaction (Top 2 box)	Opportunity Score
Add functional reusable packaging for later use	100%	20%	18.0
Add beverages that provide daily increments of health	80%	20%	14.0
Reduce need for customer to search for desired offering	80%	20%	14.0
Increase beverages that calms after activities	80%	40%	12.0
ivaximise nealth and functional benefits of the products by conveying this	80%	40%	12.0
Add known functional ingredients to products that provide known benefits	80%	40%	12.0
Improve trust by advertising the health and functional benefits	80%	40%	12.0
Maximise key messaging on the product label	80%	40%	12.0
Increase healthy beverage products that are consumed on the go	80%	60%	10.0
Improve display of the price for ease of purchase	80%	60%	10.0

Comparing to the aggregated data below, it can be seen that six out of eight criteria were chosen. Thus lending credibility to the data and results.

JTBD Name	Importance (Top 2 box)	Satisfaction (Top 2 box)	Opportunity Score
Increase healthy beverage products that are consumed on the go	83%	50%	11.7
Increase use of desired and well-liked ingredients	80%	43%	11.7
Add known functional ingredients to products that provide known benefits	80%	43%	11.7
Improve display of the price for ease of purchase	83%	53%	11.3
Add functional reusable packaging for later use	73%	37%	11.0
Maximise satisfaction around current product offering	77%	43%	11.0
Maximise key messaging on the product label	77%	43%	11.0
Add beverages that provide daily increments of health	73%	43%	10.3

# APPENDIX 5: DISTRIBUTION OF CODES THROUGH THE INTERVIEWS



# APPENDIX 6: RELATED JOBS REALISED THROUGH EACH STEP IN THE JOB MAP

Job Map	Related Jobs	
Plan  Plan beverage consumption experience and place	Consume as part of the day-to-day activities Drink the product before gym or activity Decide to drink a beverage as the remedy for quenching thirst Feeling dictates the desire for beverage experience Reward with a beverage for working through the day's activities Influence of weather dictates need for satisfying thirst Desire for calming sensation due to work done Desire for energy improvement due to work to be done Feeling tired and in need of an energy boost Improve day to day health by consumption of beverage Enjoy the company of someone with a beverage	
Locate  Gather product attributes desired for flavours, taste and sensation	Seek information related to energy for improved functioning Familiarity decreases annoyance Desire of a product that has well liked ingredients Mitigate hunger with healthy and functional ingredients Reward with familiar flavours and experience Confirm that the food product will provide refreshment Confirm in the gathering phase that the beverage will improve happiness Scope and compare offering	
Prepare  Seek information regarding the health benefits	Lose weight through beverage consumption Add to health by being satisfied the beverage provides these benefits Assist with improving functional needs Trust the solution will work Perceive the attributes of the product offering work Increase the amount of on the go beverages	
Confirm  Confirm the beverage fulfils budget dependencies	Convinced with beverage opportunity cost Value the experience of purchasing and not purchasing (deciding) Purchase own creation Decrease anxiety around budget purchase Discover the needs for the purchase Informed decision from visuals of the product Confirming the labels fulfils attributes Label convinces to purchase as ingredients confirm solution	
Execute  Experience of purchasing at the 'purchase experience'	Experience in store dictates purchase decision	
Monitor  Quenching thirst and feeling satisfied Provide energy and reduced fatigue Provides calm and satisfaction Feel the impact of functional and health attributes Satisfy desires by drinking beverage		

satisfaction of the product attributes	Satisfaction provided through the beverage Desires are satisfied through the product attributes Taste satisfies desires	
Modify		
Consider if the beverage satisfied needs or if new beverage is desired	Add functional reusable packaging for later use Sweetness of the beverage satisfies Decrease the degree of annoyance with the beverage consumption experience Feel rewarded for decision Desire for new experience through new flavours or ingredients  Desire for new experience through new flavours	
Conclude  Finish the produce and determine next frequency of use	Consider new products for future use Dispose of the product packaging Notified of the next beverage use and experience Feel healthier from the experience Happy with choice to drink beverage  Rewarded for the experience and seek next opportunity	

# APPENDIX 7: CUSTOMER OUTCOMES CREATED THROUGH EACH OF THE FUNCTIONAL JOBS

Job Map	Customer outcomes
Plan  Plan beverage consumption experience and place	Increase number of day-to-day opportunities related to activities and beverages  Add on-the-go products specific to assist with physical activity Improve product availability with attributes for satisfying thirst Add products that amplifies desires and feelings  Add beverages that rewards for efforts Increase messaging related to weather Increase beverages that calms after activities  Add beverages that provide daily increments of health Maximise opportunity for people interaction around beverage consumption Increase number of day-to-day opportunities related to activities and beverages  Add on-the-go products specific to assist with physical activity
Locate  Gather product attributes desired for flavours, taste and sensation	Maximise messaging on packaging related to energy-providing benefits Increase advertising of products to increase familiarity Increase use of desired and well-liked ingredients Add ingredients to the beverage that increases satiety Maximise satisfaction around current product offering Increase messaging on packaging that relays refreshment Improve happiness-providing attributes of the beverages Reduce need for customer to search for desired offering
Prepare  Seek information regarding the health benefits	Add products that assist with weight loss Maximise health and functional benefits of the products by conveying this clearly Add known functional ingredients to products that provide known benefits Increase healthy beverage products that provide energy Improve trust by advertising the health and functional benefits Increase healthy beverage products that are consumed on the go
Confirm  Confirm the beverage fulfils budget dependencies	Reduce costs of the beverages Add product that was created by customers Reduce annoyance around the beverage purchase experience Improve display of the price for ease of purchase Maximise key messaging on the product label Reduce costs of the beverages Add product that was created by customers Reduce annoyance around the beverage purchase experience
Execute  Experience of purchasing at the 'purchase experience'	Improve experience for the shopper to improve purchases
Monitor  Quench thirst and feel satisfaction of	Improve product availability with attributes for satisfying thirst Add new beverages that provide energy Add ingredients to existing beverage that increases health Maximise messaging on the degree of satisfaction provided Increase desires-fulfilling beverages or ingredients Improve product availability with attributes for satisfying thirst

the product attributes	Add new beverages that provide energy Add ingredients to existing beverage that increases health	
Modify  Consider if the beverage satisfied needs or if new beverage is desired	Improve taste of existing products Introduce customer rewards for quenching thirst and feeling satisfied Maximise sweetness of the products Introduce new flavours of existing products Improve taste of existing products Introduce customer rewards for quenching thirst and feeling satisfied	
Conclude  Finish the produce and determine next frequency of use	Add functional reusable packaging for later use Add messaging at the end of the experience recommending next consumption Add messaging at the end of the experience informing of increased health Maximise messaging around beverage consumption and people interaction Introduce customer rewards for quenching thirst and feeling satisfied Add functional reusable packaging for later use	

# APPENDIX 8: RESULTS OF THE CONSOLIDATED OPPORTUNITY MATRIX

Item	JTBD Name	Importance (Top 2 box)	Satisfaction (Top 2 box)	Opportunity Score
1	Increase number of day-to-day opportunities related to activities and beverarges	47%	63%	4.7
2	Add on-the-go products specific to assist with physical activity	60%	57%	6.3
3	Improve product availability with attributes for satisfying thirst	60%	63%	6.0
4	Add products that amplifies desires and feelings	37%	40%	3.7
5	Add beverages that rewards for efforts	37%	40%	3.7
6	Increase messaging related to weather	47%	47%	4.7
7	Increase beverages that calms after activities	43%	40%	4.7
8	Add beverages that provide daily increments of health	73%	43%	10.3
9	Maximise opportunity for people interaction around beverage consumption	47%	37%	5.6
10	Maximise messaging on packaging related to energy-providing benefits	70%	50%	9.0
11		67%	57%	7.7
	Increase advertising of products to increase familiarity		43%	***
12	Increase use of desired and well-liked ingredients	80%	1070	11.7
13	Add ingredients to the beverage that increases satiety	50%	47%	5.3
14	Maximise satisfaction around current product offering	77%	43%	11.0
15	Increase messaging on packaging that relays refreshment	50%	57%	5.0
16	Improve happiness-providing attributes of the beverages	50%	40%	6.0
17	Reduce need for customer to search for desired offering	73%	50%	9.7
18	Add products that assist with weight loss	57%	57%	5.7
19	Maximise health and functional benefits of the products by conveying this clearly	70%	53%	8.7
20	Add known functional ingredients to products that provide known benefits	80%	43%	11.7
21	Increase healthy beverage products that provide energy	63%	57%	7.0
22	Improve trust by advertising the health and functional benefits	67%	50%	8.3
23	Increase healthy beverage products that are consumed on the go	83%	50%	11.7
24	Reduce costs of the beverages	73%	40%	10.7
25	Add product that was created by customers	50%	50%	5.0
26	Reduce annoyance around the beverage purchase experience	70%	57%	8.3
27	Improve display of the price for ease of purchase	83%	53%	11.3
28	Maximise key messaging on the product label	77%	43%	11.0
29	Improve experience for the shopper to improve purchases	73%	50%	9.7
30	Improve product availability with attributes for satisfying thirst	60%	50%	7.0
31	Add new beverages that provide energy	70%	53%	8.7
32	Add ingredients to existing beverage that increases health	60%	47%	7.3
33	Maximise messaging on the degree of satisfaction provided	60% 53%	47% 47%	7.3 6.0
35	Increase desires-fulfilling beverages or ingredients Improve taste of existing products	60%	50%	7.0
36	Introduce customer rewards for quenching thirst and feeling satisfied	57%	40%	7.3
37	Maximise sweetness of the products	30%	63%	3.0
38	Introduce new flavours of existing products	70%	47%	9.3
39	Add functional reusable packaging for later use	73%	37%	11.0
40	Add messaging at the end of the experince recommending next consumption	50%	37%	6.3
41	Add messaging at the end of the experience informing of increased health	57%	37%	7.7