POSITIONING SERVICE INDUSTRIALIZATION STRATEGIES IN THE ACCOMMODATION INDUSTRY

ABSTRACT

Purpose – The purpose of the paper is to move forward into the understanding of the future service landscape. It addresses the apparent dichotomy in current service industrialization trends, and in particular the trade-off between standardization and customization of service offerings, and on the impact of service industrialization on these dynamics.

Methodology/approach – A new scheme is proposed to classify services following an Operations Management perspective, integrating considerations on service inputs and on the internal production and delivery processes chosen by service providers. The result of this classification scheme is a matrix, whose goal is mainly to identify the evolutionary patterns of the service industrialization strategies.

Findings – Applying our new scheme, sub-clusters of service business models emerge. In particular, an analysis of the hospitality industry shows considerable variety within the sector. Service industrialization does not take place in a unique way and different sub-clusters show different strategies: some of them solve the trade-off between standardization and customization polarizing their offering towards one of the two extremes, other clusters are able to escape the trade-off and combine both strategies for higher productivity.

Research implications – The paper represents a first step within a broader research project. The new scheme for service classification will then be used to study other industries and sectors and to compare results across industries for increased generalizability of results. Moreover, it paves the way towards a redefinition of the concept of "industrialization" as applied to services.

Originality/value – This study provides an original perspective on service classification through the lenses of Operations Management, reaching a completely new model applicable to a variety of industries and across time.

KEYWORDS

Classification, matrix, service operations, service industrialization, accommodation

PAPER TYPE

Research paper

INTRODUCTION

The emergence of services has revolutionized modern economies. The impact of the tertiary sector on productivity and employment is without precedents. Scholars devoted the last decades to the analysis of how services differ from their tangible counterpart, goods, and how they should be managed, marketed, and delivered. However, a significant gap still exists between the importance of services and the presence of this topic in Operations Management (OM) literature (Johnston, 2005; Metters, 2010; Metters and Marucheck, 2007).

From an OM perspective, traditional tools that were developed for the manufacturing context fall short when investigating services deeply. The main cause for the existence of this gap is the convergence between output and process, two concepts that are easily distinguished in manufacturing, but become blurred in service operations (Miles, 2010).

The gap is increasingly evident in a world in which services are undergoing a phase of transformation, a phenomenon that scholars, starting from Levitt in 1976, labeled "service industrialization". In particular, as happened in the manufacturing world with the advent of the industrial revolution, the service sector is experiencing a growing need of high rates of production and low costs (Bowen and Youngdahl, 1998), preserving at the same time its characteristics in terms of great interaction with the customer and hence greater scope for customization (Lovelock, 1983).

The concept of the service industrialization takes into consideration all "changes in the underlying processes of production driven by the appearance and implementation of new technologies": automation, outsourcing, geographic re-distribution of tasks, process reengineering, modularization, service redesign, standardization of designs, operations and task shifting, and self-service (Karmarkar, 2004). Such strategies are directed not only towards standardization (see for example the "service factories" concept developed by Chase and Garvin in 1989), but also to customization strategies, as demonstrated by a significant body of literature dealing with the issue of service experience (Pine and Gilmore, 1999).

In particular, scholars focused on information-based services (Apte and Chon-Huat, 2005; Schroth, 2007). In such a context, adopting the concept of service industrialization can provide an answer to overcome the apparent dichotomy between standardization and customization.

The aim of this paper is to go beyond information-based services and verify whether firms engaging in service operations are bound to choose between the two extremes, or whether industrialization and the diffusion of new technologies, and in particular of ICT, could open a third way and enable both trends simultaneously.

The paper is structured as follows. The next section critically examines service taxonomies found in literature, proposing a new one to frame the phenomenon of service industrialization. Then, the new framework is declined into the accommodation industry through a first case study, identifying industry-specific sub-criteria. Finally, the framework is adopted to analyze and map eight additional cases and their service industrialization strategies. Findings, outcomes, conclusions and further research are discussed in the last section.

LITERATURE REVIEW: HOW CAN WE CLASSIFY SERVICE OPERATIONS?

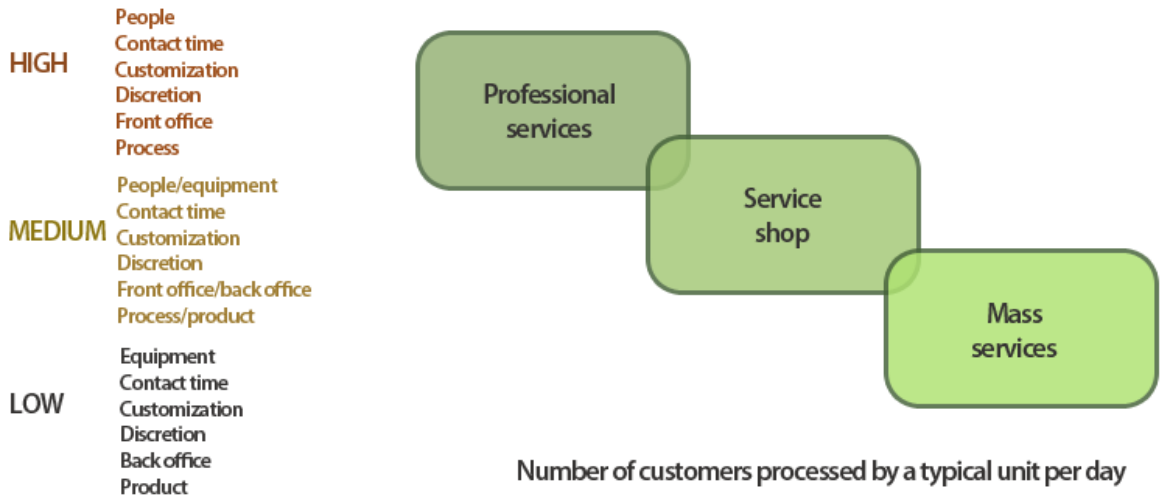
Although many classification schemes have been proposed before, no categorization has been in our opinion fully persuasive to frame the phenomenon of service industrialization on the service operations.

Our analysis starts from a milestone in the OM field, the product-process matrix (Hayes and Wheelwright, 1979). This model is used to analyze the consistency between product characteristics and its related demand and the firm's manufacturing choices, identifying the available strategic options and suggesting the most appropriate one. As known, the matrix is organized according to two main dimensions: on one side, it portrays product features and the stage reached in the product life cycle; on the other, it shows the manufacturing process adopted (Hayes and Wheelwright, 1979).

Other models attempted to replicate this configuration into the service context, focusing on different service characteristics. Few examples within a wide body of literature can be Bell (1981), who drew his attention on tangibility and customer involvement; Schmenner (1986), who dealt instead with customer interaction and the degree of labor intensity; and more recently Polito and Watson (2004), who extended the framework to include the service sector.

With time, literature on service operations increased its level of autonomy, detaching itself gradually from the manufacturing perspective and from the starting Hayes and Wheelwright matrix. New matrices have been proposed for new approaches to services classifications. In particular, Silvestro et al. (1992) suggested to match the output volume with the combination of six descriptive dimensions: (1) the relative focus on people versus equipment in service provision; (2) the customer contact time per transaction; (3) the degree of customization in process; (4) the degree of personnel discretion in service provision; (5) the main value-adding activity locus – front office versus back office; and (6) the relative focus on product or process. As shown in Figure 1., the results are three "service archetypes": professional services, characterized by few transactions, highly customized and highly interactive; mass services, with limited contact time and limited customization; and service shops, a categorization that clusters sectors falling in between the two extremes.

Figure 1. The Silvestro's et al. classification scheme (1992)



In our perspective, the most relevant feature of this model is its operations management approach. In particular, the variables included in the axis are meaningful to describe the result of process choices. However, the matrix shares with previous works the limitation of being collapsible into a mono-dimensional line along the diagonal, due to the high correlation of the two axes. In service operations, actually, the characteristics of the output, for example, cannot be considered independent from the process features, as they are direct consequences of the design of the execution and the distribution modes.

Our critical review of service classification schemes showed a series of different approaches, but no single one has proved as useful and robust as the product-process matrix in the manufacturing literature (Hayes and Wheelwright, 1979). The main strength of the manufacturing model is its

multidimensionality: several different process dimensions are correlated to the characteristics of the output. However, while in manufacturing the two concepts of output and process are easily and physically distinguished, in the realm of services they become blurred. Hence, matrices "*a la* Hayes and Wheelwright" applied to services have to be designed on axes variables that are not highly correlated. This consideration drove us to adopt two different variables: input and process.

Investigating a different determinant of the service operations (input rather than output), may allow us to broaden the scope of our classification scheme overcoming "the issue of tangibility". In fact, to properly analyze how service industrialization is shaping the current landscape, a change in scope is needed. Scholars on service industrialization have actually focused a large portion of their research on intangible services dealing mainly with information production, assembly, and delivery process (Levitt, 1976).

Yet, aiming at providing a broad classification scheme, we cannot underestimate the relevance of service industrialization for the operations of all product-service bundles (Oliva and Kallenberg, 2003). Moreover, including a physical-technical component in the picture, we expect for some of the typical manufacturing problems to emerge, while literature considering only pure intangible information services did not consider these constraints.

"Input" has been investigated including a wider range of streams of research. A strict focus on OM literature was no longer advisable, as much of the research carried out in the field focused on outputs; thus we enlarged our perspective to include hints provided by different disciplines on the subject matter, as showed in Table 1.

A first body of literature analyzed included the neoclassical and industrial economics perspective, from Ricardo (1817), to Marx (1867), to Solow (1956). Emerging from this field of study is one of the most traditional categories of inputs, *tangible inputs*, which is then declined into the two well accepted aspects of *asset* and *raw materials*.

A different perspective on the subject emphasizes the importance of a second class of inputs, *intangible inputs*. Such a perspective is shared by the fields of service operations management (in particular, Karmarkar, 2004), which focuses on data and *information*; and social science (Bordieu, 1986), which propose the concepts of *social capital*, brand, and reputation. Though from different perspectives, these schools of thought emphasize the importance of the "unseen" as input to service production processes.

The third school of thought analyzed is the one devoted to *human resources*. This class of inputs is the natural foundation of works in HRM (among others Prahalad and Hamel, 1990; Pfeffer, 1994), and it finds an overlap with the Service-Dominant-Logic perspective found in the work of Lusch, Vargo, and Wessels (2008). In particular, their work emphasizes two aspects of human competences that are relevant from an OM perspective: *knowledge* and *skills*.

Finally, the most recent class of inputs taken into consideration is the impact of the *customer*, a class which represents the main difference between manufacturing operations and service operations. The first proponents of the inclusion of customers as inputs are to be found in the fields of marketing and, in particular, experiential marketing (Schmitt, 1999). Paradoxically, service literature emphasizes the role of customer in service production and co-production (Schmenner, 1993); while the OM discipline does not explicitly insert it among factors of production. Customers are not only the buyers of a service product, but they actively contribute to the creation of the final output with their preferences, their behaviors, and the variability they introduce in the system; through their *knowledge* and *skills*.

Table 1. Service input in a broad perspective

Disciplines/stream of research	Input	Main Author(s) and Year
Political economy	Asset; Raw material	Ricardo (1817); Marx (1867); Solow (1956)
Service Operations Management	Information	Karmarkar (2004)
Social Science	Social capital	Bordieu (1986)
Human Resource Management	Human capital	Prahalad and Hamel (1990); Pfeffer (1994)
Service Dominant Logic	Knowledge; Skills	Lusch, Vargo, and Wessels (2008)
Experiential Marketing	Customer	Schmitt (1999)

The four main categories of input that represent the result of this analysis are summarized in Table 2. The new "variable" of our classification scheme, the input, can be breakdown into four main "categories" (tangible input, intangible input and people, that we split into the human capital adopted in the service operations and the customers, usually participating to the service production). Moreover, each category can be split in two main "generic components", as described in the table below.

Table 2. "Decomposing" the service input

VARIABLE	CATEGORIES	GENERIC COMPONENTS
Input	Tangible	*Asset*
		Raw materials
	Intangible	*Information*
		Brand/reputation
	Human Capital	*Knowledge*
		Skills
	Customer	*Knowledge*
		Skills

The resulting outcome is a classification scheme for services that will serve as a basis to map different configurations of service operations and to identify the impact that service industrialization strategies may have on these configurations.

The vertical axis is represented by the input, declined into its main four categories. The horizontal axis is derived from the work of Silvestro et al. (1992). It portrays the main process choices through three typologies: fixed process, modular process, and contingent process.

Table 3. Our input-process matrix for mapping service operations

		Process		
		Fixed	Modular	Contingent
Inputs	Tangible			
	Intangible			
	Human capital			
	Customer			

It is relevant to highlight that this framework does not aim at positioning service production models with a normative aim. There is no presumption of delineating neither "best practices" nor "worst practices". Rather, it is a helpful framework to understand and map service operations and their trajectories as industrialization strategies become more and more pervasive.

RESEARCH METHODOLOGY

Case study methodology was identified as the most suitable methodology in order to pursue our research objectives. Most research conducted in the OM field is based on rationalist research methods, primarily statistical survey analysis and mathematical modeling. However, since "… the explanation of quantitative findings and the construction of theory based on those findings will ultimately have to be based on qualitative understanding" (Meredith, 1998), case research is very important for operations management field (Voss et al., 2002).

More specifically, the case study approach is applied to the purpose of theory-building. Firstly, in order to derive important concepts and build the framework, a single in-depth case study (with secondary and primary sources) will be used. Secondly, multiple secondary source case studies will be analyzed and positioned in the framework.

A second methodological remark regards the investigated industry: the accommodation industry. The crucial feature that the chosen industry had to fulfill in order to represent an exemplary evidence was a clear presence of the four categories of inputs described by the framework, paving the way to subsequent research works into different industries. Accommodation industry meets this requirement. Moreover, the processes adopted in its operations can be shaped mixing portions of fixed processes, modular processes and highly customized processes, the ones we called contingent.

The first phase of our work consisted in a single, in-depth case study, developed in order to adapt the general framework to a specific industry and to sharpen the further analysis (Voss et al., 2002). General information on the case were triangulated with data obtained through a semi-structured interview at the Four Seasons Hotel in Milan, with the objective of extrapolating both specific and general characteristics of the accommodation service.

The second phase of the study focused on the analysis of eight case studies taken from the literature and combined with company information retrieved from their websites, specialized and general press, and other official documents (Voss et al., 2002). Case studies were therefore selected in accordance with the following criteria:

- available on the Harvard Business Publishing database (not mandatory);
- with teaching notes and focus on service operational process;
- strictly pertaining to the accommodation industry;
- related to service management or service operations management;
- describing at least one of the 3 main market segments ("high-end", "all-inclusive", "low-cost")

A first remark should be made on the number of cases entering the analysis. In order to choose the number of cases to be analyzed and studied, literature on research in OM has been reviewed. According to Yin (2004), while there is no ideal number of cases, a number between four and ten cases usually serves the purpose. With fewer than four cases, it is often difficult to generate theory with much complexity, and its empirical grounding is likely to be unconvincing. With more than ten cases, it quickly becomes difficult to cope with the complexity and volume of the data.

Moreover, the sample of companies involved in the research is non-randomly selected. In fact, according to Eisenhardt (1989) and Yin (2004), theoretical sampling can be more effective in order to have a sample that represents different types of companies. The sample includes both large and small/medium firms, selected in order to cover the market segments proposed in the analysis, namely "high-end", "all-inclusive", and "low-cost" hotels. These segments are chosen as there is no univocal classification of accommodation services (Jones, 1996), and the exploratory nature of this work is better suited to the analysis of extreme positioning and business models that can show significant operational differences.

THE FOUR SEASONS HOTELS IN MILAN

The company chosen as a starting point for our work is the Four Seasons Hotels. A first level of analysis focused on secondary information derived from multiple sources. Information was collected using published case studies, company web sites, financial reports, articles and other documentary analysis. This collection of secondary data was then complemented by a semi-structured interview aimed to develop specific components that can define operationally the inputs within the accommodation industry, and create the basis for the next multiple case study analysis.

The Four Seasons Hotel in Milan belongs to the high-end, full-service, luxury hotel segment. The positioning achieved and the competitive strategy adopted are supported by the use of specialized inputs belonging to the four categories outlined. All of them are crucial for the operations of a high-end, highly tailored accommodation service. In particular, emphasis is posed on the choice of location and on careful management of the building; while added value is provided by luxury furniture and environment, as well as by the supporting restoration services. Property of the building and real estate management is not considered a core competence into their specific business model.

Key features are data and information gathered in specific Customer Relationship Management (CRM) tools, and standards are enforced through routines and procedures. Marketing provides a significant contribution to operational activities through the careful management of both the brand name and the customers' expectations. In terms of relative dominance, the most crucial aspect sustaining the Four Seasons' strategic model is represented by their internal human resources. Personnel are carefully selected according to their personal traits and behavioral inclinations, and subsequently formed via ongoing continued training.

Customers are on one hand self selected thanks to the high rates of the Four Seasons Hotels' rate, that have been preserved constant even in the hardest phase of the last economic crisis. On the other hand, the company ask to its customers for behaviors both respectful towards its top class personnel and in line with the hotel standards and policies. It is not very frequent, of course, but it happened in Milan and in many other hotels of the same chain that "not compliant" customers have been refused, despite

of their purchasing power. From this case and thanks to the competence of the interviewed executives of the Four Seasons Hotels, industry specific components of the four main categories of input have been drawn, as shown in Table 3.

Table 4. Input, categories and industry-specific components for the accommodation industry.

Variable	*Category*	*Generic components*	*Industry-specific components*
Inputs	Tangible	Asset	Location
			Real estate
		Raw materials	Furniture
			Food and drinks availability
	Intangible	Information	CRM
			Routines & procedures
		Brand/reputation	Brand awareness
			Expectations management
	Human Capital	Knowledge	Managerial competences
			Employees' training
		Skills	Personal traits
			Work-related skills
	Customer	Knowledge	General expectations
			Hotel-specific knowledge
		Skills	Personal traits
			Technology-related skills

POSITIONING CASES

In order to analyze different contexts, a broad variety of geographical locations was considered. The choice of a heterogeneous sample is due to the purpose of exploring different choices in terms of innovation strategies and management in all market segments. The replication technique was used in the selection phase (Yin, 2004) in order to obtain contrasting results but for anticipated reasons (theoretical replication). In particular, for each of the three market segments, three case studies are analyzed: two of them have a confirmatory value and represent "common practices"; and one is purposely chosen to have an exploratory value and highlight an uncommon situation.

The following table summarizes key details and managerial issues emerging from each case study.

Table 5. The eight cases in summary

Market segment	**Company**	**Case Study Synopsis**
High-end	Four Seasons Hotels & Resorts	The application of ICT: pros and cons of high-tech in a high-touch industry, and its combination with a traditional high quality person-to-person approach focusing on HR.
	Orient-Express Hotels	Description of business model: high-end service in a completely individual and customized service offering. How to differentiate from competitors and increase customer loyalty.
	The Ritz-Carlton Hotel Company	Dealing with pressures from outside: a real estate management group insists on changing milestone procedures and routines in the hotel opening process.
All-inclusive	Americana	Deciding how to run a leased resort hotel in Jamaica: either as a traditional resort, or as an all-inclusive, club-type resort.

		Operational challenges and profitability of the two options.
	Canyon Ranch	Leader in the luxury segment of the SPA industry thanks to breadth and depth of offering. How to remain atop of competition, deciding between increasing human resources and/or ICT.
	Club Med	Near monopolist in the all-inclusive vacation market dealing with the issues of fluctuating customer satisfaction and differences in service quality. Focus on HR and human interaction.
Low-cost	Hostelling International	Federation of over 90 national youth hostels. Historically, how to craft and apply standards and routines for consistency across the different locations. Basic service offering at low rates.
	Omena Hotels	Automated hotel chain offering low rates in Finland. Online booking and payment, no check-in and check-out, no front-desk personnel. Additional services (food, room cleaning) are outsourced.
	Yotel	New hotel concept: fully automated venues located inside airports. Online booking, automated check-in, check-out, and payment. How to run a hotel without human resources.

DATA ANALYSIS AND DISCUSSION

The first step in the process of data analysis consisted in assigning a score to each sub-criterion determining the inputs axis and the process axis. Then the case studies were positioned in the framework, in order to map their service operations configuration and to understand how service industrialization strategies are impacting the current positioning.

The tables in Appendix 1 and Appendix 2 summarize the results of the scoring process for the two axes. For inputs, scores available for each criterion ranged from 1 to 3 (where 1 stands for "low", 2 for "average", and 3 for "high"). The total for each category of inputs is highlighted. The input category with the highest score is considered the *dominant input* on the Y axis, in order to allow the positioning of the cases on the matrix.

For the X axis, the process category, we adopted the same Silvestro's et al. (1992) approach. Score ranges from 1 to 3 (as above). The highest the score of each process category, the highest the dominance of that category onto the overall service operations model. The *dominant process* category allows us to classify case studies into one of the three defined process categories (fixed, modular, and contingent).

Case studies, including the Four Seasons Hotel, were therefore analyzed in light of the framework. Each emerging combination reflects the dominant process-input combination.

In order to combine the features described above in a more immediate and intuitive way, we represent data in our input-process matrix, where the different case studies are positioned.

This research work took into consideration the accommodation and lodging industry, and then de-construed it into the prevailing market segments, which were taken as the appropriate unit of analysis. It was precisely this choice that allowed discovering the coexistence of different operational and strategic options within the same sector.

First of all, it is quite clear that companies are concentrating their operations strategy towards the design of processes with both a reduced and more controlled degree of variability. Only 1 case out of 9 shows a high relevance of the contingent approach. Companies with different market positioning are

converging towards modular process and are differentiating their offer for different and original combinations of the dominant input.

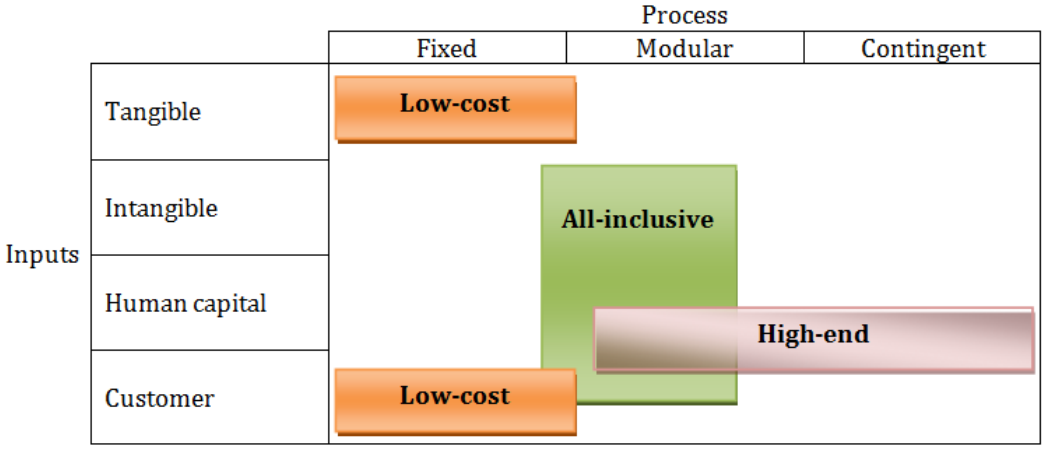
Table 6. Mapping cases through our input-process matrix

		Process		
		Fixed	Modular	Contingent
Inputs	Tangible	***Omena*** ***Yotel***		
	Intangible		***Americana*** ***Canyon ranch***	
	Human capital		***Club Med*** ***Four Seasons*** ***Ritz-Carlton***	***Orient Express***
	Customer	***Hostelling International***		

Moreover, the positioning of cases on the matrix revealed the emergence of well-defined clusters, which are segment-specific, as shown in Figure 2.

The Low Cost market segment clearly focuses their operations strategy on standardizing their processes. The search for efficiency is combined, even if in the same market segment, with a different emphasis on the enabling role of the input. In two cases, the industrialization strategy is based on the high level of automation through both the ICTs and mainly the facility. In the third case, the customer plays a relevant role in adapting its behavior to the company's value proposition.

Figure 2. Mapping the market segments through our input-process matrix



Moving towards the upper-left quadrant of the matrix implies benefiting from scale economies, efficiency, and fixed assets expenditures, which in turn allows low-prices to be a viable strategy. Conversely, moving towards the bottom-right extreme of the diagonal increases operational costs (and especially variable costs linked to the employees), and higher prices are needed to guarantee profitability of operations. Hence, the High End market segment emphasizes the relevance of the role of their human capital and search for efficiency moving its process from a contingent approach to a modular configuration. ICTs play a critical role in implementing this strategy, because they allow

preserving the control on processes while "outsourcing" relevant portion of them. The increased flexibility contributes to both enrich service functionalities and provide a higher and higher experience of consumption.

This dichotomy between high and low prices is made possible by customers' perception of the level of experience received. As customer experience has been defined as profoundly interrelated with human interaction – and the sensation of being "pampered" – its level increases moving down the diagonal, from asset-intensive clusters to human-intensive ones. This justifies price differences in the eyes of the customers, and guarantees long-term sustainability to all kinds of service operations models.

The All Inclusive market segment represents the search for combining a high level of experience making the luxury accessible to a wider mass of customers. Companies operating in this segment have to design modular processes, because they can enable a *mass-customization* strategy, but can discretionally emphasize the intangible input (through a broad and pervasive adoption of the ICTs to support any business process and its quick reconfiguration), both the competence and involvement of the human capital (in a Lean Principle perspective), and finally the customers' involvement, for example increasing the self service strategies.

CONCLUSIONS

This paper represents the first outcome of broader research project on the impact of the service industrialization on whole service context. Our expectation is that this phenomenon, early emerged and investigated in the information service, is diffusing its effects on productivity, labor, customer experience and business modeling on the whole service economy.

As argued before, we are convinced that a new way for researching on the service operations models is needed and have started our reflections on an original input-process matrix, that in our opinion can overcome the typical constraints of the output-process matrix when adopted in a service context because of the non-independence of the two variables in a service production and distribution model.

The application of our new scheme in the accommodation industry, such a specific and poorly investigated context, has demonstrated that this new framework can help in understanding and monitoring the dynamics of the service operations. Even if a small sample, our cases show that service industrialization can move the service operations from positioning along the ideal diagonal, as usually happens for these matrixes, towards concentrating around the modularity of processes and the discretionally combination of the main input categories.

On the other side, our sample cannot demonstrate the existence of a best positioning of the service operations models within the input-process matrix. Further research should contribute to validate the matrix and help in identifying categories of ideal combinations between process configurations and input categories.

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APPENDIX 1

Inputs		Case study analyzed								
Input Typology	Criteria	In-depth single case	Multiple case studies							
		Four Seasons Hotel	Ritz-Carlton Hotel	Orient-Express Hotel	Americana	Canyon Ranch	Club Med	Hostelling Int.l	Omena Hotel	Yotel Hotel
Tangible Asset	Location	XX	XXX	XXX	XXX	XX	XXX	XX	XXX	XXX
	Real estate	XX	XX	XXX	X	X	X	X	X	X
Tangible Raw materials	Furniture	XXX	XX	X	XX	X	XX	XX	XX	XX
	Food and drinks availability	X	X	X	XXX	XXX	XXX	X	XXX	XXX
Tangible Total		8	8	8	9	7	9	6	9	9
Intangible Information	CRM	XXX	XX	X	XXX	XXX	XXX	X	X	X
	Routines & procedures	XXX	XX	XXX	XXX	XXX	XXX	XX	XXX	XXX
Intangible Brand	Brand awareness	X	XX	XXX	XX	XX	XX	X	X	X
	Expectations management	XX	X	XX	XXX	XXX	XX	X	X	X
Intangible Total		9	7	9	11	11	10	5	6	6
Human resources Knowledge	Managerial competences	XXX	XXX	XXX	XX	X	XX	X	X	X
	Employees' training	XX	XXX	XXX	XXX	XXX	XXX	X	X	X
Human resources Skills	Personal traits	XXX	XXX	XXX	X	XX	X	X	X	X
	Work-related skills	XX	XXX	XXX	XX	XX	XXX	X	X	X
Human resources Total		10	12	12	8	7	9	4	4	4
Customer Knowledge	General expectations	X	XX	X	XXX	XXX	XXX	X	X	X
	Hotel-specific knowledge	X	X	XX	X	XX	XX	XX	XX	XX
Customer Skills	Personal traits	XXX	XX	X	X	X	XX	XX	X	XX
	Technology-related skills	X	X	X	X	XX	X	XX	XXX	XXX
Customer Total		6	6	5	7	8	8	7	7	7

APPENDIX 2

Processes	Case study analyzed								
Criteria	In-depth single case	Multiple case studies							
	Four Seasons Hotel	Ritz-Carlton Hotel	Orient-Express Hotel	Americana	Canyon Ranch	Club Med	Hostelling Int.l	Omena Hotel	Yotel Hotel
People v. equipment	XXX	XXX	XXX	XX	XX	XX	X	X	X
Contact time	XXX	XX	XXX	XXX	XXX	XXX	XX	X	X
Customization	XX	XXX	XXX	XX	XX	X	X	X	X
Discretion	XX	XX	XXX	XX	XX	XX	X	X	X
Front v. back office	XX	XX	XXX	X	X	XX	XX	X	X
Process v. product	XX	XX	XX	XX	XX	XX	X	X	X
Process Typology	Modular	Modular	Contingent	Modular	Modular	Modular	Fixed	Fixed	Fixed