VALUE CO-CREATION IN A PROJECT SETTING: A SERVICE-DOMINANT LOGIC PERSPECTIVE

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Research is needed to understand how value co-creation could improve project outcomes and benefits. Many studies have shown projects do not meet mandatory objectives. Further, few projects configure and design value propositions to deliver a service experience and value beyond the minimum requirements. A solution to these problems may lie in a shift on projects: from production to a service focus. Service-Dominant Logic (yet a contested arena) has become a paradigm in the marketing and is providing influence in management studies. It offers a fresh perspective to see projects as a service with a focus on outcomes. It also provides an alternative standpoint to analyse the benefits delivery and effectiveness for the long-term: value-in-use and context. However, Service-Dominant Logic needs to be operationalised as it might not work in isolation. Service Design could be used to make a bridge between practice and theory. Contrary to Service-Dominant Logic, Service Design is rooted in practical applications and could mobilise a service logic. This paper contributes to the research community by exploring the link among value co-creation, service-dominant logic and service design in the project context.

Keywords: service design, service-dominant logic, value co-creation

INTRODUCTION

Product centricity has, to some extent, dominated both past and modern forms of exchange in the project business. Yet, projects have extended periods of exchange with a service value-in-use and benefits post completion in operational use that may go beyond the client and end-user. Moving towards a service logic is not straightforward process as it requires a substantial re-organisation of any business (Leiringer and Bröchner 2010). A fundamental concept within a service logic is value co-creation which has implications in both execution and the operations phase. Value could be considered as a unique benefit and is enabled, in different contexts (places and times), during usage (Vargo and Lusch 2016). In that vein, value co-creation could be defined as a joint and unique process to improve both the condition of actors (Grönroos 2011) and the project outcome as an ultimate goal. Caution should be taken with value co-creation: if it is not properly managed, it could lead to co-destruction (Echeverri and Skålén 2011). The concept of value co-creation is still in its infancy (Ostrom *et al*., 2015) but could be regarded as the next practice in project business (Smyth 2015). The notions of value are not new. For instance, Value Management, driven by workshops, is focused on the improvement of the system functionality but with a strong inclination on achieving a cost reduction in practice.

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Service-Dominant Logic (SDL), from the marketing school of value, goes beyond that. It provides an alternative standpoint to analyse the benefits delivery and effectiveness for the long-term: value-in-use and context (Vargo and Lusch 2016). However, SDL presents contradictions and some of its principles might not work in the projects (Hartmann *et al.*, 2014). Much of the SDL research is around high volume products/services, contrary to projects where uniqueness is a major characteristic. Therefore, further research is needed in order to bring together the concepts of value co-creation and the increasingly prevalent notion of SDL into projects (Smyth *et al.*, forthcoming 2017).

This paper argues that co-creation of value needs to be managed before the service is in use (contrary to current trends in the marketing literature). Also, that value co-creation reaches its peak intensity in the design phase of a service (through co-design) with implications in subsequent phases of a project. The main objectives of this paper are to illustrate: (1) a critical review of SDL; (2) the connection between SDL and Service Design (SD); (3) a mini case to exemplify how SDL could be used as a theoretical lens to examine projects and value realisation. In the next section, previous research on service(s) is briefly introduced. This section lays the basis for the demonstration of SDL/SD. Finally, a summary and implications for the construction are provided.

Background in service(S) research

Construction projects can be considered as a service to offer value through the application of socially constructed resources (knowledge and skills), which represent the main source of strategic benefit (Vargo and Lusch 2004). Bröchner (2010) argues that construction presents some alignment with service industries. However, it is largely producing a "good" for exchange and is manufacturing oriented (Bettencourt *et al.*, 2014), in which value comes from inputs within the firm and its supply chain. Exceptions exist e.g. Build–Operate–Transfer type projects, where services are supplied, such as finance and facilities management.

Although SDL has recently appeared, a service logic previously termed 'servitization' encouraged manufacturing firms to add value through the delivery of services (Vandermerwe and Rada 1988). Recent research shows that contradictions and struggles of organising arise in servitisation (Chan *et al.*, 2015). Successful examples provided by large organisations, e.g. IBM and GE, might entice project organisations towards this logic. Yet, organisations struggle to improve their competitive advantage (Neely 2008; Gebauer *et al.*, 2011). Additionally power inequalities, conflicts and fragility of long-term relationships need careful consideration (Alderman and Ivory 2007). Artto *et al.*, (2008) point out that some organisations prefer to stay upstream from the delivery of the project due to the demanding impacts that this logic may invoke. In general, an organisation willing to innovate and move up the value chain, e.g. high-value integrated solutions (Davies and Hobday 2005), does so slowly because new capabilities need to be developed under new business models (Wikström *et al.*, 2009). Schmenner (2009) pointed out that the move to servitisation has been led by organisations with limited manufacturing strength. For instance, IT organisations have found this easier, e.g. via the 'Software-as-a-Service' delivery model where the software is centrally hosted in the cloud but the hardware is not being acquired by the client (nevertheless, the hardware is still part of the solution but not on premise). This kind of example is given as it has led to a common misunderstanding in the service logic: it does not preclude a focus on 'goods' but

considers an integration of products and service(s) with an eye on the project outcome (Lusch and Vargo 2014).

A focus on the outcome/value could be obvious. Yet the client is usually inclined to focus short term on the financial part of the equation: value-for-money. This can result in poor value/benefits to stakeholders. As widely known, traditional project management methodologies (e.g. PMBOK from PMI or Prince2) are largely limited to project inputs around time-cost-quality/scope with the assumption that this leads to financially successful and/or appreciated outcomes (impact and benefits delivery) (Morris 2013). Thus, fresh solutions are needed to raise value propositions. Chesbrough (2011) points out that not only the client but also other actors in the service ecosystem are able to co-create innovative service offerings. Marketing (with SDL) at that particular point plays a pivotal role on how to jointly develop projects in order to ensure dense value propositions (Smyth 2015).

A Review of Service-Dominant Logic (SDL)

The SDL perspective reaches back into political economy to use value (Vargo and Lusch 2004). It is an alternative lens to the economic and social exchange of human's activities. SDL may fit at a societal level (Edvardsson *et al*., 2011) but may not work at a micro level (Grönroos 2011). Service is defined as "the application of competencies (knowledge and skills) for the benefit of another entity or the entity itself" (Lusch and Vargo 2014:12). That is, socially constructed resources (operant resources) such as skills, knowledge and technology (e.g. BIM) are able to provide a strategic benefit to organisations. Those kind of resources are used to manage production (operand resources) and shared institutional logics e.g. conflicts.

In SDL, suppliers work with, rather than for, the client and other multiple of actors in the service ecosystem e.g. partners, competitors, the environment, and other societal stakeholders (Akaka *et al*., 2013). The premises of SDL (Vargo and Lusch 2016) have been part of scholarly development with roots in co-production, agile production, co-creation experiences, value constellations and others (cf. Norman and Ramirez 1993, Prahalad and Ramaswamy 2004). SDL has however integrated such development (Grönroos 2011) and it is now claimed that SDL may offer superior value (Karpen *et al*., 2012). In contrast, SDL has been sharply criticised and problematised e.g., Service Logic (Grönroos 2011); Value-in-the-Experience (Helkkula *et al*., 2012); Customer-Dominant Logic (Heinonen *et al*., 2015). For instance, the latter redefines the focus of value-in-use to be in the customer sphere. However, giving all the value-in-use to the customer might not be reflected in value-in-exchange to the supply organisations (e.g. rents in the housing sector).

SDL is not the panacea and its misunderstandings could lead to "fatal management decisions and actions" (Grönroos 2011:288) due to the misuse of its pivotal concept: value co-creation (Grönroos 2011). Analytical concepts rather than metaphorical and normative prescription should be developed to support operationalisation (Wright and Russell 2012). The value co-creation process has been further developed (Payne *et al*., 2008) yet remains unclear, e.g. dis-benefits of co-creation of value (Echeverri and Skålén 2011); start and finish point (Grönroos 2011); Return-on-Marketing-Investment (Smyth 2015); reasons for co-participation (Nambisan and Baron 2009); unknown role of the customer and supplier in co-creation in use (Grönroos 2011). In fact, some roles (e.g. end-user; client) can be interchangeable, complicating examination of the exchange for Business-to-Business (B2B) relationships. SDL with the Actor-to-Actor approach (A2A) claims to break free of the previous and simplistic

institutional logics. However, actors must be clearly identified (Grönroos 2011) rather than being treated equally, as SDL theory largely initially did, although the institutional dimension has been reintroduced recently (Vargo and Lusch 2016).
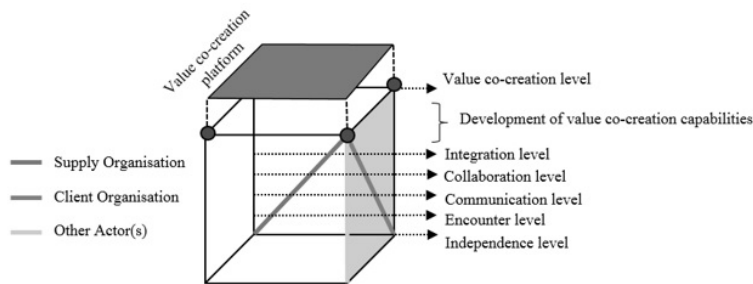

Figure 1: The value co-creation path in the project context (Source: Adapted and developed from Hudson et al., 1998).

SDL requires further development to be considered in the project business. Little empirical SDL research has been developed in projects (Cova and Salle 2008, Liu *et al*., 2014, Razmdoost and Smyth 2015); others narrowly applied (Xu *et al*., 2013). This paper argues that before a project organisation reaches a value-driven approach, it should pass through a collaboration level (Smyth and Pryke 2009) and integration level (Davies *et al*., 2005) (see Figure 1). Once reached, a platform of value co-creation, where actors can engage and co-create over time, can be established. For example, Apple has successfully used this platform where other organisations can add new systems, apps, music on top of its service offering (Chesbrough 2011). Other successful examples of co-creation exist (in Aviation, IT, Music and Entertainment), resulting in financial and non-financial benefits (Chesbrough 2011). Thus, some principles could be applied to construction. The construction sector at that point has underperformed. Generic co-creation capabilities (see Table 1) need to be developed from portfolio to programme level, partially tailored at the front-end (from programme to project level) and nuanced tailoring during delivery (project execution).

For operationalisation in a project level, SDL could take a shift from routines to unique activities where some resources are not given and novel activities, under a value imagination approach (Razmdoost and Smyth 2015), backcasting for service design (Smyth, 2015) through a holistic approach (Patrício *et al*., 2011) to become a force that modifies existing routines and creates pre-conditions for others. On the other hand, routines, in contemporary literature (Feldman and Pentland 2003), are not considered as mundane repetitions but as a source of flexibility and change in which intense and effort-laden accomplishments, such as co-creation, can also take place (Robinson and Chan 2014). Yet, a guideline of steps to undertake a value co-creation process has not yet been formulated (Ostrom *et al*., 2015). Tronvoll *et al*., (2011) suggest that SDL needs mixing with other disciplines to capture the dynamics of a service. Service Design (SD) could be used to make a bridge between practice and theory. Contrary to SDL, SD is rooted in practical applications and could operationalise SDL (Wetter-Edman *et al*., 2014). Therefore the connection between SD/SDL is worth investigating further.

Table 1: Value co-creation capabilities (Source: Developed and adapted from Karpen et al., 2012 influence by Davies and Hobday 2005; Smyth, 2015 in the project context)

Generic Co-creation Capability	Comments
Individuated Interaction Capability	Process to solicit knowledge and understanding as to what client want at a generic level with flexibility to tailor the services and customise the content to maximise the potential for value co-creation.
Relational Interaction Capability	Ability to respond to client and stakeholder wishes in the design process supported by proactive relationship management processes.
Ethical Interaction Capability	Application of a client orientated focus tempered by business acumen to satisfy corporate social responsibility and the moral economy.
Empowered Interaction Capability	Facilitating responsibility to teams and supporting actions and align processes in accordance with the requirements.
Developmental Interaction Capability	Developing programmes and codes of conduct to facilitate interaction and advise other parties of the primary associate protocols.
Concerted Interaction Capability	Synchronise processes and actions to be aligned with customer processes and protocols as part of the service design co-creation.
Learning Capability	To facilitate generation of competencies and to absorb lessons from the learning around the requirements for adaptive absorption and delivery.

Table 2: Integrated Co-Design for service (Developed and adapted from Patrício et al., 2011; Teixeira et al., 2012).

Levels of service co-design	Comments
I. Co-Design the service experience.	Mapping how actors integrate resources after the immediate service experience is essential.
II. Co-Design the service concept	The service concept starts from the inputs of the supply chain to and beyond the immediate service experience. An understanding of the business model used by the client organisation is vital.
III. Co-Design the static service system (architecture and engineering system)	This level considers aspects of the physical infrastructure.
IV. Co-Design the dynamic service system.	This level identifies how the actors will dynamically navigate across the infrastructure from execution to post-completion.
V. Co-Design the service encounter.	SDL expands the encounter beyond supplier-customer interaction and considers a service ecosystem including the market, the physical infrastructure, citizens and the environment.

The Mobilisation of SDL through Service Design

Design in construction could be better off if socially constructed resources are applied in early involvement (Volker 2008). This paper argues that value co-creation reaches its peak intensity in the design phase of a project. In fact, Sheth and Uslay (2007) say that the ramifications of value co-creation in co-design could play a fundamental role. SD could be considered an emerging discipline (Maffei *et al.*, 2005) in which a wider design concept is introduced. It pays considerable attention to the experience and the product-in-use/context (Romme 2003). Kimbell (2011) defines design-for-service as an enquiry to understand the mobilisation across and beyond the value chain. This concept has the potential to give shape both to production, with aspects beyond buildability, and value realisation. Design issues still remain open, e.g. design teams (architects it is said in particular by practitioners) propose projects with poor buildability. Then, methods in which co-creation, through co-design, are needed to ensure value propositions are transferred from design to operations. Previous service design methods are able only to capture part a holistic service e.g. service blueprinting (Shostack 1984); servicescape (Bitner 1992). Significant integrative attempts are presented by Patrício *et al.*, (2011) and Teixeira *et al.*, (2012). The lessons from these attempts can be adapted for the project business, as proposed in Table 2: five levels of co-design could manage the value co-creation from the experience to the encounter. Nevertheless, further research is needed to unpack each of the levels of co-design to

understand which practices are being carried out at a project level. A mini case is given below to understand how SDL could be applied in projects.

A Mini Case to Illustrate Service-Dominant Logic

Higher education is a very dynamic sector in UK construction and provides the research focus for this mini case. In 2013–14 around 2.3 million students were enrolled in degrees. Academic and other staff, and students are all users. Therefore, project management offices on the client side are challenged to deliver benefits to a variety of stakeholders. A major UK university, as part of its development programme, carried out a refurbishment on a student residence in 2015. Interaction occurred between the client and main contractor during the procurement phase, but the project resulted in a poor outcome: a student strike for unbearable living conditions; £300,000 in compensation; confrontation between students and university staff; a ruined student experience; the reputation of the university damaged; delayed completion of the project due to a temporal suspension of the work. Why? The client organisation only approached the end-users during execution, curtailing learning opportunities about co-creation of value-in-use at the front-end of projects. The agency (students) could have been empowered for communicating potential value-in-use. This could have been captured at the front-end to inform the design and bidding, hence the value propositions. This would need management at the front-end to support interaction and dialogue between the actors both for and as part of co-creation. Under SDL lens, the client organisation plays the role of a mediator between the supplier and the end-users. Thus, this leads to intended and unintended co-creation of value in a triadic manner with a better integration. But traditionally, the end-user has been widely regarded as a destroyer (depreciation) of value (Vargo and Lusch 2016) and positioned at the end of the project chain (see Pryke and Smyth 2006:31). Previous studies of value co-creation are rooted in dyadic relationships between the client and supplier (Pinho *et al.*, 2014). That view is limiting for B2B contexts, as shown above.
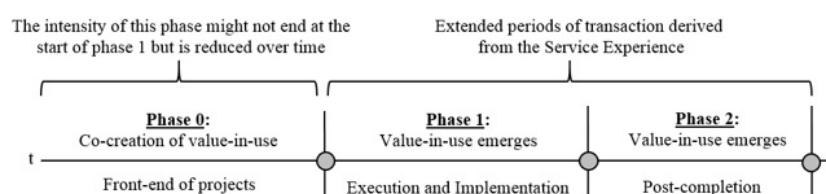

Figure 2: The value co-creation process in a project setting (Authors' own)

This example triggers the following assumption. Value-in-use has two phases for projects (see Figure 2): (1) value-in-use which emerges during the execution and delivery, and (2) value-in-use which emerges beyond completion. In that vein, extrapolating SDL theorisation would pose the proposition that consumption takes place before the completion of a project and it should be managed as part of the service experience. The focal point, located at phase 0, is schemed at improving the service experience and to co-creating the value-in-use. Building on Vargo and Lusch (2016) and Patrício *et al.*, (2011), a framework for this mini case has been developed to systematically co-create value in a triadic relationship (see Figure 3). It could operationalise a service lens through an integrated co-design (see Table 2). In this model, the Design Team and the Contractor could work along with the Business Development Management and other functions (Smyth 2015) to co-create (co-design) the service offering. This framework may enable superior value/benefits to actors;

high-quality interactions; resource integration; holistic design; an innovative service offering. Apart from the SDL weakness previously discussed, other downsides are: (a) time-consuming to implement (e.g. identification of end-users/requirements); (b) investment through the development of capabilities with an eye on medium and long-term return (Smyth 2015); (c) a change of culture into a service logic with a focus on value (old habits may appear though); (d) careful attention should be paid when letting other actors join an independent process as it might create greater dis-benefits or even destroy the whole process (Echeverri and Skålén 2011).
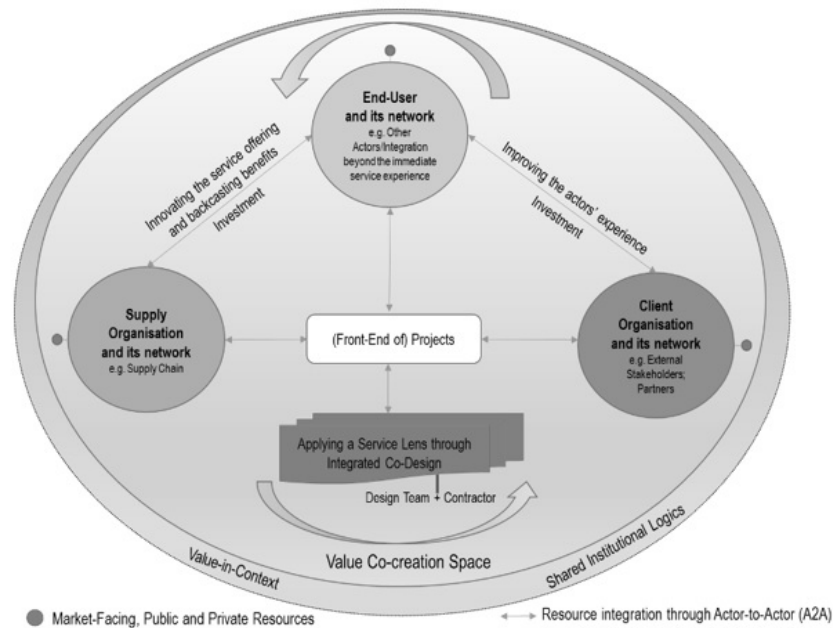

Figure 3: Value co-creation space in a project setting (Authors' own)

This framework could facilitate future empirical research to understand which SDL/SD practices are being carried out in the project business. Fair to say that SDL and/or this framework does not fit all the markets/projects but certainly, SDL could be applied to some markets, which are still rooted in the marketing mix or relationship approach. Other complex settings e.g. airports, require further investigation as heterogeneous actors (e.g. retailers, government, regulators, airlines, passengers, local community and suppliers) co-create value in a many-to-many approach rather than in a triad relationship.

CONCLUSIONS

An exploration of SDL in relation to projects has been put forward. SDL, although laden with contradictions and struggles, is a revolutionary framework which challenges neoclassical economics and offers fresh thinking that could improve project delivery and effectiveness for the value-in-use and context. If used in construction projects, SDL must be carefully adapted as exemplified. Additionally, caution should be taken with value co-creation as it might lead to undesirable outcomes. In summary, SDL, with the support of SD, has the potential to configure and design value propositions to deliver a service experience and value beyond the minimum requirements. There lies the challenge to operationalise SDL/SD in construction projects.

REFERENCES

Alderman, N and Ivory, C (2007) Partnering in major contracts: Paradox and metaphor. *International Journal of Project Management*, **25**(4), 386-393.

Artto, K A, Wikström, K, Hellström, M, and Kujala, J (2008) Impact of services on project business. *International Journal of Project Management*, **26**(5), 497-508.

Akaka, M A, Vargo, S L and Lusch, R F (2013) The complexity of context: A service ecosystems approach for international marketing. *Journal of Marketing Research*, **21**(4), 1-20.

Bettencourt, L A, Lusch, R F and Vargo, S L (2014) A service lens on value creation. *California Management Review*, **57**(1), 44-66.

Bitner, M J (1992) Servicescapes: The impact of physical surroundings on customers and employees. *The Journal of Marketing*, **56**, 57-71.

Bröchner, J (2010) Construction contractors as service innovators. *Building Research and Information*, **38**(3), 235-46.

Chan, P W, Robinson, W and Lau, T (2015) Material contradictions: Exploring paradoxes in Servitising construction. *In*: *Working Paper Proceedings, Engineering Project Organization Conference,* The University of Edinburgh, UK, June 24-26, 2015

Chesbrough, H W (2011) Bringing open innovation to services. *MIT Sloan Management Review*, **52**(2), 85.

Cova, B and Salle, R (2008) Marketing solutions in accordance with the SD logic: Co-creating value with customer network actors. *Industrial Marketing Management*, **37**(3), 270-277.

Davies, A and Hobday, M (2005) *The Business of Projects, Managing Innovation in Complex Products and Systems*. Cambridge: Cambridge University Press.

Echeverri, P and Skålén, P (2011) Co-creation and co-destruction: A practice-theory based study of interactive value formation. *Marketing Theory*, **11**(3), 351-373.

Edvardsson, B, Tronvoll, B and Gruber, T (2011) Expanding understanding of service exchange and value co-creation: A social construction approach. *Journal of the Academy of Marketing Science*, **39**(2), 327-339.

Feldman, M S and Pentland, B T (2003) Reconceptualizing organizational routines. *Administrative Science Quarterly*, **48**(1), 87-94.

Gebauer, H, Gustafsson, A, and Witell, L (2011) Competitive advantage through service differentiation by manufacturing companies. *Journal of Business Research*, **64**(12), 1270-1280.

Grönroos, C (2011) Value co-creation in service logic: A critical analysis. *Marketing theory*, **11**(3), 279-301.

Hartmann, A, Roehrich, J, Frederiksen, L and Davies, A (2014) Procuring complex performance, the transition process in public infrastructure. *International Journal of Operations and Production Management*, **34**(2), 174-194.

Heinonen, K and Strandvik, T (2015) Customer-dominant logic, foundations and implications. *Journal of Services Marketing*, **29**(6/7), 472-484.

Helkkula, A, Kelleher, C and Pihlström, M (2012) Characterizing value as an experience, implications for service researchers and managers. *Journal of Service Research*, January 10, 2012.

Hudson, B, Exworthy, M and Peckham, S (1998) *The Integration Of Localised And Collaborative Purchasing, A Review Of The Literature And Framework For Analysis*. University of Leeds/Institute for Health Policy Studies, University of Southampton.

Karpen, I O, Bove, L L and Lukas, B A (2011) Linking service-dominant logic and strategic business practice, A conceptual model of a service-dominant orientation. *Journal of Service Research*, **15**(1), 21-38.

Kimbell, L, (2011) Designing for service as one way of designing services. *International Journal of Design*, **5**(2), 41-52.

Leiringer, R and Bröchner, J (2010) Service-led construction projects. *Construction Management and Economics*, **28**(11), 1123-1129.

Liu, A M M, Fellows, R and Chan, I Y S (2014) Fostering value co-creation in construction, a case study of an airport project in India. *International Journal of Architecture, Engineering and Construction*, **3**(2), 120-130.

Lusch, R F and Vargo, S L (2014) *Service-Dominant Logic, Premises, Perspectives, Possibilities*. Cambridge: Cambridge University Press.

Maffei, S, Mager, B and Sangiorgi, D (2005) *Innovation Through Service Design: From Research And Theory To A Network Of Practice, A Users' Driven Perspective*. Joining Forces Conference, Helsinki, Finland, 21/09/05 - 23/09/05.

Morris, P W (2013) *Reconstructing Project Management*. Chichester, West Sussex: John Wiley and Sons.

Nambisan, S and Baron, R A (2009) Virtual customer environments, testing a model of voluntary participation in value co-creation activities. *Journal of Product Innovation Management*, **26**(4), 388-406.

Neely, A (2008) Exploring the financial consequences of the servitization of manufacturing. *Operations Management Research*, **1**(2), 103-118

Normann, R and Ramirez, R (1993) From value chain to value constellation. *Harvard Business Review*, **71**(4), 65-77.

Ostrom, A L, Parasuraman, A, Bowen, D E, Patrício, L, Voss, C A and Lemon, K (2015) Service research priorities in a rapidly changing context. *Journal of Service Research*, **18**(2), 127-159.

Patrício, L, Fisk, R P and Constantine, L (2011) Multilevel service design, from customer value constellation to service experience blueprinting. *Journal of Service Research*, **14**(2), 180-200.

Payne, A F, Storbacka, K and Frow, P (2008) Managing the co-creation of value. *Journal of the Academy Of Marketing Science*, **36**(1), 83-96.

Pinho, N, Beirão, G, Patrício, L and P Fisk, R (2014) Understanding value co-creation in complex services with many actors. *Journal of Service Management*, **25**(4), 470-493.

Prahalad, C K, and Ramaswamy, V (2004) Co-creation experiences, The next practice in value creation. *Journal of Interactive Marketing*, **18**(3), 5-14.

Pryke, S and Smyth, H (2006) Scoping a relationship approach to the management of complex projects in theory and practice. *In*: S Pryke and H Smyth (Eds.) *The Management of Complex Projects: A Relationship Approach*. Oxford: Blackwell Publishing, 21-45.

Razmdoost, K and Smyth, H (2015) *Value Co-Creation in Project Exchange*. 18th Academy of Marketing Science World Marketing Congress, Italy.

Robinson, W and Chan, P (2014) Servitisation in construction: Towards a focus on transitional routines. *In*: A Raiden and E Aboagye-Nimo (Eds.) *Proceedings 30th Annual ARCOM Conference, 1-3 September 2014, Portsmouth, UK*. Association of Researchers in Construction Management, 905-14.

Romme, A (2003) Making a difference, organization as design. *Organization Science*, **14**(5), 558-577.

Schmenner, R (2009) Manufacturing, service and their integration, some history and theory. *Journal of Operations and Production Management*, **29**(5), 431-441

Sheth, J, and Uslay, C (2007) Implications of the revised definition of marketing: From exchange to value creation. *Journal of Public Policy and Marketing*, **26**(2), 302-307.

Shostack, G (1984) Designing services that deliver. *Harvard Business Review*, **62**(1), 133-39.

Smyth, H and Pryke, S (2009) *Collaborative relationships in construction, developing frameworks and networks*. Chichester, West Sussex: John Wiley and Sons.

Smyth, H (2015) *Market Management and Project Business Development 1st Edition*. Abingdon: Routledge.

Smyth, H, Fellows, R, Liu A, and Tijhuis, W, (forthcoming 2017) Editorial for the special issue on business development and marketing. *Construction Management and Economics*, **34**(4-5), 205-217.

Teixeira, J, Patrício, L, Nunes, N J, Nóbrega, L, Fisk, R P and Constantine, L (2012) Customer experience modeling, from customer experience to service design. *Journal of Service Management*, **23**(3), 362-376.

Tronvoll, B, Brown, S W, Gremler, D D and Edvardsson, B (2011) Paradigms in service research. *Journal of Service Management*, **22**(5), 560-585.

Vandermerwe, S, and Rada, J (1988) Servitisation of business, Adding value by adding services. *European Management Journal*, **6**(4), 314-324.

Vargo, S L and Lusch, R F (2004) Evolving to a new dominant logic for marketing. *Journal of Marketing*, **68**, 1-17

Vargo, S L and Lusch, R F (2016) Institutions and axioms, an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, **44**(1), 5-23.

Volker, L (2008) Early design management in architecture, partner selection and value judgement in design. *In*: S Pryke and H Smyth (Eds.) *Collaborative Relationships in Construction*. Oxford: Blackwell Publishing, 179-196.

Wikström, K, Hellström, M, Artto, K, Kujala, J and Kujala, S (2009) Services in project-based firms: Four types of business logic. *International Journal of Project Management*, **27** (2), 113-122.

Wetter-Edman, K, Sangiorgi, D, Edvardsson, B, Holmlid, S, Grönroos, C and Mattelmäki, T, (2014) Design for value co-creation, exploring synergies between design for service and service logic. *Service Science*, **6**(2), 106-121.

Wright, M and Russell, D (2012) Some philosophical problems for service-dominant logic in marketing. *Australasian Marketing Journal*, **20**(3), 218-223.

Xu, Y, Wang, D and Liu, C (2013) Applying service-dominant logic to construction project management. *In*: *Proceedings of the 2013 International Conference on Information System and Engineering Management*, IEEE Computer Society, Washington, 714-719.