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## Simple rules and learning: Business model innovation during Covid-19

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Hanna-Kaisa Ellonen\*

Laurea University of Applied Sciences, Ratatie 22, 01300 Vantaa, Finland.

E-mail: [hanna-kaisa.ellonen@laurea.fi](mailto:hanna-kaisa.ellonen@laurea.fi)

Aarni Tuomi

Haaga-Helia University of Applied Sciences, Ratapihantie 13, 00520 Helsinki

E-mail [aarni.tuomi@haaga-helia.fi](mailto:aarni.tuomi@haaga-helia.fi)

Anette Johansson

Jönköping University, Gjuterigatan 5, Box 1026, 551 11 Jönköping, Sweden

E-mail [anette.johansson@ju.se](mailto:anette.johansson@ju.se)

\* Corresponding author

**Abstract:** The COVID-19 pandemic has presented the hospitality industry with novel challenges. In this paper, we follow four case restaurants for a period of 12 months and track how they have innovated their business models and their learning processes through several cycles of iteration. Our work is based on the notion of simple rules. Eisenhardt and Sull (2001) propose simple rules as an approach to help businesses make decisions under fast-changing and uncertain environments. Methodologically, our study is a comparative case study with data comprising of interviews (two rounds in 2020 and 2021) and secondary data such as newspaper articles, web articles, restaurant websites and social media validating the timelines. Our results reveal that each of the case companies has 2-3 simple rules that have been pivotal for their business model innovation, and that these simple rules have become more explicit through different learning mechanisms.

**Keywords:** Business model, Business model innovation, strategy, simple rules, cognition, action, learning

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### 1 Introduction

The turn of the decade will stay in memory as a time of disruption. Throughout 2020-21 the impacts of COVID-19 have kept cascading, from nation states' initial response to the pandemic to the long-lasting economic and social effects of companies and consumers' leap to a new normal (Donthu and Gustavsson, 2020). One industry that has been particularly disrupted is hospitality, whereby the need to observe strict social distancing

measures has brought both instability and innovation (Jones and Comfort, 2020). For some hospitality businesses, COVID-19 has meant furlough-schemes, rent concessions, and even closures, while for others it has sparked accelerated growth through exploring new service offerings, management strategies, and business models (Tuomi *et al.*, 2021).

Traditionally, innovation in hospitality has been mainly concerned with making incremental improvements to existing operational practices in order to e.g. increase profitability or introduce more sustainable working practices (Pikkemaat and Peters, 2006; Thomas and Wood, 2014; Cheah *et al.*, 2018). The sector is largely heterogeneous, whereby in most developed economies the bulk of hospitality tends to consist of independent, operator-owned enterprises as opposed to national or multinational corporations (Ashcroft *et al.*, 2019). Consequently, research and development activities in hospitality tend to be ad-hoc, informal, and ground-up in nature. Food service in particular is characterized by thin margins, leading to limited slack resources for innovation during normal times of business operation (Davis *et al.*, 2018).

Recent management literature has started to conceptualize the impacts of COVID-19 on e.g. consumer behavior (Sheth, 2020), human resource management (Carnevale and Hatak, 2020), and corporate social responsibility (He and Harris, 2020). Thus far, the emphasis has been on observing how businesses have reacted to the pandemic, as well as on analyzing the observable outcomes of the reaction. However, less attention has been paid to the actual decision-making processes underlying the strategic responses to the new operational landscape.

The emergence of COVID-19 has acted as an exogenous shock shaking up the status quo, whereby the various restrictions on movement and operational practice, e.g. limits to maximum capacity or opening hours, have in effect forced hospitality service operators to innovate their business models at speed (Breier *et al.*, 2021). Analyzing COVID-19 related innovation in the restaurant sector, Tuomi *et al.* (2021) found four distinct forms of innovation: developing new service offerings and/or introducing value-adding new elements to existing service offerings, developing new strategies for customer relationship management, developing new streams of revenue through e.g. ancillary products, and finally, developing brand's visual image or broader servicescape.

In this study, we address business model innovation in the restaurant industry during COVID-19. As such, our research is located in the intersection of strategy and entrepreneurship. Furthermore, innovations sparked by COVID-19 represent emergent strategies rather than planned changes, often involving a pivot to new business models or operational practices at speed (Tuomi *et al.*, 2021). The pandemic created a context in which traditional, planning oriented approaches to strategy making became obsolete (e.g. Bingham *et al.*, 2015) as pivotal cues such as market information and time for reflection were replaced by complete uncertainty. Eisenhardt and Sull (2001) propose simple rules (ie. simple rules of thumb) as an approach to help businesses make decisions under fast-changing and uncertain environments (see also Davis *et al.*, 2009; Bingham and Eisenhardt, 2011).

Under dynamic and uncertain conditions both cognitions and actions - thinking and doing, being vital parts of strategy formation (Baker and Nelson, 2005; Bingham and Eisenhardt, 2011) are influenced. While the pandemic, similar to other crises, offered considerable constraints, it also had the potential to force and enable high-level learning (Nenonen and Storbacka, 2020). Furthermore, while simple rules are found to be developed through experiences (Bingham and Eisenhardt, 2011; Morris *et al.*, 2005) and help business models evolve through market feedback (Sun *et al.*, 2018), we still know

little about the interplay between experiential learning (action-oriented) and holistic understanding (cognition-oriented), and how this influences the evolution of both simple rules and BMI (Ott *et al.*, 2017). This points to the need for more longitudinal, process oriented studies.

In response to these calls, we adopt an exploratory qualitative approach to study how hospitality executives have innovated their business models during the COVID-19 pandemic. Drawing on Eisenhardt and Sull's (2001) simple rules framework, we are interested in the process view of business model innovation and the related learning mechanisms. Our research questions are "*How do simple rules evolve during business model innovation in a dynamic business environment, and what kind of learning mechanisms support the process?*" We study four case companies over a period of 12 months.

This paper is structured as follows. We start with a literature review focusing on prior knowledge on strategy formation as simple rules and business model innovation. Thereafter, the methods section describes our approach to data collection and analysis. In the results section, we present our findings first case by case and thereafter summarize our cross-case analysis. Finally, the findings and conclusions section summarises the theoretical and managerial contributions of our study.

## **2 Theoretical background**

### *Strategy formation by simple rules*

That strategy can evolve through iterative learning and experimentation is acknowledged by many scholars (e.g. Mintzberg and Waters, 1985; Johnson *et al.*, 2003). Eisenhardt and Sull (2001) discuss one form of such emergent strategies as one guided by simple rules which provides guidance within which managers can pursue opportunities. They argue that as "*...the business landscape was simple, companies could afford to have complex strategies. But now that business is so complex, they need to simplify*" (p. 107). Simple rules are also termed as decision rules of thumb and their function is essentially to save time by focusing attention and simplifying thought processes, thus while providing structure also allowing for flexibility to grasp opportunities (Ott, Eisenhardt and Bingham, 2017). While exploiting existing resources from relative stable market positions are key in traditional strategy making, strategy as simple rules instead focuses on the ability to seize opportunities as they occur (Eisenhardt and Sull, 2001).

Strategies in the form of simple rules have been studied in various contexts over the past decades and have been argued as something which is learned and refined over time (Bingham and Eisenhardt, 2011; Morris *et al.*, 2005) through iterations of experiences and mistakes (Eisenhardt and Sull, 2001) through simplification cycling (Bingham and Eisenhardt, 2011) and enabling improvisation and development in unpredictable environments (Davis *et al.*, 2009; Bingham *et al.* 2015).

Similar approaches to acting in uncertain environments and conditions include the effectual framework (Sarasvathy, 2001) which explains the heuristics of entrepreneurs' creation of new business and markets; bricolage (Witell *et al.*, 2017) which explains how entrepreneurs build their businesses from the resources they have at hand, and lean start-up (Shepherd and Gruber, 2020) which suggests a quicker and leaner route to pursuing

opportunity. While these mentioned frameworks have separate underpinnings, they also have several aspects in common including the action and learning approach and the idea of using heuristics to navigate forward and create their business opportunities. One key difference between the aforementioned concepts is that the simple rules -construct is a firm level construct based on how managers in organizations shape their strategies, while the others are individual level constructs.

In their 2001 article Eisenhardt and Sull argue that “*managers using this strategy pick a number of strategically important processes and craft a few simple rules to guide them*” (p. 109) which indicates the rules are made explicit to the organization. At the same time though, they also state that often rough rules do exist in some implicit form, and that it takes an observant manager to make them explicit.

Furthermore, while simple rules are found to be developed through experiences (Bingham and Eisenhardt, 2011; Morris *et al.*, 2005) and help business models evolve through market feedback (Sun *et al.*, 2018), we still know little about the interplay between action-oriented and cognition-oriented learning, and how this influences the evolution of both simple rules and business model innovation (Ott *et al.*, 2017).

### *Business model innovation and related learning mechanisms*

A business model describes an architecture for how a firm creates and delivers value to its customers, including the mechanisms employed to capture a share of that value (Teece, 2018). Tykkyläinen and Ritala (2021) approach the business model as “*a bridge between a firm’s strategy and its actual activities in the market and the broader external environment*”.

A business model is not static, but evolves over time (e.g. Teece, 2010) to match dynamic changes in the environment. Business model innovation (BMI) refers to the process of improving existing business models (key elements or the architecture linking the elements) or introducing new ones (Fjelstad and Snow, 2018). Other concepts used to describe the dynamic process of business model changes include eg. business model “evolution”, “modification”, “reconfiguration”, or “renewal” (Foss and Saebi, 2018).

Business model innovation is a relatively recent research topic (Presenza and Petruzzelli (2019). Consequently the definitions are not yet fully established. Foss and Saebi (2017) note that within BMI research a sub-stream of research relates BMI to organizational change processes, capabilities and learning mechanisms. Indeed, experimentation and learning have been emphasized as a source of BMI (e.g., Achtenhagen *et al.*, 2013).

In their work, Berends *et al.* (2016) found two separate learning patterns related to business model innovation, namely “drifting” and “leaping”. The “drifting” pattern originates from the existing business model, goes early into operation, emphasizes experimentation and shifts to cognitive search in later phases when the organization aims to scale up the business model. Hence, drifting moves from action to cognition. In contrast, the “leaping” pattern is mainly initiated by developing new business model components, goes into operation relatively late, focuses initially on cognitive search, and shifts to experiential learning after the BM goes in operation. Hence, leaping moves from cognition to action. These two learning mechanisms correspond with the emergent and deliberate approaches to business model innovation (Fjelstad and Snow, 2018) and exploration and exploitation activities in organizational learning (March, 1991). For the purposes of this paper, we will adopt Berends *et al.*’s (2016) concepts.

McDonald and Eisenhardt (2020) provide another perspective on the learning mechanisms. In their recent study on business model design in nascent markets, they introduced a framework entitled parallel play that includes several learning mechanisms typically noted in the parallel play of preschool children, ie. “*when preschoolers play near each other but not together*”. These learning mechanisms are borrowing from peers, testing different assumptions before committing, and pausing to reflect. The authors also note that parallel play typically starts with a self-focus whereby peers may be seen as a source of ideas to be tested, and differentiation becomes a priority later in the process. While their work was rooted in nascent markets, their framework may provide useful insights also in the context of the COVID-19 crisis, as it represented a unique and highly unpredictable environment for the executives in the hospitality industry.

### **3 Methods and data**

A multiple case study approach was chosen for this study. As noted by Eisenhardt (1989), cross-case replication helps researchers to confirm, extend and sharpen the resulting theory. Examining multiple case studies adheres to the replication logic, whereby cases are chosen by means of theoretical rather than statistical sampling (Yin, 2009).

To that end, we followed four cases across a period of one year, from March 2020 to March 2021. Following Rouse and Daellenbach (1999), we controlled the industry context of our cases by explicitly choosing representative examples from the same industry: the restaurant sector. We chose to focus on food service as recent research has highlighted the restaurant sector as one of the hardest hit due COVID-19, whereby restaurants have been under extreme strain due to resource scarcity, lack of access to market because of various lockdowns and other restrictions on mobility, as well as limits to operational hours and maximum capacity of customers served (c.f. Gursoy and Chi, 2020; Huang *et al.*, 2020; Tuomi *et al.*, 2021). To further control the industry context as well as the nature of operational conditions in our sample, we chose to focus on cases that were based in Helsinki, Finland, allowing us to observe the emergence of simple rules under identical regional COVID-19 restrictions. During the studied one-year time period, two separate periods of lockdown were observed in Helsinki, Finland, resulting in two abrupt stops to access-to-market as well as two subsequent waves of tightening and loosening of COVID-19 social distancing restrictions.

In terms of business model and service concept, we explicitly looked for cases which represented the ‘best practice’ of the sector, i.e. organisations with an established reputation and sectorial acclaim. Greenhalgh *et al.* (2004) note that these types of organisations are often recognised as first-movers or role models for the rest of the sector, with ‘best practices’, that is, innovative novel behaviour, diffusing top-down to the rest of the sector.

A snowball sampling approach was used to find information-rich cases. Key decision-makers of the four case restaurants were interviewed twice, in Spring 2020 and again in Spring 2021. As our study sought to understand strategic decision-making under COVID-19, our interviews focused on individuals with the appropriate know-how and know-why of the company’s business decisions during COVID-19. In practice this meant owners and senior leadership of the companies. An interview guide drawing on literature on innovation, new product development, and strategic decision-making under times of

crises was developed and used. The interviews were thematic and semi-structured, whereby the precise wording and the order of the interview questions varied to allow us to follow the lead of the interviewees. In other words, the interviews were informal and narrative in nature, with the aim of being able to tap into participants' authentic and contextualised experiences (Eriksson and Kovalainen, 2008). Probes were used to support long, narrative answers with real-life examples. The interviews lasted between 40 and 82 minutes. To facilitate social distancing amidst the pandemic, the interviews were conducted online through a teleconferencing platform. Interviews were recorded, transcribed, and manually anonymized. The interviews were conducted in Finnish.

To add further depth to our multiple case study approach, as well as to minimise interviewee hindsight bias and the limitations of memory recall, we followed Golden's (1992) suggestion to triangulate the interview data with secondary data such as newspaper articles, web articles, restaurant websites and restaurant social media accounts covering the business decisions of the firms throughout the studied one year period. In particular, this secondary data helped us to verify the timing of different events mentioned in the interviews, allowing us to draw a clearer timeline with regards to different strategic business decisions and the emergence of simple rules guiding them.

We began data analysis by synthesizing interview and archival data into a comprehensive case description of each firm including detailed timelines for the studied 12 month period. For each of the four cases, we first identified all major business model innovations and marked them on the timelines. Next, we took a closer look at the data and focused on the rationales behind the introduction of the innovations. Third, we compared the rationales found with each other to see any emerging patterns (simple rules). Finally, we analyzed learning mechanisms involved in the process. After completing within-case analysis, we turned to cross-case analysis (Eisenhardt and Graebner, 2007) and looked for common patterns across the cases. As our theoretical insights emerged, we compared them with prior research. The analysis was carried out by one researcher, and the resulting findings were discussed with the researcher team in several subsequent rounds making modifications based on shared interpretations.

Gibbert *et al.* (2008) provide a framework for investigation of the methodological rigor of case studies within the field of management and strategy research. The present study meets the criteria as follows: Internal validity is supported by careful literature review and deriving the conceptual categorization from the current literature. Construct validity, i.e. the quality of conceptualization and operationalization of the relevant concepts, was supported with data triangulation (interviews and secondary data). The cross-case analysis (see Eisenhardt, 1989), together with careful case selection and rich descriptions support external validity.

### *Case descriptions*

Restaurant A serves traditional Nordic cuisine with a modern twist. The restaurant is known for its work on rejuvenating local recipes and traditional cooking methods, and its menu plays homage to seasonal Nordic ingredients. Founded in 2016, the restaurant has been operating for circa five years pre-COVID-19. Its market positioning and price point served is best described as fine dining. The restaurant serves around 30 covers, and it has a Michelin star.

Restaurant B's service operation is centred around its zero-waste philosophy. The restaurant serves seasonal Southern European cuisine, drawing inspiration from its broad partner network of local suppliers and organic producers. Founded in 2018, the restaurant has been operating for circa three years pre-COVID-19. Its market positioning and price point served is best described as casual. The restaurant serves around 40 covers.

Restaurant C is best described as a beloved neighbourhood bistro. Founded in 2005, the restaurant was acquired in 2018 by a new set of owners, vowing to uphold its long legacy. The restaurant serves a Western-inspired seasonal menu, placing great emphasis on its wine pairings. Its market positioning and price point served is best described as smart casual. The restaurant serves around 40 covers.

Restaurant D serves traditional Nordic cuisine. Its menu is highly seasonal, aiming to highlight the best of local ingredients. The restaurant places strong emphasis on sustainability, and it is known for its efforts to reduce food waste. Founded in 2017, the restaurant has been operating for circa four years pre-COVID-19. Its market positioning and price point served is best described as fine dining. It serves around 20 covers, and it has a Michelin star.

## **4 Findings**

### *Within case analysis*

#### *Restaurant A*

Restaurant A was one of the very first restaurants to react to the COVID-19 news and was very active to report their thinking and ideas in social media. They started their own delivery service (sometimes operated by a celebrity or a professional race car driver) and served traditional home cooked meals in neighbourhoods where other delivery services did not reach. Also, early on in the pandemic, they decided to change their menu to focus on well-known, comforting Finnish classic dishes (a concept branded as "Home front"; food based on an idea that people would prefer comfort in the times of crisis), started selling their meals in a local supermarket, and developed several meal kits for finishing at home. They also sold branded merchandise and helped to market several kitchen tools in social media.

Many of these ideas carried through the whole 12 month period. New additions later during the COVID-19 pandemic were distance cooking schools and specialty dinners in the restaurant (when restrictions on social distancing were gradually lifted) with artists and actors performing for a limited audience. During the second lockdown, Restaurant A started an innovative partnership with a hotel and turned their hotel rooms into private dining rooms served by the restaurant. Also, they participated in several goodwill campaigns, most notably cooked and delivered 1000 meals for those in need, using produce donated by companies and individuals.

What is notable about these new additions to their business model, is that the experimentation with new ideas was often preceded by a short message in social media, sometimes only a couple of hours before the actual execution. Restaurant A used social



media not only to market their offerings but also to prioritize the vast number of ideas in hand. When an idea got positive feedback in social media, they decided to give it a try; and then, based on customer feedback, the subsequent decisions regarding continuation and improvement were made. Thus, they used “*Go for ideas that get positive response in social media*” as a decision rule to prioritize their ideas for business model innovation through the pandemic.

Another notable feature in the business model design was how Restaurant A leveraged (sometimes surprising networks) to put their ideas into action. When they first came up with the idea of home delivery in social media, a car dealer provided them with vehicles. Later on, they also partnered with a software company to optimize their delivery routes as a result of them sharing their frustrating experiences of designing the routes by hand on social media. The goodwill campaign of 1000 meals was based on contributions by individuals and companies alike. These endeavours were based on the notion that people were more willing to participate during the time of crisis: “*Also, I have learnt that Finns [...] want to help and participate*”; “*I have learned that brotherhood and sisterhood have strengthened the community and brought people together*”. As such, “*leverage potential networks*” summarizes a simple rule that was used to coordinate Restaurant A’s actions in business model innovation many times during the 12 month period.

“*I have learned [...] that we will strive through. Only when you try things, will you learn what works and what does not*”. This quote illustrates the experimentation approach taken by Restaurant A. It resembles Berends *et al.*’s (2016) “drifting” pattern going early into operation, emphasizing experimentation and shifting to cognitive search in later phases when the organization aims to scale up the new business model. However, it seems that as the business model modifications made during the second lockdown period (hotel private dining rooms, goodwill campaign, etc.) required much more in terms of advance planning and negotiation with different partners, also the “leaping” pattern of learning (new business model components starting with cognitive search and shifting to experiential learning after the BM goes into operation) can be observed. In addition to these learning mechanisms, it should be noted that Restaurant A tested several business model components before committing to some. Also, it seems that the time between the two lockdown periods supported the cognition-to-action mode of business model development during Spring 2021.

### *Restaurant B*

Restaurant B did not have an easy start with their business model innovation during the COVID-19 pandemic. They describe their first weeks as trying many things and always changing the course when their ideas did not work. They started with selling a specialty product they had sold on Christmas markets. However, the customers were confused with the product and did not associate it with the restaurant. Next, they decided to sell a produce bag to redistribute their excess stock and to support their local foodstuff producers. However, Restaurant B soon realized that many of their customers did not actually know the produce that well and were thus unable to cook meals with their produce bags. “*We realized that people did not even recognize Jerusalem artichokes - let alone know how to cook them.*” Their third idea was to sell a meal kit utilizing the produce, i.e. preparing the produce in advance and provide customers with detailed

instructions on how to cook the meal at home. While the meal kit kept the owners of Restaurant B busy during the weekends, it was not profitable, hence, they decided to take some time off. After some reflection, they decided to design a limited take away menu for weekends that would be as close to their original service concept as possible. This idea was continued throughout the rest of the 12 month period, and sometimes supported with special events at the restaurant.

One of the owners of restaurant B is very explicit about their learning process and outcomes: *“For us, starting with the take away business was a difficult start. It was difficult to get your own voice through. We did not want to do the same things as everybody else was doing at the time. We should have been very clear about what we do.”* *“I have learned a lot about the core of our concept”*. Based on their experiments and the resulting offerings, it seems that a simple rule of *“Focus on the core of your concept”* evolved, guiding their decisions on what to do. Another lesson learned that provided guidance on how to execute their ideas was: *“Make it easy for the customer”*.

It seems that Restaurant B’s learning mechanisms could be described mostly as drifting, moving from action to cognition (Berends *et al.*, 2016). Also notable are taking some time to reflect early on during late Spring 2020, and passive learning about their industry and consumer behavior by observing and borrowing ideas before making long-term decisions regarding business model innovation.

### *Restaurant C*

Restaurant C kept a close eye on what was happening in Europe before the COVID-19 crisis hit Finland. *“We followed really closely to all those signs we noted in other European countries [...] We decided to close our restaurant early on and then change our concept (to take out) [...] even before it was officially recommended.”* After closing down they changed their menu to a lower price take-out menu and started offering meal kits for holidays. Later, Restaurant C applied for government funding and opened a pop up kiosk for Summer 2020 with a totally new service concept. This experiment worked out so well that Restaurant C decided to open three additional pop-up kiosks with different concepts during Summer 2021. Restaurant C mainly stuck to these business model modifications during the 12 month period under study. They did provide some customer-ordered catering services during the Christmas season but realized that *“it was not worth the trouble and we should focus on our own food”*.

Restaurant C decided early on to keep their offerings as close to their original concept as possible and decided to find alternate means to provide exceptional service to the customers they were unable to meet face to face. These methods included e.g. a personalized email by the owners to confirm orders, wine recommendations for the local liquor store, and a handwritten note to accompany the order. Hence, their guiding rule for how-to could be described as *“to create an exceptional customer experience”*. In addition, in terms of strategy formation, they opened pop-up restaurants during Summers of 2020 and 2021 to test the business potential of new concepts. This could be summarized as a decision rule of: *“Leverage new funding opportunities to rapidly test new business ideas.”*

Restaurant C’s approach to their business model development could be described as cognition-oriented: *“We decided our price point first. We had to consider what would be an attractive price point for our customers and how to build up volume.”* With the

exception of the catering experimentation, the learning process at Restaurant C was dominated by the leaping mechanism, moving from cognitive search to action (Berends *et al.*, 2016). Also clearly observable learning mechanisms included passive learning about the industry and borrowing from others.

Time between Summers 2020 and 2021 allowed Restaurant C time to reflect on their learning and scale up their newfound pop up approach. *“I believe that we (the restaurant’s two owners) have become much bolder in our decisions because of the situation. [...] We try new things, test new concepts and build our competencies on how to open new establishments and how to manage them. We started with one pop up and this summer we are opening three new pop up restaurants [...] in hindsight, I can think of many things we might have done differently, but the kiosk did really, really well. You can see how inexperienced we were when we started. This time we will know better.”*

### *Restaurant D*

The owner of Restaurant D describes that when rules and official guidance on observing social distancing were announced, the company had to figure out what to do during the first lockdown period *“overnight”*. While the original service concept of the restaurant focuses on tasting menus with a relatively high price point, the owner decided to sell sushi takeaway during the first lockdown. As the restaurants were allowed to open again, they also sold meal kits and take away throughout the 12 month period. For the second lock down period, they decided to produce and sell take away bento boxes. These boxes were also served in collaboration with a local hotel.

What is notable about the strategic approach of Restaurant D is that the owner leveraged an existing media contact to cover the impromptu sushi factory upon launch, which resulted in orders quickly increasing in volume - up to a point where the owner of Restaurant D had to hire more staff to keep up with the orders. Social media coverage of the launch exacerbated these effects, with posts by the company attracting people to travel hundreds of kilometres to sample the new sushi offering and also two retailers wanting to have them in their retail grocery store offerings. *“It was a spur of a moment thing. I did not calculate risks. I decided to start a little smaller and see how it goes. I ended up re-ordering produce several times a day.”*

For the second lockdown period, the choice of the business model concept was decided more consciously: *“I also learned to start well in advance before the second lockdown to test new possible business model ideas with my team, make calculations regarding the price points, and start resourcing the boxes used for packaging, etc. This time we did not put the cart before the horse.”* Again, existing personal media contacts were put to good use to attract extra visibility to the new service offerings.

In the case of Restaurant D, several simple rules emerged during the 12 month period studied. *“Open fun pop-ups for lock down periods”* clearly provided strategic guidance in terms of what to do, while *“leverage media contacts for pop-up marketing”* and *“test new delivery channels”* (retailers, hotel) summarize pivotal principals in terms of how-to execute them.

In this case, it seems that the start of the COVID-19 pandemic was dominated by drifting learning (Berends *et al.*, 2016), moving from action to cognition. However, the second lockdown period was approached in a more cognitive oriented fashion. Also, the

time between the two lockdown periods clearly supported reflection and learning: *“It was really good to have a calmer period last fall. A really good stop.”* As the owner of Restaurant D is active in industry networks, it seems that also passive learning and borrowing best practice ideas from others have been present as learning mechanisms.

Overall, it seems that the learning process and business model design have fed each other throughout the 12 month period: *“So basically, I have learnt to maximize what I thought I had already learnt earlier to make the ideas and execution even better.”*

### *Cross-case analysis*

What is common to all four cases (Restaurant A-D) is that they each had at least one decision rule and one process rule to navigate the 12 month period under study. It seems that these simple rules evolved and were reinforced several times as a result of an emergent learning process, rather than acted on as a clear starting point for business model innovation. In time, and also with reflection, they became more explicit. This is supported by the fact that the executives were much more explicit on their thinking and rationale during the second waves of interviews. As such, our findings build on Eisenhardt and Sull’s (2001) notion that simple rules come out of experience and mistakes. We argue that forming simple rules is in fact a result of an emergent learning process that takes repetition, time and reflection.

We noted both leaping and drifting learning mechanisms (Berends *et al.*, 2016), i.e., action-to-cognition and cognition-to-action modes of learning. While our cases differ in terms of the dominant learning mechanisms, we noted an interplay of cognition and action in all of the four cases. Also, taken together, cognition-to-action type of learning was more prevalent during the later phases of the 12 month period. This seems logical for two reasons. First, it is supported by the time for reflection in between, and second, as the crisis prolonged, also the entrepreneurs learned to take more time to make their moves.

Time for reflection is one of the learning mechanisms included in the parallel play framework by McDonald and Eisenhardt (2020). In addition to this, we also noted other learning mechanisms included in their model: Several new innovations (meal kits, separate take-away menus etc.) became very popular in the industry during the first lockdown period. It seems that the restaurants started by learning by borrowing (supported by passive learning) some working ideas from their peers, which is a typical first step in the parallel play model. You start with some common elements with the rivals and distinguish yourself later. This seems to be the case also here, as the most unique business model components (e.g. pop-up kiosks, hotel collaboration) were introduced later in the 12 month period.

Another element of the parallel play framework is testing several assumptions before committing to a particular business model. It seems that all cases did just this using social media, getting media coverage and by reacting to customer feedback. As such, it seems that while McDonald and Eisenhardt’s (2020) framework was developed for nascent markets, it does also resonate with the highly dynamic environment where restaurants had to operate in during the COVID-19 pandemic.

## 5 Discussion and conclusions

The purpose of this paper was to explore how hospitality executives had innovated their business models during the COVID-19 pandemic. We built on the simple rules framework (Eisenhardt and Sull, 2001), and investigated the process view of business model innovation and the related learning mechanisms. In response to our research questions “*How do simple rules evolve during business model innovation in a dynamic business environment, and what kind of learning mechanisms support the process?*” we made several important contributions to current literature.

From the strategy formation perspective, our study showcases how four case companies reacted to the COVID-19 pandemic with the help of simple rules. While Eisenhardt and Sull (2001) suggest that simple rules are best practices when targeting growth, we see that the companies we investigated, under the COVID-19 crisis, had survival as their primary goal. This finding highlights the usefulness of simple rules guiding strategic decisions also with sometimes impromptu decisions in times of crisis and when faced with unexpected external pressures.

We noted several learning mechanisms that supported both the evolution of the simple rules and business model innovation. In addition to drifting and leaping (Berends *et al.*, 2016) modes of learning earlier associated with business model development, we also observed several learning mechanisms included in the parallel play framework by McDonald and Eisenhardt (2020). Therefore, we argue that while McDonald and Eisenhardt’s (2020) framework was developed for nascent markets, it does also resonate with the highly dynamic environment in which these restaurants had to operate in during the COVID-19 pandemic.

Based on our findings in the four case companies, we argue that simple rules evolve through repetition, reflection and learning mechanisms characterized by an interplay of action, cognition and timing. Both action-to-cognition and cognition-to-action mechanisms of learning are needed, as is time for reflection. Hence, our findings support the findings by Bingham and Eisenhardt (2011) suggesting that simple rules are developed through experiences, yet adds to this by showing how the experiences (actions) need time to be reflected upon and thus transform to cognitions that in turn are enacted in new initiatives. In this way, simple rules transform in a process induced by a combination of both actions, thoughts and time.

From the business model innovation perspective, our study highlights the importance of the operating context. COVID-19 pandemic was a highly uncertain and dynamic environment in which to operate. Yet, the four case companies found ways to innovate components of their business model throughout the studied 12 month period. This notion also contributes to the ongoing discussion on the definition of the business model innovation by underlining the process view and the importance of learning in the process (see e.g. Foss and Saebi, 2017).

This study also contributes to the business model literature by providing insights into how entrepreneurs use simple rules in business model evolution. As such, our study makes a contribution to the scarce number of studies (e.g. Sun *et al.*, 2018) addressing simple rules in business model development. We argue that simple rules provide a useful theoretical and managerial tool for business model development in uncertain and fast-changing environments .

Our study also makes contributions to hospitality management research. The degree to which strategic decision-makers at Restaurants A-D were willing and able to take risks

by adopting different simple rules might be partially explained by contextual differences, both on the level of the business as well as the individual decision-maker. In terms of business, the maturity of the analyzed case companies varied from those founded a few years ago (Restaurants B and D) to those with a longer legacy and an established reputation (Restaurants A and C). This resonates well with research on service firm life cycle, which postulates that service companies at different stages of their lifecycle assume different strategies when innovating their business model (Langston, 1999; Laudien and Daxböck, 2017). These effects were observed in our study to varying degrees as well.

In terms of the decision-makers, the contextual differences revolve mainly around the career stage of the entrepreneurs/decision-makers, whereby our sample included restaurateurs with a relatively long track-record and an established career, including even a status as a “celebrity chef” (Restaurants A and D), as well as restaurateurs at earlier stages of their career, with relatively less experience and professional esteem (Restaurants B and C). Previous research has found the career stage to play a role in risk-taking behavior in hospitality management decisions (c.f. Seo and Sharma, 2014). In the case of our sample, these effects may be exacerbated by social media and entrepreneurs’ existing professional and personal networks, whereby decision-makers with access to a wider following on social media due to their “celebrity” status, both personal and business-specific (Restaurant A), as well as decision-makers with access to personal media contacts (Restaurant D), might approach business model innovation differently than decision-makers with limited access to such resources.

The study also has its limitations. Our empirical data represents one single industry. Moreover, the selected case companies were all considered leaders of best practices in the industry, which may have had an impact on their capabilities and resulting business model innovation activities. Care should therefore be taken in generalizing the empirical results to other contexts. Nevertheless, the study opens up interesting avenues for future research. For example, we see signs of simple rules evolving not only from iterative experience (Bingham and Eisenhardt, 2011), but also from a deeper sense of meaning, personal goals and emotions. Powell and Baker (2014, p. 1406) suggest that strategy under adverse conditions is driven by how founders’ personal identities frame the adversity - “*founders enact distinctly different definitions of the adversity and use their firms as vehicles to defend who they are or to become who they want to be*”. While there are traces of this in our data we did not design our study to respond to these types of questions, which is why we encourage future research to investigate these patterns.

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