The Evolution of Networks and Interaction in the Co-Creation of Value: A Case Study of the Development of a City Museum

Introduction

Vargo and Lusch (2004) proposed that marketing is moving to a new dominant logic where service is exchanged for service. Central to their proposal were eight foundational premises (Vargo and Lusch, 2004), subsequently extended to ten (Vargo and Lusch, 2008a). Key amongst them are: service is deemed to be the fundamental basis of exchange (FP1); operant resources are the fundamental source of competitive advantage (FP4); the customer is always a co-creator of value (FP6); the enterprise can only offer value propositions, it cannot deliver value (FP7); value creation occurs in networks through actors who are resource integrators (FP9); and value itself is ‘idiosyncratic, experiential, contextual and meaning-laden’ (FP10) (Vargo and Lusch, 2008a, p.375).

Much discussion on S-D logic has focused on developing this theoretical context (see for example: Lusch and Vargo, 2006, 2009; Vargo and Lusch, 2008b, 2008c; Gummesson, Lusch, Vargo, 2010; Brodie et al., 2011). Alongside this, the debate has developed through studies which explore how the tenets of S-D logic operate in practical contexts such as financial services (Auh et al., 2007), art experiences (White, Hede and Rentschler, 2009), opera (Lund, 2010), the travel industry (Fyberg and Juriado, 2009), electronic services (Blazevic and Lievens, 2008) and the Harry Potter phenomenon (Brown and Patterson, 2009) amongst others. Central to much of this work is the effort to understand how value is co-created within varying contexts. Of particular interest to the current research is the work of Fryberg and Juriado (2009) who highlight the importance of networks in the co-creation of value, paying particular attention to the importance of interaction between network actors. Further, defining value and value propositions has received increasing attention (Gronroos, 2008; Kowalkowski, 2011).

Through a case study of the Cardiff Story, a new museum for the people of Cardiff, this paper builds on previous work on S-D logic by exploring how networks and interaction evolve over time and the role they play in the evolving nature of value co-creation. The unique site of the work, the development from inception of a city museum, allows us to explore S-D logic in the public sector while taking into consideration the specific nature of arts and heritage in that context.

The paper begins by reviewing pertinent S-D logic constructs to provide context for the current work. The methods section details the research position adopted before providing a justification for the single case study nature of this work. Context for the Cardiff Story is provided before the data collection methods are outlined. Findings are subsequently discussed before a conclusion is offered and areas for future research outlined.

Value, co-creation, interaction and networks

As determined by Vargo and Lusch’s (2004, 2008a) foundational premises, value and how it is created is central to S-D logic (see specifically FP 1,4,6,7,9,10). As such, there have been calls to develop further understanding of value itself (see for example: Woodruff and Flint, 2006), which has contributed to the trend of an emerging body of work exploring value and
its related concepts in more detail (see Payne, Storbacka and Frow, 2008; Chandler and Vargo, 2011; Kowalkowski, 2011).

Based on this, the general use of the term ‘value’ appears to be considered from the perspective of relationships and some form of interaction involving two or more parties, depending on context and peculiar events. Holbrook (2006, p.212) asserts that ‘value’ is an “interactive relativistic preference experience”. S-D logic posits that firms cannot independently create value but can only make value propositions (Heinonen et al, 2010), with customers determining value upon later experience (Ballantyne and Varey, 2007). Gronroos (2000), Prahalad and Ramaswamy (2000) and Vargo and Lusch (2004) go further to argue that value is embedded in the co-creation process between the customer and supplier. While early S-D logic research was concerned with the fact that relatively little was known about how customers engage in co-creation (Woodruff and Flint, 2006; Payne, Storbacka and Frow, 2008); discourse of the subject is increasingly visible (see Heinonen, 2010, Edvardsson et al, 2011).

The main thrust of FP9 which states that “all social and economic actors are resource integrators” implies the context of value creation as networks of networks. Whilst some have examined the structure and governance of networks in this context, suggesting their complex nature (see Johnston et al., 2006); others provide a straightforward view as collaborative parties in the central process of creating value for the customer (see Enquist et al., 2011). Fyrberg and Juriado’s (2009) work on the inner dynamics of networks, highlights the need to consider concepts such as actors, resources and activities towards gaining a better understanding of how interaction drives value creation; suggesting questions on trust, power and competition between network actors, set roles or fluidity between participants.

Despite significant progress in the understanding of these S-D logic concepts, gaps still remain in understanding how these concepts translate in real-world situations; for instance in the public sector and not-for-profit (Cassia and Magno, 2009) as well as heritage and the arts although contributions are beginning to emerge (Corte, Savastano and Storlazzi, 2009; Baron and Warnaby, 2011). Corte et al. (2009, p.227) particularly make interesting assertions through a case based analysis including ‘resources and activities are service renderers’; ‘the importance of value in use’; value is co-created by different actors and the concept of ‘co-creating relationships’. Corte et al.’s (2009) study of a cultural product provides a fascinating insight into how the value-creation process and interaction can significantly enhance service innovation. Similarly, Baron and Warnaby’s (2011) case based research into customer operant resources and managing the co-creation of value provides unique insights into resource integration, particularly in the cultural environment; however as they observe, their findings are only partial and call for further understanding of the dynamics of networks in the co-creation of value. The current work provides a further step within the developing literature on S-D logic by exploring how networks and interaction influence the co-creation of value over time the public sector heritage context.

**Methodology**

**Research Rationale**

This exploratory study is framed within an interpretive paradigm, employing qualitative techniques and a case study design. Eisenhardt (1989, p.534) defines the case study as ‘a research strategy which focuses on understanding the dynamics present within single
settings.’ Following Eisenhardt’s (1989) guidance, in order to avoid being overwhelmed by
the volume of data, a clear research question was set at the outset:

- **RQ1:** The aim of the work is to understand how networks and interaction influence
  the co-creation of value in the public sector heritage context.

Eisenhardt (1989) also encourages the specification of tentative constructs from the literature
review at the outset of data collection. Therefore, the concepts of networks, value, interaction
and co-creation drove the initial data collection phase, although it was accepted that the
emphasis and importance of each would develop throughout the study.

**The Single Case Study**
Yin (1994) suggests that the single case study is justified when:
- The case is unique and finding other cases is so unlikely that research about the situation
could never be done if the single case was not investigated
- The case provides unusual access for academic research, and ‘unless the case is
  investigated, an opportunity to examine a significant social science problem may be lost;
an example is where the access to his/her firm can allow a researcher to see how a
  phenomenon is addressed in the real world (with all the confidential information, power
  politics and human weakness that usually prevent academic researchers from finding out
  the real story about it)’ (Yin 1994, p.40)

For both of these reasons the Cardiff Story Museum was chosen as the site for investigation.
The Cardiff Story Museum opened to the public on April 1st 2011 as a people’s museum in
the heart of Cardiff. Until then, Cardiff had been the only major UK city without a museum
to conserve its heritage and celebrate its identity. The museum focuses on the social history
of the city, opening up on the tangible elements of this history and telling its tale through
objects and oral history donated by members of the local community.

Entirely new museums are rare with the majority of new or recent museum buildings housing
existing collections and providing better services where issues of economic stability have
been carefully considered (Museums, Libraries and Archives UK, 2010). This has made the
Cardiff Story museum all the more appropriate as a single case study in that it was entirely
new (not a redevelopment) with no previous collection and its journey from inception to
completion was fully recorded either in traditional formats (reports, newspaper articles, etc)
or curatorial knowledge. Further, one member of the research team was employed in a central
role within the museum and thus has exceptional access to both people and archives.

**Research Methods**
Case studies typically involve a range of data collection methods including archives,
observations and interviews. Interviews and documentation, including archival material, were
the key methods of data collection employed.

According to Eisenhardt and Graebner (2007, p.28), the challenge of interview data can be
mitigated by data collection approaches that limit bias such as using numerous highly
knowledgeable informants from different hierarchical levels, functional areas or geographical
areas, who view the focal phenomenon from different perspectives. The only founding team
member remaining within the organization was identified as the starting point. This
individual provided an excellent source for snowballing and a range of other elite informants
emerged. Interviews lasted typically 60 to 120 minutes, depending on the interviewee, i.e.
their level within the organisation or access to information. The interviews were open-ended; following a pre-determined set of prompts derived from an interview protocol. Interviews were transcribed and subsequently analysed using analytic coding.

Documents related to the museum’s development from inception in 2002 were identified as key data sources. These documents included internally and externally generated reports, emails, letters, design schemes, posters and archive newspaper articles. Triangulation of data by source rather than method was a useful means of ensuring validity and credibility of information. The following section provides a discussion of the study’s key findings.

Findings

The Museum Development
The Cardiff Story was one of very few museums to open in the UK in 2011; an anomaly the Guardian noted is unlikely to happen for a ‘while’ (Guardian, 2011). However, the museum’s opening was unusual and unique in many ways. Until 2011, Cardiff had been the only major UK city without a museum dedicated to its heritage following a mass transfer of city’s erstwhile collections to the newly formed National Museum for Wales in the 19th century.

Appendix A details the evolution of the development of the Cardiff Story from 2002 until 2011 and details the changing value propositions, customer/service users and firm/suppliers are they emerged during that period. In 2002/2003, Cardiff found itself with a strategic need which council officers identified as an ambition to “develop (as) an important British city operating on the international stage” (see Chadwick Jones Associates, 2002, p.1). Following a financial incentive of a tourism grant, Cardiff Council officers initiated a feasibility study – through consultants – to understand ways of improving the city’s tourism product. A key recommendation arising from this was a proposed city museum, which would fill the existing gap – providing a ‘gateway’ offer for tourists and sense of place for local people. The current museum officer suggests that this largely informed the political impetus for delivering the museum. According to museum project officer for the period 2004 – 2008, other stakeholders had a strategic desire to see the development of the new museum for Cardiff including CyMAL (Museums, Archives and Libraries Wales), the industry regulator.

A museum team of two was appointed around 2004, quickly evolving to over twenty in 2011. Both museum officers (2004-date) suggest that the “community museum agenda and (local) resident involvement” was a position championed by the initial museum team and influenced the way the museum was developed on an operational level. According to one museum officer (2006 – date) this new direction may have been related to the social history backgrounds of the museum officers at the time.

Co-creating Value
The museum had no collection of its own and no previous ‘history’ of content. As such temporary exhibitions were developed, which arguably marked the beginning of close engagement of the museum brand with the local community, with value being constructed based on the different value sources (see Smith and Colgate, 2007). Based on feedback collected, these temporary exhibitions running between 2006 and 2008 provided an ‘interactive, relativistic preference experience’ for visitors – most of whom were city residents (see Holbrook, 2005). Partnering with the local paper, the museum engaged local people to contribute their stories, objects and memories towards developing a collection and content for the museum in a six year campaign. Archival investigation reflects a relationship
building/sense of ownership tone to museum story headlines, building particularly on relational sources of value (Fournier, 1998). As such, headlines such as “Wanted: More of YOUR opinions to shape city facility” and “a wish list for their museum!” were typical of the campaign (Holt, 2006, 2007). The museum opened (Phase 1) in April 2011 showcasing objects from its newly acquired collection as well as oral histories and memories including contributions from various partners including local heritage sites and community groups, funders and design consultants.

The evolving network
A variety of interactions are heavily reflected in the development of this museum, evidencing the interactive nature of the co-creation of value (see Tynan et al, 2010), which informs the formation of a network structure. These interactions maintain a degree of fluidity within the context of a unique set of multiple exchange relationships (Vargo and Lusch; 2004, 2008, 2010). As such, a timeline analysis of the museum’s development reflects several interconnected and interrelated value creating relationships, which, crucially change as the development progresses. For instance, the changing nature of stakeholder interaction at inception to meet the (then) value proposition when compared to circa 2004 and later, 2011; suggests an evolution (see Appendix A). In one way or the other, some stakeholders appeared to be undertaking an often changing, resource integrating, service providing role that suggests a fluid ecosystem framework (see Vargo and Lusch, 2010; Appendix B). For instance the role of the South Wales Echo in promoting the museum and its collecting campaign to its readership who in turn, contributed objects to the museum they would later visit but reading Echo newspapers all through. Crucially, the subject of influence within the network is also touched upon linearly and vertically; linearly as value is co-created within the system (e.g. the community focused direction the project takes circa 2004) and vertically in relation to the roles of stakeholders (South Wales Echo campaigning to the local population). However, findings suggest differences in real and perceived power within networks by actors and of other actors.

Discussion and conclusion
Figures 1-6 (Appendix B) show the networks and interaction which evolved during the development of the Cardiff Story museum. During these phases the value proposition changes and certain key individuals prove decisive in the evolution and co-creation of value within the networks. Certainly, the current work supports calls for further investigation and more detailed studies into value co-creation and the dynamics of networks and contextual relationships (see Fyrberg and Juriado, 2009; Vargo and Lusch, 2010). The evolving value-creation process and experience of the various network actors it comprises in this case, may define the transitional nature of this value ecosystem and opportunity for further questions/research. Importantly, the context of these networks and the direct and indirect exchanges that manifest and influence the final product of the museum is noteworthy (see Chandler and Vargo, 2011). This is particularly evident in events that took place between 2004 and 2006 in the museum’s development where the community focus of the project intensifies and enlarges the network including interactions at various levels, but with high flexibility, yet unresolved tensions (see Appendix B). Vargo and Lusch’s (2011) observation of an absence of a ‘firm’/‘customer’ dyad is readily visible in this situation, in its place, a complex web of actors interacting at different levels or even other alternatives (see Brodie et al, 2006; Chandler and Vargo, 2011). Findings also suggest the transitional nature of value for network actors (Kowalkowski, 2011), most notably in the changing value proposition
across the development of the museum. The current work also advocates further study on the impact of change agents in the development of network interaction and value definition.
References


Appendix A


Value Proposition

2002 - Meet City Ambitions as International destination
2003 - Develop City Museum to contribute to city ambitions as international destination.
2011 - Brand new city Museum for local residents and tourists to enjoy - Contributes to city ambitions
2011 - Further development with local people to reach new audiences including 17-35 year olds in Cardiff

Customer/Service user

Value

Firm/Supplier

Civic Leadership

Civic Leadership

Council Officers

Council Officers

Council Officers

Council Officers

Council Officers

Civic Leadership

Council Officers

Council Officers

Council Officers

Council Officers

Local Media

Museum Staff

Museum Staff

Museum Staff

Museum Staff

Design Consultants

Design Consultants

Design Consultants

Design Consultants

City heritage partners

Cardiff Residents

City heritage partners

Cardiff Residents

Tourists

Funding Partners

Funding Partners

Funding Partners

Industry Regulators e.g.

Museum Staff

Museum Staff

Museum Staff

Tourism

Design consultants

Tourism

Consultation Groups

Consultation Groups

Cardiff Residents

Cardiff Residents

Local Media

Local Media

City Heritage Partners
Appendix B: Evolving Networks, Interaction and Value Propositions in the Development of the City Museum

**MUSEUM DEVELOPMENT STAGE 1**
- Value proposition is to establish the city as an international destination
- City councillors are keen to meet this objective and task council officers towards achieving this
- Council officers engage external consultants to develop business case
- Key recommendation is the development of a city museum

**MUSEUM DEVELOPMENT STAGE 2**
- Following consultant recommendations, value proposition changes to develop city museum to contribute to city ambitions as international destination
- Further council resources are expended including council scrutiny committee, who are also customers in this context
- At this stage, all network actors are all influencing each other towards the central value outcome
MUSEUM DEVELOPMENT STAGE 3

- The integration of resources including political buy-in and funding means that the museum project is given the go-ahead.
- A small team is appointed including staff from the council’s tourism department and one external appointment with CyMAL funding—all have museum backgrounds, mostly in social history and community museums.
- The value proposition evolves to developing the city museum with local communities to tell their story through their voice.

MUSEUM DEVELOPMENT STAGE 4

- As with development stage 3, the network has expanded dramatically to include stakeholders functioning at different levels and contributing directly/indirectly towards the value proposition.
- The media partner inadvertently exposes the large sum donated by a local millionaire, the museum is facing a threat of losing his support without which the project cannot go ahead.
- Relationships also change, crucially with the media and with Cardiff Residents now influencing the value proposition.
MUSEUM DEVELOPMENT STAGE 5

- Following the successful integration of resources (donation of objects and stories by local people, funds from funders, expertise from designers, knowledge, etc), the value proposition evolves to 'brand new city museum for local residents and tourists to enjoy'.
- New stakeholders join the network including tourists and relationships change (such as that of local media, residents and the museum).
- Mini-networks are building including amongst city heritage partners who are now working together towards an individual value proposition.

MUSEUM DEVELOPMENT STAGE 6

- The value proposition once again evolves, this time to target new audiences – specifically, 17-35 year olds in the city.
- The network once again expands now including new partners and consultation groups whom the museum suggest could influence the value proposition.
- With the museum now established, council officers take on a customer role in the final product being delivered but still influence the value proposition.