

Research Article

The Applicability of Design Thinking in the Tourism Sector, Kwazulu-Natal, South Africa

Zahir Sayed¹, Cecile N Gerwel Proches¹, Abdullah Kader¹, Simon Taylor²

1. Graduate School of Business and Leadership, University of KwaZulu-Natal, South Africa; 2. University of KwaZulu-Natal, South Africa

One of the most significant corporate trends nowadays is design thinking, which gives firms the ability to develop their strategic thinking capabilities in order to tackle difficult problems. The goals of design thinking are to transform enterprises, encourage imaginative abilities, pinpoint needs and opportunities, and provide fresh ideas and scenarios for the company. South Africa's economy can grow as much as is desired by including all of these aspects. Design thinking is a capability that may deliberately assist the South African tourism industry in attaining its aspirational goals of increasing visitor arrivals, accelerating job development, and unleashing entrepreneurial prospects across sub-sectors that are closely related to the tourism sector. Tourism industry stakeholders must be aware of the evolving consumer demands. Understanding whether design thinking might be applied to the tourism sector in KwaZulu-Natal, South Africa, and whether doing so may be effective and advantageous for this sector, was the study's primary objective. Purposive sampling was used in this study's qualitative research approach. Eleven members of the tourism industry participated in a design thinking workshop, a focus group, and interviews in August and September 2021. The main conclusions showed that design thinking would be an effective technique to support improvements and innovation in the tourism sector, as all participants confirmed and agreed. The study's findings have led to various factors that can help design thinking improve tourism industry business. It is recommended that though design thinking can boost business in the tourism industry, a number of contributing factors must be properly implemented.

Corresponding author: Zahir Sayed, zahirsayed786@gmail.com

1. Introduction

Design thinking is one of the most influential business trends today (Friedlander, Murphy Land Noel, 2021; Jamal, Kircher and Donaldson, 2021), a capability that enables organizations to strengthen their strategic thinking skills in an effort to handle complicated challenges. According to Marion, Cannon, Reid, and McGowan (2021), design thinking is focused on transforming businesses, fostering innovative skills, identifying opportunities and needs firsthand, and developing new visions and scenarios for the organization. Incorporating all of these factors can result in the desired economic growth for South Africa. Design thinking is a skill that can methodically support the tourism sector in South Africa in achieving its aspirational goals of increasing tourist arrivals, accelerating job creation, and empowering entrepreneurship opportunities across sub-sectors that are directly linked to the tourism sector. Tourism stakeholders need to be aware of the shifting consumer preferences. Leveraging local communities to build products for these preferences will lead to long-term economic and community development benefits for industry participants and local communities (Panashé, 2020). Given that design thinking is a customer-centric approach, it is wise to interact with customers and learn more about their preferences.

Therefore, the study's objective was to determine whether design thinking could be applied to the tourism industry in KwaZulu-Natal, South Africa, and whether doing so might be efficient and advantageous for this industry. Overall, this article provided a detailed presentation of the understanding of design thinking among personnel from the tourism sector in KwaZulu-Natal, South Africa. This article further provides insight on the usefulness, benefits and the likelihood of applying design thinking in this sector. It is hoped that this article will offer a guideline to the tourism sector on the applicability of design thinking and how this process can support in addressing of multitude of challenges faced by this sector.

2. Literature Review

2.1. Design Thinking

Design thinking is defined as an idea and a methodology used to tackle complex problems that place people at their core (Barnett, 2020). The ultimate goal of design thinking is to improve people's quality of life, the environment, and the planet (Gopinathan, Kaur, Ramasamy and Raman, 2021). Due to complicated business models and a surge in global partnerships that function in vast ecosystems, organizations today face multidimensional issues that present both unique difficulties and opportunities for organizations (Marion et al, 2021). This further suggests that these problems call for multi-layered solutions that come before the typical product and service offerings. This is where design thinking excels, as its use enables organizations to handle contemporary business

challenges and to gain a competitive edge. The main problem in design is to slow down and consider who will benefit first from the creation or progress. It becomes obvious that one is expecting that a single development can work for everyone when one's products depend on millions of consumers, which is against the design thinking technique (Gopinathan et al., 2021). Because of the self-imposed restrictions that take up space, the problems that humans face frequently do not have straightforward solutions that come to mind (Dam and Siang, 2019). It has been suggested that organizations should stop debating whether to be design-led and instead focus on forming alliances to become more solution-led by putting design thinking's core principles into practice. Design thinking is basically about listening intently, learning more, and then experimenting to develop a solution that has real meaning and a lasting impact (Shahrasbi, Jin and Zheng, 2021).

2.2. The Design thinking process

The fundamental benefit of design thinking is the effective assessment of whether a solution can deliver real value to its clients by merging multiple methodologies from the domains of design, business, marketing, and psychology. Design thinking is effectively a human-centric method of problem-solving (Ayala, 2019). It is essential to involve participants in the in the design process. Customers' roles can range from proactive participation, where consumers frame and help solve design problems, to an inactive one, where developers evaluate customer data without having direct interaction with the user group (Kwon, Choi and Hwang, 2021). Solutions that are truly creative come from knowing the business from the inside out and anticipating the demands of the end user (Friedlander et al., 2021).

There are several methods of design thinking in use today, ranging from three to seven stages (Ordóñez, Lema, Miño, Lema and Vega 2017). These include:

- The three-phase model created by IDEO CEO Tim Brown, which follows the following steps: "Inspiration," which identifies problems and sparks action; "Ideation," which produces potential solutions; and "Implementation," which entails putting ideas to the test. This model is illustrated in Figure 1.

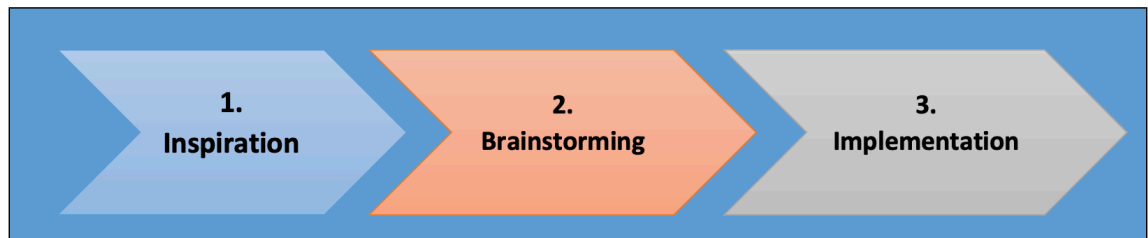


Figure 1. IDEO's Procedure Model of Design Thinking (Brown, 2008)
Source: Adapted from Schallmo, Williams, and Lang (2018)

- The Hasso-Plattner Institute at Stanford University (d-school model) created the procedure model, which consists of five stages: empathise, define, ideate, prototype, and testing. This model is illustrated in Figure 2 below

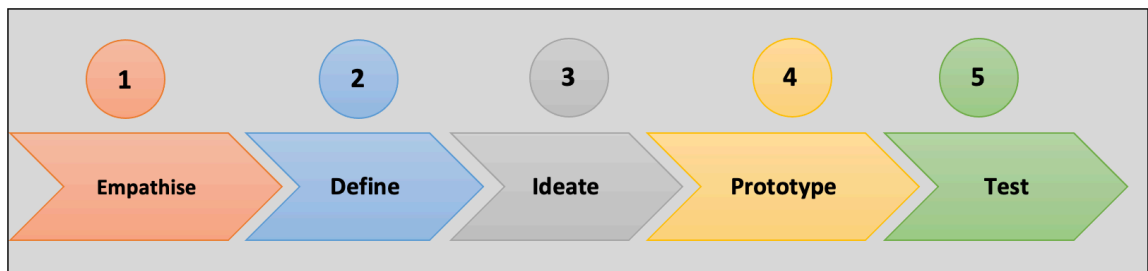


Figure 2. Procedure Model of Design Thinking (d.School)
Source: Adapted from Schallmo et al. (2018)

- The UK's Design Council created the Double Diamond model, which consists of the following four steps: Find, Specify, Develop, and Deliver.

It is clear that all models share characteristics that define, develop, prototype, and test scenarios before they are ready for implementation.

2.3. Design thinking as a capability

Design thinking uses a method that creates sustainable services, products, and systems to satisfy customer wants in a viable and practicable way (Shahrasbi et al., 2021). It blends the sensibility of a designer with problem-solving techniques. International corporations including Apple, Nike, Disney, Proctor & Gamble, Philips, Sony, and General Electric have also included design thinking as a method of problem-solving within their organizations (Matthews and Wrigley, 2017). Customers should be able to see market opportunities and know how to take advantage of them, according to the justification. According to Friedlander et al. (2021), design thinking can be an interesting method for coming up with ideas and solutions, but it ignores the fact that even the best ideas risk being ignored and having no influence if power dynamics and systemic complexity aren't taken into account. It is crucial for designers to accurately describe the nature of the design process in order to establish design thinking as an alternative to scientific thinking in a professional and academic context.

Design thinking has piqued the interest of business academics due to its capacity to boost creativity across a variety of situations and organizations. The increasing reputation of design thinking is mirrored by the emerging number of published and unpublished articles detailing the prospects of design thinking and its ability to promote new ways of thinking (Ribeiro and Souza (2021) By optimizing its framework for comprehension and pursuing innovation, which is a fundamental component in the design thinking process, particularly in pioneering new solutions while maintaining practicality, design thinking seeks to develop value-added solutions for consumers (Friedlander et al., 2021). According to Ribeiro and Souza (2021), design thinking is anchored in human-centered innovation and starts with an awareness of the user's implicit demands. A few design thinking-led brainstorming sessions may be the solution if several organizational divisions or stakeholders from the same industry find it difficult to reach an understanding or collaborate (Ramanujam, Ravichandran, Nilsson and Ivansen 2021). Applying a designer's mindset blends what is desirable from a human perspective with what is economically viable and what is technologically practical since it enables those who lack the necessary training to apply innovative solutions to solve a wide range of problems (Shahrasbi et al., 2021).

3. Methodology

A focus group, semi-structured interviews, and a design thinking workshop were used to collect data in this study. The sample was made up of tourism industry participants from KwaZulu-Natal, South Africa. Eleven tourism industry management professionals were chosen to participate in this study. Purposive sampling was used to select study participants from the tourism sector because it was assumed that these people were knowledgeable about the industry and could thus shed light on the critical issues it faces. The focus group session was held on September 28, 2021, following the design thinking workshop on August 10 and the one-on-one interviews on 24, 25, and 26 August 2021. The focus group session lasted about two hours, whereas the interview lasted about 55 minutes.

The purpose of this research was to understand the difficulties encountered in a tourism scenario. To better understand how these issues affect the tourism industry, key players in the industry were interviewed. Each participant was required to complete an informed consent form prior to data collection, which the researcher obtained ethical approval for. The purpose of this research was to better understand the challenges that the tourism industry in KwaZulu-Natal was facing. All study participants were assumed to have prior employment experience in the tourism industry, which aided the study's effectiveness significantly. Each participant was expected to respond to all interview questions while also having the opportunity to comment on other issues related to the research topic. The interview questions were designed and organized so that the researcher could gradually collect responses from participants that were straightforward, easy to understand, and focused on the study's goal. Table 1 contains information from the focus group, design thinking workshop and interviews for each participant.

#	Current Role	Business Sector (within Tourism)	Experience
1	Manager	Hotel and Accommodation	5-10 years
2	Business Owner	Hotel and Accommodation	10 years +
3	Staff Member	Media	5-10 years
4	Business Owner	Events Management	10 years +
5	Business Owner	Food and Catering	10 years +
6	Manager	Tourism Hospitality	5-10 years
7	Manager	Chamber of Commerce	10 years +
8	Manager	Chamber of Commerce	10 years +
9	Manager	Hotel and Accommodation	10 years +
10	Staff Member	Municipal/Governments	10 years +
11	Business Owner	Tourism - Souvenir and Crafts	10 years +

Table 1. Details Participants

Participants in the study were given the opportunity to freely express their thoughts, opinions, and experiences about the topic under investigation. It was critical to avoid pressuring participants to provide responses that were deemed appropriate for the research project. In order to ask the appropriate questions of the participants, the researcher must fully understand the research topic under investigation. Participants were free to discuss their perceptions, experiences, and feelings about the study's topic and were not required to contextualize their explanations of the subject in the context of broader social norms and preferences. To ensure that all data was collected correctly, each interview was digitally recorded. The researcher used thematic analysis to uncover themes and patterns in the data resulting from the opinions of the participants.

The researcher established the credibility of the study before it began by reserving their own thoughts about the study, being mindful of the participants' expectations and interests, and allowing the data obtained from the interview and focus group session to be conveyed without limitations. The researcher simplified the participants' ability to communicate their ideas, knowledge, and practices. Finally, the study's findings reflect the opinions and experiences of its participants.

4. Results and Discussion

4.1. Demographics

Eleven people took part in the study, which included a focus group discussion, a design thinking workshop, and semi-structured interviews. These included managerial personnel who work in the travel and tourism industry on a regular basis. This study's main objective was to clarify how design thinking may be used in the tourism industry. The fact that every participant had prior experience working in the tourism sector greatly increased the study's applicability. The contestants included two men and nine women. Eight of the focus group participants and those interviewed had more than ten years of work experience in the tourism industry; the other three had five to ten years of experience. These representations demonstrated that the research participants had previously worked in the tourism sector and could relate that experience to the stated research issues. All participants had worked in the tourism industry for more than five years, making them qualified to understand the current challenges in their environment. None of the participants had less than five years of industry experience. Participants who meet these requirements will almost certainly convey their industry responsibility and expertise.

4.2. Design thinking understanding

In this sub-theme, the participants gave their views and understanding of design thinking. Design thinking is a method of problem-solving that positions problems at the centre of interest, and how they are framed and observed. The understanding of design thinking from participants revolved around the following:

4.2.1. Customer-centric

Design Thinking is a human-centric method of problem-solving that integrates different techniques from the fields of design, business, marketing and psychology. Its main advantage is the efficient testing of whether a solution can bring real value to its customers (Ayala, 2019). This was the highest ranked factor, as many respondents believed that design thinking was customer focused. It entailed getting to know exactly what the client needs were and formulating offerings around that. A participant mentioned:

“I will say that design thinking in my understanding is how you sort of perceive or how you deal with the problems that you come across. It also involves customers that come into your resort, how do you handle them, and how do you try and understand where the customer is coming from with whatever complaint that they have or tell you that they have a problem. How do you handle that, so that both of you, especially the customer, they leave as happy customers, as you try to understand and try and resolve whatever issue they are having” (Participant 1).

Another participant explained:

“I understand that it’s basically coming up with innovative ideas and ways of working that are based on what our customers are looking for, basing our innovation and our ideas on what exactly our customers are looking for. I think there will be both internal and external customers” (Participant 10).

Another participant added that the design thinking process creates a superior service experience and a viable advantage for business, further supporting these contributions. The participant’s view mentioned:

“I believe that design thinking is the key, I mean, the key approach to it, it can be used as an as a process of enhancing customer experience by creating a superior service experience for the customer. And at the same time, it must also offering a clear and a viable advantage” (Participant 2).

Finally, a participant mentioned that design thinking will assist in meeting the direct needs of the customer:

“and at the heart of it is being customer focused or customer centric, to deliver our services such that it responds to the customer’s needs and desires. More than that, it needs to respond to the societal aspirations, and requirements” (Participant 4).

4.2.2. Collaboration

Collaboration seemed to be highlighted as an important factor of design thinking understanding because it required inputs from various stakeholders. Mahakata et al. (2017) indicated that it has been widely acknowledged that without various businesses working effectively together to serve the customer, not much can be accomplished, thus making collaboration in this sector critically essential. This was quite evident in the responses from participants from the tourism sector as well. The tourism sector is a dynamic industry that connects many other sectors in the supply chain. The participants additionally explained the need for collaboration with the communities in which they operate. A participant commented:

“You see the external community communities are your stakeholders as well, because you’re in that same precinct as those communities. So whatever fixes the Giants castle could impact those communities as well, problems that may emanate within the areas that all of you because you’re all stakeholders within that process” (Participant 10).

The participant further added:

“If you are solving a problem for the road that leads to Giant’s castle, it will impact them as a community as well, in terms of road closures or routing and stuff like that. So, I think those are customers that you may consider as well” (Participant 10).

The participant’s view indicated that in solving a problem, the use of design thinking allows for engagement with all stakeholders that are affected or impacted by the problem and hence their involvement and viewpoints become essential in the process. Ultimately, the objective is develop a solution and this was further identified by another participant who mentioned:

“To me design thinking is a collaborative effort between different personnel with the new organization with the objective of developing a solution” (Participant 9).

This participant’s view is supported by Panashe (2020), who postulated that within the tourism industry, an impressive range of services are offered. However, none of these can stand alone, all of which are part of a network, relying on direct and indirect partners to provide a lasting experience.

4.3. Design Thinking can be useful or effective in your organization

This sub-theme examined if design thinking can be useful to the organisation. Most respondent agreed on its usefulness. Design Thinking allowed the organisation to become adaptive in the following ways:

4.3.1. Flexibility

The participants expressed that design thinking allowed the organisation to become flexible in its product and service offerings. It can also look at other areas of revenue generation. Furthermore, design thinking can be flexible enough to be applied to different areas in the organisation, inclusive of production and marketing. A participant mentioned:

“In our organisation, as we are in biodiversity, the hospitality side was just a token because we have all these places that we can use to generate revenue. So how can we then use design thinking to maximize such a resort to be profitable and those that are not profitable? Can we not find another business sense where it will generate revenue for us like renting it out to people because we have things like timeshare, which are not applicable in our organization, we still have that stereotype. We are not as flexible enough on the tour operators that are selling the products for us” (Participant 9).

Design thinking also allows for the generation of multiple ideas and solutions which can be applied to any facet or division within an organisation (Noh and Abdul Karim, 2021). A participant who commented echoed these thoughts:

“I don't see a way why it can be not useful, because it is the same thinking in production, you still need to use this thinking in marketing and design thinking. I say it is of paramount importance” (Participant 1).

4.3.2. Engagement

Design thinking can be useful in terms of creating engagements, which is further supported in the points presented below:

4.3.2.1. Communication

Design thinking can improve communication between stakeholders and promote transparency on ideas and solutions. A participant who expressed the view that multiple sources of input will provide a greater platform for idea sharing and prospective solutions rather than relying on one person, commented:

“Then I think then design thinking is going to come there because if we sit as a team then everyone is going to share their own ideas. And those ideas when they are put together, you sort of sift through it through them and see what's going to work better, that design thinking process that was formed by a team is surely going to work in favor of the organization, rather than just one person trying to solve every problem that arises in the organization” (Participant 1).

Another participant mentioned that communication with all relevant stakeholders is key and design thinking can support this process of designing eloquent products and services:

“We market and we want to attract people, we want to educate people about the environment and nature. So we have good stakeholders. So again, design thinking, is it's always about putting all your stakeholders at the center of the products you design. It is about improving your communication strategy. It's about giving people a meaningful experience” (Participant 6).

4.3.3. Marketing and markets

Design Thinking can assist in the areas of both marketing and reaching new markets.

4.3.3.1. Marketing

Destination Marketing can also be improved thereof. The marketing aspect can be improved via design thinking as it can allow for creative marketing and the ability to place the organisation on the map. A participant mentioned:

“we also contribute to destination marketing as the organization because we are an organization that predominantly drives ecotourism within the province and we are serious contributors to ecotourism in the country. We are part of a bigger ecotourism. Let me let me give you an example, Ezemvelo is the only provincial, it's one of the two provincial entities where SanParks does not dominate. So the ones that is run by South African National Parks in the province, it is largely implemented by Ezemvelo. So from that perspective, that's why I use the destination marketing and product Marketing” (Participant 4).

Another participant supported this view and stated:

“So we need to be able to be on the map as well, because you find people are not even familiar with what Ezemvelo, because they just think that Ezemvelo is more on biodiversity and Ezemvelo is only at Hilltop where you find the big five, and when they come to the side of the Drakensberg, they get to be surprised on all that there's, so there is still more that we can offer” (Participant 9).

Collaboration in the tourism sector is an essential factor as it highlights success and competitiveness, whilst also improving knowledge- sharing and resources (Mahakata et al., 2017). This is evident in the comment below:

“So yes, marketing is a very important important tool, but it is design thinking or marketing perspective would be not to operate in silo, but rather try and collaborate activities that will put you on the map and be with the market that will sell your product accordingly” (Participant 3).

4.3.3.2. *Reaching new markets*

Design thinking will allow for new market spaces and clients to be identified and reached. The tourism industry is very customer-centric, unlike many other industries that position the company at the core, hence it is necessary to develop solutions that will enhance customer experiences (Panashé, 2020). If this practice can be achieved, service providers can create confidence, relevance and a superior customer experience. A participant similarly expressed that:

“In terms of benefiting Ezemvelo, it will definitely see us soaring to new heights in terms of reaching in markets, the correct markets for the correct products, communicating correctly, accordingly and timeously with our stakeholders” (Participant 6).

From a business perspective, this means a road to being a market leader by creating strategies that leap forward to competition. When a concept or solution does not evolve in a linear way or starts to develop on a plateau, design thinking is a crucial force and addresses problems in a more inventive way (Acker, 2020).

4.3.4. *New methods*

The participants of this study viewed design thinking as useful in promoting new methods pertaining to the following:

4.3.4.1. *Break traditional methods*

Design thinking, as expressed by the participants, allows for organisations to break the vicious cycle of doing the same thing repetitively. This can foster new ways of operation and service delivery. Participants in this study expressed the following:

“As I indicated that there are services that we have currently, like we have got this cash management and people are coming to our facilities collecting cash. Why is it that we carry on doing the same thing all the time? I mean, there are a lot of ideas that we can get out there, like have a completely cashless service as this will also mitigate the risk factor of keeping cash on site at the resort” (Participant 5).

The participant added that design thinking can help ideate methods for a cashless system within the organisation, by stating:

“I believe we should implement a cashless system in our organization whereby people don't have to run around carrying cash. Yes, those are the things that I believe that you can come up with, it's a lot more ideas that you can implement using the design thinking” (Participant 5).

Another participant explained that design thinking can help explore alternatives for the Tourism sector:

“So, let's say you have about 66 your rooms that you need to sell and you know that with the South African tourism you are not selling. Then what is stopping you from renting your rooms to others, for people to be able to use as timeshares or organize some activities that will bring more movement around your resorts” (Participant 9).

4.3.5. *Service delivery*

Design thinking is a method and a philosophy that focuses on practical solutions to issues in a human-centric manner (Stevens, 2019). For service-related organisations like the Tourism sector, service delivery is of paramount importance. Participants expressed that service delivery can be improved by knowing exactly what the client requires and analysing client feedback.

“It would be very useful because instead of just being generic about what we want to do, we can focus in on what clients need, and we can formulate all our strategies, whether it's marketing or finances or human capital, we can streamline all of those things based on what our customers are looking for” (Participant 10).

Another participant supported this view and expressed that service delivery is not only about customers, but also being cognisant of the environment:

“Besides even being visible to them, we need to ask as an industry, what can we do even better or to better our service delivery? It is not only about clients, even us as an organization, how can we even get our service delivery, what can we do differently, is it gonna make it cost effective, what's gonna make it green or environmentally friendly?” (Participant 2).

4.4. Likelihood of implementing Design Thinking

4.4.1. Very likely

A few respondents asserted that they would be very likely to implement design thinking. One organisation already seems to have implemented it in certain areas. This was because design thinking could improve the organisation when it came to idea sharing and improving processes. It also did not require any financial resources but more human resources. A participant found design thinking to be immensely valuable and stated:

“For me, if it's valuable for me, I can have a look at it and try by all means to implement it as soon as possible if it doesn't need financial resources, it just needs maybe human capital, some things they don't need money to be implemented. To be implemented it can be done as soon as possible for me and like I said, to be communicated to all everyone and then get buy in from them” (Participant 2).

Another participant mentioned:

“So, as a team we come up with quite a number of initiatives, some of them we are able to implement the right away. And those that need a bit of idea sharing we share them with the managing executive. So, there's quite a lot of movement in terms of coming up with ideas and then presenting them to the executive and some they get supported while some they don't, but most of them if idea is good, they normally support it” (Participant 5).

Ideally, design thinking was found to be valuable in an informal tourism business that was ready to try this new methodology to improve business, with a participant stating that:

“My business is very informal. So anything that can support business I normally implement with not much research. So I can do that immediately. As long as I believe that, it's going to improve my process” (Participant 1).

Finally, a participant revealed that they have embraced design thinking and practice the methodology already:

“Immediately 100%. The likelihood is very, very likely, In fact, I do it every day without even thinking it's become second nature” (Participant 2).

Kosmala (2018) postulated incorporating design thinking activities into organizational processes and introducing an own label for design thinking in order to integrate design thinking with organizational culture. While collaboration is a key ingredient to overall success, it is not always easy and a willingness to share information through a shared vision and regular communication through engagement can create trust, remove barriers and inspire lasting partnerships on information-sharing and collaboration in a manner that benefits all (Mahakata et al., 2017). Organizations should concentrate on changing processes and mind-sets at the same time, implementing changes slowly and teaching non-designers hands-on while emphasizing the method's clear benefits (Kosmala, 2018).

4.4.2. Dependant

However, many felt that the likelihood of implementation of design thinking would be dependent on the following factors:

4.4.2.1. Collective

It would need a collective response, with all stakeholders actively involved. Teamwork would be necessary for implementation. A participant mentioned:

“It will be nice to form a team, sort of a strategic team so that there is standardised outcomes that is applied across all our resorts in the region. And this will be evident to the clients in that they can see it in our offerings across all our resorts. I would like to apply Design Thinking back as a collective as a team, So if we if we apply it I would love that it's not only me that I want to apply it but it's the whole region here, all the resorts in the same area that are applying it probably at the same time” (Participant 1).

Another participant was keen to implement design thinking within his or her area of control immediately. However, in terms of standardising the process organisation-wide, it would require management executives to influence the process. The participant stated:

“There is a likelihood of me implementing design thinking locally at the resorts that I manage. In terms of the organization as a whole, that would require people like executive management to come up with ways on how the organization as a whole can do it, but there's definitely a likelihood. And in fact, I think it is happening, because it's an excellent approach. So yeah, the likelihood of me implementing it locally, definitely. As an organization, there is also likelihood it will just need leaders to come on board” (Participant 10).

Managers must understand and express the importance of design throughout the organization (Kosmala, 2018). This view was similarly supported by a participant who stated:

“I would think coming together as a collective, so sort of middle management coming together as a collective and building these strategies, so in terms of our marketing, looking deeply into, as going into the customer needs and basing our approach and our message on that. So it would be the different resort management people, it would be our marketing, it would be our human resources coming together as a collective, and basing what we intend doing on our customer's needs” (Participant 2).

4.5. Design Thinking effectiveness and benefit for the Tourism sector

Design thinking was viewed as being effective and can bring about innovation and a new direction and trajectory for the sector.

4.5.1. Customisation

Design thinking allows customisation to be implemented, rather than generic services all the time. Such customisation comes from asking the right questions of customers and gauging their feedback. This allows the organisation to establish needs by which services and products can be customised accordingly. It also caters for and will attract a diverse range of customers. The views shared by respondents were similar:

“Design thinking being a way of, of looking at things from a customer perspective, and then coming up with ideas on how to address those, I think that benefits the tourist and it can benefit the tourist industry immensely. Because when you think of yourself, as a tourist, when you are traveling somewhere, the things that you are looking for are pretty basic, it's comfort, it's friendly people, it's a good feeling environment. And if we, as people working in the tourism sector can get ourselves to understand exactly what it is that our clients are looking for, put ourselves in their shoes, that obviously is the winning formula” (Participant 10).

“So I think it only has a positive benefits for the industry. I don't see how we as an industry would go wrong as we wouldn't design a one size fits all, rather we create unique packaging for different types of customers. Like you may have the leisure customers with the families or the business clients or you can have school groups, so different markets” (Participant 6).

“I think design thinking needs you to now and again have the morning meetings with your team, look into what can you do better in increasing the occupancy. And then what other opportunities are there that enables you to package your business, example, like we did with the Department of Health. We can also do the same thing and open more space into allowing our neighbours, I will say our stakeholders to kind of commercialize some of the businesses that you are unable to run because you have shortage of staff and have them pay rental fees to you” (Participant 9).

“With all the provision, like what I just mentioned before, first, you search for those needs, what needs to be done? And then you improvise, try to see a way of to the tourists need? Why do we need to have a bridge yet close the other side? And how can we make it? And why? Why should we not have a wooden deck? And instead of having an eye on one because this is low maintenance and these kinds of things? I think, okay, will improve the tourism sector a lot” (Participant 1).

4.5.2. New market opportunities and growth

Design thinking allows for the sector to reach new market opportunities. A few participants shared similar views:

“It can help us tap into new markets that we probably never use. There are different types of tourism. People do travel for different reasons. It could really help the industry to tap into new market, re-package traveling deals” (Participant 6).

“You are also in line with the economic changes that are happening around as too many people have lost jobs. So design thinking will benefit in a way that makes it more adaptable to the economic changes and on stakeholders requirements, but also the flexibility allows you to cross over into another space and still flourish in it because you are willing to adapt and to be flexible. I will say Design thinking therefore will allow us to be more open to different opportunities and at the same time it strengthens the survival of the tourism sector” (Participant 9).

4.5.3. People and client-centred

By being people and client-centred, design thinking created value for the business and sector. Customers become very happy with services and they will return, which leads to more income and ongoing value. A few participants asserted the following:

“One which is human centred, because you’re dealing with people either way. Whether it’s your customers, whether it’s your enablers, you’re dealing with people” (EI 3).

“And two, to create value for customers” (Participant 4).

4.5.4. Culture

Design thinking can hence be embedded into the organisational and sectoral culture. A participant explained:

“And I think the design thinking process, if it’s if it’s embedded as a culture now, and you are applying design thinking you’re obviously fine tuning yourself to align to what is coming in the future. So I think I think you have certain you have certain countries in Asia that have already aligned. We have NDP national development plan, but what are the country plans to the fifth Industrial Revolution. So in essence, it’s a matter of when not if, but when and are we preparing for it in that aspect. And I think I think design thinking will help to, to navigate that way and create that alignment to those goals” (Participant 3).

4.6. Discussion

Previous research correlated with participant perspectives. Design thinking is a well-known human-centered approach to problem solving (Gopinathan et al., 2021). Design thinking is a set of actions that places the user at the center of the process, allowing for empathy and a thorough understanding of their behavior, values, and points of view, as well as the creation of opportunities based on those insights (Marion et al., 2021). Design thinking can be viewed as a clever technique that businesses can use to succeed in a competitive environment (Noh and Abdul Karim, 2021). Businesses have used design processes as a strategy and as tools for developing new practices and products (Henseler et al., 2021). Relationship building is critical in tourism, and design thinking has been shown to improve outcomes in many contexts because it can lead to more imaginative human-centered solutions that are more inclusive (Ni Shé, Farrell, Brunton, and Costello, 2022). Collaboration can take many forms, including working together for mutual benefit, participating in the self-sufficiency process, and responding to authoritative decisions affecting communal culture or personal life. There may be reciprocal or collective benefits for stakeholders in collaborative processes where participants can learn from one another, develop new policies, and adjust to a changing environment (Van Huy, 2021). Such collaborations must also include government interaction and involvement, with the ultimate goal of ensuring that organizations successfully implement their vision of a dynamic, inclusive, and innovative tourism sector (Bojanala, 2021).

5. Conclusion and Recommendations

The study's main contribution was to understand how design thinking may be applied in the tourism sector. All participants in this study affirmed and agreed that design thinking would be an excellent tool to assist changes and innovation in the tourism sector. The study's findings revealed that the following factors influenced the support of this view, as graphically displayed in Figure 3.

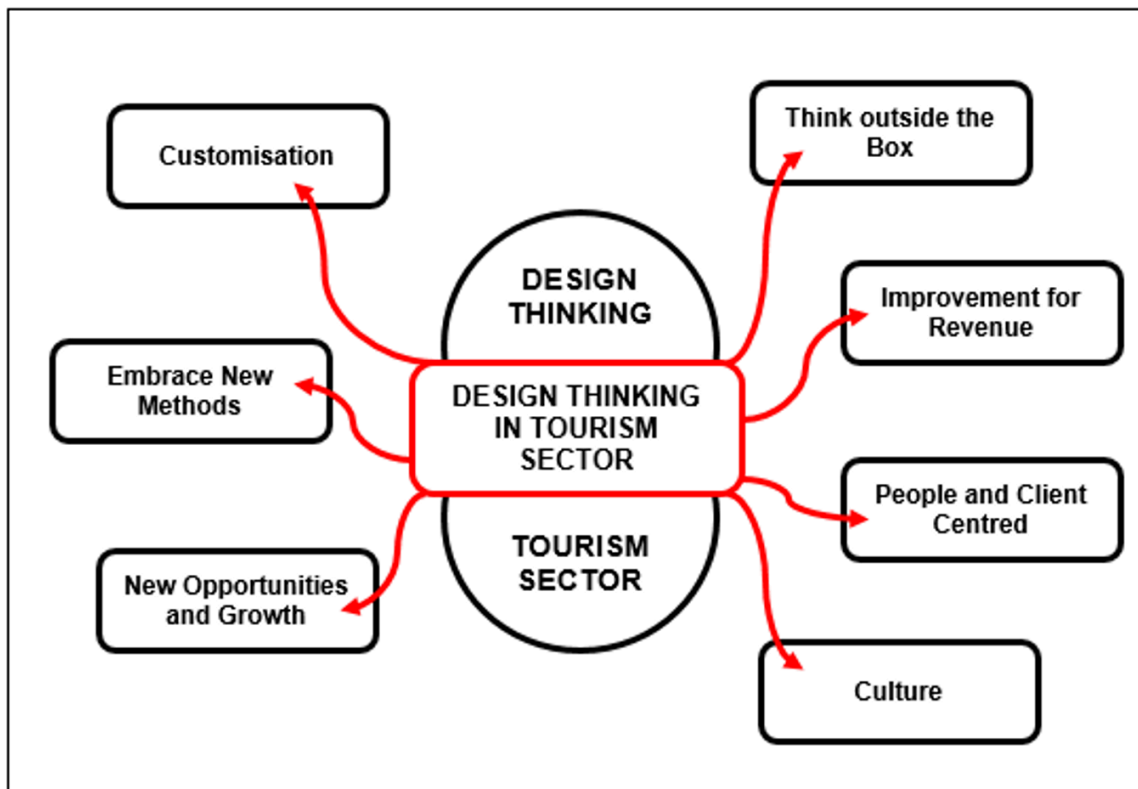


Figure 3. Factors contributing to design thinking improving business in the tourism sector

Source: Constructed by the researcher (2021)

- **Customisation**

Design thinking enables customization to be used frequently rather than generic offerings. Personalization results from the right questions being asked of customers and the evaluation of their input. This makes it possible to identify a demand and then modify services and products to meet it. Additionally, a variety of clients can receive it, which will appeal to them.

- **Think outside the box**

Thinking creatively and unconventionally with the aid of design thinking can result in innovations in the tourism industry.

- **Embracing New Methods**

As a result of design thinking, the industry will be able to embrace new operational practices, such as keeping up with the most recent technology, allowing for true competition and, most importantly, customer pleasure. Customers will also value the dependability and cutting-edge service techniques available to them. The internal workings of an organization can be modernized through the adoption of new technology that is motivated by the design thinking process.

- **Improvement for Revenue**

Increased revenue keeps an organization's financial machinery going. Design thinking enables the investigation of novel ideas and strategies for producing money. This might involve improved and novel practices, financial strategies, as well as goods and services.

- **New Opportunities and Growth**

By being more receptive to alternative options, design thinking helps the tourism sector look for new commercial opportunities while ensuring the sector's survival.

- **People and Client-Centred**

By concentrating on people and clients, design thinking will benefit the industry and business. If customers are satisfied with the services they receive, they might come back, increasing income and long-term value.

- **Culture**

By coordinating and modifying design thinking to correlate with and get ready for the future, it should be included into organizational and sectoral cultures.

However, the following crucial elements must be present for design thinking to succeed in the tourism industry:

- **Implementation**

The operational level needs to apply design thinking in order to streamline operations and improve decision-making. Ground level design thinking could be useful as well. No one knows the ground better than the people who are there, so it does not necessarily have to be a top-down strategy; it may also be a bottom-up one. However, management does not have a bottom-up perspective. To obtain a deeper awareness of the situations and difficulties, they must meet with staff at that level.

- **Change Management**

Design thinking must be used to implement and manage change because the process won't be successful until changes are made at all levels.

- **Collaboration**

The emphasis shifts to teamwork in order to guarantee a group reaction. Collaboration with all parties involved is necessary for this, including management, employees at all levels, clients, and the general public. This is so that all inputs may be taken into account and because the design thinking methodology can be based on a variety of concepts, a wide range of solutions can be produced. Additionally, communal platforms must be established, with the main goal of getting individuals to collaborate and come up with feasible ideas. These platforms must include meetings, consultative forums, and feedback mechanisms.

- **Customer Feedback**

Customer feedback should be a key component of any process that is adopted since it is crucial that communication with the customer determines whether or not the customer's needs are being met.

- **Assets and Capabilities**

Design thinking could help match assets to capabilities, facilitating more efficient problem-solving and service improvement. If skills, expertise, or credentials are lacking, they must be defined using the design thinking paradigm in order to identify exactly what is absent.

- **Markets**

Markets may be better understood, which may help to open up new markets or broaden existing ones. Packages can be created as needed by using design thinking techniques.

- **Service offerings**

Service offerings will need to be reevaluated in light of the current condition of COVID-19 and related concerns.

According to the study's findings, design thinking can boost tourism industry profits through a number of the aforementioned contributing variables. However, other elements that must be appropriately planned and coordinated, such as implementation, service offers, and feedback mechanisms, are heavily dependent on its success. This study might be helpful in detecting pertinent problems and suggesting fixes to boost a tourism setting's success. The limitations of the study must be acknowledged. One of the most significant weaknesses in this study was how the COVID-19 outbreak affected the tourism industry. Due to the considerable engagement needed, it was challenging to finalise participants. Additionally, the study was restricted to KwaZulu-Natal's tourism sector in order to keep the study's time and expense under control. The qualitative research methodology was used in this study. Undoubtedly, more research is necessary, perhaps employing strategies that are more productive than those employed in this study. Future research should use a quantitative methodology to better explore the multiple diverse themes and sub-themes identified in this study.

References

- Acker, Rachael. 2020. The Business Benefit of Design Thinking. [Internet: <http://blog.eliassen.com/the-business-benefit-of-design-thinking>; downloaded on 11 August 2020].
- Ayala Maribel. 2019. What is Design Thinking [Internet: <https://medium.com/swlh/what-is-design-thinking-bafb454f23>; downloaded on 24 July 2019].
- Barnett Michaela. 2020. To Achieve Sustainability, We Need to Go Upstream in the Design Process. [Internet: https://behavioralscientist.org/to-achieve-sustainability-we-need-to-go-upstream-in-the-design-process/?utm_source=newsletter&utm_medium=email&utm_content=Sustainable%20Design%2C%20Informed%20by%20Behavioral%20Science&utm_campaign=En downloaded on 7 May 2020].
- Bojanala 2021. [Internet: <https://www.tourism.gov.za/AboutNDT/Publications/Bojanala%20Jan%20to%20March%202021.pdf>; downloaded 16 June 2021].
- Brown Tim. 2008. Design Thinking, Harvard Business Review June 2008 Issue. [Internet: <https://hbr.org/2008/06/design-thinking>; downloaded on 11 June 2019]
- Dam Rikke and Siang Teo. 2019. What is Design Thinking and Why Is It So Popular? [Internet: <https://www.interaction-design.org/literature/article/what-is-design-thinking-and-why-is-it-so-popular>; downloaded on 14 September 2019].
- Dam Rikke and Siang Teo. 2021. 5 Stages in the Design Thinking. [Internet: <https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process>; downloaded on 16 May 2021].
- Dunne David. 2018. Implementing design thinking in organisations. Journal of Organisation Design 7(16): 1 – 16.

- Elsbach Kimberly D. and Stigliani Ileana. 2018. Design Thinking and Organisational Culture: A Review and Framework for Future Research. *Journal of Management*: 1 – 33.
- Friedlander Jay, Murphy Laura and Noel Lesley-Ann. 2021. New approaches to social innovation: design thinking theory, practice and critique. 13th International Social Innovation Research Conference “Enabling the change! Social innovation and enterprises for a better future”, ALTIS-Graduate School Business & Society, E4Impact Foundation Università Cattolica del Sacro Cuore (Milan) September 8-10th, 2021
- Gardner William L., Karam Elizabeth P., Alvesson Mats and Einola Katja. 2021. Authentic leadership theory: The case for and against. [Internet: <https://www.researchgate.net/publication/349121989>; downloaded on 20 December 2021].
- Gopinathan Sharmini, Kaur Anisha Haveena, Ramasamy Kanesaraj and Raman Murali. 2021. Enhancing innovative delivery in schools using design thinking. *F1000Research* 2021: 1 – 13.
- Henseler Jörg, Guerreiro Manuela and de Matos Nelson. 2021. The interplay of marketing and design. *Review of Managerial Science*: 1 – 9.
- Jamal Tazim, Kircher Julie and Donaldson John Phillip. 2021. Re-Visiting Design Thinking for Learning and Practice: Critical Pedagogy, Conative Empathy. *Sustainability* 2021: 1 – 25.
- Kosmala Martyna. 2018. Becoming a design-driven large organisation: Challenges faced and support efforts needed to implement design thinking. Masters thesis, Aalto University. [Internet: https://aaltodoc.aalto.fi/bitstream/handle/123456789/34237/master_Kosmala_Martyna_2018.pdf?sequence=1&isAllowed=y; downloaded on 14 November 2021].
- Kummitha Rama Krishna Reddy. 2019. Design thinking in social organisations: Understanding the role of user engagement. *Creat Innov Manag* 28: 101 – 112. [Internet: <https://doi.org/10.1111/caim.12300>; downloaded on 16 May 2021].
- Kwon J, Choi Y and Hwang Y. 2021. Enterprise Design Thinking: An Investigation on User-Centered Design Processes in Large Corporations. *Designs*: 1 – 14. [Internet: <https://www.mdpi.com/journal/designs>; downloaded on 27 November 2021].
- Lambdin Charles. 2020. Design Thinking as Decision Framing. [Internet: <https://charleslambdin.com/2020/01/23/design-thinking-as-decision-framing/>; downloaded on 7 July 2020].
- Liedtka Jeanne. 2015. Perspective: Linking Design Thinking with Innovation Outcomes through Cognitive Bias Reduction. *J PROD INNOV MANAG* 32(6): 925 – 938.
- Liedtka Jeanne. 2018. Why Design Thinking Works: It addresses the biases and behaviors that hamper innovation. *Harvard Business Review* 2018. [Internet: <https://hbr.org/2018/09/why-design-thinking-works>; downloaded on 16 September 2019].
- Mahakata Susan, Tsokota Theo, Mupfiga Paul and Chikuta Oliver. 2017. A framework for enhancing Information Sharing and Collaboration within the Tourism Industry in Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, 6(3): 1 – 24.
- Marion, T., Cannon, D., Reid, T., McGowan, A.M. 2021. A Conceptual Model for Integrating Design Thinking and Lean Startup Methods into the Innovation Process. *Proceedings of the International Conference on Engineering Design (ICED21)*, Gothenburg, Sweden, 16-20 August 2021 31 – 40.
- Matthews Judy and Wrigley Cara. 2017. Design and Design Thinking in Business and Management Higher Education. *Journal of Learning Design* (10)1: 41 – 54. [Internet: <https://www.researchgate.net/publication/312184607>; downloaded on 18 June 2020].
- Micheli Pietro, Wilner Sarah J. S., Bhatti Sabeen Hussain, Mura Matteo, Beverland Michael B. 2018. Doing Design Thinking: Conceptual Review, Synthesis, and Research Agenda. *Journal of Product Innovation Management* 36(2): 124 – 148.
- Namdarian Shay. 2017. Does Design Thinking Actually Work. [Internet: <https://shaynam85.medium.com/does-design-thinking-actually-work-164614f1b2fb>; downloaded on 26 November 2019].
- Ní Shé Caitríona, Farrell Orna, Brunton James and Costello Eamon. 2022. Integrating design thinking into instructional design: The #OpenTeach case study. *Australasian Journal of Educational Technology*, 38(1): 33 – 52.
- Noh Suhaila Che and Abdul Karim Abdul Malek. 2021. Design thinking mindset to enhance education 4.0 competitiveness in Malaysia. *International Journal of Evaluation and Research in Education (IJERE)* 10(2): 494 – 501.
- Ordóñez Adriana Santos, Lema Carlos González, Miño Puga María Fernanda, Lema Cinthia Párraga Ing and Vega Ma. Fernanda Calderón. 2017. Design Thinking as a Methodology for Solving Problems: Contributions from Academia to Society. 15th LACCEI International Multi-Conference for Engineering, Education, and Technology: “Global Partnerships for Development and Engineering Education”, 19-21 July 2017, Boca Raton FL, United States: 1 – 8.
- Panashe Patience. 2020. Domestic travel is key to saving the tourism sector. [Internet: <https://mg.co.za/opinion/2020-10-07-domestic-travel-is-key-to-saving-the-tourism-sector/>; downloaded on 1 November 2021].
- Qian Davy. 2019. Design thinking as Strategy for Business Innovation. [Internet: <https://www.themartec.com/insidelook/design-thinking-strategic-business-innovation>; - downloaded on 22 September 2019].

- Ramanujam, H., Ravichandran, B., Nilsson, S. and Ivansen, L. 2021. Barriers and Opportunities of Implementing Design Thinking in Product Development Process of a Business to Business Company. Proceedings of the International Conference on Engineering Design (ICED21), Gothenburg, Sweden, 16-20 August 2021: 551 – 560.
- Ribeiro Ana Elisa L. and Souza Renata S. 2021. Design Thinking as an Approach to Foster Recife's Creative Tourism. International Conferences ICT, Society, and Human Beings 2021: 95 – 101.
- Schallmo, Daniel, Williams, Christopher A. and Lang, Klaus. 2018. An Integrated Design Thinking Approach: Literature Review, Basic Principles and Roadmap for Design Thinking. In: (Proceedings of the) XXIX ISPIM Innovation Conference "Innovation, The Name of The Game", June, 17-20, Stockholm, Sweden.
- Shahrasbi Nasser, Jin Leigh and Zheng Wei-Jun. 2021. Design Thinking and Mobile App Development: A Teaching Protocol. Journal of Information Systems Education Spring 2021 32(2): 92 – 105.
- Van Huy Nguyen. 2021. Stakeholder collaboration in tourist destinations; A systematic literature review. e-Review of Tourism Research (eRTR) 18 (4): 571 – 590.
- Vinni Rauno. 2021. The Potential of Design Thinking and Total Quality Management in Creating Public Value. The NISPAcee Journal of Public Administration and Policy 14(1): 285 – 309.
- Zhang Yanchun, Zheng Junwei and Darko Amos. 2018. How Does Transformational Leadership Promote Innovation. Sustainability 2018, 10: 1 – 19. [Internet: www.mdpi.com/journal/sustainability; downloaded on 12 March 2020].

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.