

Business Model Innovations in the French Food Sector During the Covid Crisis

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Abstract: This article attempts to answer the followed research question : how did the restaurants innovate their business model in order to adapt it to the COVID crisis?. A study of two cases shows that the activities, the resources and skills, the revenue model, and the beneficiaries have been transformed even sometimes reinforced in order to keep the business on. In the two cases, the inner resources were mobilised and the offer was changed. As regards the suppliers, their profiles have been changed because of the take away offer which pushed the restaurateurs to have new recipients and new materials in order to adapt their offer.

Keywords: business model, innovation, food sector, covid

1. Introduction

The food sector and more particularly the restaurants was severely hit by the Covid pandemic crisis. Even though the French Government offered subsidies to support the restaurateurs, they had to innovate their business model in order to survive, seize new market opportunities, and as such demonstrate organisational resilience.

According to (Sobaih et al. 2021, p.2), “organisational resilience deals with diverse responses to extrinsic changes and shockwaves that affect business performance and innovation. It can be defined as the enterprise’s capability to remain and withstand extraneous environmental changes, relieve and overcome the negative effects caused by the changes, and rebound forward to a new state for sustaining future performance.

It focuses on the ability of enterprises to respond effectively, adapting and developing in the face of critical crises. In a crisis situation such as Covid, the question could be asked how French restaurants were able to adapt their strategy and business model to face the crisis. Harms et al. (2021) declare that even innovating ‘only’ one core dimension of the business model, usually leads to changes in the remaining dimensions (Harms et al., 2021, p.3).

In this paper, we intend to explore the business model innovations developed and implemented by French restaurants during the crisis. The definition of Foss and Saebi (2017, p.201) which defines a business model innovation as a “designed, novel, nontrivial changes to the key elements of a firm’s business model and/or the architecture linking these elements” was retained. We will be focusing on these different elements which allow companies to generate external added value.

During the two Covid lockdowns imposed by the French government of the industry, the restaurateurs’ main concern was to retain their existing customers by expanding their offer for example with new value propositions, click & collect and delivery systems.

This paper aims to fill the gap in the literature addressed by few authors and considers the business model innovations put forward during the Covid crisis. It also provides recommendations on how to adapt a business model during a period of crisis in the food sector.

So, our research question is: **how did the restaurants innovate their business model in order to adapt it to the COVID crisis?**

To explore this question, a qualitative survey was conducted before twenty restaurant managers. A preliminary analysis was made on two case studies that will be discussed in this paper. We first present the conceptual model, followed by the methodology, the results and a discussion.

2. Conceptual model

There is a large body of literature on business models offering a wide range of models focusing on one or different core value propositions. An increased use of technology has been observed when it comes to adapting the restaurants business model during the crisis. It increases the role of customers as co-creators of value and transforms them into engaged prosumers. During the different lockdowns, the consumers had the budget and time to consume even better than before without caring about the costs of the produce.

Research has shown that consumers generally form an attachment to their favourite hospitality products. According to Peng and Chen (2021), consumers' brand/product attachment is more able to contribute to their purchase intentions than the contrary. One can then assume that during the Covid crisis of 2020 and 2021, consumers were not ready to abandon their favourite restaurant and that restaurateurs responded to this demand by adapting their offer.

In order to identify the restaurateurs' business model innovations deployed during the pandemic, we started collecting data based on a large model combining the models of Verstraete et al. (2012) and Osterwalder & Pigneur (2010). This model takes into account the following items: (1) Value proposition 2) Customers 3) Skills and resources 3) Activities, 4) Partners 5) Communication and 6) Distribution (Figure 1).

Based on this model we will study how the restaurants' value proposition and activities have been adapted during the crisis, how they mobilised their skills and resources, whether they managed to establish new partnerships, reach new customers, how they changed their distribution and communication networks. The objective is to identify the main components that have changed and shaped their new business model.



Figure 1: Conceptual model

3. Methodology

Semi structured interviews were conducted with the managing teams of 20 Parisian restaurants during the months of July, August and November 2021. The participants were selected via the purposeful criterion sampling method to gather information about the research topic (Patton, 2002). All participants were either the creators or were part of the managing team of the restaurants which had been created before 2020. The interview protocol was designed to lead the interview. Semi structured questions allowed the interviewees 1) to answer open-ended questions focusing on the *business model* innovations that they have deployed to cope with the restrictions and the two lockdowns of 2020 and 2021 (Doody & Noonan, 2013) and 2) express their own viewpoints (Järvenpää & Lang, 2005). The interviews were conducted over the phone (Irvine, Drew & Sainsbury,

2012), audio-recorded and transcribed into text files. The average time for each of the interviews was 42 minutes. The interview guide included all the items presented above in the conceptual model.

The data analysis process followed the content analysis process of Miles and Huberman (1994) which consists in 1) data reduction, 2) data display and 3), conclusion drawing. Interviews were read several times, coded and organised based on the two business models of Verstraete *et al.* (2012) and Osterwalder & Pigneur (2010). In this paper, we present the study of 2 cases out of 20 because the research is still in process at this level.

In this paper, we present two opposite case studies in order to show two opposing situations: a social and solidarity restaurant, and a gourmet restaurant. Both of them were situated in the heart of Paris.

Case N°1 – Parisian social and solidarity restaurant

Created in 2018, the restaurant A. Paris is a link in a chain of solidarity restaurants around the world. The Parisian establishment was founded by the association of a three-star chef, a tour operator and a contemporary artist. S.M. is in charge of the establishment next to Mr. B.D., its resident head. The restaurant prepares and serves gourmet dishes for people suffering from social exclusion in a mythical place, the crypt of a Parisian church. It is both a gourmet restaurant and a cultural project, "*it is a bridge to connect people*".

The restaurant mainly sources unsold products from the Food Bank, Metro and other large retailers. The products are then worked with *love*, by a team of employees and volunteers, and this, in the kitchens of an existing restaurant. Renowned chefs are regularly invited to develop menus based on consumable products but removed from distribution channels. The hall was decorated by successive & renowned artists. The beneficiaries, called "the guests" are sent by partner associations equipped with cards, to identify the guest and lead him to his place in the room. The Restaurant A. team counts on several patrons who each bring their own touch to the project. Restaurant A. serves a hundred meals every day using 130 kg of food which ordinarily would have been disposed of. It employs eight people and has thousands of volunteers. The lockdown imposed during the Covid health crisis did not stop the restaurant's actions. The team had to adapt to the restrictions imposed by opting for the delivery of packed lunches to poor families.

Case N° 2 - Michelin-starred Parisian gourmet restaurant

F.U. is a Starred Chef, "Meilleur Ouvrier de France" who opened a gourmet 20 seat restaurant in Paris, in June 2019, which quickly became starred in January 2020, and which offers contemporary cuisine balanced with quality tasty produce, using seasonal ingredients with the attention to detail on order to propose a high quality meal.

The COVID crisis hit him hard, six weeks after having obtained his first star. The success of the restaurant which quickly became popular in this district of Paris, was totally halted, leaving F.U. struggling with staff leaving, high bills and government aid which was difficult to obtain due his lack of a baseline year.

The closure which totalled 11 months, prompted him to continue with a takeaway service and meal plateaus delivered to a local hotel, in order to maintain a contact with his customers and for him and his wife, to maintain some kind of activity.

4. Results and discussion

The Covid crisis has forced French restaurateurs to close their establishments on two occasions, the first between 14 March and 3 June 2020, and the second from 29 October 2020 to 19 May 2021 with the partial opening of terraces, but they had to wait till the 9 June 2021 for the complete reopening including the interior of their establishments.

These imposed closures completely disrupted the sector forcing restaurateurs to adapt to the situation by showing ingenuity just to survive. At the same time and under the same conditions, the activity of fast food and dark kitchens¹ experienced a remarkable growth, thanks to a particular business model based on takeaway, delivery platforms and click & collect. In order to minimise losses and maintain some kind of activity, some restaurateurs didn't hesitate to use the same economic models adapting them to their own way of working.

¹ The dark kitchens are what are called "ghost restaurants". These are virtual, online restaurants that do not rely on the reception of the public. They are a big success with employees at noon and young workers in the evening.

The tables below show the detail of the business model innovations deployed by the two restaurateurs to cope with the months of forced closure. The analysis of the data collected during the interviews permitted the emergence of four categories reflecting the main business model innovations that they have put into place: Innovations in the restaurants' 1) activities, 2) resources, supplies & skills, 3) revenue model and 4), beneficiaries of value creation.

Table 1: Business model innovations of a Michelin-starred Parisian gourmet restaurant

Michelin-starred Parisian gourmet restaurant of 20 seats	What was unchanged	What was eliminated	What has been added
Activities		On-site gourmet catering	Gourmet catering to take away: 2/3 of the activity during the lockdown new takeaway card respecting gastronomic codes Restitution with assembly of the dishes by the customer at home 15/20 meals a day (rather on weekends) Meal trays delivered for room service at a contiguous Parisian hotel 1/3 of the activity during the lockdown Development of a specific offer for the hotel Peak of 80 trays for Valentine's Day 2021
Resources, supplies and skills	Human resources: The Chef entrepreneur Food supplies: Same suppliers to keep the same gastronomic line Service Providers: Maintaining the Website Manager Material resources: Restaurant equipment (vacuum packing machine) Skills: Catering skills already acquired	Human resources: 7 employees on furlough who did not return after the lockdowns	Human resources: The wife of the Chef entrepreneur (packaging, bagging) Supplies: Packaging for takeaway Skills: New staff (to be trained before the reopening in June 2021). Service providers: Web page dedicated to takeaway and display on the front of the restaurant
Revenue model	Cost structure: <u>Fixed Costs</u> Rents maintained Loan drafts maintained <u>Variable Costs</u> Certain wage costs (ACMS, occupational medicine) maintained Same multiplier coefficients to maintain the same food quality URSSAF costs maintained Certain variable costs (electricity, gas) maintained	Revenue On-site gourmet catering Cost structure: <u>Fixed Costs</u> Cancellation of the rent increase <u>Variable costs</u> Salaries of employees paid by the state Financial balance: Not achieved, significant losses	Revenues: 80% drop in turnover Gourmet catering to take away Sale of meal trays to a hotelier Monthly aid from the state (difficult to unlock because no reference year, opening of the restaurant in June 2019, start January 2020, aid 2 months late) No State-Guaranteed Loan Use of the restaurant's own funds

Michelin-starred Parisian gourmet restaurant of 20 seats	What was unchanged	What was eliminated	What has been added
Beneficiaries of value creation	Clientele: Same large neighbourhood clientele to maintain the link that has been keen to support the restaurateur		Clientele: Some new customers

The entrepreneur and Chef decided to maintain an activity during the forced closures to keep a presence in the restaurant which was important for its newly acquired clientele and to maintain physical activity. Very quickly, and relying on skills acquired from catering, he developed a takeaway menu which respected the gastronomic codes of his starred restaurant and whose produce was intended to be assembled by customers in their own kitchen.

In addition, to assist a hotel neighbouring the restaurant that was not able to maintain its activity without offering a catering service, he started to produce food trays that he delivered, operating in particular on the weekend and on special occasions.

His opinion on this period is simple, "*Without state aid, I would not have survived, it is the state that saved us*". He also had to overcome other acute problems during the same period: the loss of all his staff at the reopening, uncertainty about the reopening dates and significant financial losses in 2020.

The analysis of this first case study reveals that the main components of the business model which were able to evolve were: 1) the activities, 2) the resources and skills, and 3) the revenue model. As we can see in Table 1, the resources were adapted, even innovated in order to accommodate the restaurant's new activities. Since the restaurateur has lost many of his employees (some because they were scared to be contaminated and some others because the restaurateur couldn't afford to pay them), his wife had to step in to replace the labour force and take care of the packaging among other responsibilities.

In this example, the restaurateur and Chef was able to prepare the meals. He demonstrated his resilience, adapting to the situation and innovating to continue to serve their customers. To help promote their new activities, he created a Web page dedicated to takeaway menus. Even though the turnover dropped by 80%, he declared having acquired new customers and developed a business to business activity by selling to the hotels.

Table 2 presents the business model innovations of the Parisian social and solidarity restaurant during the months of forced closure of 2020 and 2021.

Table 2: Business model innovations in the Parisian social and solidarity restaurant

Parisian social and solidarity restaurant (Association Law 1901)	What was unchanged	What was eliminated	What has been added
Activities	Publishing (anti-waste cookbook)	Gastronomic catering on site (100 seats/day, unsold recycling) Art gallery (collage, paintings, sculptures...) Event	Packed lunches (5000 baskets/ day) Logistics management of deliveries
Resources, supplies and skills	Human resources: 100 Grand Chefs (in rotation), 100 volunteers per evening, 8 employees	Material resources: Existing restaurant (kitchen, room)	Material resources: Cuisines of partner chefs

Parisian social and solidarity restaurant (Association Law 1901)	What was unchanged	What was eliminated	What has been added
	Supplies: Unsold from mass distribution, Food Bank		
The revenue model	Revenues: Patronage (Accor Hotels, Carrefour Foundation, Voyageur du monde...), publishing. Cost structure: Donations of food products (The Food Bank, Metro, Carrefour, Intermarché, Elle & Vire, ...) Grand Chefs offering their time gracefully Volunteers (aviation, gastronomy, logistics...) Financial equilibrium achieved	Revenue: Events	Cost structure: Use of volunteer Chefs' kitchens
Beneficiaries of value creation	Employees: Salary, adequacy with values in SD, especially social Volunteers: Alignment with SD values, especially social Community: Fight against waste, recycling, Patrons: Strengthening of their CSR policy, involvement of their employees (volunteering) Association: Associative activity maintained.	Guests: Gastronomic experience, cultural experience, social reintegration.	Families staying in hotels by the SAMU social: Meeting nutritional needs Community: Preparation of packed lunches (SAMU Social residents in hotels)

After a week of administrative closure, the Parisian social restaurant had to adapt its offer. Very quickly, the management team decided to start with another model based on standardising meals, outsourcing kitchens, and devoting themselves to logistics. The restaurant had to manage two additional activities for the benefit of a new category of beneficiaries (the families of the Emergency Outreach service for the Homeless). They had to prepare packed lunches (which replaced table service), their logistics and delivery. These new activities required greater involvement of partners, ranging from volunteering to material resources (i.e. kitchens of volunteer Chefs and partners).

As opposed to the previous case, more activities were cancelled than added, even though these new activities were very innovative. New resources based on volunteer work by other Chefs reduced costs. In this case, added value was created for new beneficiaries which is a distinct contrast to the first case.

5. Conclusion

Inspired by fast food business models, the restaurateurs discovered new skills, new markets and new models of value creation. They developed new ways to maintain their activity.

Restaurant n°2's social and solidarity mission allowed it to quickly bounce back from other activities. Business model innovations, carried out during and after the Covid 19 health crisis, were always taken to preserve the company's mission, first social, then environmental. The restaurant transformed its activity and launched into the manufacture of packed lunches (5000 / day at the busiest time) for families staying in the Emergency Outreach Service for the Homeless hotels. Its cost and income model based on the donation of unsold goods and volunteers allowed it to stay afloat and maintain a financial balance in 2020.

The situation is more complex for the Starred restaurant n°1 which barely opened and as such must adapt to 11 months of closure. Building on its recent success with a neighbourhood clientele, it has relied on its skills to

develop a takeaway service, intended mainly for a local clientele, and a specific offer of food trays for a hotel adjacent to the restaurant. Despite state aid (furlough for its staff, and state aid for monthly activity), the restaurant made a substantial loss in 2020, with activity remaining low (an 80% drop in turnover) and the high overheads of the restaurant (rents, loans, staff wages, employer costs, electricity etc.).

According to this study, we could obtain some preliminary answers to our research question: how did the restaurants innovate their business model in order to adapt it to the Covid crisis? The results show that the activities, the resources and skills, the revenue model, and the beneficiaries have been transformed even sometimes reinforced in order to keep the business. In the two cases, the inner resources were mobilised and the offer was changed. As regards the suppliers, their profiles have been changed because of the take away offer which pushed the restaurateurs to have new recipients and new materials in order to adapt their offer. But as presented in the conceptual model, all the items presented were not especially discussed by the restaurateurs. They were in a survival situation and they had to focus on the core items of the business model: the activities, the resources & skills management and the revenue model. Even with the significant results of this paper, it is limited by the fact that we present and analyse two case studies which don't allow us to generalise the results. The future study of 20 managers will cast more light on the restaurateurs practices during the Covid crisis.

References

- Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher*, 20, 28–32.
- Foss, N.J. & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, 43 (1), 200–227.
- Harms R., Alfert C., Cheng-Cheng C. & Kraus S. (2021), Effectuation and causation configurations for business model innovation: Addressing COVID-19 in the gastronomy industry, *International Journal of Hospital Management*, 95, 2021.
- Irvine, A., Drew, P., & Sainsbury, R. (2012). Am I not answering your questions properly? Clarification, adequacy and responsiveness in semi-structured telephone interviews and face-to-face interviews. *Qualitative Research*, 13, 87–106
- Järvenpää, S.L. & Lang, K.R. (2005). Managing the paradoxes of mobile technology. *Information System Management*, 22(4), 7-23.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative Data Analysis*, 2nd edition, Sage Publications, Thousand Oaks, CA.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers* (Vol. 1), John Wiley & Sons.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods*, 4th edition, Sage publications, Saint Paul, MN.
- Peng, N. & Chen, A. (2021), Consumers' luxury restaurant reservation session abandonment behavior during the COVID-19 pandemic: The influence of luxury restaurant attachment, emotional ambivalence, and luxury consumption goals, *International Journal of Hospitality Management*, 94.
- Sobaih, Elshaer, I., Hasanein, A.M. & Abdelaziz, A.S. (2021). Responses to COVID-19: The role of performance in the relationship between small hospitality enterprises' resilience and sustainable tourism development, *International Journal of Hospitality Management*, 94.
- Verstraete, T. et al. (2012). Le business model : une théorie pour des pratiques », *Entreprendre & Innover*, 1 (13), 7-26.