



**Customer Influence on Supply Chain Management
Strategies:
An Exploratory Investigation in the Yacht Industry**

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**Customer Influence on Supply Chain Management Strategies:
An Exploratory Investigation in the Yacht Industry**

Structured Abstract

Purpose:

Customers influence companies’ operational strategies, and supply chain (SC) processes. In this vein, signals coming from the market must be translated into proper strategies in terms of production and supply. This study aims to provide an understanding on how to transform customers’ expectations into SC decisions. The yacht industry, encompassing both technical and emotional peculiarities, becomes this study’s driven focus to interrogate the interrelationship between supply and demand.

Design/Methodology/Approach:

The study explores the luxury yacht industry through exploratory case studies conducted with eight companies operating in Italy.

Findings:

It was found that a wide range of factors influenced customers. That is to say, brand reputation, other brands’ involvement in the final product and emotional appeal were the most distinguishing characteristics identifying emotion-oriented customers. In this sense, companies serving such customers adjusted their SC strategies to channel a direct emotional impact. It was noticed that personalization was pivotal and companies were increasingly required to customize and create unique products to attract and further satisfy the customers. Thus, multiple sourcing strategies were often employed with an increasing number of suppliers to ensure that increasing material supply need would be met. As for performance-oriented companies, cost, quality and innovation capabilities emerged as key signals to be embedded in operations management. Companies serving performance-oriented customers were characterized by low product value and medium level of customization, and kept their core activities, including design and architecture, vertically integrated. In order to generate cost advantages without compromising product quality, single sourcing strategy was largely implemented. What the findings suggested is that the customization level and the product value were positively correlated. To illustrate, companies having more exclusive products were found allowing their customization and customer involvement in higher degrees.

Originality:

Due to a relatively unexplored nature of the phenomenon, this study opted for a method by which individual and collective reconstructions were explored in a not well-investigated area, that is, the luxury yacht industry.

1. Introduction

During the 1990s, individual companies started becoming members of larger networks where independent units were transformed into integrated chains (Caniato et al., 2012; Vachon and Mao, 2008). Supply chain (SC) consists of upstream and downstream partners in the management boundary (Brandenburg et al., 2014). In this vein, SC encompasses a complex set of nodes that are intersected by information, cash flows and material flows (Persson, 2011). SC management (SCM) hence refers to the management of these intersected businesses to deliver products and series required by the end consumers (Harland, 1996). To this end, SCM could be described

as the management of physical, logical and financial flows in networks of intra- and inter-organisational relations (Mentzer et al., 2001).

Earlier studies address distinctive SC models to show how companies could understand the nature of demand for their products and how they could accordingly organise their SCs that could meet the demand. To this end, Fisher (1997) articulates that there exist two types of products, namely functional and innovative for which two types of strategies could be applied. Either an efficient or a responsive SC strategy could be utilized depending on the product type. However, Lamming et al. (2000) advance what was hitherto addressed and suggest that product innovation, complexity and uniqueness emerge as important aspects that could impact the way a supply network should be managed.

Nevertheless, product related characteristics must be combined with demand and lead times based indicators to better match market demands. Accordingly, Christopher and Towill (2002) develop a classification in accordance with market demand, product, and supply lead times. Yet, lean and agile SCs cannot be considered only available strategies. Reliability is an important facet within SCM. Amongst performance metrics are customer satisfaction (Beamon, 1999), level of customer perceived value of product, and customer complaints (Beamon, 1999) that indicate the extent to which customers influence companies' operational strategies.

In this vein, Childerhouse (2002) proposes a model to ensure that demand chains are engineered to match customer requirements. Product characteristics could be used as instruments to provide a segmentation to enable such a focus. ~~Such-A~~ classification could enable specific results generated in one industry to be placed in a ~~generic~~-broader context. However configuring SCs through different positioning strategies by focusing only on product might not extend implications; ~~because~~as product, brand and retail channel altogether appear to be driving SC configuration and management strategies (Brun and Castelli, 2008). On the whole, novel strategies must be sought to reorganise supply networks in order to advance the distribution towards larger consumer bases (Brun et al., 2017).

In today's growingly complex and competitive business structure, where customers are demanding for more and customized approaches are becoming increasingly dominant, the interface between marketing and ~~SC management~~-(SCM) appears to be more and more crucial. The definition of SCM, as the integration of supply and demand management, involves many practices common to the discipline and practice of marketing and marketing management (Pero and Lamberti, 2013). Customers affect operations management practices (Lee et al., 2015) and SC decision making processes, which are not integrated into marketing decisions are expected to cost the company twice (Bell and Chen, 2015). Relatedly, the quality of the company's strategic and tactical decisions is found being dependent on how the company makes marketing and SC decisions.

The significant benefits appear for those manufacturers who could successfully and strongly integrate production, logistics and marketing decision making (Bell and Chen, 2015). As earlier research shows, Gucci's decline stopped through Tom Ford's strategy in which his business model adoption maximised internal controls in terms of product sourcing, brand communication and distribution (Moore and Birtwistle, 2004). Furthermore, companies, skilfully managing the entire customer experience, benefit from customer satisfaction, increased employee satisfaction and increased revenue and they even find more applicable ways to collaborate across functions and levels (Rawson et al., 2013).

Yet, as Pero and Lamberti (2013) stress, in spite of such benefits, the nature and implications of the interrelationships of SCM and marketing have not been fully explored. Some negative consequences could still be drawn as a consequence of such inappropriate integrations. On the marketing side, for example, the lack of collaboration with the SC could lead to negative effects on the ability to embrace market and consumer oriented practices. On the SCM side, additionally, the lack of coordination between SCM and marketing could result in unsatisfying customer performance (Pero and Lamberti, 2013). Thus, gaining a deeper understanding on why and how marketing and SCM should be managed appears to be growingly imperative for both research and management.

This study attempts to analyse whether and to what extent ~~a particular industry characterized by low selling volumes and high product complexity, which has not been widely covered in prior research, that is, the yacht industry,~~ translates what customers expects into strategic SC decisions. The goal is to explore the extent to which companies operating in ~~a specific context, that is,~~ the yacht industry adjust their strategic SC decisions in accordance with their customer expectations. The remainder of the paper is organized as follows. First, theoretical background is provided in section 2, which is followed by research methodology in section 3. Findings are displayed in section 4, leading to the study's discussion in section 5. Lastly, conclusion and future research avenues are presented in section 6.

2. Theoretical Background Literature Review
2.1. The Interlink between Supply Chain and the Luxury Context

Luxury consists of very heterogeneous products and services, including personal goods, jewellery and highly complex systems such as jets and yachts. Luxury is distinctly separated from other traditional industrial sectors since a strong factor of human involvement, limited supply and the value recognition by others are some of the distinguishing features (Vigneron and Johnson, 2004). A luxury brand is considered the one whose ratio of functionality to price is low when the ratio of intangible and situational utility to price is high (Vigneron and Johnson, 2004). Legitimacy in luxury is essential, and therefore some factors whose significant consideration is pivotal to operate in luxury are highly critical.

Market characteristics emerge as a relevant set of contingent variables, which must be taken into account while evaluating the most appropriate SC strategy for a certain context (Caniato et al., 2009). However, not all contingent variables derived from SC models could be applied to companies operating in the luxury market (Caniato et al., 2011). To this end, there are some critical success factors (CSFs), including premium quality, heritage of craftsmanship, exclusivity, emotional appeal, global reputation, recognizable style and design, country of origin, uniqueness, technical performance, and creation of a lifestyle, which must be encompassed in order to obtain competitive advantage in the luxury markets (Caniato et al., 2009).

Nevertheless, a luxury product does not necessarily have the entire list of CSFs. For example, quality and technical performance are more highlighted areas for sports cars. The legitimacy of luxury expects to be accomplished with the excellence in terms of experience. After all, luxury is a distinguished offering, delivering symbolic and experiential value alongside functionality (Grigorian and Espinoza-Petersen, 2014). True luxury brands should go beyond offering 'luxury' at the product level. Design and communication management is only a part of the prerequisites contributing to the success of a luxury firm. Therefore, product line management,

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customer service management, and channel management, in other words the entire SC, appear to be relevant to achieve success in the luxury industry (Brun et al., 2008; Caniato et al., 2009).

Luxury should not be abstracted as a set of characteristics (Sjostrom et al., 2016). There must be harmony between functional, experiential and symbolic magnitudes. Given that the concept of demand chain is the whole manufacturing and distribution process as a sequence of events to serve the ultimate customer (Childerhouse et al., 2002), the SC has to be oriented to customer satisfaction whose influence affect not only physical aspects but also the SC structure (Ponticelli et al., 2013). On the one hand, partner selection, decision-making, equipment integration and information processing are some of the critical factors to consider for the companies belonging to low degree of supply network dynamics and high degree of focal firm influence (Harland et al., 2001); on the other hand, an integration between planning and demand forecasting is essential for those whose ability to respond to demand information is hindered by longer lead times (De Treville et al., 2004).

Earlier research suggested that a perceived limited supply of products advances customer value and preference for the brand. Such observations seem to be consistent with other finding articulating the importance of uniqueness (Brun and Castelli, 2013). Accordingly, it could be suggested that the inherent scarcity as well as the exclusivity of prestige goods could satisfy the need for uniqueness (Vigneron and Johnson, 1999). Additionally, it was found that companies that can skilfully manage the entire customer experience gain enormous rewards including customer satisfaction, increased employee satisfaction and increased revenue. They even discover more effective ways to collaborate across functions and levels (Rawson et al., 2013).

To excel in customer satisfaction and to provide peculiar luxury experiences, upstream and downstream parts of a luxury SC must be strategically coordinated. Yet, the supply network complexity requires a more structured supply management (Caniato et al., 2011). The choice of the SC configuration must also be coherent with critical success factors (Brun et al., 2017). But luxury companies often have difficulties at the chain level. On the one hand, the integration of traditional marketing initiatives to logistics, production and relationship management (Ponticelli et al., 2013); on the other hand, the difficulties of making unique products and selling them at higher prices become more and more challenging for the luxury companies (Riot et al., 2013). Luxury companies seek competitive advantage over brand exclusivity (Robinson and Hsieh, 2016), however the extant literature fails in providing a deeper understanding of how to design and implement ~~an~~-unique luxury experiences (Grigorian and Espinoza-Petersen, 2014).

Product complexity and brand reputation require an articulated structure since such companies must encompass both soft factors, incorporating lifestyle, exclusivity, emotional appeal, and hard factors, involving style, design and performance. Conversely, complex products encompass many technology-intensive and interrelated components, and therefore a deeper upstream and downstream network association is largely required. As previously indicated, a strong commitment to brand repositioning is a prerequisite for market success, and yet again marketing efforts cannot guarantee long-term stability (Caniato et al., 2011).

To summarize, existing knowledge gaps involve lack of theoretical approaches and set of tools to show how companies can actually manage the interface between SCM and marketing. Albeit being critical, supplier and customer relationships management are not merged in theory and therefore both ends of the

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value chain must be jointly investigated to provide theoretical as well as managerial implications. To this end, benefits as well as particularities of such integration could be explored so as to optimize the company performance. Furthermore, contextual variables must be taken into account given industry specific critical success factors. Hence, research angle could take an interesting posture in terms of how to configure SCM choices whilst working on customer experience optimization in specific industries. Along that line, the questions can become even more interesting when unconventional industries in which product complexity is high and selling volumes are low are given a closer look; for example, the luxury yachts industry do not fit hitherto consolidated SC models due to its industry characteristics. On the whole, there is a research call to understand how the intersection between marketing and operations management can be better managed, and how managerial practices can be given contributions on how to execute complex projects to meet not only customer expectations but also operational goals. The next section explains the research method by providing further details regarding research objectives and formulated research questions followed by identification of the sample and data execution.

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3. Research Methodology

3.1. Research Objectives

A deeper understanding is needed to understand how marketing and SCM could be managed in terms of management because some inappropriate integrations could result in less favourable situations. For instance, the lack of coordination between SCM and marketing might cause result unsatisfied customer performance. In this vein, luxury’s emotional and psychological dimensions offer many rooms for exploration. There is ample evidence coming from process based luxury segments such as personal luxury goods, nonetheless there is a research scarcity in terms of complex luxury products. In this sense, yachts could be considered one of the most complex and luxurious products pertaining to both technical and emotional challenges. Further, yacht is believed to be the outcome of a mix between high-tech systems with the craftsmanship (Ponticelli et al., 2013). Yachts present an interesting yet an unexplored angle to interrogate the interrelationship between SCM and customer relations management. This study accordingly attempts to analyse whether and to what extent companies operating in the yacht industry adjust their strategic SC decisions pursuant to customer expectations and how customer relationship is translated into SC operations.

3.2. Research Questions

Following In accordance with aforementioned theoretical observations objectives, the current study formulates two guiding research questions.

RQ1: Whether and to what extent do companies operating in the yacht industry adjust their strategic SC decisions pursuant to customer expectations?

RQ2: How is customer relationship management translated into SC practices?

This study thus opted for an exploratory method where individual and collective reconstructions were collected. To this end, case study methodology was pursued to seek, interpret and uncover the reality.

In this vein, research variables are uncovered in Table 1 to demonstrate theoretical constructs that research questions investigate. This study opts for an exploratory method where individual and collective reconstructions were collected. To this end, case study methodology was pursued to seek, interpret and uncover the phenomenon.

- Table 1+ to be inserted here -

3.2. Sample Selection

A case study design was pursued in which purposive sampling approach was taken. Italy emerges as a peculiar country for the global yacht industry. In 2015, Italy was selected as the top builder in the luxury yacht industry, as what was produced in the country accounted for 38% of the global production. As such, it was reported that 10.474 meters were actually produced in Italy while 27.365 metres were produced globally. In this vein, the Italian boating industry, employing 180.000 individuals, accounted for 2.5 billion Euros in 2014 (UCINA, 2016); further, the 93% of the national production are sold in foreign markets. Hence, this study was specifically conducted in Italy. This also ensured the case comparability, as potential contingency effects pertaining to cultural differences were eliminated. On the whole, case studies were conducted with eight Italian players operating in the luxury yacht industry. Table 1 accordingly displays the sample companies' characteristics.

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The product value represents a quantitative classification variable whose unit of measure is k€/meter. Literature classifies the yachts in high and ultra-luxury categories without defining a specific threshold. To this end, the sample companies were categorized depending on their value for one meter. Cases B, D, and H are characterized by a value that is much lower than the ultra-luxury yachts. Additionally, the customization level emerges as a qualitative classification variable. That is, a degree to which the customer is involved in the design and project finalization processes. For example, low customization refers to a yacht chosen from a catalogue by the final customer without a radical personalization. Semi-customized yachts, on the other hand, refer to a product range having wider customization opportunities. Finally, full customization implies that the company does not provide a product catalogue; rather it offers bespoke solutions in which customers are fully integrated in product design and project development phases. To illustrate, it could be stated that the customer has the entire control over the process, and depending on his choices, the company configures and executes the entire production. It is important to note that these two dimensions, namely, the customization level and the product value, are positively correlated. In other terms, the products having a higher market value are found having a higher customization degree.

3.3. Data Collection-Management&-Analysis

A structured analysis was performed to investigate the phenomenon. In 2016, a semi-structured interview protocol was developed and interviews were conducted with managers of abovementioned companies. Each interview lasted ~~between-around~~ 60 and 90 minutes while archival documents were additionally reviewed to triangulate the responses.

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Firstly, within-case analysis was conducted, which allowed the study to gain a broad understanding of the extent to which luxury yacht companies adjust their SC decisions pursuant to customer expectations. Subsequent to within-case analysis, cross-case analysis was employed to identify common patterns. Eventually, a coherent understanding was reached on how customer relationship management was translated into SC practises. Reliability was also obtained, as the case study protocol and internal case study database were arranged.

Topic guide including variables and research constructs utilised throughout the data execution process are displayed in Appendix A while cross case results are exposed in Appendix B by mapping individual cases in accordance with research variables. Respectively, the findings are presented in the following section.

4. Results

4.1. Findings pertaining to research question 1:

How do customer expectations drive strategic supply chain decisions?

The luxury experience is different from simply offering the highest possible level of quality. The luxury experience expects to be designed and executed differently to provide symbolic value and emotional attachment. Hence, it is pivotal to differentiate emotional components from technical aspects and it is imperative to translate signals coming from customers into SC practices. First and foremost, it is important to strategically analyse different customer typologies to better encapsulate how sample companies could execute their SCs accordingly. When sample companies were explicitly asked which factors were driving their customers, the results emerged in two main categories, namely ‘technical’ and ‘emotional’.

On the one hand, brand reputation, other brands’ involvement in the project, and emotional appeal were named as indispensable emotional factors triggering the final customers. In other terms, the final product gradually expects to be associated with symbolic value and emotional attachment. On the other hand, the technical drivers constituted rather performance-oriented facets, including cost, time, quality, innovation, and flexibility all of which were related to the final product’s functionalities. Furthermore, amongst technical drivers, it was possible to observe two sub-groups: ‘efficiency orientation’ and ‘innovation orientation’. Cost and time were highlighted as triggers of the customer desire toward efficiency; whereas, quality and innovation related features were named as the customers’ search for peculiarity.

On the whole, there appeared to be three main target customer groups for which companies were required to revisit their managerial cognitions. Such target groups encompassed Efficiency Oriented-, Innovation Oriented- and Emotion Oriented Customers. With an attempt to translate qualitative information into a quantitative scale, the research team gave each driver a value. To illustrate, each company was evaluated in terms of its customers’ expectations and how significant such drivers for the operations management perspective. The interviews along with the secondary data were carefully examined to see which factors were driving companies to accordingly adjust their practices. The values constitute 1, 3, and 5 representing low, medium and high prioritization, while the values of 2 and 4 represent drivers affecting managerial actions from low to medium and/or from medium to high. Each driver was given a weight pursuant to how companies receive these signals from their customer bases. Table 2 depicts the target customer

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orientation per case in addition to an understanding of which factors are critical to be deployed for each SC.

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Findings categorize customers based on their expectations, leading to suggestions for companies to further operationalize their actions to meet such anticipations. To this end, companies serving to Efficiency Oriented customers, such as Company D in our sample, were found aligning their operations to satisfy customers by providing fair cost and shortened lead-times. Companies serving Innovation Oriented Customer were observed focusing on their operations in order to advance the delivery of high quality products, provide more innovative solutions and offer more environmentally friendly solutions. Lastly, companies providing Emotion Oriented customers with products and/or services devoted their SC operations with a goal to deliver products that would valorise the prestige of their products for providing an emotional attachment and a feeling of empowerment. Table 3 displays an overall picture of how such drivers were translated into downstream orientation in each case.

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Yet, what must be highlighted is that these clusters were found strongly interlinked. Therefore companies were observed considering most of these aforementioned factors in their operations. Company B, for example, was chosen by customers those of driven by quality, innovative solutions and more environmental friendly products. Thus, Company B was observed fostering innovation and co-design. Still, they worked on other components to align their SC objectives with other needs. Company A, on the other hand, had a customer base that is attaching more importance to emotional appeal and country of origin. So the company was found aligning its operational practices to deliver a more customized experience. Having this initial classification in mind, the very next section aims to further explore the specific translation of customer expectations into SCM.

4.2. Findings pertaining to research question 2:

How are customer expectations translated into supply chain management?

This section aims at bringing the discourse back to the mismatches between practical knowledge and theoretical contributions, and at revealing what findings have revealed. Earlier research stresses that cost has become a decisive parameter, as customers increasingly started perceiving yachts as long-term investments. In this sense, a number of different sourcing strategies named to be deployed to ensure premium quality and underline lifetime value. Relatedly, vertical integration can ensure companies to be in direct control of their value added activities. Case B revealed that their customers chose its products due to the company's strong reputation, innovative solutions, and perceived quality. Production engineering, interiors & exteriors and accessories related activities were outsourced by using single sourcing through long-term partnerships in order to ensure the same level of cutting edge quality. Technology and interior & exterior design related activities, on the other

hand, were executed through a dual sourcing strategy between the buying firm and two suppliers. Information sharing along the chain has been growing as a key principle to meet customer demands and ensure the highest quality joint development strategies.

Design and pre-sales activities were mostly held in-house within the sample companies. Perceived quality and uniqueness were also observed getting dramatically affected by social and cultural values that might vary from customer to customer. That is to say, young customers were suggested being more driven by innovative product features. Hence, high degree of standardization emerges as an important feature to foster technical aspects, which inevitably results in low levels of customer involvement. Case D, accordingly, provided very precise and detailed indications to their suppliers to ensure homogeneity with respect to product specifications drawn by the customers. A specific strategy where suppliers and the buying firm jointly defined specifications was merely observed in interior and exterior design, including all goods concerning the yacht furnishing, marking information exchange as an open topic only with these suppliers.

As for the interior and exterior design, Case H provided the suppliers with precise information reflecting customer expectations. Interior and exterior design related furniture and/or accessories were purchased from only one supplier through a single sourcing strategy. Co-design emerged as a profound practice for production, engineering and technology clusters where a dual strategy was deployed. Regarding design, any plan pertaining to production and engineering related practices were jointly managed through a partnership between the buying firm and its suppliers, implying that grey box approach was pursued. Depicting and implementing a strategy on how to customize SCM according to customer demands plays a critical role. To this end, Case A gradually involved customers during design and development processes to increase overall satisfaction. Case A opted for taper integration with an attempt to create an optimal balance between in house production and outsourcing.

Subsequently, collaboration with both upstream and downstream emerged as a key principle in the managerial cognition to ensure and improve customer experience through emotions. Case A, accordingly, pursued Grey Box approach where outsourced design was equally accompanied by in-house design capability, and therefore joint development and joint decision-making were found characterizing the main foundation of upstream supplier management. In this vein, production based activities were only outsourced through dual sourcing strategy while interior as well as exterior design related activities, such as furnishing, were deployed through a wide range of suppliers.

Suppliers of Case A were categorized in two clusters. First group of suppliers were related to production, engineering and technology related processes, for which the company put cost, innovation capabilities, flexibility, know-how and quality as the main selection criteria. Second group of suppliers, on the other hand, dealt with design, architecture, interiors as well as exteriors, all of which were associated with the brand image. Hence, supplier selection criteria for this category were driven by supplier's reputation and time.

In order to provide a fulfilled customer experience, Case C customized many of its business activities by involving customers to the process, including the core steps of pre-sales services, design, development, and production. This could be attributed to the fact that the company did not want to compromise the quality perceived by the customer. In this vein, Case E enlisted customers' purchasing choices as brand reputation, other brands' involvement in the projects, innovation,

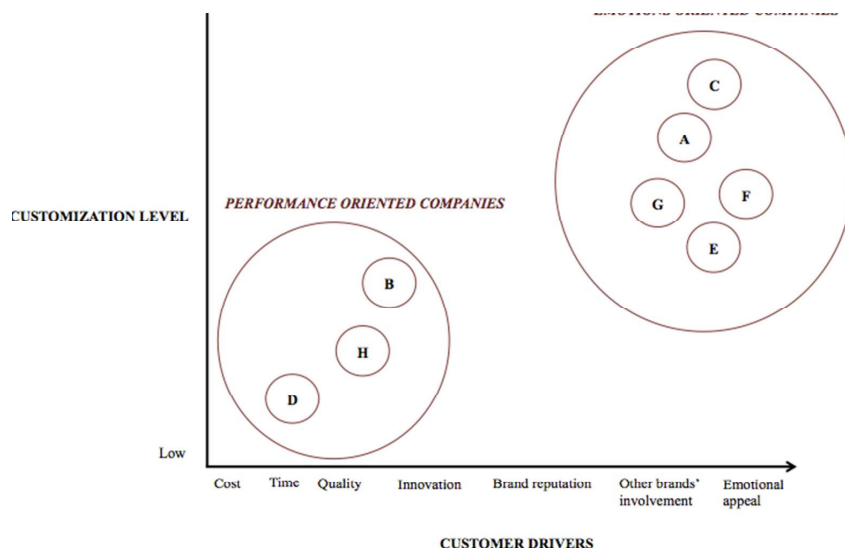
and emotional appeal. Quality, surprisingly, did not appear as one of the primary criteria influencing customers' purchase decisions. Case E correspondingly fostered its activities to enable customers to take a higher level of involvement in the development processes. Supplier relationship management were nurtured through several communication tools and practices, and grey box specification strategy was observed rather dominant where co-design and development were performed jointly between the buying firm and its suppliers.

Additionally, the customers of Case F were found being highly involved in all stages throughout the entire process and the company aimed at developing services targeting further customer involvement. Particularly, after sales activities were paid a growing attention to generate a 'serial buyers' effect. Interior and exteriors were paid a specific attention through both co-design and ingredient marketing with an attempt to optimize the customer experience. Thus, collaboration was fostered through co-design activities for production and engineering, co-branding for design and architecture and ingredient branding for accessories.

Within Case G, the customer involvement along the project development was observed getting higher in order to excel at customers relationship management. Despite reputation and emotional appeal being the decisive factors, quality and innovation became more and more important respectively. It was suggested that the customers were growingly paying attention to interiors and exteriors, and after sales services. Therefore, interiors and exteriors along with the accessories were designed and executed through a more customer-centric approach. Furthermore, design specifications, production and engineering as well as technology was adopted within grey box specification characteristics where decisions were made jointly between the suppliers and the company itself.

In order to reach competitive advantage and to provide an exquisite customer experience, eight companies under investigation adjusted some of their strategic SC decisions according to signals coming from their customers. Figure 1 depicts a matrix in which companies were positioned according to their product customization level and target customers' prioritized values. All in all, what customers have been seeking became a pivotal question for sample companies. Emotional appeal, other brands' involvement and brand reputation evidently fostered companies to increase their customization level and therefore to orient themselves toward emotion-oriented customers; whereas, performance oriented companies guided and driven by cost, time and quality indicators showed a more moderate trend toward product customization.

Figure 1 Company distribution depending on their customer orientation



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12 **5. Theoretical Discussion**

13 Luxury is meant to last, empower and make individuals feel exquisite. As earlier
14 findings highlight, the luxury experience is expected to go beyond basic product
15 and/or service offering. Creating emotional attachment and value experience has
16 become one of the main goals of luxury companies. Despite being already challenging
17 to reach a balance between technical and emotional aspects, this becomes even more
18 complex for certain industries, such as yacht, where high-tech systems are meant to
19 meet craftsmanship. This section aims to seek an understanding on how complex
20 supply networks could translate customer expectations into performance and how to
21 create a more structured supply management to stipulate both quality and emotional
22 appeal.

23 Findings support what was hitherto developed in the managerial literature and
24 suggest that a wide range of factors, including emotional and technical aspects,
25 influence the end-customers. As such, brand reputation, other brands' involvement
26 and emotional appeal become the most distinguishing characteristics of emotion-
27 oriented customers, as targeted by Cases A, C, E, F and G. In this vein, companies
28 serving emotion-oriented customers adjusted some of their SC strategies. In order to
29 create a direct emotional impact on the customers, companies defined design, and
30 production and engineering processes as their core activities and attempted to create
31 unique designs.

32 Pre-sales services were mostly vertically integrated and internal resources
33 were devoted to better understand the final customers with an overarching goal of
34 establishing an emotional connection. Further, it was noticed that personalization was
35 pivotal and companies were increasingly required to customize and create unique
36 products to attract and further satisfy their customers. However, companies were
37 often in need of high numbers of materials, even a large number of very same goods
38 in some cases. To this end, multiple sourcing strategies were often employed with an
39 increasing number of suppliers to ensure the need for increasing material supply to be
40 met.

41 Additionally, customers' perceptions were observed being improved through
42 companies' co-branding strategies. To this end, many of aforementioned companies
43 relied on prestigious brands (including Armani and Fendi) to collaborate with other
44 brands and to utilize ingredient branding for mostly furniture and design related
45 architecture features. What is suggested is that information sharing was crucial for
46 these companies. Since customer involvement is required to be having a high degree,
47 trust and relational capabilities among suppliers were vital not only to transmit
48 customer expectations to further upstream suppliers but also to ensure product quality
49 while tailoring the emotional appeal for customers. Emotion-oriented companies were
50 defined by the highest product value and therefore it is clear that high degree of
51 customer involvement and maximum product customization emerged as the most
52 critical features to be maintained.

53 As for performance-oriented companies, cost, quality and innovation
54 capabilities emerged as key signals to be embedded in operations management. Cases
55 B, D and H, characterized by low product value and medium level of customization,

kept their core activities including design and architecture vertically integrated. In order to generate cost advantages without compromising product quality, single sourcing strategy was largely implemented. Since standardization was deployed to a great extent, the same and yet a limited number of suppliers were found being utilized. To this end, SC structure shall be suggested to become less complex compared to other cluster.

6. Conclusion and Future Steps

The current study aimed at understanding to what extent companies operating in the yacht industry adjusted their strategic SC decisions pursuant to their customers' expectations. Results were generated throughout multiple case studies conducted with eight companies operating in luxury yacht industry in Italy. Exploratory case study methodology was pursued to seek meanings, interpret and uncover the creation of social reality through open dialogue and negotiation with participants

It was unveiled that luxury companies operating in the yacht industry must amend their strategy by moving toward market orientation and innovation. Uninterruptedly, supply networks must be coordinated to provide the best product quality while delivering intangible values. What was explored suggest that the customization level and the product value are positively correlated. Hence, more customization and, accordingly, a higher degree of customer involvement is required.

In other terms, companies having more exclusive products were found allowing their customization and customer involvement in higher degrees. It is suggested that the companies serving to consumers seeking efficiency and technical facets need to advance performance related aspects. To this end, utilizing very same suppliers could ease standardization and shorten lead times. Companies targeted by emotion-oriented customers, on the other hand, must deliver an emotional attachment and uniqueness. Celebrity designer collaborations and high level of customization must be ensured in a way in which their SC structure could respond such demands.

6.1. Managerial Implications

This study provides an original contribution. To the best of our knowledge, there are not many studies representing complex industries where there exists a crucial intersection between technical and emotional aspects. Hence, this study delivers a focal as well as a novel point on which managers could see how certain characteristics of their operational strategies could be revisited to be amended according to their customer's orientation. The luxury yacht industry was found being affected by a number of factors. That is, brand reputation, other brands' involvement in the final product and emotional appeal were the most distinguishing characteristics that identify emotion-oriented customers. Therefore, companies whose client bases are more emotional are suggested to adjust their practices to further emphasise emotional appeal. Personalisation, in this vein, is suggested as a pivotal angle; therefore, managers must coordinate their suppliers to constantly customize and create unique products to attract and further satisfy the customers. As for the customers seeking rather performance related results, quality and innovation must be constantly met and satisfied. Consequently, low to medium level of customization could be adopted; while core activities, including design and architecture, could be vertically integrated. In order to generate cost advantages without compromising product quality, single sourcing strategy could be implemented. Lastly, customization level and product value are found being positively correlated. To this end, companies having more

exclusive products must adjust their operational strategies to further involve their customers' involvement degree and improve personalization approaches.

6.2. Future Research Directions

While providing an overall understanding and vital suggestions on how to embark on emotional and technical aspects simultaneously, the current study invites scholars to further investigate the phenomenon. This section aims at providing what future research could explore. To start with, the study could be introduced to other contexts within different industrial settings. Hence, future research could explore how the existence of some contingent variables could affect the translation of customer requirements throughout SCM. That is to say, a different country and/or cross-country analysis could be chosen. Changes in the product typology could be another interesting angle to consider. As such, other complex luxury products could be investigated to understand how high-end luxury consumers deem certain things, for example in terms of luxury cars or jewellery, and how SC practices are arranged accordingly. Lastly, about the methodological stance, it can be seen that findings are not generalizable, as what this study channels have been generated based on observations and interpretations. Such observations could be utilized as initial steps for theory building, nonetheless it shall not be considered the final product. Therefore, survey methodology could be introduced to reach a wider audience and to provide evaluations by going through various stages of validation to reach statistical saturation.

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Customer Influence on Supply Chain Management Strategies:
An Exploratory Investigation in the Yacht Industry

Tables

Table 1 Research variables

Research Variable	Definition	Specification
<i>Competencies</i>	Companies' ability to perform efficiently. The identified seven blocks are sensitive dimensions that are utilised to represent companies' strongest competencies and that influence the customer experience	Pre-sales services, Production & engineering, Technology, Design & architecture, Interiors & exteriors, Accessories, After-sales services
SCM	Supply chain management	
<i>Drivers</i>	Factors that companies take into consideration while selecting their suppliers	Quality, Sustainability, Time-service level, Cost, Brand reputation, External know-how, Innovation capabilities, Technology expertise, Flexibility
<i>Sourcing</i>	A procurement process, which is part of the purchasing strategy. The number of suppliers and the type of the relationship to be formed with the suppliers are greatly important	Multiple sourcing, Single sourcing, Dual sourcing, Parallel sourcing
<i>Specification</i>	The extent to which suppliers are involved in the product development phase depending on their collaborative configurations	Black box (supplier driven), Grey box (joint specifications), White box (customer driven)
CRM	Customer relations management	
<i>Drivers</i>	Factors that customers take into consideration during their purchase decisions	Quality, Sustainability, Time, Cost, Yacht – producer brand reputation, Other brand involvement in the projects, Innovation, Emotions
<i>Customer involvement</i>	The degree to which customers involve in the project development	Low, middle, high

Table 2 Sample companies

Case Study	A	B	C	D	E	F	G	H
Number of employees	>200	<20	>250	<10	>250	<20	<20	<70
Product value (K€/m)	490	50	1000	35	370	300	418	35
Luxury category	Ultra	High	Ultra	High	Ultra	Ultra	Ultra	High
Customization degree	High	Medium	High	Low	Medium	High	High	Medium
Outsourcing	60-80%	40-60%	60-80%	80-100%	40-60%	80-100%	20-40%	20-40%

Table 3 The classification of target customer groups

	Emotions Oriented			Innovation Oriented			Efficiency Oriented		Target Customer
	Reputation	Other brands' involvement	Emotional appeal	Quality	Innovation	Sustainability	Time	Cost	
A	5	5	5	3	3	3	3	3	<i>Emotion oriented</i>
	5	5	5	3	3	3	3	3	
B	5	3	5	5	5	4	5	4	Innovation oriented
	4.4	5	5	4	4	3	4	4	
C	5	5	5	4	4	3	4	4	<i>Emotion oriented</i>
	5	5	5	4	4	3	4	4	
D	5	3	5	5	2	2	5	5	<u>Efficiency oriented</u>
	4.4	5	5	4	5	4	4	4	
E	5	5	5	4	5	4	4	4	<i>Emotion oriented</i>
	5	5	5	4	5	4	4	4	
F	4	5	5	4	5	4	4	5	<i>Emotion oriented</i>
	4.7	5	5	4	5	4	4	5	
G	5	4	5	4	4	3	3	3	<i>Emotion oriented</i>
	4.7	4	5	4	4	3	3	3	
H	5	2	5	5	5	3	5	3	Innovation oriented
	4	2	5	5	5	3	5	3	

Table 4 Sample companies' performance orientation pursuant to customer expectations

Orientation	Case	Performance Area
Emotions	A, C, E, F, G	Brand Reputation, Other Brands' Involvement, Emotional Appeal
Innovation	B, H	Quality, Sustainability, Innovation
Efficiency	D	Cost, Time

Appendix

A – Topic guide

1. Company Information

- Company name
- Interviewee name
- Role in the company
- Percentage of the outsourcing (X) on final product’s cost
 - $X < 20\%$
 - $20\% < X < 40\%$
 - $40\% < X < 60\%$
 - $60\% < X < 80\%$
 - $80\% < X$

2. Company Competences

- Which of the seven blocks mainly represent your main competence for the company?
 - Pre-sale
 - Production & engineering
 - Technology
 - Design & architecture
 - Interiors & exteriors
 - Accessories
 - After sales
- How do you manage these aforementioned blocks?
 - Which activities are completely managed internally?
 - Which key activities are managed internally?
 - Which activities are only partially managed internally?
- Which of the seven blocks are mainly characterized by high asset specificity (degree of company’s asset customization) and risk of opportunism (spill-over risk from supplier)

3. Supplier Relationship Management

Taking into account only the blocks where activities are outsourced:

- Which ones are important for supplier selection?
 - Quality
 - Sustainability
 - Time – service level
 - Cost
 - Brand reputation
 - External know-how
 - Innovation capabilities
 - Technology expertise
 - Flexibility
- Which is the sourcing strategy (for the categories identified as the blocks)? How has this strategy been changing by time?
 - Single sourcing
 - Dual sourcing
 - Multiple sourcing

- Which is the collaboration approach? How has this strategy been changing by time?
 - Co-design
 - Co-branding
 - Ingredient marketing
 - Licensing
- Which is the specification and integration strategy? How has this strategy been changing by time?
 - Black box (supplier driven)
 - Grey box (joint development)
 - White box (customer driven)
- Which is the visibility degree within the relationship in terms of information sharing? How has this strategy been changing by time?
 - Low
 - Medium
 - High
- Which are the tools that the company uses to support supplier relationship management? How has this strategy been changing by time?
 - Team working
 - Colocation (inter-organisational teams)
 - IT systems
 - Web platforms
 - Regular meetings

4. Customer Relationship Management

- According to your experience and your target clients, which ones are of importance for your customers? How has this strategy been changing by time?
 - Quality
 - Sustainability
 - Time
 - Cost
 - Yacht – producer brand reputation
 - Other brand involvement in the projects
 - Innovation
 - Emotions
- Which is the degree of customer involvement during the project development? How has this strategy been changing by time?
 - Low
 - Medium
 - High
- Once customer drivers and the involvement degree are identified, are you able to manage customer's request along the entire supply chain? How has this strategy been changing by time?

B – Data analysis – Cross case results

	<i>Case A</i>	<i>Case B</i>	<i>Case C</i>	<i>Case D</i>	<i>Case E</i>	<i>Case F</i>	<i>Case G</i>	<i>Case H</i>
<i>% Outsourcing</i>	60-80%	40-60%	60-80%	80-100%	40-60%	80-100%	20-40%	20-40%
<i>Core activities</i>	Production & Engineering, Design & Architecture	Pre-sales Services, Production & Engineering, Design & Architecture	Pre-sales Services, Production & Engineering, Design & Architecture	Pre-sales Services, Design & Architecture	Production & Engineering, Technology, Design & Architecture, Interiors & Exteriors, After-sale service	Pre-sale service, Production & Engineering, Design & Architecture, After-sale service	Pre-sale services, Production & Engineering, Design & Architecture, Interiors & Exteriors, After-sale service	Design & Architecture, Technology, After-sale services
<i>Vertical integration</i>	Pre-sales	Production & Engineering, Design & Architecture	Pre-sales, Production & Engineering, Design & Architecture	Design & Architecture	Production & Engineering, Technology, Pre-sale service, After-sale service	Pre-sale services	Pre-sale services, After-sale services	Pre-sale services, Design & Architecture, After-sale services
<i>Asset specificity</i>	Production & Engineering		Pre-sales, Production & Engineering	Design & Architecture	Production & Engineering, Technology, Design & Architecture, Interiors & Exteriors	Design & Architecture, Production & Engineering	Production & Engineering	Production & Engineering, Technology
<i>Drivers for supplier selection</i>	Cost, flexibility, quality, time, brand reputation	Quality, flexibility, cost, sustainability, innovation	Flexibility, time, brand reputation, cost, quality	Quality, time, cost, external know-how, technology expertise	Quality, cost, brand reputation, innovation	Cost, quality, innovation capabilities, technology expertise	Time, innovation, technology expertise, flexibility	Quality, time, technology expertise, brand reputation, innovation
<i>Sourcing strategy</i>	Multiple sourcing	Single sourcing (Pre-sale service);	Dual sourcing	Single sourcing (Production &	Dual sourcing	Single sourcing (After-sale	Dual sourcing (Production &	Single sourcing

		Multiple (After-sale service); Dual (Technology, Interiors & Exteriors, Accessories)		Engineering, Interiors & Exteriors, Accessories); Dual sourcing (Technology); Multiple sourcing (After-sale service)		service); Dual sourcing (Design & Architecture); Multiple sourcing for the others	Engineering, Technology), Multiple sourcing (Interiors & exteriors, accessories)	
<i>Collaboration with suppliers</i>	Ingredient-branding (Interiors & Exteriors, Accessories); Co-branding (Design & Architecture); Co-design (Production & Engineering, Design & Architecture)	Ingredient branding (Technology, Accessories) Co-branding (Interiors & Exteriors in future), Licensing (After-sale in future), Co-design (Production & Engineering)	Co-design (Production & Engineering, Design & Architecture, Technology), Co-branding (Design & Architecture); Ingredient branding (Interiors & Exteriors, Accessories)	Co-design (Production & Engineering); Ingredient branding (Technology, Accessories, Interiors & Exteriors); Licensing (After-sale service)	Co-branding and Ingredient branding (Design & Architecture, Interiors & Exteriors, Accessories) Co-design (Design & Architecture) (increasing importance in the future)	Co-design (Interiors & Exteriors, Design & Architecture, Production & Engineering)); Ingredient branding (Accessories, Interiors & Exteriors); Co-branding (Design & Architecture)	Production & Engineering; Co-design; Technology and Design & Architecture: Co-design; Interiors & Exteriors and Design & Architecture: Co-branding, Ingredient branding (+ Co-design and Licensing in future); Accessories: Co-branding, Ingredient branding, Licensing	Co-design (Production & Engineering, Technology); Ingredient branding (Accessories, Interiors & Exteriors)

<i>Specification strategy</i>	White box	Grey box	Black box (Technology, Design & Architecture, Accessories); Grey box (Production & Engineering); Grey/White box (Interiors & Exteriors, After-sale service)	Grey box (Interiors & Exteriors); White box (Production & Engineering, Technology, Accessories, After-sale service)	Grey / White box	Black box (Accessories); Grey box (Production & Engineering, Design & Architecture, Interiors & Exteriors); Black box (Technology)	Grey / White box	Grey box
<i>Information sharing</i>	High	Medium	Medium	Medium	Medium	High	High	Medium
<i>Customer drivers</i>	Brand reputation, emotional appeal, other brands' involvement	Quality, emotional appeal, brand reputation, time, innovation	Brand reputation, emotional appeal, other brands' involvement, sustainability	Quality, time, cost, brand reputation, emotional appeal	Brand reputation, other brands' involvement, innovation, emotional appeal	Cost, innovation, emotions, other brands' involvement	Quality, sustainability, time, cost	Quality, time, brand reputation, innovation
<i>Customer involvement</i>	High	Medium	High	Low	Medium	High	High	Medium

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