Strategic Foresight and Innovation

2021

The Crisis Model Canvas

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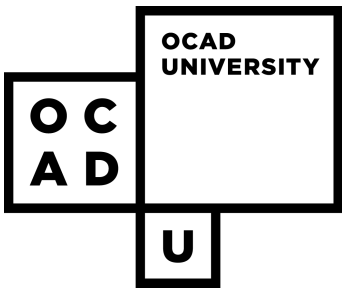

The Crisis Model Canvas

Project Report
Independent Study SFIN-6898

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Submitted To
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Date
2021-04-14

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Background

In coursework titled Business Innovation Initiative and Business and Design Thinking (SFIN-6009-002) at OCAD University in 2020, the researcher was introduced to Business Model Canvas (BMC) as a comprehensive design tool for modeling conceptual business plans.

Initially proposed as a business design template by Alex Osterwalder in 2005, the BMC had later evolved to become one of the most popular business design tools among entrepreneurs around the world (Wikipedia, 2010). The tool allows users to analyze a wide range of business models within a framework of nine building blocks (Fig: 1), each of which represents essential components of a business.

But at the time when this tool was introduced to the researcher, the world was going through a crisis, likes of which it has never seen before. In December 2019, the world was hit by a global pandemic that has not only taken more than two million lives but also disrupted economies all around the world. In the wake of such a disaster, the researcher felt curious to find if BMC is capable enough to assist entrepreneurs with a business plan that an external crisis has largely disrupted.

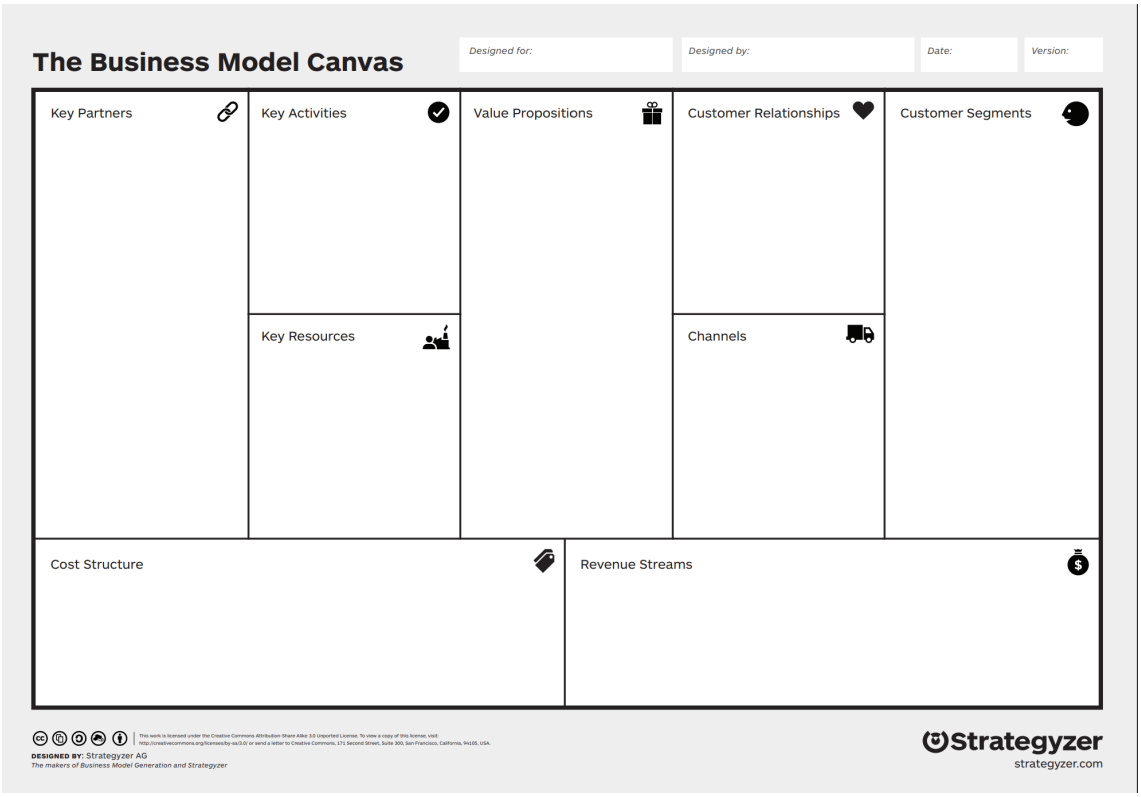


Fig 1: Business Model Canvas: nine business model building blocks, Osterwalder, Pigneur & al. 2010

Objective

This independent study aims to conduct theoretical research on the functional limitations of BMC and suggest a solution that will overcome the shortcomings. First, the researcher seeks to examine the functional limitations of BMC when it is applied during an unprecedented crisis. Then this explorative research follows a theoretical investigation of contemporary evidence that supports its hypotheses.

Second, a potential intervention plan for BMC is discussed. This part aims to set up a foundation for future dialogues with the help of a conceptual design toolkit. This section hypothetically connects real-life problems to the newly designed toolkit for substantiating the desired evolution of BMC. Framing real-life issues in terms of a hypothetical toolkit will help future researchers identify possible applications, limitations, and the development of better models in the future.

Goals

The research questions this paper seeks to answer are:

“What might be a human-centered approach to redefine BMC’s role in a crisis, and how might we integrate it with strategic foresight to enhance its functionalities and capabilities in managing a crisis?”

The researcher desires to provoke imagination for a more intuitive, engaging, and meaningful tool that will overcome the limitations of BMC. The ultimate goal of this research is to produce a conceptual business modeling tool that is tailored to perform in a crisis.

Assumptions

Crisis: In this paper, the researcher has used the term ‘crisis’ as a protagonist to characterize an uncertain world we live in. However, ‘crisis’ in this paper refers to large-scale systemic failures caused by sudden disruption such as the global pandemic, natural calamities, war, market crash, etc. Events of systemic failures, such as climate change, that span several years in making, are not referred to as ‘crisis’ in this project.

Normal: ‘Normal’ time as referred to in this paper implies the absence of a crisis

Users: This paper assumes all actors (i.e individual, team, and organization) referred to as ‘user/s’ is/are subjected to a crisis, like of which described in the preceding section, and his/her/their/its business has been substantially disrupted by the presence of it.

Team The researcher presumes multidisciplinary teams working under constrained conditions, such as limited funding, narrow deadlines, lack of support, and enjoying limited scopes of collaboration in between them. Planning and execution of a business model are regarded as separate responsibilities of different teams in this study.

Knowledge: One implication of having poorly connected teams is the nonuniformity of shared knowledge. Thus, dissemination of knowledge without explicit mentioning is considered to be unreliable by default. Information disseminated without considerable remarks is reckoned misunderstood in any form.

Time: Testing hypotheses in the real world is a critical part of business planning. But it also requires time and effort to collect insights from testing. This study assumes that users of BMC do not have enough time to test their hypotheses while tackling a crisis.

Hypothesis

- Logical sequencing of BMC boxes ensures a more effective work process than choosing them randomly.
- The risks of failing in a crisis are higher than that of a stable time
- When going through a crisis, desirability has the highest priority in business planning, followed by feasibility and viability.
- Economic profitability may not be the prime focus of all organizations, but it is critical for the survival of the business.

Limitations

Methodology

Based on observation, personal experience, and online content analysis.

A static tool

The Business Model Canvas (BMC) is a simple and intuitive tool that allows its users to have a shared language for strategic dialogue and helps them to put better ideas on the table (Nabila Amarsy, 2015). However, it is an oversimplified tool that does not allow users to analyze their business models with great details (McClaine, 2018). Because of the simplistic characteristics of the tool, BMC fails to produce dynamic business models, leaving its user with the responsibility to update the model through iteration (Rodrigues, Lopes, 2018). Indeed, the users can revisit their models and align changes with time, but the tool itself has no functionality to provoke that change. For instance, Humberto Elias Garcia Lopes and Vívian Cândido Rodrigues studied 120 Brazillian entrepreneurs to test their hypothesis whether or not BMC can be used as a dynamic framework (Rodrigues, Lopes, 2018). The majority of the participants who recognized BMC as a dynamic tool updated their business plans only when they had already decided to do so. Ninety-four percent of participants believed that the BMC helps them to define relationships between the nine boxes, but almost all of them were confused and lost when asked to describe those relationships. Another research conducted by Strategyzer suggests 57% of users find BMC helpful in developing a new business plan (36%) or a new product/service (21%), whereas only 19% think it is useful for the strategic alignment of an existing business (Nabila Amarsy, 2015).

While going through a crisis, a firm may choose to have different motivations other than launching a new product or a service. Typical business planning may fail to come up to the pace and rapidity at which leaders need to act in a crisis. “Business leaders are saying that they’ve accomplished in 10 days what used to take them ten months,” Kate Smaje, a senior partner and global co-leader of McKinsey Digital said in an interview highlighting the sense of urgency the COVID-19 pandemic had induced on organizations (McKinsey & Company, 2020). Organizations rapidly reinventing themselves within a crisis will have to look beyond traditional guidelines of business design forgoing simple anticipations obtained from static models. This shift in mindset will require a deeper analysis of the situation from a systemic point of view.

Research suggests that increased uncertainty leads us to process information more deeply and systematically (Tiedens, 2001). For example, higher degrees of uncertainty and risk involved with the Coronavirus pandemic forced businesses to think critically about the causal relationships with which key elements are connected and how making a change in one could affect another. The education industry, for example, had to shift classes from offline to online within a matter of days and had to deal with the massive adaptational transformation for

MOOCs (Massive Open Online Courses) despite being one of the least digitized economic sectors in the USA (Gallagher & Palmer 2020). Going against their tradition, elite institutions like Princeton and Georgia Tech offered discounted tuition fees for online degrees, creating value propositions for a new consumer segment (Gallagher & Palmer 2020). On the other hand, students felt forced to join classes from home.

Research suggests that the theoretical structure of BMC alone does not support capturing values in a dynamic situation like this (Pigneur & Fritscher, 2015, p. 04). If we hypothesize a conceptual model of the education industry in BMC, several elements from nine boxes need to shift to simulate one change. For example, to arrange online lectures, institutions may have to rethink what key resources they have, what activities are required to establish the connecting platform, and what implications having such a platform may cause on the cost structure. But an institution may have to undergo several other changes like this. For example, “How will financial systems work?” or “How can unutilized physical spaces on campus be more generative?” are just a few of many questions that would require answers. It would have taken multiple iterations performed on BMC combined to mimic the dynamism of the transformation. A series of static business plans, ‘superimposed’ one top of another, would have created a sense of dynamic perspective just the way a series of still images create an illusion of motion graphics. That could have cost valuable time and resources that leaders cannot afford to lose during a crisis. In fact, companies that responded with urgency to the pandemic have enjoyed the first-mover advantage in grabbing new market shares and in unlocking new ways of working (McKinsey & Company, 2020).

Missed opportunities

The same research by Humberto Elias Garcia Lopes and Vívian Cândido Rodrigues on Brazilian entrepreneurs revealed 77.5% of the participants believe BMC allows them to monitor existing business models. But in practice, the respondents declared they used multiple off-BMC indicators, such as SWOT (Strength, Weakness, Opportunity, Threat) analysis, top trends, customer feedback, industry forces, etc., to measure their actual capacity (Rodrigues, Lopes, 2018). The study also concludes, BMC is more useful when integrated with external resources, methodologies, and add-on features. For example, it does not allow users to generate business models based on their organization’s core competencies (if existing) or identify the innovation spaces it wants to explore (for a new organization). “Core competencies are the resources and capabilities that comprise the strategic advantages of a business. A modern management theory argues that a business must define, cultivate, and exploit its core competencies to succeed against its competition” (Twin, 2021). On the other hand, recognizing innovation spaces around a business can be the differentiator between success and failure in a crisis. In a recent survey by McKinsey, 90% of the responders claim that business-model innovation has been the most influential driver for strategy planning during this pandemic (Diedrich, Northcote, Röder, & Sauer-Sidor, 2021).

The restaurant industry is one of the worst affected industries by the Coronavirus pandemic. Thousands of restaurants in New York (NYC) were closed amid the fear of transmitting the virus. Unutilized kitchen spaces remained abandoned for many months costing hundreds of thousands of dollars in rent. Recognizing this crisis as an opportunity, many culinary service providers switched their business concept into something called ‘the cloud kitchen’ (Ye & Jones, 2020). It is a kitchen that delivers food to its customers without having any physical space to dine in. Orders are placed and delivered through online delivery service providers like Uber Eats, and Doordash. For most customers who are maintaining social distance and working from home or attending classes online, it is a viable solution to get their meals delivered at home.

This business model follows a simple structure that fits into BMC’s nine-box framework. But asking intriguing questions like “whether or not to explore this opportunity” or “What opportunity are we missing?” has a lot more to do with innovation than business design. The framework of BMC neither ‘pushes’ users to find new avenues that are there to explore nor aids users to find a replacement for a missing element. Relating to the example of the cloud kitchen, in their older business models, business owners believed in value propositions that no longer exist during the pandemic. Along with value propositions, their partners, channels, and revenue streams for the physical stores have also gone missing. For example, if schools and office premises were open, restaurants could generate revenue from walk-in customers and they could partner with corporate houses by offering exclusive deals. Potential sales over the counter is another channel they are missing due to COVID-19.

In this changed reality, leaders may find it difficult to innovate. One might get caught in the dilemma of acting against their own beliefs. Orthodoxies are unquestioned, deeply-held beliefs that can lead to blind spots resulting in fatigue to change (Kasper, Ausinheiler 2015). There are strategic orientation tools such as *The Never Say Tool* and *The Missed Chances* tool that can help users to identify blind spots hidden beneath their orthodoxies. Both of these tools were introduced by SFI instructor Anthony Campbell in the course, Strategy Development, at OCAD University. The Missed Chances tool was introduced with an example to show how McDonald's used it to find unexplored innovation spaces (Fig: 02)

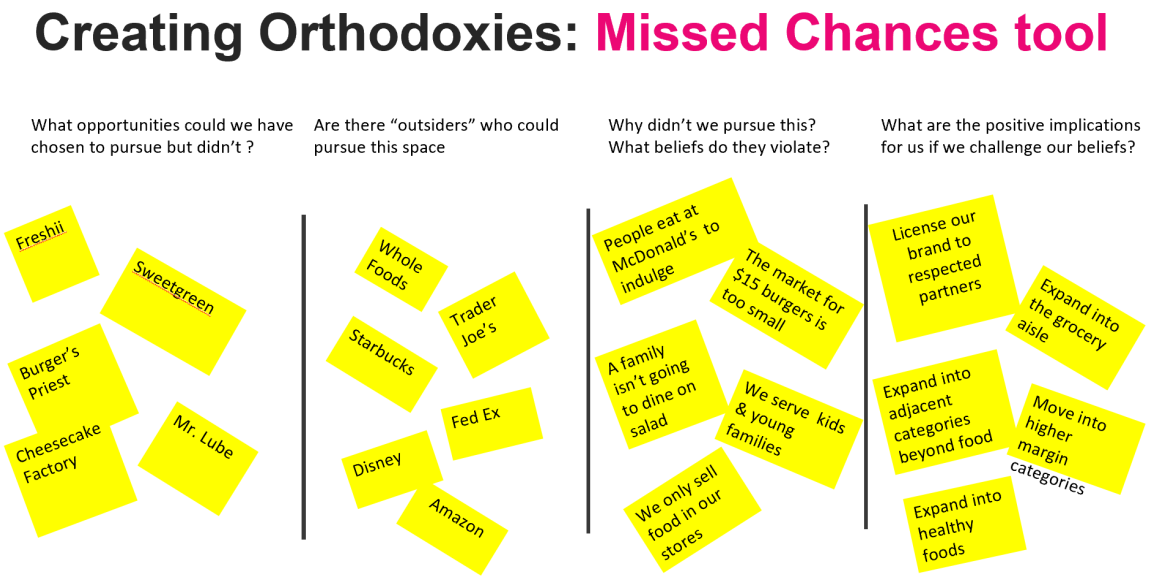


Fig 02: Example of orthodoxies for McDonald's with Missed Chances tool (Cambell, 2020)

In a crisis situation, identifying a blindspot can become the difference between merely existing or not. Referring back to the example of NYC restaurants, not all of them could transform into a cloud kitchen. More than 1000 restaurants have been permanently closed in NYC between March and December 2020 (Fortney & Eater Staff, 2020). Hence, business model innovation in crisis time is different from that in a relatively stable time. Leaders cannot rely on an external tool to provoke questions that are critical to innovation. Instead, they should use a framework that embodies features to inspire dialogues around a business plan as well as unexplored innovation spaces around it. BMC has no feature that lets users examine their models in terms of innovation spaces available. The tool may also fail its users in producing desired outcomes if they are not aware of their own biases. Entrepreneurs looking to explore the innovative capacity of an organization may find other tools such as Doblins's Ten Innovation Framework ("Doblin," 2013) or Innovation Space 4P's (David, 2016) useful along with BMC. For example, Doblin's framework can be used as a diagnostic tool for measuring the internal and external innovation capacity of an organization. These tools generate a sense of understanding where an organization's critical competencies are located and where it is lacking resources. These tools also provide insights on when and where further investment would be more justified.

It is also imperative for an organization to create values through problem-solving. Problem-solving matters because it is literally translated into value creation. (Regev, 2019). Furthermore, it gives planners mechanisms to avoid things that are not working, especially when an organization is trying to fix what is broken and considering a modification to the existing business model (Stottler & Tregoe, 2018). The Value Proposition Canvas was later introduced by Alexander Osterwalder to highlight the 'Pain' and 'Gain' factors of the customer (B2B International, 2020). But this mechanism of problem-solving remained missing in the original framework of BMC. The original canvas does not have any placeholder for a problem

statement which its user is trying to solve (McClaine, 2018). Without a clear statement, it would be challenging to bring clarity to the model. An external spectator, who was not part of the design process, may find the designed model unrelatable or incomprehensible to some extent.

Scenario compatibility

The Coronavirus pandemic has indeed forced businesses to shut down and lay off their workers, but it has also given birth to unprecedented opportunities for organizations to exploit (Lok, 2019). With millions of users locked inside their homes, the global pandemic pushed meetings, events, and gatherings online in 2020. This sudden shift created an unexpected surge in global demand for video calling apps. Zoom, one of the most popular applications for iPhone users in the United States, for example, saw a spike of downloads going from 10 million to 200 million per month within the first quarter of 2020 (Dain Evans, 2020). Such growth opportunities are rare and only emerge for a brief moment. Therefore, having the proper infrastructure readiness can make a world of difference between a great success or a colossal failure. But how could companies like Zoom have anticipated such a spike of growth? We may find answers in Abraham Lincoln's famous quote:

> "The best way to predict your future is to create it" (Brown, 2014)

Crises like pandemics are highly improbable but also plausible events. One effective way to prepare for an uncertain future is to have multiple scenarios planned for it. "Scenarios are used to develop plans for significant changes in the environment, personnel, or processes for which data are limited and uncertain" (Reference for Business, 2013). Robust scenario planning can help organizations stay prepared for radically different situations, making them more spontaneous and dynamic. On the other hand, traditional business models based on a 'linear future' model may overlook the impacts of highly improbable incidents. BMC, in particular, has no mechanism to incorporate multiple scenarios in planning. Indeed, there can be discrete models for each scenario, but that will provide a non-cohesive narrative of the future.

Shell, one of the world's most significant energy and petrochemical companies, has been developing future scenarios since 1970 (Shell, 2020). Their project Energy Transformation Scenarios explores three different pathways - *Waves, Island* and *Sky*, to demonstrate multiple decarbonization models the world could follow in a fight against climate change. The basis of these models is evidence and research of today's trends and future possibilities. For example, the Sky scenario "shows a transformation to a lower-carbon energy system, with the world achieving the temperature goal of the Paris Agreement" (Shell, 2020).

Shell's business model for each scenario is radically different and yet very much connected to a plausible future. Recognizing business models as part of a scenario is crucial for planners to

make informed decisions. Shell's scenarios, for example, have been guiding internal and external stakeholders for more than 50 years to follow different pathways while making decisions (Shell, 2020).

Transformational changes as big as the 'future of energy' require systemic knowledge of nuances causing economical, political, and societal shifts. In a world that is constantly changing, shifting, and reshaping, business models based on a single perspective can be very obstructive to shortcomings. BMC users have this challenge as there is no mechanism to incorporate scenario planning into the nine-box model. The current structure of the BMC does not provide any option to choose the 'best fit' model for a specific scenario nor does it suggest how the model might evolve when contextualized in a different scenario. A business transformation without holistic planning could result in a hesitant and sluggish response.

Scenario planning tools like Causal Layered Analysis (CLA), The Future Wheel, and The Future Triangle take users deeper into analysis by provoking dialogues with the tool (Inayatullah, 2008). Users' ability to dive deeper into analysis with these tools creates rich and vivid scenarios that can be coupled with BMC. However, fragmented models may risk creating knowledge gaps if not fully integrated within a single framework.

Lack of self-awareness

Economies resurrecting from their downfall in crisis will be needing new forms of leadership that will help organizations to regain growth and sustain it long enough for the crisis to fade away. Such leaders must foster adaptation and embrace disequilibrium at the same time when a disruptive event like a pandemic poses risks to their businesses (Heifetz et al., 2009). They must continue to face the challenges of today and succeed in planning for tomorrow at the same time. This adaptation requires successful planning based on the absorptive capacity of an organization, successful scenario planning based on evidence, and pragmatic analysis of strengths, weaknesses, opportunities, and threats (SWOT) (Lewis et al., 2010) (Fig 03).

Zara, the world's largest fashion retailer (Amrith Sudhakaran, 2020) has incurred a net loss of 409 million euros in the third quarter of 2020 following the closure of its 1200 physical stores around the world (Jolly, 2020). If we had plotted Zara's business model on BMC before the pandemic, these physical stores, along with its remaining 6700 stores, would have made their place under 'Key Resources'. Retail stores are one of Zara's biggest strengths. In fact, with the highest number of fashion stores in the world, Zara stands clearly apart from its closest competitor, Nike (Amrith Sudhakaran, 2020). If we plotted Zara's model in BMC immediately after the crisis, its closed stores may no longer be a valid entry for Key Resource. In fact, stores were no longer Zara's primary channel to reach their customers. Awakened by the shock of the pandemic, Zara's mother company Inditex has planned to invest 3 billion euros in building online-retail infrastructure for making a quarter of their revenue from online sales by 2022 (Jolly, 2020). It is also planning to turn its stores into distribution hubs for online sales.

Online retail may not be new to Zara but it was surely not their greatest strength or biggest priority. The pandemic has largely affected their business model forcing stakeholders to rethink priorities. Internalizing this change will take resource allocation both internally and externally. If we compare Zara's business model before and after the pandemic, we will find two very different models with a different set of partners, resources, channels, and activities. But without a thorough SWOT analysis, it is hard to explain why there is a difference between the two models and what was the motivation behind it. Featureless boxes of BMC make it more difficult for an external stakeholder to understand which input area reflects strengths and which does not. The knowledge might be private to the users, say participants of a workshop, but that knowledge would be hard to disseminate in large organizations like Zara. There will be a chance of misinterpretation of this knowledge. For example, if we compare two models of Zara before and after the lockdowns (Fig: 04), both will be referring to physical stores as well as their online platform as 'Channels'. But an extra remark of SWOT analysis shows how radically two models are different, although apparently identical. Later we will discuss how integrating SWOT can help to differentiate models and disseminate the right knowledge to an external viewer who was not part of the design process.

Fig 03: Shewan, Dan. (2020). How to do a SWOT analysis for your small business (with example) [PNG]. https://www.wordstream.com/blog/ws/2017/12/20/swot-analysis

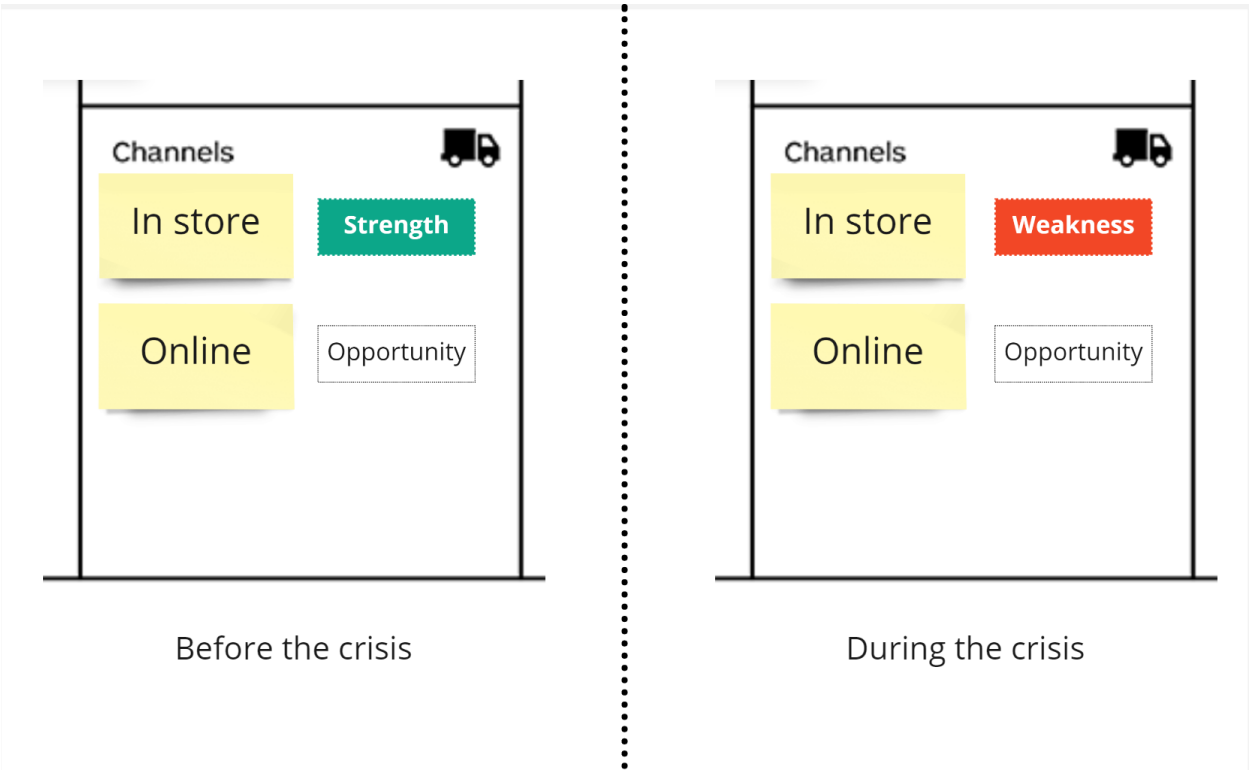


Fig 04: Zara's 'Channels' plotted in BMC before and after the crisis. Without remark of SWOT analysis, they are identical

Priority indicator missing

The responsibility of a crisis management team may involve planning not only for the initial recovery process but also for the long-term organizational transformation. Internalization of shifting priorities is critical for the organization to perform in a crisis. To achieve a common goal, everyone must have a common understanding of priorities. In June 2020, *MIT Technology Review Insights* surveyed 372 senior business leaders and academics most of whom are top executives, directors, and decision-makers in their respective fields. Nearly three-quarters of the respondents reported that COVID-19 has acted as a catalyst to their company's innovation roadmap. In other words, their priorities have changed. Also, 62% of respondents of the same survey believe that the pandemic will disrupt the way their company innovates (MIT Technology Review Insights, 2020).

This paper hypothesizes that the BMC framework 'assumes' all input equally important by not having an indicator in the boxes. To understand this limitation we will have to discuss how inputs are provided in the first place. A business design process initially starts with the rigorous collection of as many ideas as possible. These are user-generated ideas based on intuition. In

subsequent iterations, these ideas are refined and conceptualized with evidence. Ideas generated in the initial process are finally synthesized into testable hypotheses which users of BMC need to test in the real world. When it comes to testing those hypotheses, users need to identify which are the most important hypotheses that have the strongest evidence, and then they need to prioritize testing for the chosen ones. In his latest book, co-authored by David J Bland, Alex Osterwalder has introduced an additional 2x2 matrix (Fig 05) to set the priority of hypotheses (Bland & Osterwalder, 2019, p. 38-39). The book also strongly recommends rigorous testing of top-priority hypotheses first (top-right quadrant of the matrix) before a business plan can be fully realized. It is recommended in this book to keep updating the canvas after each iteration of testing and to keep doing that until a satisfactory version of the canvas is produced.

Here the assumption is that the same people executing the business plans are also involved in planning and testing. However, that may not always be true for a team that works remotely and stays geographically apart. It is unclear how BMC ensures that external stakeholders, who were not part of the iterative process, would identify priorities.

To test this hypothesis, I randomly searched images for “Airbnb business model canvas” on www.google.com and chose three random results for analysis (See Appendix 1,2 and 3). The purpose of this test is to check if it is possible for an external viewer to identify priorities without having an additional brief. The experiment mainly set to focus on BMC’s own capacity of knowledge transfer regardless of the intellectual capacity of its user.

Two out of three models listed inputs in bullet points. The third one has its inputs written in red boxes. All inputs are captured in an identical fashion making it impossible for an external user to identify which one has greater priority. To give an example, one of the samples has listed five channels in the following order:

- Digital Ad Campaigns
- Social Media
- Word of mouth
- PR - media coverage
- App store

From this input, no conclusion could be derived on the hierarchy of channels. An external viewer, such as an investor, may have questions like “Do all the inputs have equal priority?” or “Was there any sorting criteria?”. There can be multiple perspectives of answering these questions which may lead to further confusion. A priority indicator can reduce uncertainties by explaining the order without sharing too many details on the process.

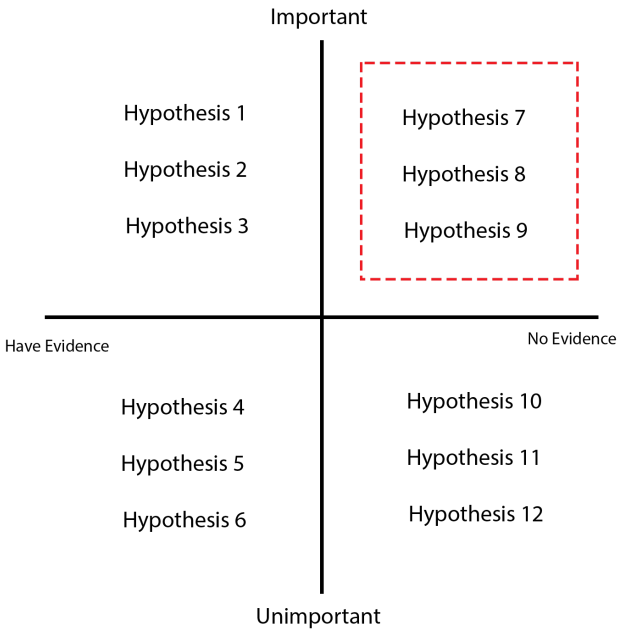


Fig 05: A 2x2 Matrix illustrated by drawing inspiration from the book Testing Business Ideas by Alex Osterwalder and David J. Bland. Ref: (Bland & Osterwalder, 2019, p. 38-39)

Focused on Success

The feasibility of a business model in BMC is assessed in terms of *Key Partners*, *Key Activities,* and *Key Resources* (Bland & Osterwalder, 2019, p. 32-33). However, identifying key partners may not be enough to determine the feasibility of a business in the context of a crisis. In turbulent times like a global pandemic, entrepreneurs may have to switch strategies from a growth mindset to a survival mindset within a matter of months (Licht, 2020). Such rapid alteration in planning cannot be designed based on a feasible business plan only. Instead, many other external factors may come into play as a catalyst. How key stakeholders are adapting to the crisis and how they are shifting priorities may suggest a lot more about successful crisis planning.

We can try to evaluate this point through the lens of Zara again. Most suppliers of Zara are located within close proximity of its mother company's headquarter in Spain (Dowsett, 2020). During the first wave of the pandemic, Spain was one of the worst affected countries, along with Turkey and Portugal, which are home to Zara's key partners. During the first wave of the pandemic, suppliers in Spain had to stop apparel production in order to deliver emergency supplies of masks and PPE (Personal Protective Equipments) (Dowsett, 2020). On top of that, failure to control the spread of the virus made Europe one of the worst affected regions in the world resulting in prolonged lockdowns and severe economic crisis (Griffin, 2020). Due to a

systemic failure that originated in its supply chain, Zara was struggling to operate in Europe (Dowsett, 2020). Whereas, in the Asia-Pacific market, ready-made garment (RMG) supplier countries like Bangladesh, Vietnam, China, and Cambodia were resuming operation as early as April 2020 (Perfect Sourcing, 2020).

Hypothetically, what Zara's BMC could have captured is its own capacity to run the business. But it would have not assessed the condition in which its partners are operating. Ultimately systemic challenges failed Zara's key partners to deliver in a crisis. Similar to the example given for Shell, Zara could have designed more resilient business models through scenario planning. One such scenario could explain how Zara could swiftly alter its business plan when key partners would fail to provide support.

Scenarios do not just prepare organizations for anticipated growth but also for dramatic downfalls. It would be unwise not to think about failures while designing a business since failure is more common to a business than success is. In fact, it is estimated that only one in every ten startups in Silicon Valley becomes economically successful (Bhatia, 2013).

Therefore, business models cannot be merely sketched on hypotheses that have their foundations rooted in ideas only. The ideation process must cover multiple scenarios ranging from the 'hyper-growth' model to the 'catastrophic failure' model. Leaders also have to be mindful of a situation when it might not be possible to test hypotheses in the real world. For example, it would have not been practical for Zara to test a hypothesis that involves the closure of its 1200 stores. Thus, a business modeling tool needs the functionality that rightly assesses situations based on both success and failure.

Profit Focused

BMC primarily focuses on the maximization of the economic profitability of an organization and its capacity to keep the balance between desirability, feasibility, and viability of the business. It excludes considering an extended range of ecological, social, and political stakeholders who may share direct or passive interests with the same system (Joyce & Paquin, 2016, p. 05). Also, the model is regarded as successful if the firm can satisfy supply and demand sides with a substantial gain in monetary benefits. It disregards other benefits or losses that may be associated with planning such as social, political, or ecological value creation. A growing body of literature in environmental science and social science suggests organizations should consider its ecological, social, economic, and emotional impact on stakeholders including the ones that are passively affected (Upward & Jones, 2015). The environmental impact of livestock farming, for example, has become a growing concern for the consumers of the dairy and meat industry and has left a noteworthy contribution in influencing new business models involving 'fake' meat (Plumer, 2020).

Another drawback to the profit-focused business modeling is that it predominantly assumes all designers of business models measure success in terms of economic profitability (Upward, 2013). This approach is only valid for the capitalist model of the economy. This makes BMC incompatible with regenerative circular economic models that are grounded on the theories of social entrepreneurship. A growing body of literature has criticized BMC for its limitation as a tool to design sustainable business models. One of the noteworthy to mention here is the *Strongly Sustainable Business Model Ontology* by Upward and Jones (Upward & Jones, 2015) that eventually evolved to become The Flourishing Business Canvas (Flourishing Business, 2021). Another example of such literature is The *Triple Layered Business Model Canvas: a tool to design more sustainable business models* by Alexandre Joyce, Raymond L. Paquin, and Yves Pigneur (Joyce et al. 2015). This independent study also acknowledges the contribution of preceding literature that may have criticized BMC in the same fashion but not mentioned here.

The profit-centric framework of BMC is a limitation that has been discussed by a growing body of literature, including the ones referred to here in the previous paragraph. These works have well-established this limitation of BMC for regenerative circular economic models that are grounded on the theories of social entrepreneurship. In response to this limitation, Steve Blank and Alexander Osterwalder later adapted BMC to Mission Model Canvas (MMC), making it more favorable to non-profits (Blank, 2016). The question remains, to what extent this limitation could have influenced a business planning crisis.

Bidyanondo foundation, a Bangladeshi non-profit organization that started distributing emergency food supplies during COVID lockdowns, ended up distributing 500 tons of rice a day to the most vulnerable people of the community (Jasim, 2020). Apart from the food supply program, it also distributed medicines, PPE, and masks to the least privileged communities that do not have access to proper sanitation and medical treatments (Antara, 2020). The foundation's food program alone covered as many as 3.4 million people (Kolpolok Limited, 2015). This massive operation also required a workforce. Between April 12, 2020, and May 3, 2020, it was working with 73 non-government organizations and some of their volunteers did not go home for 50 consecutive days (Antara, 2020).

These massive programs were funded by donations worth billions of Taka (BDT) collected from wealthy individuals and organizations (Antara, 2020). This model of operation would have not aligned? with BMC since there are no revenue channels that feed the operation here. Also, its business had no target customers who would have paid in exchange for these services. To understand the true nature of a non-profit business such as Bidyanondo, a framework needs to be more inclusive in terms of capturing costs and benefits of a business plan, not just in terms of economic perspective but also in terms of environmental, social, and psychological perspectives.

Intervention

Methodology

Based on inspirations drawn from personal experiences and observations, the researcher primarily focuses on mind mapping. Mind-mapping is an exercise of visual thinking that graphically represents ideas and concepts (Litemind, 2007). This tool was used to explore all the areas where BMC lacks focus. First, the graphical structure (Fig: 6) was roughly drawn with a digital pencil on Microsoft Whiteboard.

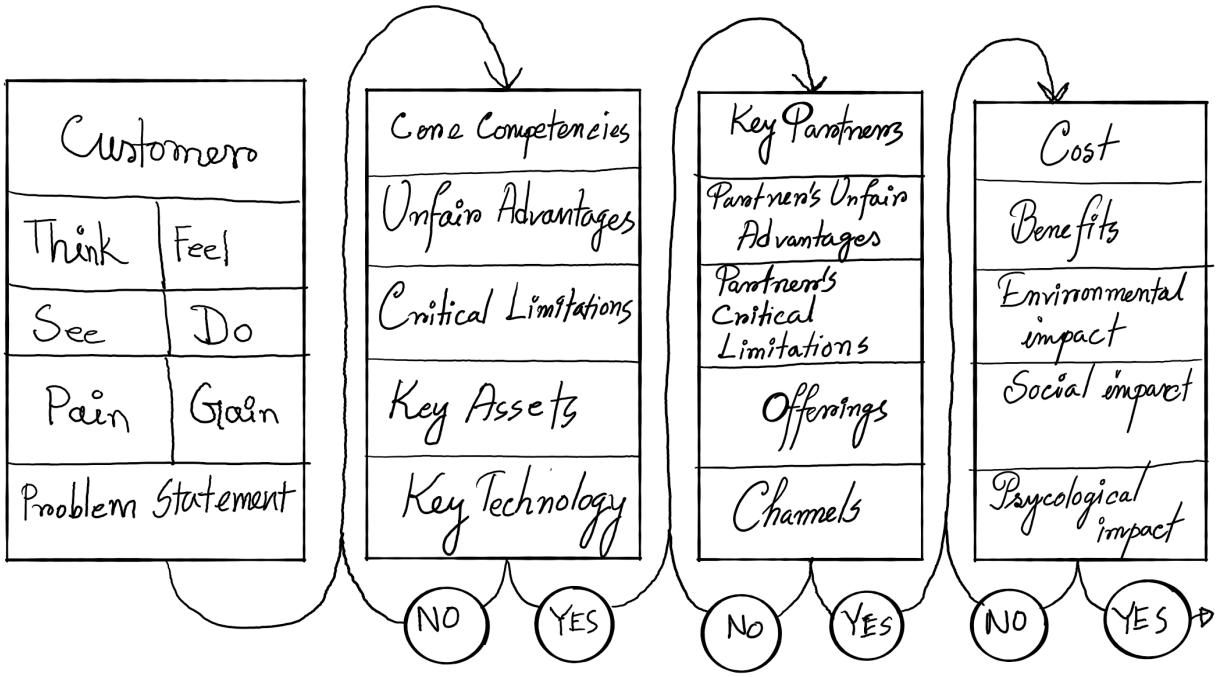


Fig 6: Roughly sketched framework drawn on Microsoft Whiteboard

Nine boxes of BMC along with additional boxes were arranged in a logical sequence following a hypothetical hierarchy that a user may follow during a crisis. The rationale of following such a hierarchy is grounded on a hypothesis that claims: An organization must ensure its survival first. Finally, boxes were logically grouped in columns in a way so that starting from the left, they sequentially represent customer, organization, partner, and extended ecosystem. To introduce dynamism in this concept, the researcher includes decision-making points at the bottom of each column. We will see how these decision-making points have evolved to become directional signposts of dynamic navigation later in this paper.

Additional boxes mentioned earlier are borrowed from other popular canvases used in business design. For instance, the concept of ‘Unfair Advantage’, ‘Key Assets/Technology’, and ‘Environmental/Social Impact’ are inspired by Lean Model Canvas (Mullen, 2016), Business Model Innovation Canvas (Cuofano, 2020), and Triple Layered Business Model Canvas (Joyce & Paquin, 2016) respectively.

Conceptualization

Next, the researcher plans to develop a toolkit that integrates BMC’s framework with multi-purpose tools, such as *SWOT, The Missed Opportunity, The Never Say*. Inspired by a future landscaping tool The Future Triangle, introduced by Sohail Inayatullah in his research paper “Six pillars: futures thinking for transforming” (Inayatullah, 2008), the researcher tries to imagine a dynamic toolkit that integrates business design concepts with strategic foresight. For now, let us call it the ***Crisis Model Canvas toolkit*** or the ***CMC toolkit***.

The Future Triangle (Fig: 07) tool maps today’s views of the future based on three dimensions (Inayatullah, 2008). These dimensions are Weight of the History, Push of the Present, and Pull of the Future. The proposed CMC toolkit has three canvases each resembling one corner of The Future Triangle.

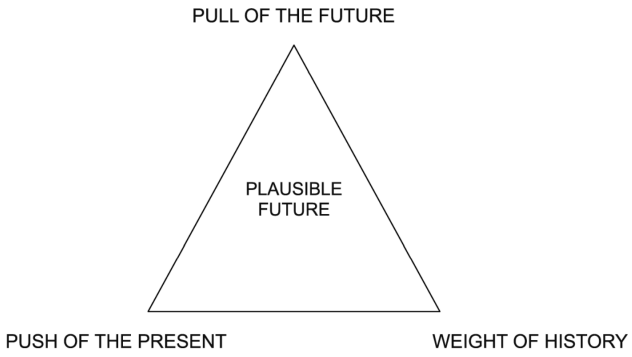


Fig 07: The Future Triangle (Inayatullah, 2008)

The first and the last canvas of the CMC toolkit are optional but strongly recommended to try during a crisis. The first one connects strategy with business design while the last one illustrates scenario planning. The researcher has experimentally combined multiple tools in the CMC toolkit to add more value to the design process. Limitations discussed in the previous sections are addressed with the help of these tools. However, the purpose of this approach is not only to minimize gaps but also to enhance the creative functionalities of the tool in desperate times.

The ideation technique of this hybrid model is a creative concept imagined by the researcher. The efficacy of this concept is still unknown and has not been tested in the real world. It will require rigorous testing and consolidating inputs from users, stakeholders, volunteers, and researchers before a workable version is obtained. We shall discuss more limitations in a separate section later.

The CMC Toolkit

Strategic Orientation Canvas (SOC)

Rationale: One of the five key action points suggested by Deloitte for organizational recovery from the global pandemic is to reflect on the past (Deloitte, 2020, p. 04). As discussed earlier in the Limitation section, a sense of urgency to act on business plans must be accompanied by a sense of self-awareness as well. Organizations must be aware of their strengths and limitations along with their core competencies, in order to innovate. An optional exercise was later (after BMC) introduced by Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, Alan Smith in their book *Value Proposition Design: How to Create Products and Services Customers Want,* to find core competencies of an organization (B2B International, 2020). In this optional exercise, each value proposition is plotted on a 2x2 matrix, with respect to its value to the customer and the competitive advantages of the organization (Fig: 08).

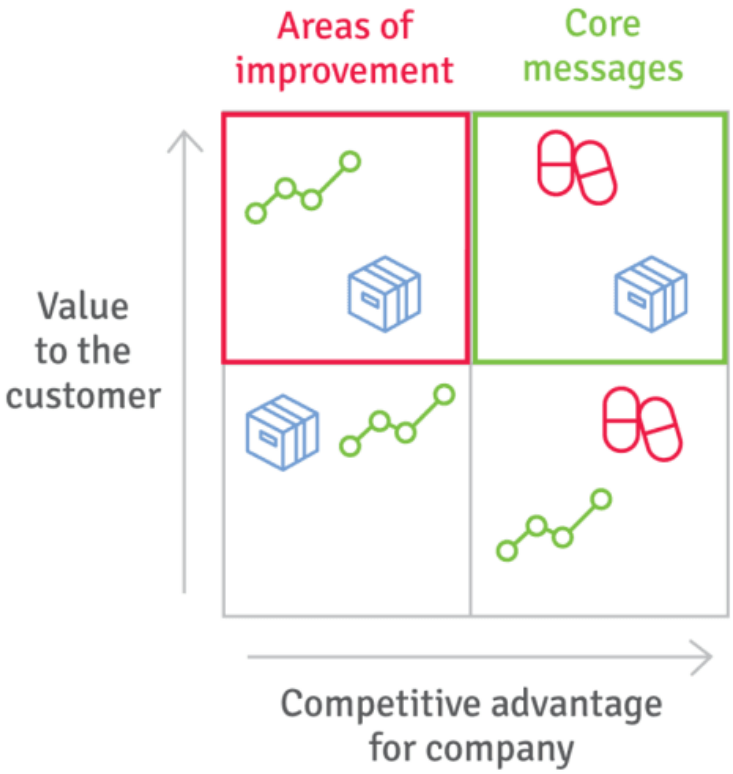


Fig 08: Finding core competencies exercise from inputs of a value proposition canvas. Source: B2B International. (2020, March 24). value-proposition-canvas-2-smaller.png. https://www.b2binternational.com/. https://www.b2binternational.com/research/methods/faq/what-is-the-value-proposition-canvas/

A *Harvard Business Review* article published on post-pandemic business models also suggests, to succeed in business planning in the post-pandemic time, entrepreneurs must have a tailored

business model that targets a defensible market segment (Byrnes & Wass, 2021). Therefore, the importance of core competencies in business design is comprehensible, although the capturing mechanism of this important information has been missing in BMC since its introduction.

Motivation: The layout structure of the first canvas of the CMC toolkit is inspired by a popular South Asian board game called Ludo. In this model, users provide input in four corners and co-create an innovation space in the middle. This hypothetical analysis of the innovation space would serve as the groundwork for the conventional business design process, which we shall discuss in the next section.

Structure: This Ludo-inspired structure (Fig: 09) has the SWOT tool embedded in it along with the *Missed Opportunity* tool and *The Never Say (Orthodoxy)* tool. It lists strengths, weaknesses, opportunities, and threats in four corners of the structure. To indicate priority, the researcher has divided the input areas into three columns. Each column enables users to capture insights based on readily available evidence and its reliability. For example, the box representing ‘Strength’ has space to capture a total of nine inputs. A user can place the greatest strengths of her organization in the first column, followed by good strengths and moderate strengths in the next two columns.

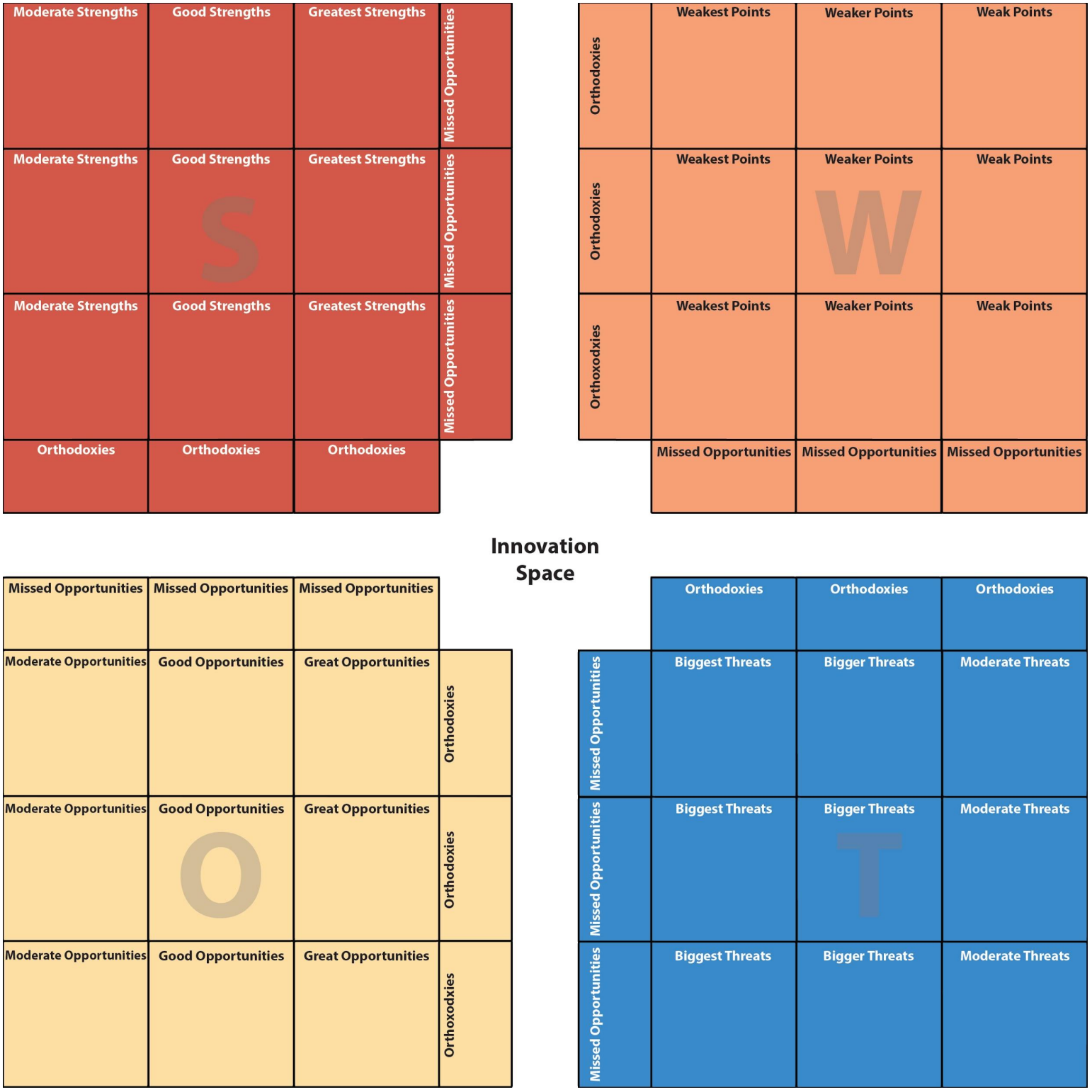


Fig 09: Strategic Orientation Canvas

Add-ons: Each corner has six additional input areas, three on each side, to capture insights from missed opportunities and orthodoxies exercises. For example, a user can capture three of the most common orthodoxies concerning their greatest threats, which they had believed in the past. Inclusion of *Missed opportunity* and *Orthodoxy* tools will strategically align business planners with the changed reality as well as allowing them to rethink what is possible.

Combining three different tools, the researcher has tried to create a space for innovation where opportunities are potentially highest for a user. We have already discussed the importance of integrating strategy with business planning. In later sections, supporting examples will be given to highlight this importance even further.

Crisis Modeling Canvas

When BMC was first introduced in 2008, it provided a simplistic and yet very effective way of communicating business plans through a nine-box model that helped entrepreneurs quickly discard ideas that will not work for their startup (Monterrosa, 2020). The disposable nature of this tool is one of the many reasons why it became so popular among change-makers. BMC has also been very successful in producing an intuitive, engaging, and meaningful visual language that is easily understandable to people coming from all backgrounds.

While brainstorming a new tool, the researcher was aware of the benefits of BMC's framework. Therefore, keeping the simplistic nature of the tool is as important as keeping it relevant to the crisis. Any attempt of 'reinventing the wheel' would have confronted users with ambiguity and complexity. The challenge is to utilize existing knowledge of a well-known tool in the development of a new tool while keeping the fundamental design language unchanged. One of the goals of this project is to propose a dynamic tool that is as handy and as disposable as the BMC itself. One should not compromise simplicity to achieve greater sophistication. We have already discussed why capturing change through multiple iterations may not be the best choice in a crisis. However, that does not mean limiting the number of iterations should let go of freedom in exchange. A better version should be as intuitive, as engaging, and as appealing to the users as BMC has been.

Desirability

The centerpiece of the CMC toolkit is a conceptual business design tool that the researcher refers to as 'Crisis Model Canvas (CMC)' (Fig: 10). This model is adopted from the hand-drawn sketch discussed in the Methodology (Intervention) section. The center of this diagram hosts an Empathy Map that connects targeted beneficiaries with the rest of the model through a problem statement. An Empathy Map, often known as the first step of design thinking, is a collaborative visualization technique that develops a shared understanding of user's needs (Gibbons, 2018).

The problem statement translates knowledge from the empathy map into actionable questions, answers of which are the value proposition of the business. The inner-circle area including the problem statement and the Empathy Map is what the researcher would like to name 'Human-centered Core' (Fig: 11).

Users of BMC externally collaborate on Value Proposition Canvas to justify their offerings in contrast to the pains and gains of customers. Depending on an external tool for this crucial analysis may have consequences in crisis as this paper hypothesizes teams under crisis will not enjoy smooth transmission of knowledge. Therefore, the CMC attempts to solve this issue by embodying this knowledge at its core so that an external viewer can visually connect with the problem statement, and can make informed decisions to align the rest of the process with it.

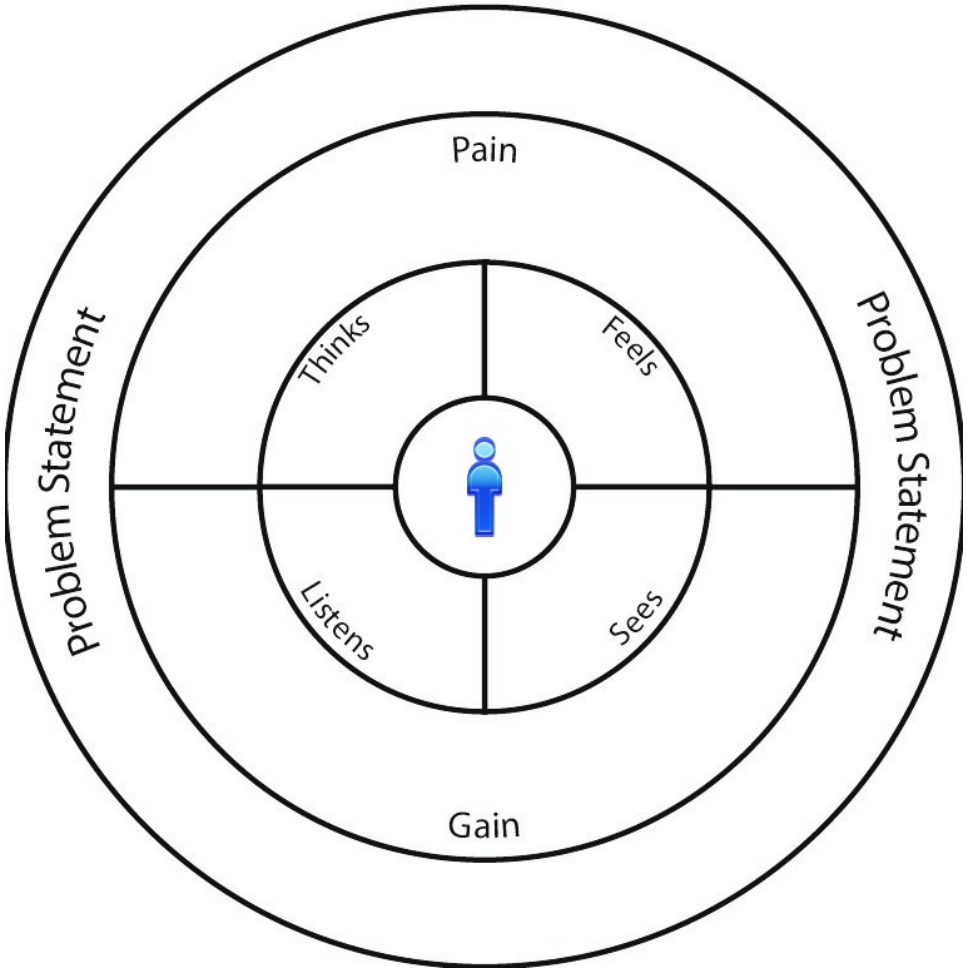


Fig 11: Human-centered core of CMC

While it can be overwhelming for a user to understand so many boxes and their relationship with the rest of the model, a different approach to this model can be more helpful. It is called the Three Lenses of Innovation, created by IDEO and later adopted by Strategizer as an overlay to discuss three major areas of uncertainty in BMC - **Desirability**, **Feasibility**, and **Viability**

(Osterwalder, 2017). A simplified view through these lenses helps users broadly identify areas of uncertainty and risks. Following the same model, the researcher has identified key areas of uncertainties in the CMC as well. By definition, “Desirability” focuses on the underlying needs of the customer. The human-centered core discussed in the previous section is where we find such attributes located.

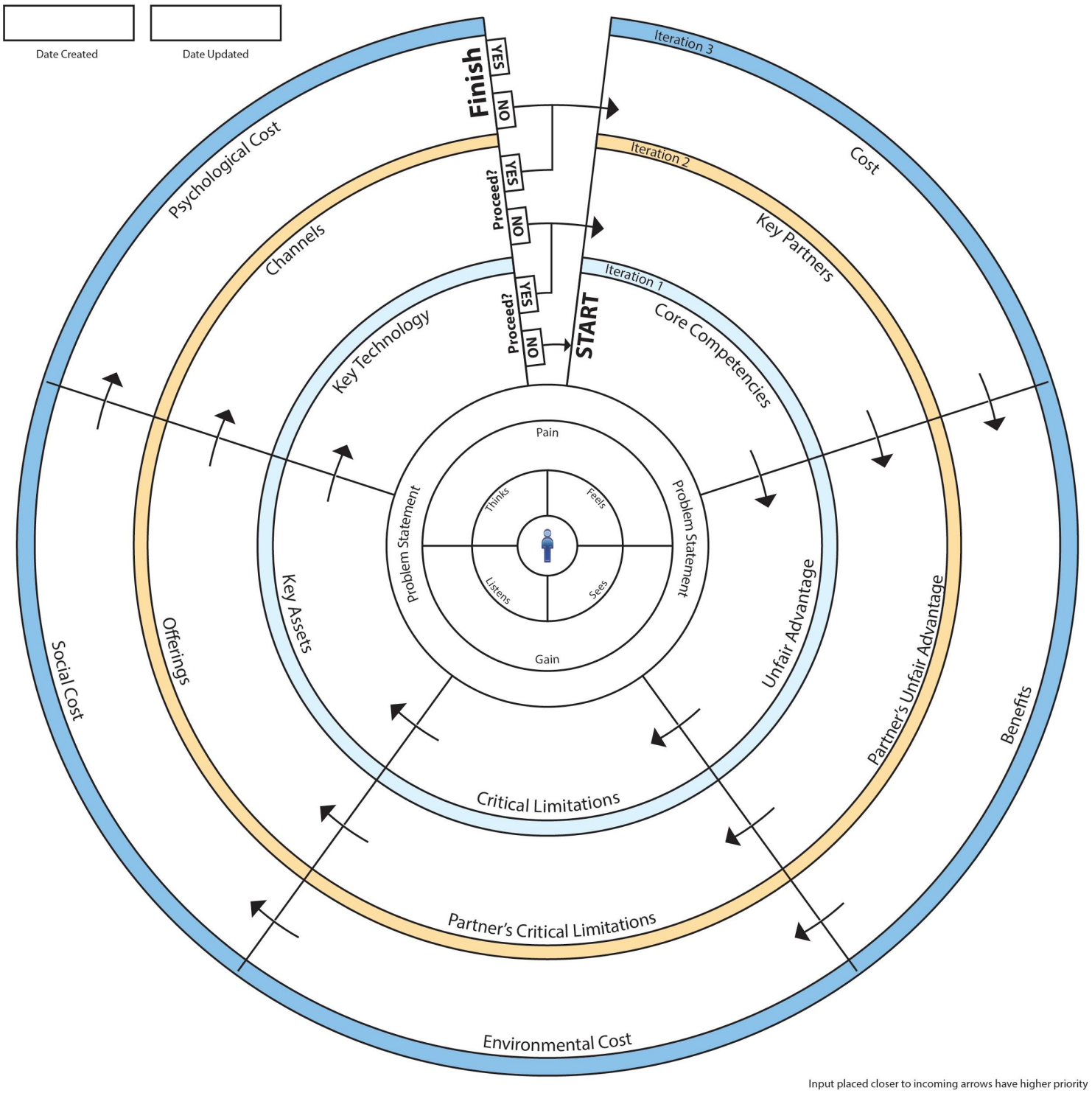


Fig 10: Crisis Model Canvas

Feasibility

The second lens to find uncertainty in innovation is Feasibility. This lens represents key building boxes that answer “How to build the solution?”. In BMC, the organization’s core capacities are tested through this lens. But as discussed in the Limitation section, being aware of self-capacity is not enough during a crisis. It is equally important to know the partner’s strengths, limitations, and challenges. In CMC, the researcher sequentially assesses organizational capacity in two circular loops (Fig: 11).

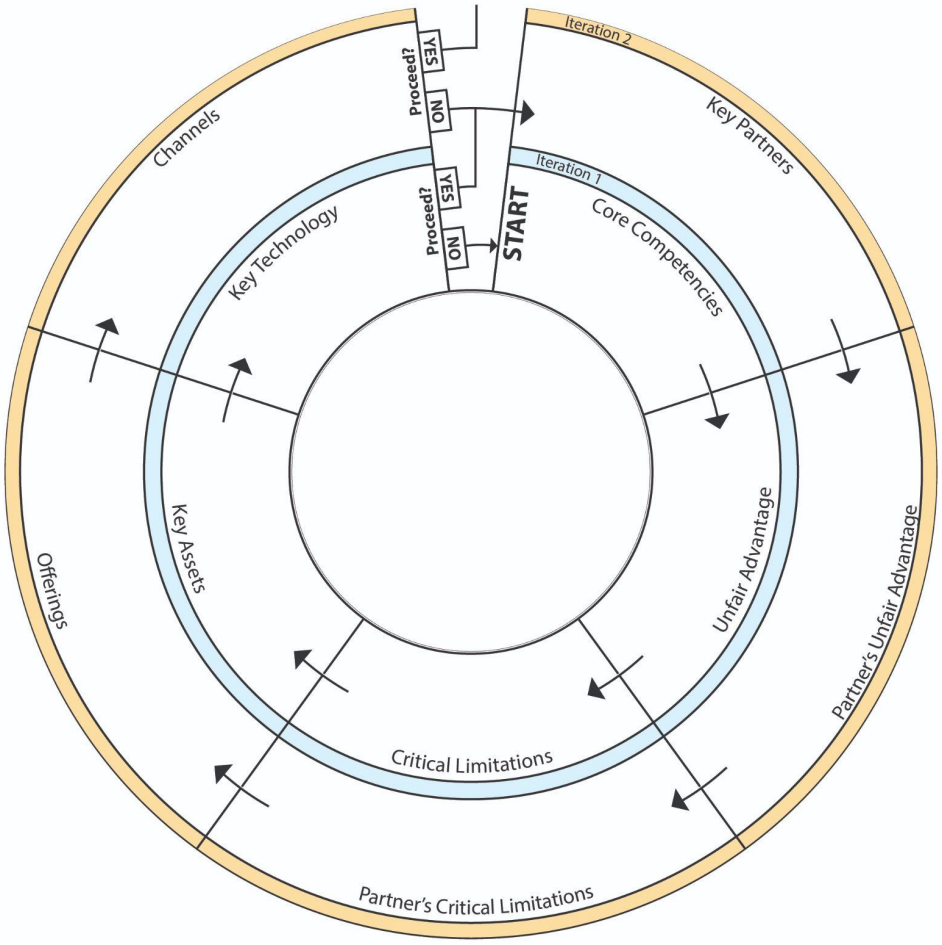


Fig 11: Two loops of ‘Feasibility’ in CMC

Each loop contains five boxes. The first five boxes represent organizational response capacity in the crisis. Here boxes are arranged in a circular shape around the core for two reasons.

First of all, the circular shape is derived from the second column of the hand-drawn sketch (Fig: 06), following the same logic that sorted the columns. Therefore, placing ‘Organization’ next to ‘Customer (the core)’ visually aids users to have critical dialogues in order.

Second, it allows for a compact design that keeps information equally distanced as well as closest to the core. Boxes in the first circle are sequentially described below:

- **Core Competencies:** Which competencies differentiate the organization from its competition and why are they hard to imitate?
- **Unfair Advantages:** Has the crisis offered an unfair advantage that was absent previously?
- **Critical Limitations:** Has the crisis posed any unique threat that was absent previously?
- **Key Assets:** What are the physical assets this organization has after the crisis?
- **Key Technology:** What technologies are readily available to exploit after the crisis?

After working through the first five boxes, what a user will complete is described as ‘Iteration 1’ in CMC (See in Fig: 11). The researcher has marked the end of this iteration as a trigger point for decision-making. Before proceeding further, users are given two choices. If the model constructed so far satisfies their goal, they can choose to proceed to the next step. If not, then they can reiterate through the first circle, until a point of consensus is reached.

Breaking the whole canvas into logical trigger points may appear to be a redundant step, but it will allow users to create interactive dialogues with the tool as well as enabling them to make dynamic course corrections without spending too much time on seemingly unimportant things. After all, if existing value propositions of an organization are unsuitable to serving beneficiaries in a crisis, users might want to reframe the problem statement (i.e going back to the core), or even the innovation space (i.e going back to *SOC*), before discussing cost-vs-revenue models.

Referring back to the example of NYC restaurants - While their key assets (dine-in facilities) were missing, entrepreneurs must have had a discussion on enabling their business with the help of the Internet before discussing revenue sharing models with their delivery partners. Here, ‘Key Technology’ logically tops ‘Cost’ and ‘Revenue’ in the hierarchy of discussion. On the other hand, if culinary items they serve cannot be transported by a delivery partner, then knowing this ‘Critical Limitation’ early would have saved valuable time and effort from getting wasted in other boxes. For example, if a restaurant sells ice cream, it cannot be transported for online delivery without having specialized vehicles (Fig: 12).

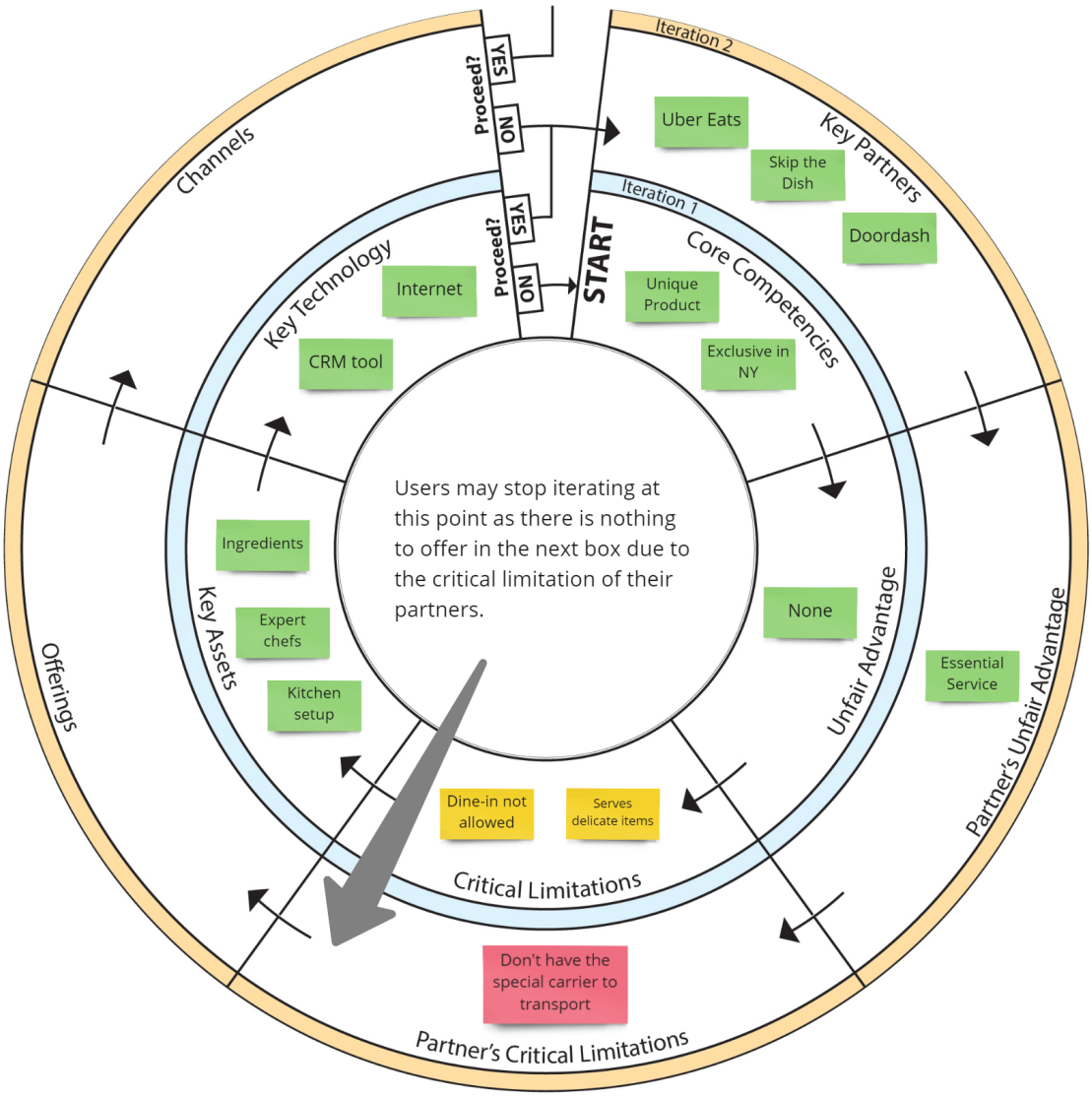


Fig 12: How sequenced boxes of CMC could hypothetically save critical time from being wasted on unfeasible business pivots?

It is to be noted here that an organization least affected by the crisis will not have to rethink its entirety and may choose to move to the next phase with theoretically no interruption.

The second circle of 'Feasibility' represents the third column from the sketch (Fig: 06). These boxes evaluate organizational response capacity in terms of external variables such as partner's strength and partner's limitation. It also has spaces to discuss offerings and channels before the iteration loop ends with another trigger point. The reason for placing 'Offerings' and 'Channels' at the end of this loop is as follows:

1. Before deciding on final offerings and their distribution networks, users will have a clear idea of how they (the organization) and their partners are doing in terms of the crisis. In other words, what channels are available and which products can be served through

those channels. For example, NYC restaurants would not know what channels are available there before knowing who their partners are, or what food they can serve if delivery partners have a space limitation in their carrier.

2. Both boxes belong to ‘Feasibility’ as they provide information on “How to build a solution”.

Viability

The third and final loop of the CMC framework (Fig: 13) is to discuss the viability of the business. The first two boxes, Cost and Benefits are adopted from the original BMC framework except the latter one being generalized for all kinds of businesses, not just the ones with capitalist economic models. The next three boxes map the Environmental, Social, and Psychological impacts of the business.

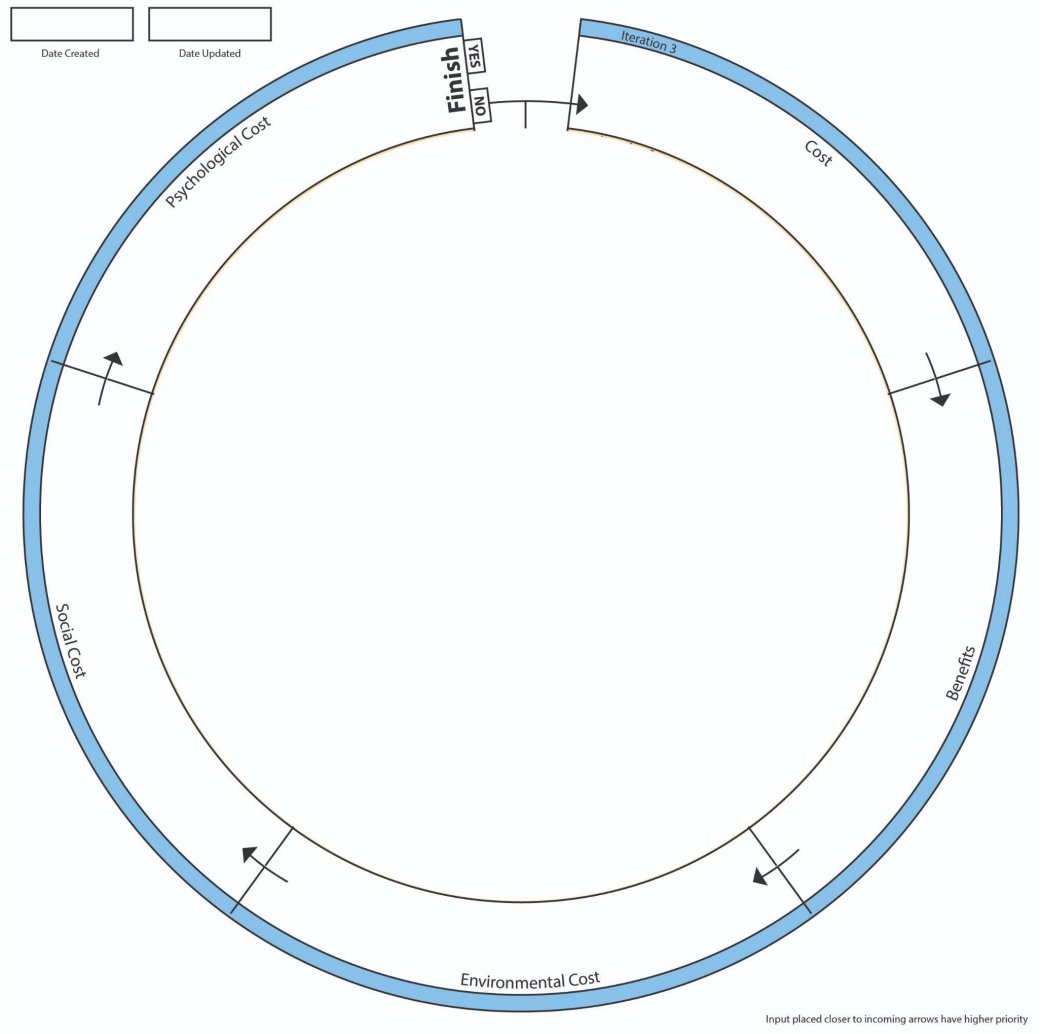


Fig 13: The ‘Viability’ loop of CMC

Priority Indicators

Finally, some guided texts and arrows have been placed strategically on the canvas for better navigation. Directional arrows serve two purposes. First, they aid users with directional navigation. Second, inputs closer to the incoming arrow of each box have higher priority. Whereas, input closest to the outgoing arrow has the lowest priority. By following this input instruction, users can create a common language of priority without sharing an external brief. For instance, the problem of Airbnb's BMC models discussed in the Limitation section under 'Priority Indicator missing' can be solved here by sorting inputs as shown in Fig: 14. Instead of placing inputs randomly, they are provided here in hierarchical order. Following the instruction of CMC canvas, an external viewer can understand what is the order of priority. The closest input to the incoming arrow is Digital Ad Campaign, which means it has the highest priority.

Input in BMC	Input in CMC
• Digital Ad Campaigns • Social Media • Word of mouth • PR - media coverage • App store	1. Digital Ad Campaigns 2. Social Media 3. Word of mouth 4. PR - media coverage 5. App store

Note that an instruction is given for priority indicators at the bottom of the canvas.

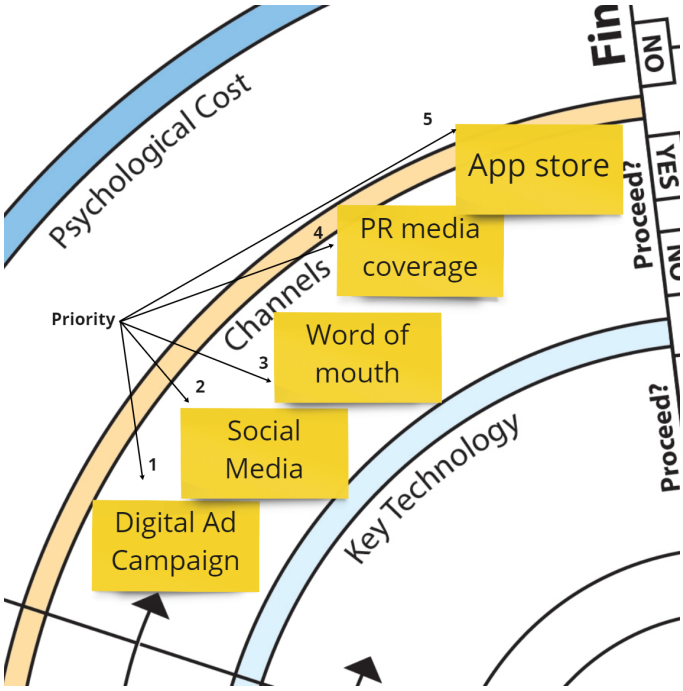


Fig 14

The Future Landscaping

The Future Landscaping (Fig: 15) is another exercise that Ludo has inspired. This different version of Ludo is called ‘Snake and Ladder’. Guided by the insights collected from previous activities, users will plot a scenario for the next hundred days in this exercise. This last piece of the CMC toolkit provides a sense of what is lying ahead in the next hundred days and how existing planning fits into that context.

The canvas has a hundred boxes to list the most priority tasks for the next hundred days. There are two types of metaphors that users can use to mark days, either for an opportunity or for a critical failure. Upcoming opportunities are marked with ladders, and failures are marked with snakes. Upon meeting proper conditions, users can take advantage of a ladder and start planning for days to come. In this way, they can stay ahead of their own time in planning and execution. On the other hand, snakes will remind of critical failures that users may encounter in their hundred days of planning. Failing to avoid a ‘snake’ condition will imply going back to planning and start sketching a new plan.

The purpose of this exercise is not to have an in-depth study of the future. It is the opposite of that. The aim is to outline the foreseeable future based on available signals roughly. This paper predominantly assumes that users of CMC will constantly be under constraints of time and resource limitation. Highly sophisticated scenario planning tools like Causal Layered Analysis (CLA) and Dator’s Four Futures can develop robust scenarios (Inayatullah, 2008). At the same time, these tools require intensive planning and arrangement like horizon scanning and trend analysis. These tools specialize in mapping change over a long period, but an organization under crisis may not have enough time and space to do such intense planning. Referring back to the example of New York (NYC) restaurants, for instance, hotels, restaurants, and bars in NYC were shut down only three days after the first death from COVID-19 was announced in the state (Kerr, 2020). Practically, entrepreneurs had no time for scenario planning, and those who did were not certainly planning it for the next 20 years.

Therefore, instead of working on multiple scenarios simultaneously, users will logically build them following an order. There are four themes that an organization can follow to audit its position in a crisis. Users may develop scenarios in the following order:

1. Survivor: Existence is the top priority
2. Competitive: Only the best will survive
3. Aggressive: Aiming for the best, ready for the worst
4. Achiever: Top of the food chain

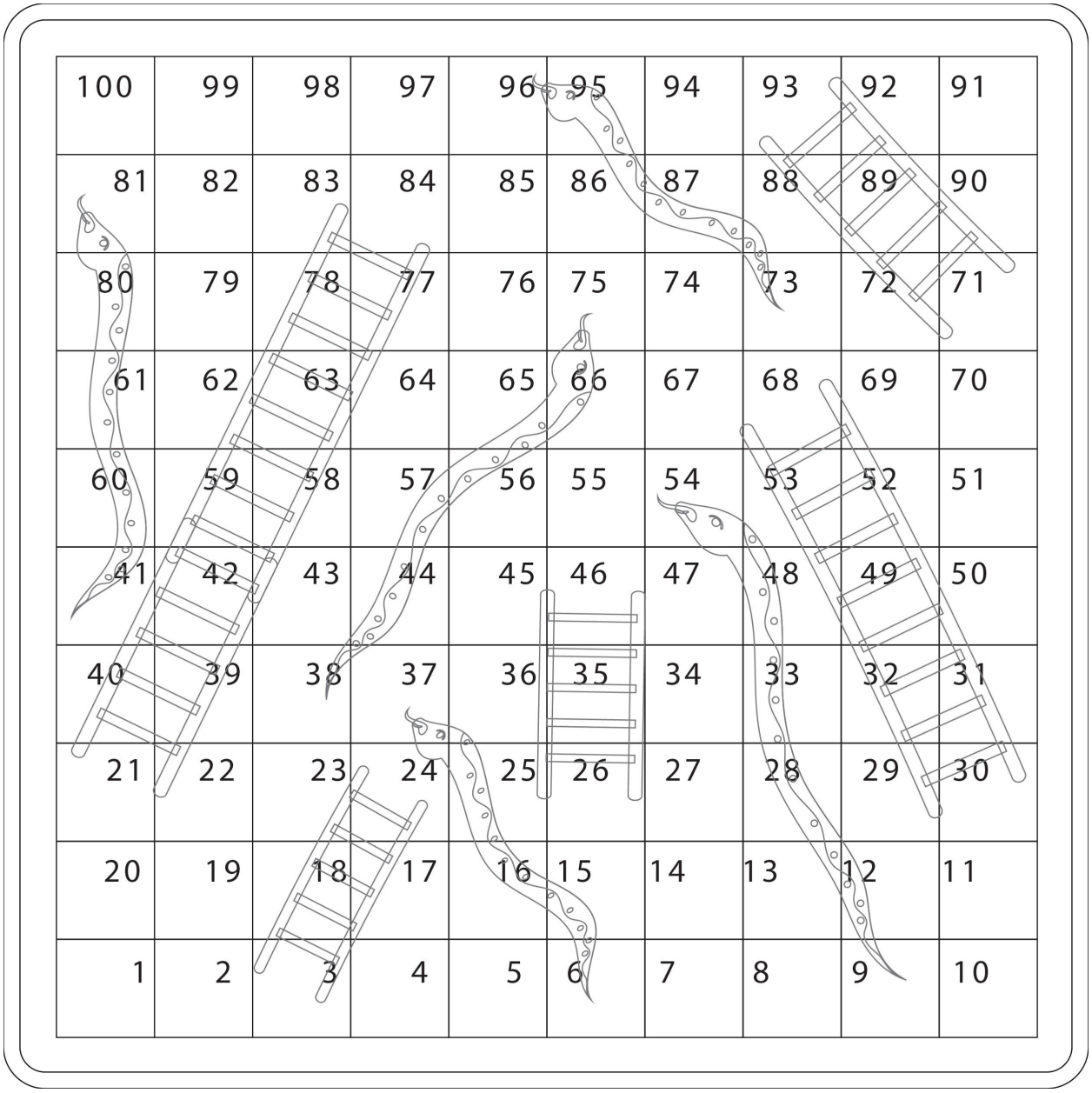


Fig 15: Future Landscaping Tool. The design adopted from free vector graphics downloaded from Freepik.com

Process

While creative design processes may follow many different paths, a normalized user journey is discussed here.

Strategic Orientation Canvas

- Users are expected to provide their inputs in the SO canvas first. Planners can either choose to fill up corners in the clockwise direction or randomly. Each corner should have at least one piece of information for *SWOT*.
- After filling up the corners, users can have inputs in the middlebox to define the innovation space they would like to explore or, in other words, the innovation space available to explore. These inputs will define the boundary conditions for this space.
- The white spaces between corners are for discussing *Orthodoxy* flips. Users must explicitly mention if they are using white space for any other purpose.

Capturing insights: Users are expected to borrow key insights from this tool to set a crisis action plan. Using insights from this tool, decision-makers can determine which battle to fight and which to not. The innovation space revealed after their exercise would act as a boundary condition for business planning in the next stage.

Crisis Model Canvas

- Moving onto the next canvas, users should start filling up the core first.
- Once the problem statements are defined, they should start filling up the first loop, starting from the text ‘Start Here’.
- The SOC outcome dictates inputs of the first loop (Iteration 1). Users should only allow inputs that are permitted by the innovation space defined in the previous exercise.
- As discussed in the section ‘Priority Indicator’, users should start putting their input in order by placing the highest priority input closest to the incoming arrow in each box.
- A discussion point in each loop is an opportunity to have open discussions between planners. If there is a conflict between groups of planners regarding a decision, it should be solved by voting.
- Once the final loop is completed, users should first try to test their hypotheses in the real world. If situations do not permit, they should move onto The Future Landscaping exercise.

Capturing Insights: Insights collected from this tool are hypotheses that are theoretically grounded on an organization’s best chance. Users are expected to integrate the knowledge of this tool with scenario planning in the next phase. If conditions permit, they must test their assumptions in the market. Based on collected insights from this tool, users might be able to produce, share, and detail variable business plans during a crisis.

The Future Landscaping

- The Future Landscaping exercise is all about painting a picture of the most plausible scenario.
- First, users will collect as many signals as possible in an exploratory manner.
- Next, they will combine insights from CMC with collected signals to start planning for the next hundred days.
- Once input is given in all boxes, users will try to identify highly advantageous or risky events in the plan. They will try to draw relationships between events and activities.
- Once the relationships are defined, they will mark the relationships with appropriate metaphors (ladder or snake)
- The future landscape will keep evolving, so will be the plan. Planners will keep adjusting the project as they go through new iterations.
- Users can audit their position and write it down in the corner of the canvas for the external audience

Capturing Insights: Insights captured in this tool would help users to identify the future landscape in terms of barriers and opportunities. The representation of the future is roughly outlined based on the insights collected from CMC and SOC to give users the comfort of practicality and plausibility.

Sample Case Study

Here is an example of Airbnb's business model hypothetically analyzed on SOC (Fig: 16) and CMC (Human-centered core zoomed in: Fig 17 & zoomed Out: Fig 18)

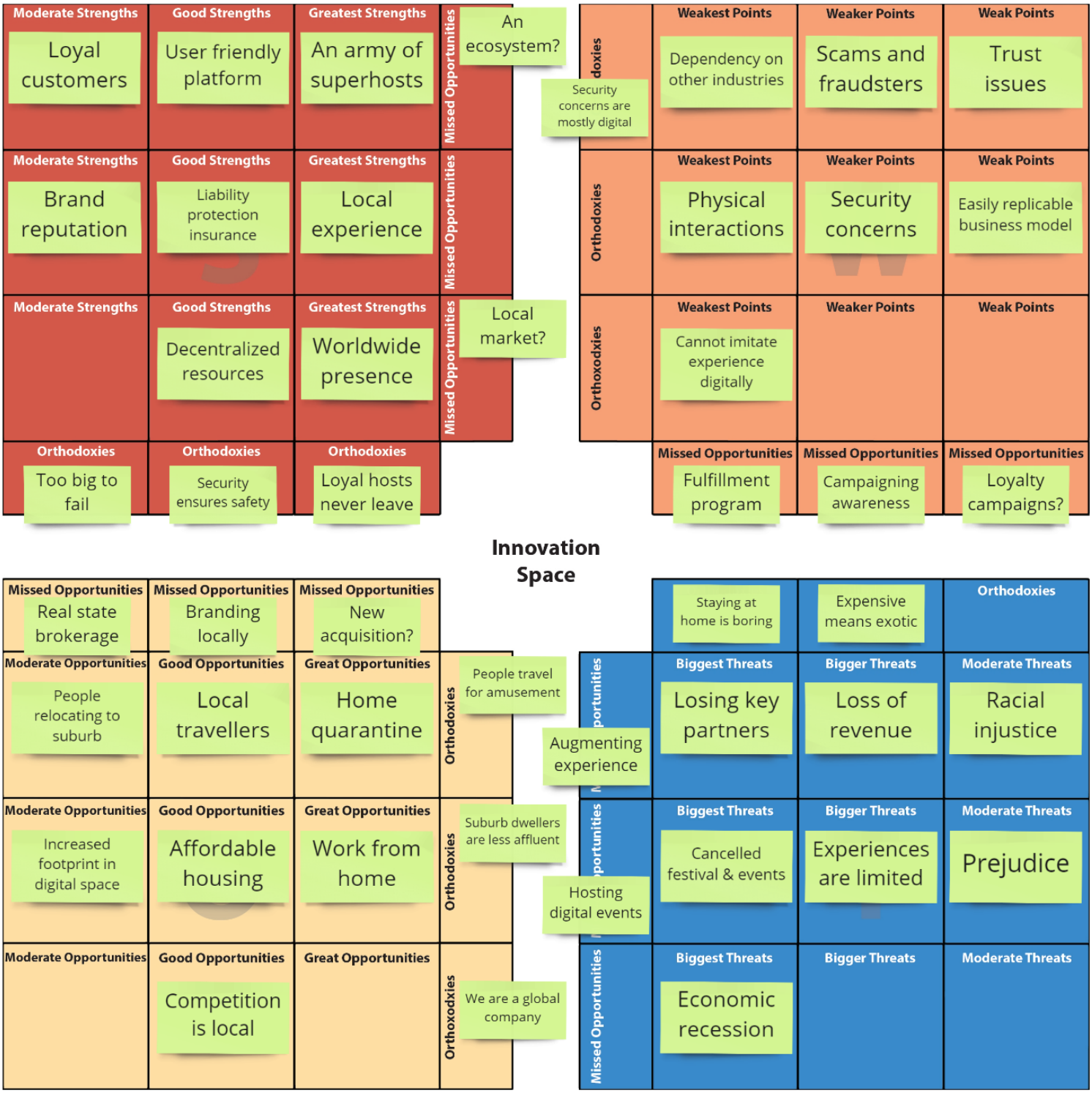


Fig 16: sample analysis of Airbnb's innovation space with SOC

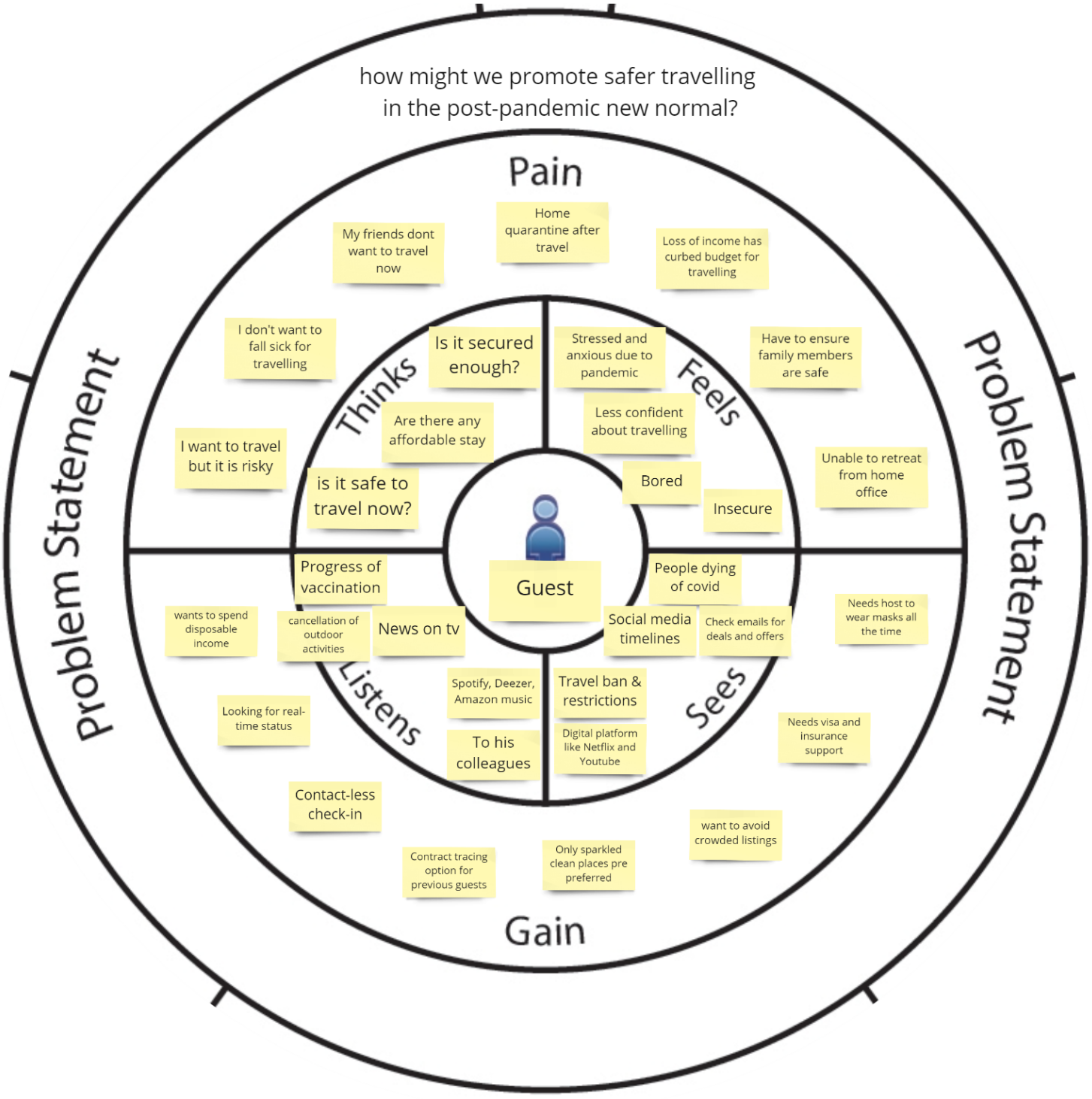


Fig 17: Human-centered core zoomed in

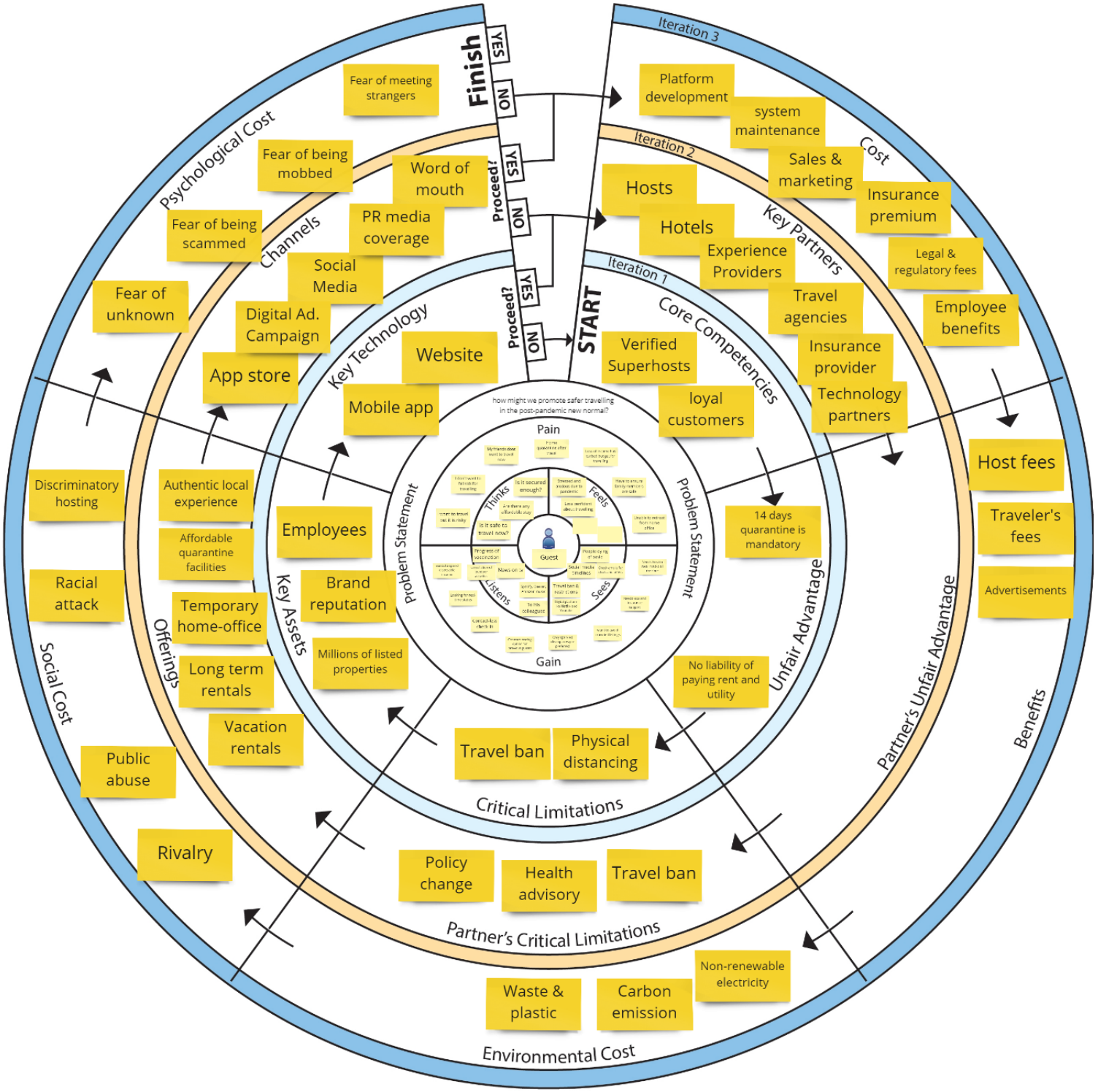


Fig 18: Airbnb's model analyzed in CMC (zoomed out)

Limitations

While every effort was made to make this study a comprehensive research, there are known limitations acknowledged here.

Context: The global pandemic has substantially influenced how this study was conducted, limiting its scope to a great extent. Due to limited access to offline journals, articles, books, and reports, this study was entirely researched and produced with online resources.

Complexity: It is undeniable that the minimalistic design of BMC has made it easy to understand, although oversimplification is the cause of some of its limitations. In the process of addressing those limitations, the CMC framework has clearly become more complex than BMC. For general users with a limited understanding of a business design process, CMC may appear overwhelming.

Validation: The conceptual design of CMC is an outcome of a research project conducted by one individual. It has been produced through brainstorming and not through collaborative design processes. Value addition from a diverse perspective would have built this concept in a better way. More validation is required from users, peers, designers, researchers, and experts before this concept can be tested for real-life problem-solving.

Review: Since this concept has not been tested yet, it is unknown if users will find it more valuable than BMC. Although theoretically, the idea seems to have made some progress in mitigating some of the limitations of BMC, the researcher does not claim that users will prefer this concept over BMC in actual practice. There can be multitudes of reasons for which a canvas can be preferred for business modeling. This study does not explore those reasons here.

The fundamental concept of this study is grounded on the idea of doing business in a crisis. How this concept will work in a normal situation has not been explored yet. Assumptions and hypotheses considered in this paper may be significantly altered if the project is contextualized in stable business conditions.

Future Scopes

The practicality of this design concept largely depends on how people of different interests interact with it, leading it to a path to evolve as a robust and powerful toolkit. Currently, the concept is framed for an intersecting space between volatility, creativity, and design thinking. It would be interesting to see how this model will work for other interdisciplinary areas. Users may creatively modify this tool on purpose while trying to cross-pollinate ideas and expressions

through peer-assessed reviews. Although creativity bounds no rules, the researcher anticipates some areas where further development may focus.

Language: One of the primary objectives of this project is to create a common visual thinking language. On numerous occasions in this paper, the researcher has emphasized the importance of seamless dissemination of knowledge across teams within an organization. Refinement of this process is critical to the success of this tool as well as to the success of the users. Otherwise, valuable insights may get lost in transmission, jeopardizing all effort for convincing a new vessel. The visual language recognized in this paper has scopes of further development, and it is expected that future researchers will add more value to it.

Scalability: The framework discussed in this paper is highly conceptual and imaginative. Potential integration possibilities are practically limitless at this stage. A deeper assessment of the critical assumptions may reveal new perspectives and avenues of new possibilities. It is still unknown how such changes might shape this tool's functionalities, but it is certainly expected that more complex questions will be answered through the process.

Versatility: The CMC framework is grounded on some generalized assumptions that may have simplified the scope of this research but has also raised some unanswered questions as well. For example, the research area of this paper does not include the diversity of users in consideration. Similarly, how alternative variables such as age, location, gender, and educational background of participants would influence this framework is something to be seen in the future.

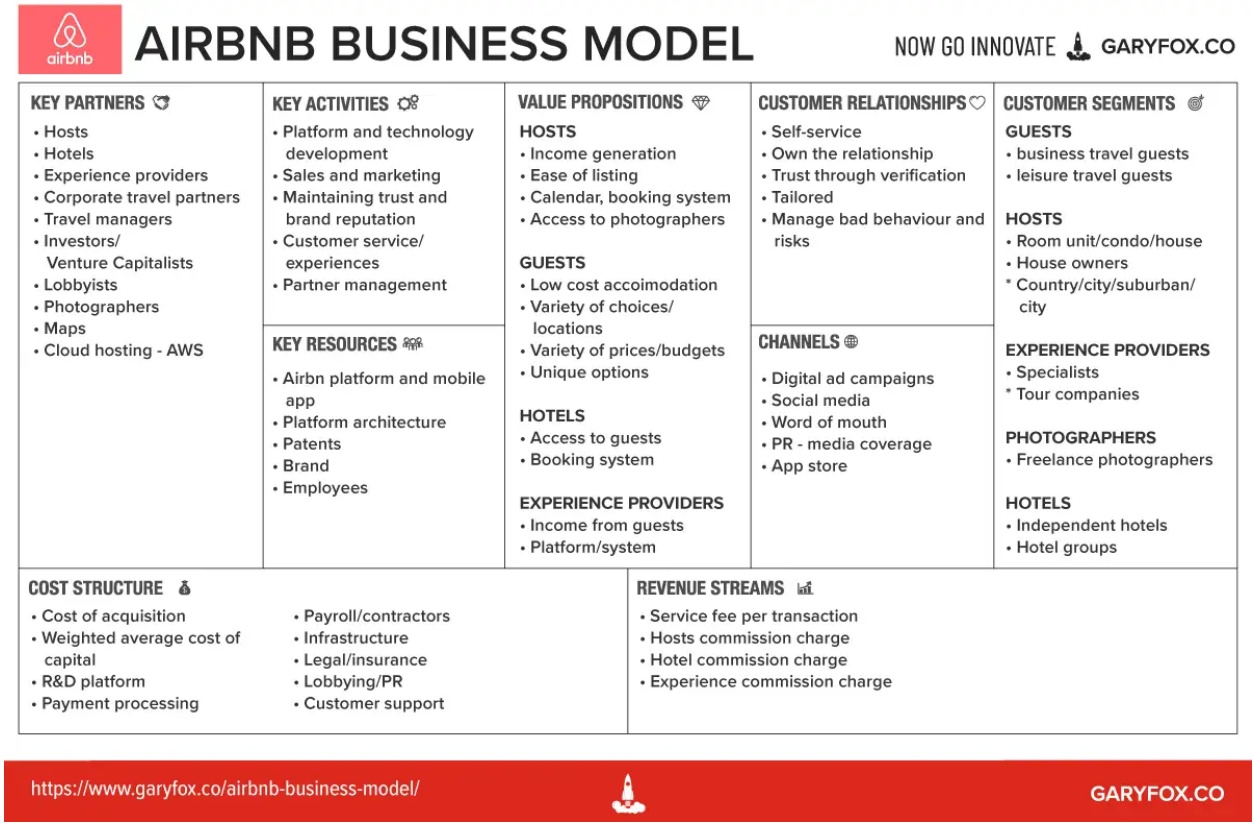
Conclusion

This independent study highlights some key areas where BMC may have space for improvement. Many research papers have already addressed some of these points, and some are unique to this study. The motivation behind criticizing this tool is not for undermining its potency as a business design framework. Instead, the motive is to achieve a greater tool that fits into the changed reality we live in. Organizations in today's world are constantly adapting to changes posed by threats and opportunities from its surrounding. The rapidity with which they operate demands an upgraded tool for business design. A crisis like the global pandemic has exposed the need for a tailor-made custom tool for the context. With the introduction of the CMC toolkit, the researcher has attempted to conceptualize one such tool. It may not have all the answers, but it can surely be used as a platform for developing a more robust tool. The researcher plans to take this conceptual design toolkit for rigorous testing in the real world.

Appendix

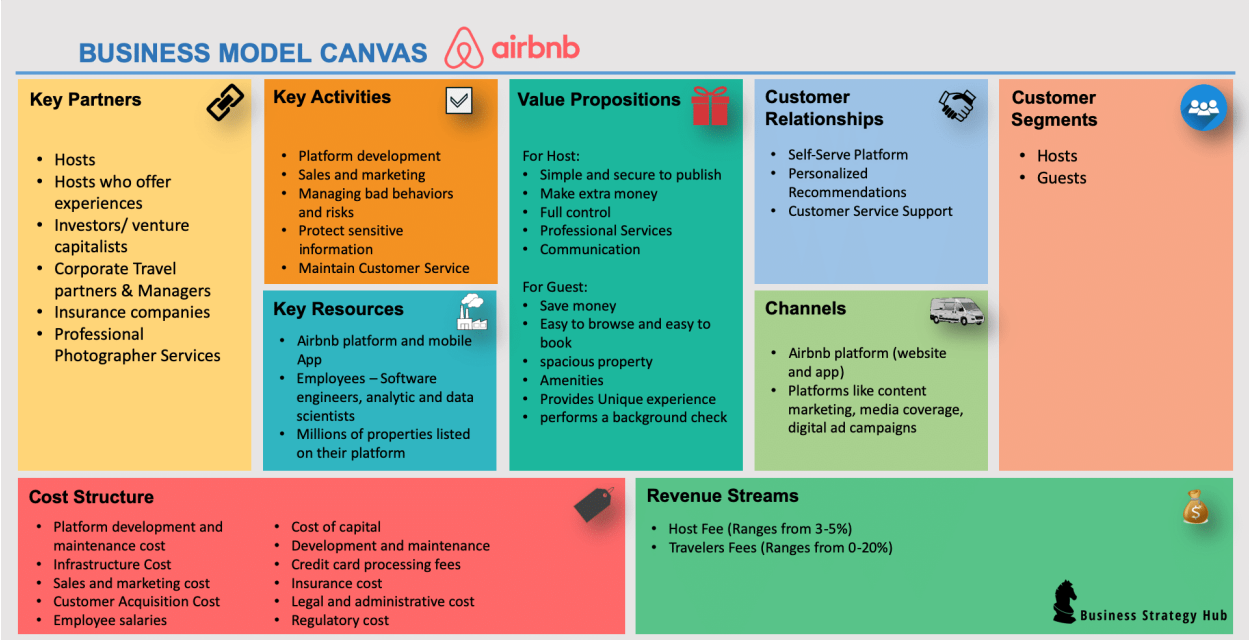
Appendix 1:

Randomly chosen canvas 1 from Google image search (Garyfox, 2020)



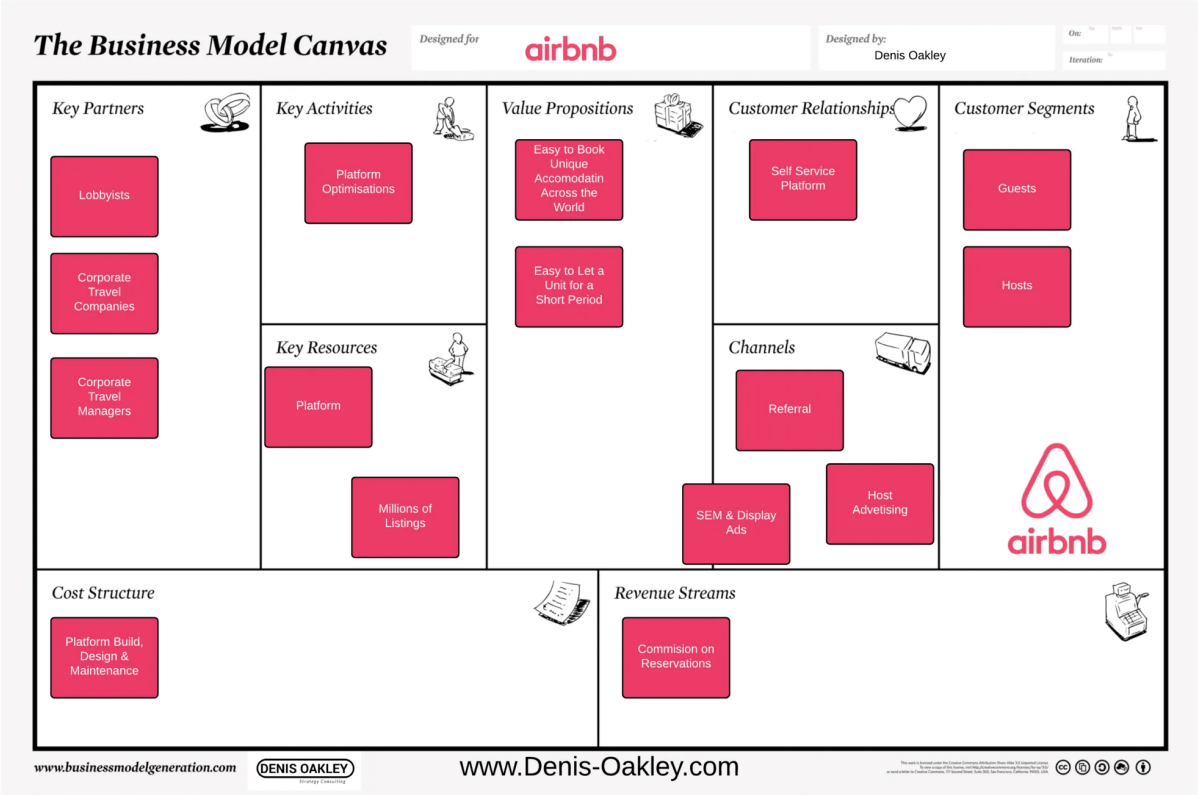
Appendix 2:

Randomly chosen canvas 2 from Google image search (Business Strategy Hub, 2019)



Appendix 3:

Randomly chosen canvas 3 from Google image search (Denis Oakley & CO, 2018)



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