

Metainformações das revisões bibliográficas (2022)

1. Referência completa do artigo

ADRODEGARI, F et al. *The transition towards service-oriented business model: A european survey on capital goods manufacturers*. International Journal of Engineering Business Management, v 10, p. 1–10, 2017.

2. Autores (um registro por autor)

FEDERICO ADRODEGARI

2.1. Tipo: professor / aluno (que tipo) / parceiro de empresa: Doutor, professor assistente e pesquisador do laboratório Research and Innovation for Smart Enterprises da Universidade

2.2. Idade: NADA

2.3. Anos pesquisando no assunto: NADA

2.4. Instituição: University of Brescia

2.5. Índice-h: 15 (Google Scholar), 13 (Scopus), NADA (Research gate)

2.6. Colegas da mesma instituição: Gianmarco Bressanelli, Daniela Bonetti, Marco Perona, Andrea Bacchetti, Università degli Studi di Brescia, Nicola Saccani, Andrea Alghisi, Marco Ardolino, Massimo Zanardini e Theoni Paschou

2.7. Quantidade de artigos já publicados: 54 (Google Scholar), 33 (Scopus), 62 (Research gate)

2.8. Outros artigos significativos (mais citados) sobre outros temas:

Bressanelli, G., Adrodegari, F., Perona, M., Saccani, N.. Exploring how usage-focused business models enable circular economy through digital technologies. Sustainability 10 (3), 639 (2018). – 306 citações

Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M., Adrodegari, F. Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. Industrial Marketing Management 88, 225-237 (2020). – 217 citações

Paschou, T., Rapaccini, M., Adrodegari, F., Saccani, N. Digital servitization in manufacturing: A systematic literature review and research agenda. Industrial Marketing Management 89, 278-292 (2020). – 130 citações

2.9. Outros artigos significativos (mais citados) neste tema:

Adrodegari, F., Alghisi, A., Ardolino, M., Saccani, N.. From ownership to service-oriented business models: a survey in capital goods companies and a PSS typology. Procedia CIRP 30, 245-250 (2015) – 60 citações

Adrodegari, F., Alghisi, A., Saccani, N. Towards usage-oriented business models: an assessment of European capital goods manufacturers. Proceeding of 21st EurOMA conference, Palermo (ITA) (2014) – 11 citações

2.10.Co-autores recorrentes: Christian Kowalkowski, Chiara Cimini, Gianmarco Bressanelli, Cosimo Barbieri e Daniela C. A. Pigosso

ANDREA BACCHETTI

2.11.Tipo: professor / aluno (que tipo) / parceiro de empresa: Doutor e pesquisador na Universidade

2.12.Idade: NADA

2.13.Anos pesquisando no assunto: NADA

2.14.Instituição: University of Brescia

- 2.15.Índice-h: 14 (Google Scholar), 11 (Scopus), NADA (Research gate)
- 2.16.Colegas da mesma instituição: Luca Bertazzi, Marco Perona, Simone Zanoni, Nicola Saccani, Federico Adrodegari, Stefano Bonetti, Andrea Alghisi, Marco Ardolino, Massimo Zanardini, Beatrice Marchi e Massimo Collotta
- 2.17.Quantidade de artigos já publicados: 60 (Google Scholar), 32 (Scopus), 89(Research gate)
- 2.18.Outros artigos significativos (mais citados) sobre outros temas:
- Bacchetti, A., Saccani N. Spare parts classification and demand forecasting for stock control: Investigating the gap between research and practice. *Omega* 40 (6), 722-737 (2012) -- 307 citações
- Zheng, T., Ardolino, M., Bacchetti, A., Perona, M. The applications of Industry 4.0 technologies in manufacturing context: a systematic literature review. *International Journal of Production Research* 59 (6), 1922-1954 (2021) -- 119 citações
- Pour, M. A., Zanardini, M., Bacchetti, A., Zanoni, S. Additive manufacturing impacts on productions and logistics systems. *IFAC-PapersOnLine* 49 (12), 1679-1684 (2016) -- 71 citações
- 2.19.Outros artigos significativos (mais citados) neste tema: NADA
- 2.20.Co-autores recorrentes: Ting Zheng, Aitor Arnaiz, Dmitry Ivanov, Roberto Pinto e Renato Redondi

NICOLA SACCANI

- 2.21.Tipo: professor / aluno (que tipo) / parceiro de empresa: Professor associado da Universidade
- 2.22.Idade: NADA
- 2.23.Anos pesquisando no assunto: 2015 a 2018
- 2.24.Instituição: University of Brescia
- 2.25.Índice-h: 33 (Google Scholar), 25 (Scopus), NADA (Research gate)
- 2.26.Colegas da mesma instituição: NADA
- 2.27.Quantidade de artigos já publicados: 150 (Google Scholar), 76 (Scopus), 132 (Research gate)
- 2.28.Outros artigos significativos (mais citados) sobre outros temas:
- Ardolino, M., Rapaccini, M., Saccani, N., Gaiardelli, P., Crespi, G., Ruggeri, C. The role of digital technologies for the service transformation of industrial companies. *International Journal of Production Research* 56 (6), 2116-2132(2018) -- 418 citações
- Bacchetti, A., Saccani, N. Spare parts classification and demand forecasting for stock control: Investigating the gap between research and practice. *Omega* 40 (6), 722-737 (2012) -- 307 citações
- Bressanelli, G., Adrodegari, F., Perona, M., Saccani, N. Exploring How Usage-Focused Business Models Enable Circular Economy through Digital Technologies. *Sustainability* 10 (3), 639 (2018) -- 306 citações
- 2.29.Outros artigos significativos (mais citados) neste tema:
- Adrodegari, F., Alghisi, A., Ardolino, M., Saccani, N. From ownership to service-oriented business models: a survey in capital goods companies and a PSS typology. *Procedia CIRP* 30, 245-250 (2015) - 60 citações
- Adrodegari, F., Alghisi, A., Saccani, N. Towards usage-oriented business models: an assessment of European capital goods manufacturers. *Proceeding of 21st EurOMA conference, Palermo (ITA) (2014)* -- 11 citações
- 2.30.Co-autores recorrentes: NADA

AITOR ARNAIZ

- 2.31. Tipo: professor / aluno (que tipo) / parceiro de empresa: Doutor e chefe do departamento
- 2.32. Idade: NADA
- 2.33. Anos pesquisando no assunto: NADA
- 2.34. Instituição: Tekniker
- 2.35. Índice-h: 17 (Google Scholar), 12 (Scopus), NADA (Research gate)
- 2.36. Colegas da mesma instituição: Marta Hernaiz, Kerman López de Calle - Etxabe, Oscar Revilla, Eduardo Gilabert, A. Igartua, Ignacio Lazaro, Gonzalo Gil, Alberto Villar, Izaskun Fernandez, Susana Ferreiro, Egoitz Konde, Iñaki Bravo-Imaz, Estibaliz Aranzabe, Loreto Susperregi
- 2.37. Quantidade de artigos já publicados: 133 (Google Scholar), 52 (Scopus), 85 (Research gate)
- 2.38. Outros artigos significativos (mais citados) sobre outros temas:
Holmberg, K., Adgar, A., Arnaiz, A., Jantunen, E., Mascolo, J., Mekid, S. E-maintenance. Springer Science & Business Media (2010) -- 140 citações
Ferreiro, S., Arnaiz, A., Sierra, B., Irigoien, I. Application of Bayesian networks in prognostics for a new Integrated Vehicle Health Management concept. Expert Systems with Applications 39 (7), 6402-6418 (2012) -- 80 citações
Bediaga, I., Mendizabal, X., Arnaiz, A., Munoa, J. Ball bearing damage detection using traditional signal processing algorithms. IEEE Instrumentation & Measurement Magazine 16 (2), 20-25 (2013) -- 74 citações
- 2.39. Outros artigos significativos (mais citados) neste tema: NADA
- 2.40. Co-autores recorrentes: Marta Hernaiz, Kerman López de Calle - Etxabe, Oscar Revilla, Eric Levrat e Rosa Maria Basagoiti

THOMAS MEIREN

- 2.41. Tipo: professor / aluno (que tipo) / parceiro de empresa: filiado ao Instituto
- 2.42. Idade: NADA
- 2.43. Anos pesquisando no assunto: NADA
- 2.44. Instituição: Fraunhofer Institute for Industrial Engineering IAO
- 2.45. Índice-h: 21 (Google Scholar), 8 (Scopus), NADA (Research gate)
- 2.46. Colegas da mesma instituição: Walter Ganz e Jens Neuhüttler
- 2.47. Quantidade de artigos já publicados: 118 (Google Scholar), 17 (Scopus), 41 (Research gate)
- 2.48. Outros artigos significativos (mais citados) sobre outros temas:
Bullinger, HJ., Fähnrich, KP., Meiren, T. Service engineering—methodical development of new service products. International Journal of Production Economics 85 (3), 275-287 (2003) -- 729 citações
Meiren, T., Liestmann, V. Service Engineering in der Praxis. Kurzstudie zur Dienstleistungsentwicklung in deutschen Unternehmen (2002) -- 159 citações
Fähnrich, KP., Meiren, T., Barth, T., Hertweck, A., Baumeister, M., Demuß, L. Service Engineering—Ergebnisse einer empirischen Studie zum Stand der Dienstleistungsgesellschaft in Deutschland. Irb: Stuttgart(1999) -- 154 citações
- 2.49. Outros artigos significativos (mais citados) neste tema: NADA
- 2.50. Co-autores recorrentes: Walter Ganz, Bo Edvardsson, Lars Witell, Kwang-Jae Kim e Adrienne Schäfer

3. Estrutura do abstract (contextualização, gap/lacuna, objetivo, metodologia, resultados e conclusão)

Contextualização: New trends for capital goods manufacturers push towards selling the products usage or performance rather than the product itself. This evolution from traditional business models, based on the product sales, to new service-oriented business models (BMs), has received increasingly attention both in the academic and managerial community.

Gap/lacuna: Despite this, a limited application of service offerings has been observed in the capital goods sector.

Objetivo: and has two objectives: (a) to empirically investigate the way BMs of capital goods companies are configured and (b) to analyse the degree of service orientation of such BMs.

Metodologia: This article reports the results from a survey carried out during the T-REX project, funded by the European Union under the Seventh Framework Programme.

Resultados: NADA

Conclusão: Finally, the main challenges for practitioners emerged from the survey are discussed in this article, highlighting directions for future research.

4. Palavras-chaves e se foram citadas no abstract.

Palavra-chave	Quantidade de vezes citadas no abstract
Servitization	0
Service transformation	0
Survey	2
Business model	2 [+3 = BM]
Capital goods	3

5. Introdução e/ou revisão bibliográfica introdutória, afirmações / constatações (tipo) versus citações (essa lista pode ser longa, por isso coloquei em forma de tabela)

Afirmação / Constatação	Tipo (*1)	Referência (*2)
Increased competition in the capital goods sector challenges product-based competitive advantage, and manufacturers should embrace new strategies based on other sources of competitiveness	C	Baines T and Lightfoot HW (2013)
capital goods manufacturers are moving from product-centric offerings to services and solutions in order to increase and provide steady/balanced revenues during time, and to build sustainable competitive advantage	J	Kamp B and Parry G (2017)
services represent one of the main elements to design such new strategies where firms' value propositions move from selling products to provide product-service-systems	C	Gebauer H, Paiola M and Saccani N. (2013)
transformational processes whereby a company shifts from a product-centric to a service-centric business model and logic	C	Kowalkowski C, Gebauer H, Kamp B, et al (2017)
transformation implies not only a redesign of the value proposition but also companies need to reshape their business models (BMs)	G	Baines TS, Lightfoot HW, Benedettini O, et al. (2009) Kindström D. (2010)

		Adrodegari F and Saccani N. (2017)
manufacturers undertaking such a shift face numerous challenges	G	Alghisi A and Saccani N (2015)
that may lead to the so-called service paradox.	G	Gebauer H, Fleisch E and Friedli T (2005)
even though several manufacturers are considering to undertake servitization paths a limited application of service-oriented BMs (SOBMs) has been observed, especially in manufacturing companies	J	Lay G, Schroeter M and Biege S. (2009)
The successful implementation of advanced services, in fact, is still portrayed as an exception, and mostly concern large-sized companies.	C	Copani G (2014)
in order to investigate the degree of service orientation of BMs of capital goods manufacturers, with particular reference to the machinery, automation and transportation (i.e. forklift truck and earth moving machines) sectors. The analysis is based on a structured framework, in order to advance knowledge on specific BM's features and gaps.	L	
we used as a reference framework the BM Canvas	C	Osterwalder A and Pigneur Y (2010)
which has gained considerable attention among practitioners and scholars alike and can be used also to describe SOBMs.	C	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017)
Each element (building block) of the reference framework is investigated through one or more variables and specific questions of the survey, following the BM framework developed by Adrodegari et al.,	C	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017)

(*1) Tipos de afirmação / constatação: G (geral), C (contexto), J (justifica o artigo / pesquisa), L (**explicita a lacuna**). A constatação da lacuna é muito importante. Mas é difícil diferenciar J de L.;

(*2) Inserir somente autor(es) e ano. A referência completa encontra-se no próprio artigo

6. Casos citados e principais características dos casos

Os autores não apresentam caso específico de empresas, apenas citam o de forma geral o segmento das empresas de bens de capital (máquinas, automação e transporte) que são orientadas ao serviço e foram estudadas.

“carried out on around 100 manufacturers, within a European project, in order to investigate the degree of service orientation of BMs of capital goods manufacturers, with particular reference to the machinery, automation and transportation (i.e. forklift truck and earth moving machines) sectors” [página 2]

7. Questão da pesquisa, Foco (escopo) e Objetivos (geral primário e secundários)

Questão da pesquisa: não são definidas em forma de pergunta: entender e conhecer as características de empresas de bens de capital orientadas ao serviço [página 2]

Foco (escopo): survey com 100 empresas europeias [página 2]

Objetivos:

(a) to empirically investigate the way BMs of capital goods companies are configured and (b) to analyse the degree of service orientation of such BMs. [página 1]

8. Caso seja uma survey sobre o assunto: qual o diferencial deste artigo (análise da revisão) com relação a outras revisões e/ou surveys? (segundo o autor, caso ele tenha citado). Avaliar cada um dos diferenciais separadamente, caso o autor tenha feito isso. Pode montar uma tabela se for o caso.

Os autores referenciam cada dado estudado da survey com referências de outros autores, porém não de forma comparativa, apenas como complemento de literatura (referencial teórico).

Afirmção / Constatação	Característica da survey	Referência
Although value sources such as minimization of life cycle costs and operational risks are among the constituent elements of SOBMs	PREPOSIÇÃO DE VALOR	Neely A. (2008)
Is still mainly anchored to basic services.	PREPOSIÇÃO DE VALOR	Baines T and Lightfoot HW (2013)
In the machinery and automation sectors, advanced and relational services are rarely, if never, offered and this partially explains the low adoption of SOBMs.	PREPOSIÇÃO DE VALOR	Lay G, Schroeter M and Biege S (2009) Copani G (2014)
Companies should develop customer-specific value propositions that are linked to specific customer needs.	SEGMENTO DO CLIENTE	Storbacka K. (2011)
Customers should be segmented using multiple and advanced criteria	SEGMENTO DO CLIENTE	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017)
Increased customer interaction is a distinguishing factor for SOBMs	RELACIONAMENTO COM O CLIENTE	Kindström D. (2010)
Information sharing between the company and the customer is a prerequisite to establishing close customer relationships.	RELACIONAMENTO COM O CLIENTE	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017) Reim W, Parida V and Örtqvist D. (2015)
The service delivery is a critical activity in SOBMs as it can directly affect customer satisfaction and retention.	CANAIS	Kindström D. (2010)
Field technicians interact frequently with customers, which makes them a key resource also for sales as they serve to establish a trust relation with customers.	CANAIS	Uлага W and Reinartz WJ. (2011)
Companies need to reconfigure the after-sales channel by internalizing/externalizing specific resources	CANAIS	Storbacka K. (2011)
Develop new resources dedicated to service provision	CANAIS	Kindström D. (2010)
Companies need to rethink the way through which they create customer awareness about the new service offering	CANAIS	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017)

		Reim W, Parida V and Örtqvist D. (2015)
Critical resource enabling SOBMs is the information and communication technologies (ICTs).	RECURSOS CHAVE	Porter ME and Heppelmann JE. (2014)
ICT systems allow to share information and knowledge extracted from data collected among different functions	RECURSOS CHAVE	Storbacka K. (2011)
Fully integrated, and applications that support supply chain management and collaboration activities should be implemented.	RECURSOS CHAVE	Neff AA, Hamel F, Herz TP, et al. (2014) Adrodegari F, Bacchetti A, Pinto R, et al. (2015)
Critical resource for most manufacturing firms is the installed base of goods.	RECURSOS CHAVE	Uлага W and Reinartz WJ. (2011)
Managing the installed base is crucial, as it is a source of knowledge and creates critical insights about the products' operation, Enabling new service offerings and revenue models to be developed	RECURSOS CHAVE	Adrodegari F, Kowalkowski C, Saccani N, et al. (2017)
The need for capital is high, since the company may remain the owner of the product, companies must have enough capitals or obtain funding from partners to sustain the new service offering	RECURSOS CHAVE	Tukker A. (2004) Barquet APB, de Oliveira MG, Amigo CR, et al. (2013)
Investigated the perceived importance and the adoption level of a set of activities that typically support the development and delivery of SOBMs.	ATIVIDADES CHAVE	Kindström D and Kowalkowski C. (2014)
The service innovation may require industrial firms to change their internal organization, modifying current processes.	ATIVIDADES CHAVE	Kindström D and Kowalkowski C. (2009)
Respondents perform research and development (R&D) on product, whereas R&D on services is perceived as the least important activity among respondents although it is crucial to develop new SOBMs.	ATIVIDADES CHAVE	Gaiardelli P, Cavalieri S and Saccani N. (2008)
Service-related activities (e.g. service engineering, new service development, etc.) are fundamental to successfully and effectively expand the service business.	ATIVIDADES CHAVE	Kindström D and Kowalkowski C. (2009)
Companies should be aware of the products' total cost of ownership in order to price contracts correctly	ATIVIDADES CHAVE	Kindström D, Kowalkowski C and Alejandro TB. (2015)
The transition from traditional BMs to SOBMs has to be supported also by service engineering practices.	ATIVIDADES CHAVE	Bullinger HJ, Faehrich KP and Meiren T. (2003)
Activities such as fleet operation and maintenance practices have to be performed in order to mitigate the risks that such BMs generate for the manufacturer	ATIVIDADES CHAVE	Rapaccini M and Visintin F. (2015)

To achieve these objectives, remote monitoring as well as analysis on data collected remotely from the installed base would be truly beneficial.	ATIVIDADES CHAVE	Arnaiz A, Konde E and Alarco'n J. (2013)
In SOBMs, relationships with key partners, being suppliers of physical, human or intellectual resources, should be long-lasting,	PARCEIROS	Storbacka K. (2011) Barquet APB, de Oliveira MG, Amigo CR, et al. (2013)
For instance in order to improve spare parts management	PARCEIROS	Persson F and Sacconi N. (2009)

9. Metodologia

9.1. Descrição Geral: Nome do(s) método(s); se é qualitativo, quantitativo ou combinação de ambos

Método survey (quantitativo)

9.2. Fontes (referências) utilizadas sobre os métodos científicos adotados. Pode montar uma tabela: método x fonte.

[página 2]

Reference framework (Canvas) – Figura 1	Osterwalder A and Pigneur Y (2010)
one or more variables and specific questions of the survey, following the BM framework developed	Adrodegari et al. (2017)

9.3. Período de análise das referências (publicações desde que ano)

Artigos de 2001 a 2017. [referências]

9.4. Tamanho da amostra analisada

Inicial 100 empresas, porém 95 contribuíram para o estudo. [página 2]

9.5. Quantidade de referências citadas

35 artigos referenciados. [referências]

9.6. Foram realizadas observações complementares?

NADA, não foram apresentadas complementações.

9.7. Fontes da revisão (casos, periódicos específicos, e quais bases de dados). Quais as justificativas para escolher essas fontes.

NADA, não foi citado fonte das revisões e nem os motivos de escolhas.

9.8. Estratégia para construção da string de busca

NADA

9.9. String de busca

NADA

9.10.Filtros

NADA

9.11.Técnica / método de análise utilizada

Questionário enviado por email para as empresas, enviado primeiramente para piloto de três empresas, os gerentes industriais foram responsáveis por responderem. Com esses questionários pilotos, foi possível identificar e definir os termos utilizados e o tamanho da survey, porém não foi especificado se foi quantidade de perguntas ou empresas participantes. O novo questionário final foi traduzido para outros idiomas para envio as demais empresas, que foram selecionados por meio de amostras não probabilística. [página 2]

Identificado o porte das empresas participantes em micro e pequena, média e grande [página 2]

As respostas foram transferidas para mapas codificados, e cada resposta foi analisada individualmente para verificar erros de respostas; e foram separadas por critérios em cada variável de estudo. [página 3]

9.12.Metodologia para definição de pesquisas futuras

NADA, apenas cita coleta de dados em demais regiões geográficas.

10. Resultados

10.1.Quantidades resultantes antes e após cada filtro

NADA

10.2.Definições (resultantes da análise ou mesmo adotadas como premissas no início da publicação)

In line with the results of the revenue model analysis and confirming that these companies are still product-oriented. [página 9]

10.3.Evolução da pesquisa / das publicações no assunto

NADA

10.4.Comunidades / “tribos” / “igrejas”/ áreas de conhecimento / disciplinas identificadas

NADA

10.5.Características de cada tribo (os atributos e/ou explicações são definidos pelo próprio artigo)

NADA

10.6.Principais “achados” (*findings*)

PREPOSIÇÃO DE VALOR

Important differences emerge among industrial sectors; in fact, companies operating in the transportation sector appear to have a more extended service offering with a consistently higher average score on almost all the services that aim to increase the product life cycle and this can enable new SOBMs. On the other hand, manufacturers have to understand deeply their customers’ needs and problems first, then develop new value propositions more customer-oriented, and finally, build new BMs that allow generating and delivering expected value. [página 3]

Listou os principais serviços que agregam valor.

SEGMENTO DO CLIENTE

In fact, segmenting customers with specific criteria can enable the development of new, more customer-oriented value propositions. Therefore, customers should be segmented using multiple and advanced criteria. However, our results show that the most common criteria to segment customers are still based on the revenue generated by customers through the product sales (84%) and their geographical location (72%), both based on information easy to collect for companies. [página 3]

Listou os principais critérios de segmento do cliente.

RELACIONAMENTO COM O CLIENTE

Shows that the majority of the responding companies has still not implemented such tools. [página 4]

Listou ferramentas que auxiliam no relacionamento com o cliente.

CANAIS

All different after-sales activities are performed mainly internally by the majority of the companies (67%) and no particular patterns emerge looking at how answers are distributed across different contextual variables with the exception of the supply chain positioning. [página 5]

Respondents consider the assessment of product reliability as the most important way to help customer to evaluate their offering, followed by other tangible and basic methods, such as comparisons of performance, use cases and on-site visits of previous and successful clients, that are typical of traditional product-oriented BM. [página 5]

Listou as características de pós-venda e as características de valores para os clientes.

RECURSOS CHAVE

Companies seem to adopt only rarely integrated and advanced information systems that can ease and support the information management needed to develop SOBMs. [página 5]

Listou os recursos de TI que as empresas usam e os dados que coletam/tratam/monitoram.

ATIVIDADES CHAVE

Quite surprisingly, we observe a relatively low importance attributed to marketing activities although the development of a new, more service-oriented value proposition could greatly benefit from the adoption of specific marketing activities to better understand customer needs. In line with other results, it also emerged that manufacturers are still focusing mainly on product-related activities and resources. [página 6]

Moreover, in order to effectively deliver the new service offerings, manufacturers have to develop new sales strategies. [página 6]

Despite that, our analysis shows that a wide number of companies is still not performing these activities: In fact, only 20 companies assert that they have a high experience on the application of total cost of ownership models and in techniques for reliability assessment of product subsystems. [página 6]

In fact, new service development and service engineering activities may help product-centric firms to successfully extend their service offering and its integration level with the tangible component. To this end, specific processes, responsibilities, methods and tools should be defined. [página 6]

Apresentou as atividades que as empresas estudadas classificam como importante.

PARCEIROS

Due to the specific sectors analysed, it is not surprisingly that respondents are actually oriented towards long-lasting partnerships, although the majority of them (56%) still prefers to manage a wide portfolio of suppliers instead of focusing on few key partners. [página 7]

MODELO DE RECEITA

Contribution of revenue components related both with advanced services such as service contracts (based on preventive/predictive maintenance) and with new SOBMs such as renting or product usage-fee (pay-per-x contracts) each contribute is overall under 6% of the turnover. [página 8]

Our results show that although the main reason for developing SOBMs stands in the possibility of locking-out competitor and achieve new competitive advantages, quite surprisingly, customers are perceived more as an obstacle rather than a driver in the servitization journey. [página 8]

ESTRUTURA DE CUSTO

Most of the respondents perceive production and purchase as the most impacting activities, in line with the results of the revenue model analysis and confirming that these companies are still product-oriented. [página 9]

10.7.Outros tópicos que não foram tratados aqui (sugestão para nova meta-informação ou resultados significativos)

NADA

10.8.Proposições de pesquisas futuras (geral)

Only basic and easy to collect data such as maintenance history, or product failure modes and effects are widely managed by European companies. This is definitely another important gap on the way to develop new BMs. [página 6]

Advanced fleet operation and maintenance practices are still scarcely diffused among European companies: This represents a significant gap to be fulfilled by companies who are seeking to offer new service-oriented value propositions to their customers. [página 7]

10.9.Contribuições (para academia / prática / ambas?)

This article contributes both to the practice and academic discussion about servitization, providing empirical data and adopting a novel perspective (i.e. the BM one) to analyse the service orientation of manufacturing firms. In particular, the business practice has been investigated through a specific research framework that defines a set of elements that can be used to assess the service level of companies operating in capital goods sector. Moreover, through this novel approach, we also identified significant gaps for

each element to be fulfilled by companies seeking to develop new service-oriented value propositions. [página 9]

11. Conclusões

11.1. Trabalhos futuros (que o autor se propõe, diferente das proposições futuras)

In particular, the data collection can be further extended in terms of sector and geographical areas besides the analysed ones, to increase the generalizability of the findings presented in this article. In addition, since little attention has been devoted to the description and formalization of SOBMs in literature, future works should focus on the development of guidelines, tools or techniques to be used by companies to design and implement SOBMs. [página 9]

This highlights a gap between what is posited by the literature in terms of rationale and benefits from servitization, and the actual adoption of this strategy by the capital goods industries surveyed in this article. [página 9]

11.2. Limitações

NADA

12. SUA ANÁLISE

12.1. Pontos fortes

Apresenta o status atual das empresas europeias de bens de capital quanto ao novo modelo de negócio: orientado para o serviço. Embora acredite-se que as empresas estejam mudando o olhar para o serviço, o estudo mostrou que as mesmas ainda permanecem voltadas para o modelo de negócio de produto; o setor de transporte está um pouco mais avançado para o novo modelo.

12.2. Pontos fracos

Foi estudado somente uma parte de servitização das empresas, que são as características, que as mesmas apresentam perante ao novo modelo de negócio (orientado ao serviço), não definindo nada de serviço propriamente dito para os modelos de negócios dessas empresas.

Estudo com empresas por meio de análise não probabilística, deixando assim o resultado tendencioso e analisado baseado nos que foram respondidos. Embora a survey com análise probabilística seja mais difícil de se fazer, a mesma apresenta melhor valor estatístico.

O artigo especifica survey em empresas da Europa, porém não fica claro se foi em toda Europa, uma vez que empresas da Itália e Alemanha somam juntas 81% da pesquisa.

12.3. Sugestões para melhoria do artigo

Adicionar o questionário da survey nos anexos

Indicar período do estudo com as empresas

13. Figuras ou tabelas importantes (caso você queira copiar e citar nos tópicos anteriores)

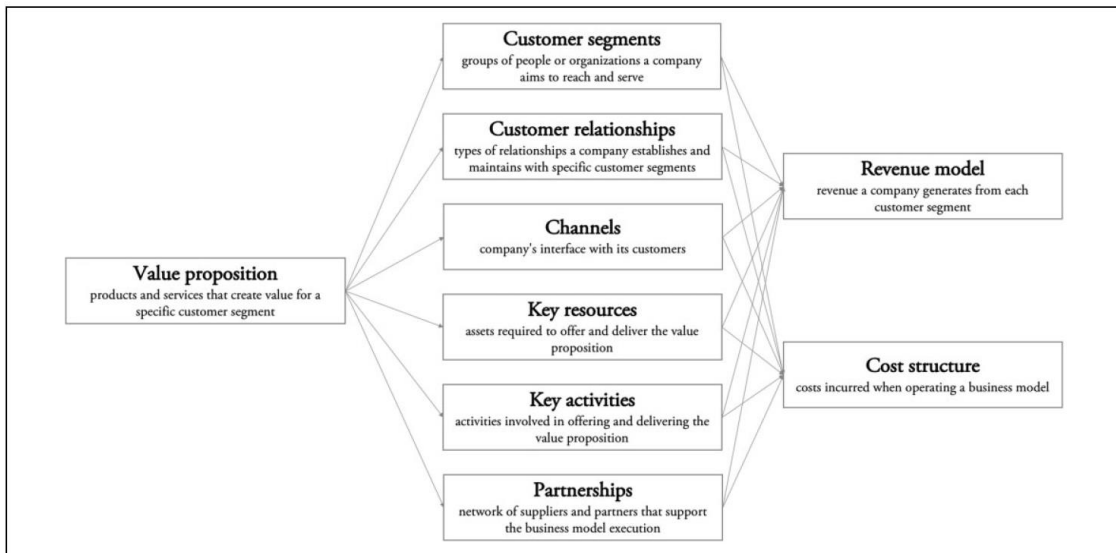


Figure 1. Reference framework.¹²

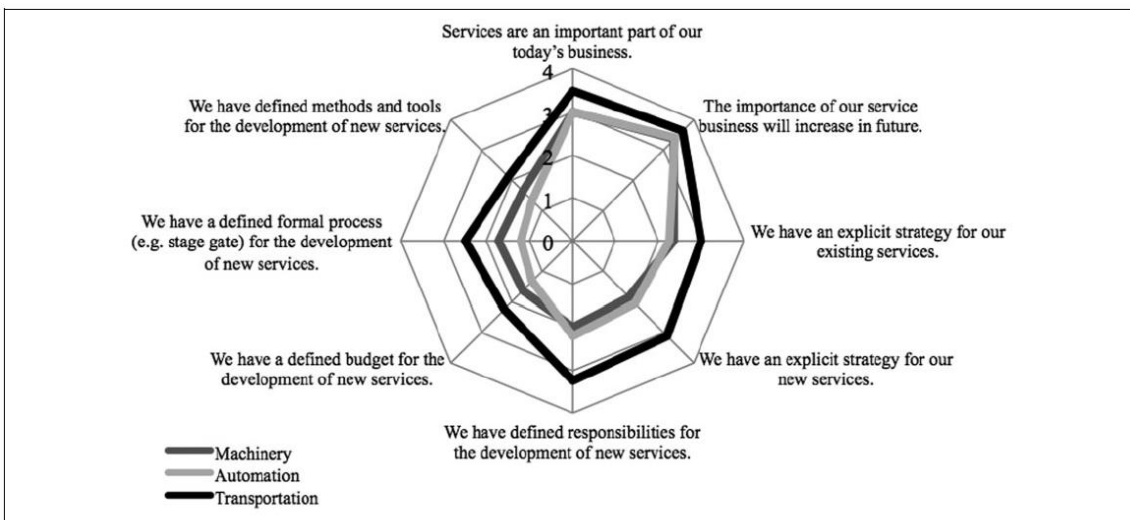


Figure 10. Orientation towards the service business and service engineering practices across industry sectors (0 – strongly disagree and 4 – strongly agree).