

# How do foodservice companies organize for inbound open innovation? Empirical evidence from a Dutch organization

Organizing for  
inbound open  
innovation

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## Abstract

**Purpose** – The aim of the paper is to analyze how actors in foodservice companies organize for inbound open innovation (OI).

**Design/methodology/approach** – This paper conducted a case analysis of a large and successful foodservice company operating in the Dutch market. Furthermore, drawing on 18 interviews and archive data, we identified the main organizational practices involved in the implementation of inbound innovation activities and the ways they are embraced are defined.

**Findings** – The results provide a holistic view of the main organizational practices a foodservice company implemented at different organizational levels, to exploit external knowledge coming from third parties and to promote the sharing and recombination of knowledge resources within the organization. The identified organizational practices reveal the main interaction patterns between relevant internal actors and other external parties in the company network, as well as between actors on different hierarchical organizational levels which allows processing relevant innovation information and make relevant decisions about it.

**Research limitations/implications** – Implications are provided in terms of both theory and practice. This paper helps foodservice companies to create an internal organizational environment that supports the exploitation of customer knowledge.

**Originality/value** – There are few studies on how companies organize themselves for OI in general, and especially in the foodservice sector.

**Keywords** Case study, Foodservice, Open innovation, Organizational practices

**Paper type** Research paper

## 1. Introduction

The dispersed knowledge sources, the strategic role played by intellectual property rights, the decline of research and development (R&D) expenditures and the digitization of information are all trends that render imperative the adoption of the open innovation (OI) approach (Bogers *et al.*, 2018). In the food sector, the European Commission, through the Food Strategy 2030, has

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explicitly underlined the critical role of OI (European Commission, Directorate-General for Research and Innovation, 2018) for companies. In this sector, the competitiveness and the sustainability goals are creating considerably more pressure on companies as, in addition to the trends above, they have to consider the increasing competition for natural resources, climate change and resource scarcity (FAO, 2019). The current business scenario demands that companies leverage the use of external sources of knowledge and ideas to maintain their competitive advantage (e.g. Wolpert, 2002; Chesbrough *et al.*, 2006). Executing and implementing OI is not an easy task specifically for companies in the food sector. Indeed, food organizations have peculiar characteristics making them strongly dependent on their environment. Additionally, food companies have a strong dependency on the production processes which can be influenced by many variables, all of which are difficult to control such as the perishability of products and raw materials (Bayona-Saez *et al.*, 2017). Moreover some food companies are vertically integrated along the food value chain and need to establish links and network with different actors in different fields and create a dense network of contacts that will promote cooperation and development of OI practices (Fortuin and Omta, 2009; Sarkar and Costa, 2008). However, the OI practices enabling the relationships with external parties and external knowledge cannot be enough to generate relevant innovation performance for company. With regards to that aspect, Cohen and Levinthal (1990) indicate that the internal organization may matter for the identification, assimilation and exploitation of external knowledge. A holistic examination of how an OI strategy is implemented is necessary and it depends on a wider understanding of the complex and collective processes that link decision delegation, communication channels and rewards systems, all of which constitute the description of internal organization (e.g. Burton and Obel, 1998; Mendelson, 2000; Roberts, 2007; Tushman and Nadler, 1978). These elements support our understanding of how the knowledge collected from customers relates to the innovation performance in companies that interact with these customers (Foss *et al.*, 2011). With more modest ambition, the relevance of the internal organizational structures has been previously discussed by Chiaroni *et al.* (2010). Their studies limit to analysis of organizational shift scenario from closed to OI. Furthermore, Gentile-Lüdecke *et al.* (2020) statistically analyzed the effect of the organizational structure on inbound OI performance but only for small and medium-sized enterprises (SMEs). Based on the results from a survey involving 756 global organizations, Zynga *et al.* (2018) have underlined the relevance of organizational structure by showing the relevant effect of four distinct organizational practices on the successful implementation of OI: cross-divisional collaboration; strong leadership with personal responsibility for OI; regularly scheduled meetings and reward systems that support openness.

Despite the research on OI has been mostly company-centric – see for instance the study on the influence of innovation climate such as Popa *et al.* (2017) or studies on capabilities driving OI (e.g. Casprini *et al.*, 2017; Lichtenthaler and Lichtenthaler, 2009) – there is still a lack of research studies focused on producing a comprehensive description of how the OI strategy is implemented at a company level (Randhawa *et al.*, 2016). Similarly, Bogers *et al.* (2017) have stressed the need for more studies on the organizational structure that supports companies to adapt to suggested changes. They also found that past studies have put too much emphasis on individuals designing strategies at the executive level but leaving unexplored how OI is holistically implemented in terms of internal organization. We argue that the way companies are internally organized to use external knowledge is crucial for the success of inbound OI. Indeed, a companies' organizational design may facilitate employee interactions with external knowledge sources (Teece, 1998). However, only few studies have focused their attention on the companies' organizational design for OI (Lewin *et al.*, 2017) with rare examples of large companies experiencing OI in mature industries (see, e.g. Mortara and Minshall, 2011; West and Bogers, 2014). Thus, the adoption of OI organizational designs results elusive. For instance, Foss *et al.*'s (2011) study emphasizes mainly early contacts with customers and neglects subsequent

interactions. Given the above gaps, our study aims to answer the following research question: *How do foodservice companies organize for inbound open innovation?*

Drawing on a qualitative inductive study of a Dutch foodservice company and based on 18 interviews and archive data, we have identified the relevant organizational practices affecting the inbound OI, thus unveiling how actors at different organizational levels prepare to let external knowledge inflow into the company. More specifically, in line with the work of [Kogut and Zander \(1992\)](#), we intend to describe how organizations systematically use knowledge to accomplish a particular function related to the inbound activities and the ways they are embraced.

The paper is structured as follows: [Section 2](#) provides a theoretical background, [Section 3](#) describes the research design and methodology adopted for this study, [Section 4](#) presents the findings while [Section 5](#) discusses the emerged grounded model and implications of the research.

## 2. Theoretical background

### 2.1 *Inbound open innovation and the internal organization for inbound OI*

Inbound OI has been defined as the purposeful search of external knowledge – typically gained in collaboration with suppliers, customers, universities, research centers and consultants ([Cheng et al., 2020](#)) – to accelerate new product development processes ([Enkel et al., 2009](#); [Sisodiya et al., 2013](#)). Several studies have focused the attention on the advantages of embracing inbound OI activities ([Chesbrough et al., 2006](#); [Laursen, 2015](#); [Moreira, 2014](#)). Accordingly, empirical studies have started exploring the paths to access external knowledge, the degree of openness of the companies and the channels used by the same. For example, [Rosenkopf and Nerkar \(2001\)](#) study the relevance of boundary-spanning searches, indicating that the impact of explorative search is greatest when the search expands outside both organizational and technological boundaries. [Powell et al. \(1996\)](#) analyze the inter-organizational collaborations in the biotechnology sector and link collaborative activities to learning and company performance. Along similar lines, [Capurro et al. \(2021\)](#) recognize the key relevance of boundary management for the OI implementation and illustrate the benefits and the challenges affecting the innovation process in absence of an effective management of boundaries.

However, the acquisition and the access to knowledge is not enough for the inbound OI to have a positive effect without knowledge integration between external and internal knowledge ([Chesbrough, 2003](#)).

For example, a stream of literature has started discussing the companies' capability to allow for successful exploitation of inbound OI. For example, [Kotabe et al. \(2011\)](#) explored the role of the absorptive capability and suggest that knowledge acquisition can only enhance new product market performance with the presence of realized absorptive capacity. Others have focused on dynamic capabilities, knowledge management and learning as means to reconfigure and realign the knowledge capacities needed to explore and exploit knowledge based on a company's innovation strategy ([Helfat et al., 2007](#); [Zahra et al., 2006](#)). The work of [Teece \(2020\)](#) more specifically relates OI to the dynamic capabilities framework, identifying where OI better integrates into the dynamic capabilities and indicates the dynamic capability perspective suitable to investigate what a company "innovation process should look like when implementing OI".

However, the capability view does not give a clear perspective on how to prepare for OI and how companies implement an OI strategy. Past research studies have discussed the relevance of organizational structure in information processing showing that it can facilitate the acquisition, elaboration and distribution of information with the aim to support managers in making decisions ([Galbraith, 1974, 1977](#); [Tushman and Nadler, 1978](#)).

However, past research studies have explored the impact of the organizational structure mainly at macro level, for example when a dedicated alliance function is created (see [Chesbrough et al., 2006](#)), a corporate development department ([Helfat et al., 2007](#)) or also parallel structures, with project teams ([Gibson and Birkinshaw, 2004](#)). More recently, the

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interest on the impact of the organizational structure has increased with the work of [Sisodiya et al. \(2013\)](#) that discusses the relevance of flexibility, in the form of resource slack, in terms of a complementing relational capability that is important for implementing OI.

Following the work of [Sisodiya et al. \(2013\)](#), some researchers have begun to emphasize the structural mechanisms that affect the successful implementation of OI strategy or influence the transition from the closed to the OI model. However, structural issues can only be partially responsible for the successful exploitation of customer knowledge as other parts in the entire internal organization of the company may hinder interaction with customers as well as the flow and integration of knowledge inside the company ([Foss et al., 2011](#)). The internal organization has been indeed traditionally described through a combination of dimensions that relate to the structure but that also include other dimensions such as the interactions with customers, the communication channels and rewards systems used (e.g. [Burton and Obel, 1998](#); [Mendelson, 2000](#); [Roberts, 2007](#); [Tushman and Nadler, 1978](#)). Therefore, an overview on the internal organization helps to obtain a more holistic understanding about how the knowledge transmitted to the company, through third parties, is connected to the innovation performance of the company interacting with their customers ([Foss et al., 2011](#)). Indeed, [Foss et al. \(2011\)](#) attempt an initial operationalization of the highlighted dimensions of the internal organization and show a correlation between them and the innovation performance. However, besides this statistical attempt to delineate the organizational dimensions affecting the successful organization for OI, past research studies have failed to provide a detailed view on how the highlighted internal organization dimensions discussed above can be translated into organizational practices that guide the implementation of OI, thus leaving unresolved the issue on how the implementation of OI strategies in the organization can be executed ([Aloini et al., 2017](#); [Bogers et al., 2017](#); [Huizingh, 2011](#); [Randhawa et al., 2016](#)). Past studies have indeed failed to provide a view on the relevant organizational practices enacting the individual dimensions describing the internal organization for OI and are mainly limited to emphasizing the involved structural organizational elements and their relevance for OI. Accordingly, the work of [Chaurasia et al. \(2020\)](#) emphasizes the statistical relevance of organizational factors such as knowledge management systems, openness and organizational structure, for the successful creation of shared value for OI. Some scholars have focused on the transition from a closed to an OI model looking at organizational coordination and the impetus (top-down or bottom-up approach) of OI adoption ([Mortara and Minshall, 2011](#)), or at other organizational dimensions such as inter-organizational networks, organizational structures, evaluation processes and knowledge management systems ([Chiaroni et al., 2010, 2011](#)). [Gentile-Lüdecke et al. \(2020\)](#) look instead at how the traditional variables that describe the organizational structure – formalization, specialization and centralization – favor the adoption of inbound OI. The results show a positive association between centralization and formalization and inbound OI. [Oltra et al. \(2018\)](#) provide an in-depth analysis of the role of formalization and decentralization on the effectiveness that different types of OI have on company performance.

The previous research studies mainly focus on the relevance of the organizational structure for OI and on knowledge management. Their objective is not to clarify the relevant organizational practices necessary to implement OI models inside the organization. As a consequence, a holistic view regarding the implementation of an OI strategy remains missing aspect to cover in OI literature ([Aloini et al., 2017](#); [Bogers et al., 2017](#); [Huizingh, 2011](#); [Randhawa et al., 2016](#)). More specifically [Randhawa et al. \(2016\)](#) have emphasized that, despite the OI research has predominantly embraced a company-centric perspective, it has not been able to provide a holistic examination of how companies may “*unpack the complex, collective processes of formulating open strategy across OI networks and communities*” (p. 767). This lack of focus is specifically evident in the case of foodservice organizations as previous studies have highlighted the need to comprehend how organizations leverage customer input to produce new values ([Randhawa et al., 2016](#)) by using structural complexities to address their

distributed, multientity service value networks. Indeed, regarding service organizations, past studies have put more emphasis on the mechanisms of co-creation (e.g. Ramaswamy, 2009) thus shedding more light on the processes between the company and the customers in open service innovation and neglecting aspects related to the internal organization of the companies.

For that reason, it is necessary to address this research gap with a qualitative study and identify the relevant organizational practices that affect the transformation of companies' third-party input into innovation and give consistency to the description of the dimensions of the internal organization after the implementation of OI.

### 3. Methodology

Due to the explorative nature of our study (Eisenhardt, 1989; Yin, 1994), we engaged in a case study approach of a large Dutch foodservice company that had successfully experienced inbound OI activities. A single case study approach is recommended when the aim of the research is to provide an answer to "how" questions and it is appropriate in order to obtain a fine-grained view about a contemporary phenomenon (Yin, 1994). Considering the inner characteristics of organizational practices, we believe that a single case study represents the best way to unveil the internal organization of a company after the implementation of inbound OI.

Indeed, the foodservice sector represents an interesting research setting for OI, especially for inbound OI, since customers may play a very important role in introducing new products and services due to the fact that their tastes are still quite local (Bianchi and Mortimer, 2015).

Our focal company granted the authors unusual access: all facilities and personnel were accessible for the purpose of this research study. Furthermore, the company offered strong evidence of inbound OI activities which was a sufficient indication of it being a strong candidate for a single case study (Siggelkow, 2007).

The focal company offered tailored catering services to educational institutions covering more than 160 locations in Netherlands and employing over 400 individuals. It had started its operations as a traditional family business and in 25 years it had become a leader in the sector, distinguishing itself from its direct competitors by making health, sustainability and social involvement its core pillars that guide its activities. The company has two major divisions: school catering and events/business catering. There is also a Formula Team. Furthermore, there are various departments such as marketing, logistics/operations, human resources, and sales and purchase.

The organization served final customers, according to the strict regulations imposed by the schools and catering sector; it worked on a fully customized service to better fit the needs of their customers. It also established solid partnerships with its customers, thus introducing new (e.g. vegan, vegetarian, healthier) options for students and custom-made events. The organization was also increasingly experiencing pressure from competitors and from the changing behaviors of consumers which stimulated the foodservice sector to become more complex and industrialized and pay more attention to innovation (DiPietro, 2017; Ottenbacher and Harrington, 2009; Rodgers, 2007). The company has had to implement innovation regarding both the development of products and the meal experience, service and atmosphere (Jones, 1990).

#### 3.1 Data collection

For our theory-building process (Remenyi *et al.*, 1998), we used multiple data sources: (1) semistructured interviews, (2) observations from the third author and (3) the company archive data we had had access to (e.g. internal reports, service documentation) which we used to better understand the company business. We started building general understanding of the company by interviewing the general manager who reported to us about the business, the market position of the company and the general approach towards innovation, the strategy used for the third parties and the way they built relationships with them. Other managers were

also involved with the aim to understand the rationale used for the OI activities launched in the company and processes to enact and to benefit from. After this initial set of interviews, with the management support, we identified suitable respondents who could help us understand the operations at different company locations. They also helped us to trace the evolution of the OI activities into new product and service concepts, as well as the process that lead to novel innovation activities and new value delivered to their customers. We interviewed 18 interviewees. Each interview was conducted in person by the third author either at one of the company's locations or at University, during the first weeks of December 2017.

The average length of the interviews was about 52 min. Each interview was recorded and transcribed by the third author, who also took notes during the on-site visits, which allowed him to gain deeper understanding on the emerging findings. Interviewees' roles are reported in [Table 1](#). The interview protocol was designed to collect information regarding the work,

Interviewee	Main activities (as described by the respondent)	Year(s) in the company (up to Dec 2017)
Head of Formula	Development of food and drinks, implementation of formulas/brands at the sites	4
Formula Manager 1	Responsible for the operations and the staff at one site	10
Formula Manager 2	Covers the role of support and control in 12 different sites, including the supervision of site managers	5 months
Formula Manager 3	Responsible for 4 sites, develops improvement plans, helps and supervises site managers	5
Site Manager 1	Responsible for 6 sites, supports and monitors site managers	4
Site Manager 2	Covers the role of supports and administration in different sites, trains site managers and monitors staff	5
Site Manager 3	Administration of 5 sites, manages staff, acts as an intermediary between university and company, improves operational plans	4
Operation Director	Supervision of district managers, monitors revenues, projects management, monitors contracts	10
Head of Events and Banqueting	Responsible for operations and sales of the events unit, responsible for festivals and events management	8 months
Operations Manager	Management and planning of events, staff and material organization, monitors budget and revenues, responsible for hospitality and banqueting at the events	3 (1 as Op Man)
Operations Manager: corporate catering	Responsible for corporate contracts, development of plans for corporate catering, staff management, customer support	5 months
Sales Manager: school banqueting	Event organization and planning, preparation of sales offers, customer support	2
Operations Manager: school banqueting	Coordination of events, management of personal and materials, events logistics	8 months
Integration Manager	Organizes, coordinates and manages the organization	4 months
Application Manager	Responsible for the sales and supplies platform, cash points programming and revenues and sales tracking	9
Sales Director	Site sales and marketing and assortment. Consumer insights	1
Head of Facility Department	Responsible for store design and the concept development in the stores. Equipment maintenance (around 150 stores), insurance, car plan, lease contract, buildings rent contracts, constructions, etc.	4
Facility Employee	Responsible for the development and operational part of the sites, including materials, equipment and construction	3

**Table 1.** Interviewees' role, main activities and time in the company



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the organizational contexts (both centrally on a business unit level and at the various sites), the OI activities, the partners they were collaborating with, their expectations regarding the existing relationships, perceptions about what worked, the company's constraints and the actors they had to take into consideration to run inbound OI activities and to transform their input into a valuable result for the company.

### 3.2 Data analysis

We executed the coding process as suggested by [Corley and Gioia \(2004\)](#) and followed the recommendations by [Pratt \(2008\)](#). The authors read all the interviews and archive as data overview. Each author coded independently the transcriptions, identifying relevant emerging concepts and, still independently, clustering them into first order concepts. Therefore, the authors did open coding independently, then axial coding with individual literature search and finally they had a brainstorming session together. During the coding process, the authors continually compared and contrasted the emerging concepts ([Creswell, 2013](#); [Miles et al., 2014](#)). They went back and forth between their data and the relevant literature in the field of inbound OI (e.g. [Chiaroni et al., 2010](#)), discussing the findings. Finally, following also the discussion with reviewers, the authors reached an agreement on the final list of 4 aggregate dimensions that were eventually linked to the organizational elements identified by [Foss et al. \(2011\)](#), thus introducing a link with the organizational practices and structural mechanisms.

[Figure 1](#) shows the resulting data structure. [Figure 2](#) shows the resulting grounded model.

## 4. Findings

In the following section, we describe the 4 aggregate dimensions that emerged from our analysis: Interaction with clients, Managers-employees' relationships (to allow employees to be sensitive to clients' needs), Delegation of responsibility (Innovation at employee level is encouraged, but constrained by rules and controlled by top-level managers) and Internal communication (Knowledge is filtered at local level and diffused within the organization).

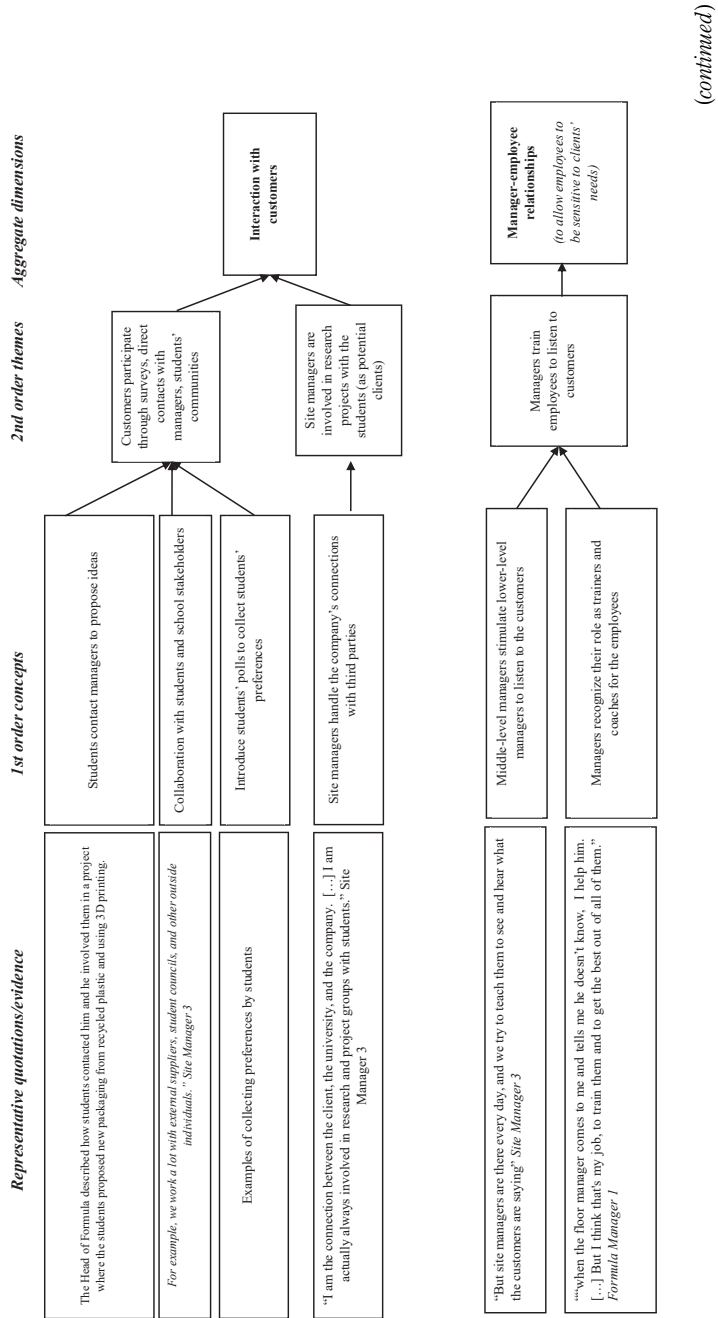
### 4.1 Interaction with clients

There are several examples the company had embraced inbound OI. Several respondents highlighted the importance of introducing new value offerings and creating work conditions that support innovation.

The company collaborates with clients and suppliers to identify opportunities. New products are developed by involving students through joint development projects. For example, a student contacted the Formula Manager to introduce a healthy snack he himself developed. Students are involved through "polls". For example, one site, the employees ask students to provide feedback on product characteristics. Furthermore, the organization also involves students, via student communities, in the collection of information. Based on the data analysis, the organization acts. As the Formula Manager says:

At some sites, we work a lot with students and student communities. They talk a lot with everyone, they give us the result, and then the company has to do something with it. So, we must listen very well. For example, you walk here with a piece of paper and ask: "what do you think about the products? Do you want them healthier? More vegan? More vegetarian?" In the end, the result was to have more vegetarian and more vegan products. As a result, we started selling more vegan and more vegetarian products.

Local suppliers are also involved in the innovation process. For example, there are suppliers that produce soup out of vegetables that have been discarded. In general, there is deep learning thanks to the collaboration along the supply chain.



(continued)

Figure 1.  
Data structure



(continued)

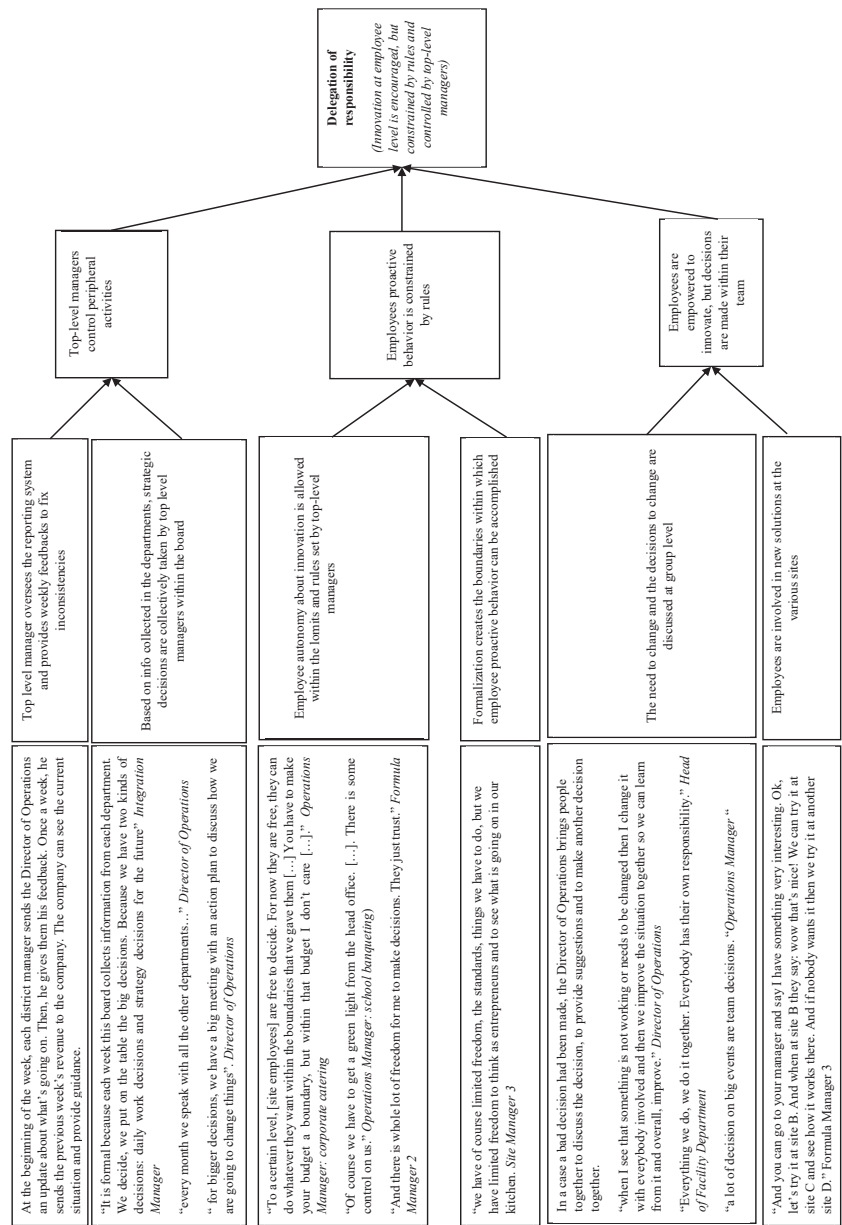


Figure 1.

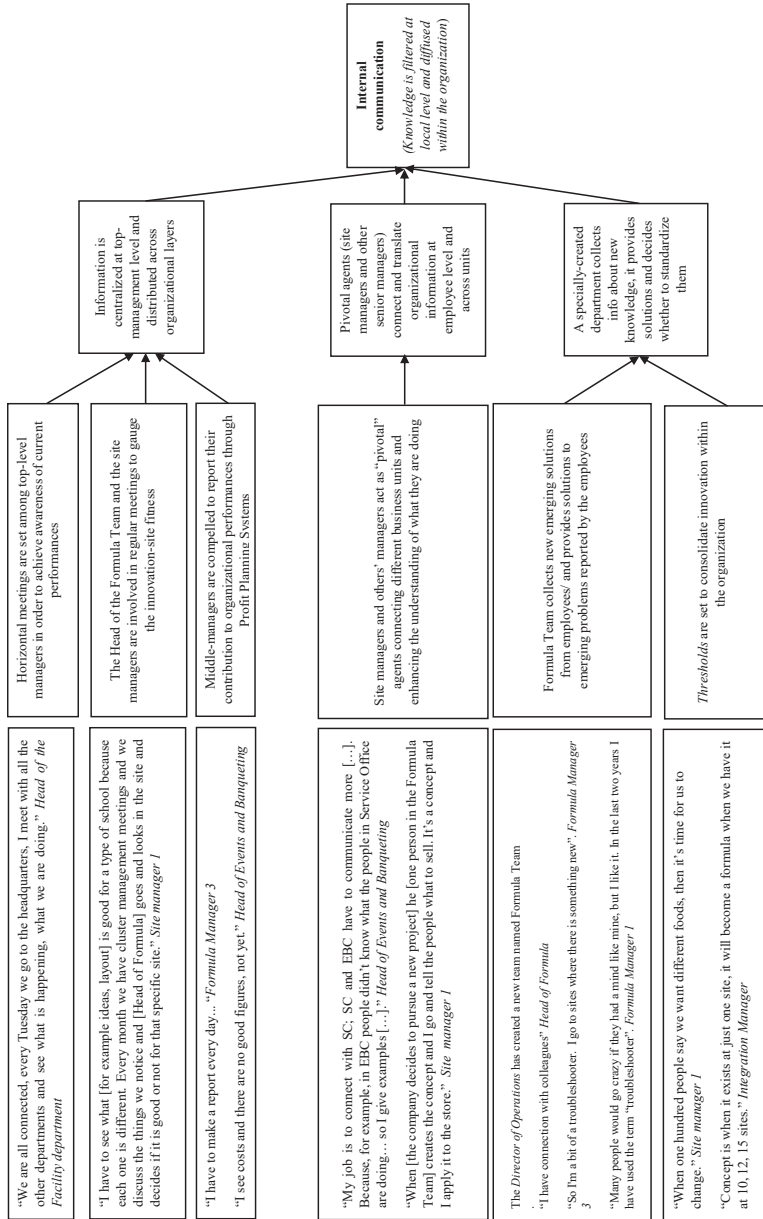
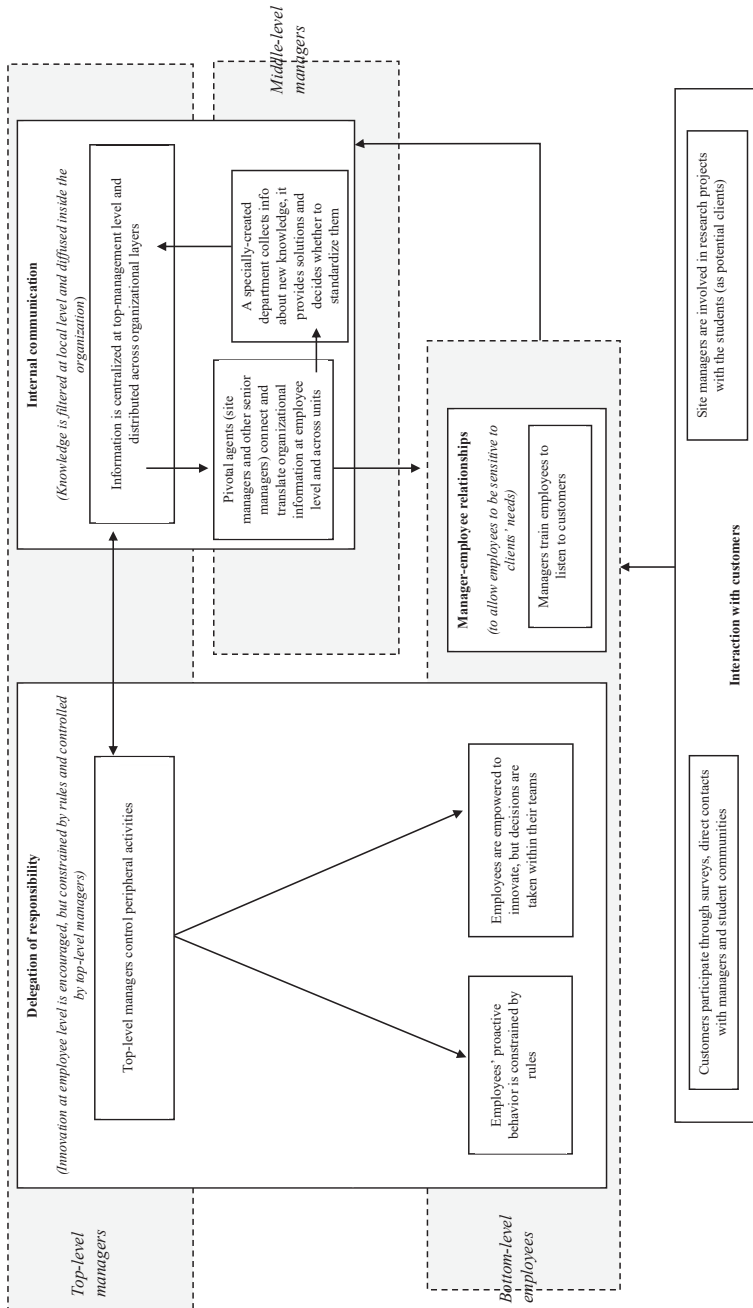


Figure 1.



**Figure 2.**  
Grounded model of  
organizational  
practices for  
inbound OI

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A central role is played by site managers who belong to the lower and middle lever within the School Catering Business unit but who are crucial to connecting not only the company with suppliers, but also with the other stakeholders. We can mention the case of Site Manager 3 who is personally involved in projects with students and the university:

Sometimes when something refreshing comes out of the project groups with students, I try to share it with our headquarters and managers. To let them know that there are interesting things “brewing” at the Campus which perhaps we can embrace as a company because sometimes there are really good things out there.

#### *4.2 Manager-employee relationships*

The organization pays lot of attention to manager-employee relationships in order to allow employees to be sensitive to clients’ needs. Being always in contact with the final customers in the role of food providers, bottom-level employees are crucial in the company’s innovative process. Employees are the “business card” of the company and hold a central role in the provision of the service. Furthermore, they are better at understanding customers’ needs as well as to influencing them in terms of deciding what to eat since they spend a lot of time with them.

For that purpose, employees are trained by their managers to listen to customers. Employees need to be capable to understand how customers’ needs are changing, what customers want and whether there is something new that that company could introduce. For example, one interviewee recalls an episode at one site where a client asked for fresh salad:

“Why do not you have fresh salad?” said a client. So, we tried introducing a salad bar.

Middle-level managers stimulate lower-level managers to listen to the customers, as shown by the following quotation:

Location managers are there every day, and we try to teach them to see and hear what the customers are saying. says Site Manager 3

Managers are also aware of their role as trainers and coaches for the employees:

When the floor manager comes to me and tells me he does not know . . . Then I help him. [. . .] But I think that’s my job, to train them and to get the best out of all of them., said Formula Manager 1

#### *4.3 Delegation of responsibility*

In the analyzed company, top-level managers control peripheral activities in a way that they encourage innovation at employee level, while they control it via rules. The first thing we noticed from the interviews is that the company has a clear reporting system and this system is overseen by the top-level managers who provide feedbacks on a regular, weekly basis. The feedback is aimed at overcoming potential inconsistencies between expected and actual results. In this reporting system, managers inform of the progress or the lack thereof, in his/her business unit:

Every week I have to fill out a weekly report for the director that explains what we are doing, what we are not doing, what we are going to do, the status or progress. I explain the problems, important things, in a short summary. says the Head of Facility Department

Based on info collected from the departments, strategic decisions are collectively made by top-level managers within the board:

[we are] unique because we have a big company working like a family, we work tight as a team and that’s why we have less people at the head office, a small management team to make quick decisions and we do it, says the Head of Facility Department

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A second aspect refers to how employees behave. Employees are autonomous about innovation, but within certain limits and rules that are set by top-level managers. These limits are budget driven. In particular, the budget and the costs associated to innovation represent the limits within which employees' autonomy can be exercised. When there are big investments to make, there is the need for a "green light":

I need to have the green light to go for something, of course. When the cost is reasonable I have a green light from my boss. said Formula Manager 3

Formalization is yet another element that influences the innovative activities since it sets the boundaries within which the employees' entrepreneurial behavior can be expressed. The employees' freedom is influenced by the standards that are determined not only by third parties, such as the school requirements, but also by the company that clarifies, very carefully, the processes to follow. The company, in fact, has written procedures and it seems it also has "unwritten" procedures that are somehow known by the employees:

We have written and not written procedures, and everybody is well aware of them, says the Director of Operations

The written procedures are collected in a "manual", while unwritten ones are related to constant improvements that are not included in the manual. For example, while conducting the interview, the third author observes that the employee takes notes about the assortment of products located near the cashier. Asking for the reason behind that, the employee replies that he should be able to identify the type of products that consumers buy together thus making those more available for consumers. In other terms, he wants to better understand consumer behavior that could lead to a more tailored assortment.

A third aspect refers to the fact that employees are empowered to innovate, but decisions are made together, with the other employees, at a group (e.g. site) level. Managers encourage a participatory approach when some bad decisions had been taken or when something must be changed. Hence, all employees are encouraged to take active part in the organizational challenges, proposing their individual ideas and to sharing them with the others. For example, employees are engaged in experimenting new solutions at the various sites. As the Formula Manager 3 remembers:

[What] shall we do now? Is there someone who has an idea? What can we do with our fries? Or what can we do with the vegetables we have here?

He encourages employees to think and to propose solutions.

#### *4.4 Internal communication*

We identified three main organizational practices that characterize the internal communication that allows knowledge to be filtered at local level and diffused within the organization.

The first one is the fact that information is centralized at top-management level and distributed across the organizational layers. There are scheduled meetings that are held among top-level managers. These horizontal meetings are important since they make all the top-level managers aware of what is going on within the other departments, thus allowing awareness of current performance and exchange of information. Other regular meetings involve the Head of Formula and the several site managers. These meetings are important since through them the Head of Formula is able to grasp what type of innovation each site is pursuing and which is its contribution. Finally, middle-managers are required to report activity on a daily basis, through the Profit Planning Systems. To what extent are these, ordinary and less ordinary, activities, of the middle-manager aligned with the expected costs?

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The contribution of each specific activity, event or new concept that has been carried on must be clear to the manager.

The second one refers to the role of “pivotal agents” (site managers and other senior managers) who connect and translate organizational information at employee level across units. In order to diffuse information inside the company, the company relies on the role of some managers who visit branch offices talk to employees and link multiple units, such as those dealing with universities and those dealing with events, thus connecting different business units and enhancing the understanding of what they are doing:

Every time I'm at a branch office I just walk in, say hi and sometimes we have a meeting [with facility managers] which are scheduled every 6 months. [These meetings are about] not only changes, but also the business progress. How things are going or if they have complaints or improvements, says Formula Manager 2

A third one refers to the specially-created department that collects information about new knowledge provides solutions and decides whether to standardize them. The company has created a dedicated cross-divisional team to supports business units address problems and integrate new cumulated knowledge into different business units: its name is Formula Team. This team is responsible for identifying problems, fixing them using innovative solutions, and disseminating new products/processes across units. For example, Formula Manager 3 explains:

I'm a little bit of a troubleshooter. I go to sites where there is something new. For example I have seen something on the market or on the news or Facebook or whatever. I think: ok let's try that! Can we try it? What do we need? [ . . . ] Then I go to my boss [Head of Formula] and say: I got a new sandwich, is it our cup of tea? [ . . . ] And then when it's a success, we can promote the whole team.

Finally, there are thresholds above which innovation can be consolidated into organizational practices. These thresholds are important because they set the boundaries between which idea that may come from outside the company as well as from an employee, becomes an innovation that the company introduces in its offering. For example, when there is a new concept, it can become a “formula” that can be used at the various sites following specific procedures:

Ideas, new ideas are right when they are feasible. [ . . . ] Before deciding on something we must first decide how I can manage it. [ . . . ] A concept from one site will become a formula when we have it at 10, 12, and 15 [sites]. [For example] we serve coffee in a small cup, with some sugar and a spoon. Before opening this concept, you must have an idea about how you can manage this. Every little detail, because otherwise they [employees] will serve you a bottle with spoon. says the Integration Manager

## 5. Discussion

This paper aims to answer the following research question: *How do foodservice companies organize for inbound OI?* Based on an in-depth case study of a Dutch foodservice company, this study aims at contributing to OI research that has focused on organizational practices as an important aspect to consider when implementing OI strategies (Chiaroni *et al.*, 2010; Di Minin *et al.*, 2010; Foss *et al.*, 2011; Gentile-Lüdecke *et al.*, 2020). According to the inbound OI definition, the organization's knowledge base is enriched through suppliers and other external knowledge sources, such as customers (Enkel *et al.*, 2009). The company we studied mainly leveraged customer insights, purposively using their knowledge. The company involved customers in several ways (e.g. via direct contact with the managers and students' communities and via surveys/polls). Adding to previous research that has mainly focused on the co-creation mechanisms between the customers and the company in the service sector (e.g. Ramaswamy, 2009), our study describes how a foodservice company internally organized for executing inbound OI, hence providing a holistic view of the implementation of



an OI strategy. In fact, extant studies have often analyzed OI in the food sector (Annosi *et al.*, 2021; Arcese *et al.*, 2015; Bigliardi and Galati, 2013; Chesbrough *et al.*, 2014; Palumbo *et al.*, 2021), but a holistic view of how a foodservice company organizes for OI is missing (e.g. Aolini *et al.*, 2017; Randhawa *et al.*, 2016). For example, Chesbrough *et al.* (2014) analyzed how a foodservice company has developed an ecosystem involving, over time, customer, suppliers, farmers and other stakeholders and has embraced an open culture, focusing on the creation of external networks rather than investigating how the company has organized itself internally.

We developed a grounded model (Figure 2) where we detail the organizational practices that a foodservice company can adopt when implementing inbound OI. In line with Foss *et al.* (2011)'s model, our paper identifies and clusters the organizational practices that, as mediating factors, a company could use to transform external customers' knowledge into successful innovation performance. By describing the different organizational practices involved the process of company and customer knowledge recombination, we touch upon different organizational levels of analysis. As shown in the grounded model we developed, we have detected organizational practices for bottom-level employees, middle-level managers and top-level managers, thus looking at multilevel analysis in the context of OI (see for example Beck *et al.*, 2022; Bogers *et al.*, 2017; Engelsberger *et al.*, 2021). The model also highlights the practices that establish a regular communication flow between the company and its clients (Interaction with customers) and the links connecting different actors within the organization, as showed in the dimension of internal communication, manager-employee relationships and delegation of responsibility.

Our case shows that, to implement inbound OI, a company needs, on the one side, to invest in manager-employee relationships, to facilitate internal communication at different levels, to encourage employees to innovate, while on the other side, to select, standardize and diffuse relevant knowledge across the whole organization and maintain control the innovation strategy. Therefore, our case analysis expands on what has previously been said regarding the importance of inbound OI control centralization (Gentile-Lüdecke *et al.*, 2020), showing that what matters in terms of inbound OI in a foodservice company is the balance between centralization (deriving from top-level management control over peripheral activities) and decentralization (as represented by bottom-level employees' autonomy in the innovation activities). Gentile-Lüdecke *et al.* (2020) have provided a quantitative study with respect to SMEs and according to their results centralization may be helpful in reducing ambiguity and determining the needed knowledge. Our case suggests that formalization alone is not enough since the bottom-level employees, as they are in contact with the final consumers, are in a better position to identify the type of external knowledge to be used.

Furthermore, our paper sheds light on the importance of the interface between employees and customers in a foodservice company and contributes in terms of collaborative processes that are involved between the company and the customers (Randhawa *et al.*, 2016). Our study describes the involvement of clients via student communities and surveys. This sheds light on more traditional tools, since previous research has focused on more technological tools such as social media that are especially used by food manufacturers (Mount and Martinez, 2014). In a foodservice company, a crucial role is still played by those employees that work at the sites daily and who can interact with clients. Our study emphasizes that bottom-level employees are privileged actors as they can get to know the customers well thanks to their daily interactions, which puts them in the right position to understand clients' needs and come up with new ideas. This leads us also towards opening a discussion about how foodservice companies could interact with clients and to what extent onsite practices (with focus on the role of employees) could be better than online ones, for example. A crucial role in managing inbound OI is played by site managers and other managers who connect the organization to the external environment and who therefore play a role of boundary spanners. This corroborates existing research that has focused on "boundary spanning

employees that are physically on-site at customer facilities” (Grawe *et al.*, 2015, p. 88) and that has noticed that spanning roles are important for innovation (Rosenkopf and Nerkar, 2001). These employees are particularly good at leading knowledge exchanges since they create affective commitment to the customers.

Moreover, since employees are in a privileged position to identify innovation that the company could embrace and to notice changing environmental conditions (Tushman and Nadler, 1986), our case also emphasizes the importance of nurturing manager-employee relationships, with middle-level managers who stimulate and teach/coach employees. Therefore, creating an organizational environment (e.g. Hornsby *et al.*, 2002; Udwadia, 1990) where middle-managers and top-level managers are willing to contribute to the development of bottom-level employees is necessary to collect all the information coming from the external environment. Extant research has emphasized the role of compensation (Atapattu and Jayakody, 2014; Foss *et al.*, 2011), but our case shows that more intangible aspects, such as gaining management support, are no less important in implementing inbound OI. This also enriches previous studies (e.g. Casprini *et al.*, 2017) that have highlighted how important the relationships between managers and employees are in executing OI.

Finally, our paper sheds light on the organizational practices that make internal communication happen at multiple levels within the organization. Extant research has noticed that practices such as meetings, cross-disciplinary teams, training and establishing consensus across groups help the company to provide services aligned with customers’ requirements (Skålen *et al.*, 2015). Our findings show that internal communication is enabled by practices that should be different at different organizational levels. There is a need of employees who act as ‘pivotal agents’ thus allowing the dissemination (and understanding) of information at the bottom-level, but there is also a need to create practices that help the company filter and select relevant knowledge and crystallize it into standards that can be diffused across the company. This role is played by the so-called Formula Team that represents a bridge between the employees and top-level managers. Then, the information is centralized at the top level thanks to meetings and reporting systems. For example, the use of a Profit Planning System could be a tool to avoid one of the barriers identified by OI scholars, i.e. the fact that the actual costs are higher than the planned costs (Bigliardi and Galati, 2016).

## 6. Conclusions

This paper provides answers to how foodservice companies organize themselves for inbound OI by proposing a model that considers the various organizational practices that a foodservice company has adopted when dealing with external knowledge sources. Our paper contributes to the theory and practice in several ways. From a theoretical standpoint, we identified three main contributions. First, the model that emerged from our research provides an in-depth description of organizational practices concerning the various layers within an organizational level, thus providing information on how companies are organized to achieve inbound OI (Bogers *et al.*, 2017; Gentile-Lüdecke *et al.*, 2020). Second, our study expands on previous studies regarding OI in the food context (Bresciani, 2017; Chesbrough *et al.*, 2014; Palumbo *et al.*, 2021), by zooming into the foodservice and, more in general, the service sector (Randhawa *et al.*, 2016). Finally, it extends extant studies on organizational practices (Foss *et al.*, 2011) shedding light on the importance of “soft” practices such as the fact that employees are trained by managers to listen to customers, which helps reinforce manager-employee relationships. This is also in line with recent research that has shown the importance of top-management support as an element that helps service innovation (Hsu *et al.*, 2019).

From a managerial point of view, our paper provides also practical insights about which organizational practices a foodservice organization could adopt. Understanding how

companies may organize to balance a high level of local customization with an increasing need to find products that could scale up beyond local borders, is an important factor to be addressed, also from a managerial perspective. Managers may be inspired by our model and choose the elements that could be useful to them when they execute inbound OI.

This paper is not without limits. In particular, it relies on a large European foodservice company. Therefore, the identified practices may not be suitable for smaller companies where, for example, there is not a clear distinction between the various levels of employees and managers. However, we think that our findings could be applied in contexts where customers and suppliers are particularly important sources of innovation. Of course, we would recommend that future research should extend our insights through a multiple case study (also at cross-country level), providing also testable propositions. Furthermore, since this paper is on inbound OI, we also recommend that new empirical evidence is needed regarding outbound OI processes.

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