Developing Integrated Solutions at the Front-end on the Supply Side by a Global IT Project Provider

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Abstract

Supply-side systems integration is an important part of developing integrated solutions. Applying a marketing lens, integration commences at the front of the front-end with business development and cross-functional coordination to generate value propositions. Value propositions reflect the capability to develop and deliver integrated solutions, which shape the potential for customers to co-create value in context and use. The research explores the extent of functional coordination and how this affects the development of integrated solutions in a global IT project provider. The principle finding is that a transactional approach led by financial control constrains coordination and integrated solution development.

Keywords: Systems Integrator, Value Propositions, Integrated Solutions, Adaptive Replication, Relationship Marketing, Co-Created Value.

Introduction

There has been a great deal of emphasis upon developing the front-end of projects to identify and configure integrated solutions on the demand side (e.g. Morris, 2013; Edkins et al, 2013), whether the project is sourced in-house or from external providers. There has been less emphasis upon the supply side, especially at the front of the front-end where marketing and business development reside (Smyth, 2015a). The focus is to explore the extent to which a large supply-side project business develops integrated solutions, applying a marketing lens for the purposes of analysis. This approach evokes the project business in the *systems integrator* role (Davies et al, 2007), arguing that the ability to effectively coordinate execution is also a function of and heavily influenced by the extent of cross-functional coordination in order to integrate provision in the project content. The empirical data comes from the UK market, specifically the regional operations of one of the largest global providers of IT software, hardware and service solutions.

Project businesses have slowly been transitioning from transactional to transformational business development management by applying relationship marketing and service logic principles. The shift on the ground has the potential to draw upon the conceptual shift from a focus of discrete, tangible inputs derived from technical and engineering expertise to a complementary customer and service orientation to meet specific needs where the focus includes benefits delivery and realization. This can also be conceptually couched in terms of the paradigm shift from the transactional *marketing mix* to the more transformational *relationship marketing* and its development into the service-dominant logic (Smyth, 2015a in project businesses; see also Grönroos, 2000; Vargo and Lusch, 2004).

The conceptual transition towards relationship marketing over several decades and the development of the service-dominant logic (S-DL) over the last decade places greater responsibility upon the business development function to identify and develop the value propositions based on deep understanding of customer needs aligned to mobilizing internal resources and capabilities, including the ability to leverage value potential among suppliers. Routines as capabilities to coordinate and enable integration (cf. Parmigini and Howard-Grenville, 2011; Jarzabkowski et al, 2011) feed into systems integration. It starts with the marketing strategy and business development management because this is focused upon customers prior to any specific project and occurs at the front of the project front-end (Smyth, 2015a). Investments are required and costs are incurred in establishing the capabilities to identify and subsequently deliver integrated solutions with the potential to satisfy customer needs. This leads to a question: *to what extent does a systems integrator invest in the development of integrated solutions at the front-end?* There is a cross-functional element of coordination to addressing the question. In this research finance, business development and procurement functions are particularly addressed, thus the finance-sales-procurement interface. This research question is conceptually analyzed using a marketing lens, applied to the UK regional operations of one of the largest global IT hardware and software providers. This firm uses projects as the delivery channel for a large part of provision of bundled products and services to its public and private customer base that it claims to constitute integrated solutions for its customers.

Literature Review

The *systems integrator* is the main provider or contractor responsible for allocating resources and mobilizing capabilities to a customer and their project. The resources include in-house and externally sourced product and service elements. The resources are articulated through organizational and project capabilities (Davies and Brady, 2000; Brady and Davies, 2004). In-house capabilities are mobilized through cross-functional coordination to integrate the internal resources and solutions and form them into value propositions for delivery. Cross-functional coordination is also used to manage supply chains and to integrate supply. Outsourcing by the systems integrator therefore brings external specialist solutions providers that have the potential to maximize the value configuration technically, supported by project business and project routines of coordination.

The systems integrator may directly produce products and a project artifact as part of the provision, but need not do so to fulfill this role. The systems integrator role relies on others, and thus performs a management function. It acts as the coordinating means between the customer, advisors, and other providers, namely subcontractors and suppliers, in order to identify, lever and deliver potential value that comprise holistic and integrated solutions. The systems integrator role is largely a service function (Page and Siemplenski, 1983; Galbraith, 2002; Davies et al, 2007). Project businesses have become systems integrators of diverse technical and service skill sets in order to provide integrated solutions (Davies et al., 2007).

Research has highlighted that systems integrators have increasingly been asked to delivery service content in several dimensions, including finance, embedded operational and maintenance services, and integrated product and service solutions (Wise and Baumgartner, 1999). In project businesses a prime difficulty is shifting from a technical to become customer-centric with a service orientation (Kirsilä et al, 2007; Smyth, 2015a).

Marketing has been defined as follows: *The purpose of a business is to create and keep a customer* (Levitt, 1983: 5). To keep a customer requires satisfying them by delivering value in execution, in use and context (cf. Akaka et al, 2013). This is in line with the service-dominant logic in marketing where value is *co-created* (Vargo and Lusch, 2004, 2008). Co-created value recognizes that the provider has the certain resources and capabilities to provide the potential for value realization by the customer as sponsor and end-users. It depends upon how the customer (i) perceives and engages with the service during execution, and (ii) uses and perceives the provision to assess benefits in context and use. It therefore takes both organizational actors to actually realize the project value during execution and in use.

Marketing is operationalized at the front of the front-end through business development as the sales function in project businesses (Smyth, 2015a). The business development function becomes the initial interface between the customer and project and the first opportunity to coordinate the functions (cf. Jarzabkowski et al, 2011) and integrate value (cf. Parmigini and Howard-Grenville, 2011). The routines include formal and informal means of coordination. Coordination is thus not only coordination of the project for execution, but coordination of customer management. Customer management at the programme level is the locus from which business development enters into the outset of the project lifecycle at the front of the front-end (Hadjikani, 1996; Smyth, 2015a). This is aided at the project level by placing thoughtful and reflective people who acknowledge the importance of contact and responsibilities in the frontline positions (Porath et al, 2011), who are customer orientated and can build relationships to enhance value propositions and project business performance (e.g. Grönroos, 2000; Storbacka and Nenonen, 2009).

It has been found in R&D projects, integration occurred through three main mechanisms: the systems integrator role in the organization, the team and the individual levels (Nihtilä, 1999). This paper focuses on the role of systems integrator, as supported by internal integration between functions and for delivering integrated solutions of potential value to clients. Decisions made at these levels of systems, teams and individuals affect the propensity for coordination and the development of integrated solutions. Cross-functional coordination is an important constituent element from a marketing perspective. Decision-making between functional roles can constrain alignment for integration, for example between finance and business development, where disciplines use contrasting language of transactional and transformational approaches as well as regarding the contrasting language used in different disciplines (Smyth and Lecoeuvre, 2014). It has been further found that external providers tend to lack routines for internal coordination in order to keep overhead and operational transaction costs low, weak systems typically occurring on the supply side between central functions at the programme level and projects (Smyth, 2015a).

The project literature points to barriers and constraints to the adoption of relationship marketing principles and value co-creation activities, whereby relationship management is needed to facilitate integration and overcome the barriers during execution (see Smyth, 2015b). The management literature tends to assume such systems are put in place using relationship management systems supported by relational skill sets to coordinate activities (Storbacka et al, 1994). Evidence to date in project businesses show a lack of a systematic approach at the front-end to managing relationships and coordinating business development. Most of this evidence comes from projects in the construction and engineering sectors. Capability development to support business development, systems integration and the development of integrated solutions are shown to be lacking or underdeveloped: *It is possible and a case exists for project businesses to develop additional capabilities to make their position as systems integrators more compelling* (Smyth, 2015a: 210).

Capabilities and integration are important regarding *value propositions*. Organizational capabilities, including marketing capabilities (Möller, 2006), affect the ability to differentiate a service at a programme level, and harness project capabilities developed from previous learning and responses. Integration brings the potential together at a project level to configure differentiated value propositions that are aligned to a detailed understanding of customer strategies, organizational problems for which the project is a potential solution, and the decision-makers acting for and on behalf of the customer. Differentiated value propositions will have developed content and service elements that constitute win-strategies at the bid stage from the project business viewpoint. This has been a trend and has been put this way:

> *Some of the world's leading suppliers are developing strategies to move into the provision of innovative combinations of products and services as 'high-value integrated solutions' tailored to each customer's needs* (Davies, 2004: 727).

Value propositions are therefore derived from the internal processes of capability development and coordination. Value propositions are also derived from the entire supply chains that are also competing against each other (Pryke, 2012). Propositions derived from supply chains have to be integrated in bid management as part of the win-strategies and delivered in integrated ways during execution. Value propositions create the potential experiences the customer will receive (Lanning, 1998), conventionally comprising parity of performance and functionality, differences between options and alternatives, based upon what customers value rather than what experts consider valuable (Anderson et al, 2006). These features are further expounded in the concept of the *co-creation of value* whereby value is not only based upon what customers perceive to be valuable but how effective they are in realizing the value in use (Vargo and Lusch, 2004, 2008) and in context (Akara et al, 2013). It has been observed that where suppliers develop value propositions despite customer perceptions and only use their expertise of value, and where they fail to differentiate value propositions, customers are kept in the *zone of indifference* (Grönroos, 2000). Project businesses tend to keep many customers in that zone. The reason for a lack of differentiation and the prevalence of this zone of indifference is primarily the pursuit of low investment driven by shareholder value drivers (Srinivasan et al, 2009; Srivastava et al, 1998) and transactional expenditure controls (Smyth and Lecoeuvre, 2014). This can result in a gap between provision and the potential to meet customer needs. Where differentiation leads to customized solutions (Davies et al, 2007; cf. Davies, 2004; Hobday et al, 2005), new service model development emanates from technological systems, competency and capability development (cf. Davies and Brady, 2000; Davies et al, 2009; Wikström et al, 2009), and from relational and relationship management (e.g. Tuli et al, 2007; Smyth 2015b).

Generating new solutions for every project is resource intensive and impractical in cost terms, however the need for integration is still seen as the source of modern competitiveness and perhaps the most prominent means to addressing ever more idiosyncratic client priorities and needs. Therefore, generic capabilities can be developed at organizational level and from project learning (Davies and Brady, 2000; Brady and Davies, 2004). This operates at the level of portfolio management to resource and support development. They reside and support the programme management level on the supply side, particularly the ability to increase the value of customer contribution or *customer lifetime value* (Smyth, 2015a). This programme level of capabilities provides a basis for replication. However, customer needs for valuable solutions vary by context and in use (Akara et al, 2013). Generic solutions therefore have to be customized for technical content and tailored for service delivery on a project-by-project basis. This can be termed the generation of adaptive replication (Miraglia et al, under review), which is cost effective, draws upon generic capabilities, represents differentiated win-strategies and meets potential customer needs:

> *The logic here implies learning, collaborating and co-creating value with the customer, and being adaptive to the customer's individual and dynamic needs (*Wikström et al, 2009: 116).

Liinamaa and Gustafsson (2009) argue that customer integration is part of systems integration. This is necessary for the co-creation of value at the front-end, in execution and value realization in use (cf. Vargo and Lusch, 2004, 2008). The result is potential value provision, which is enhanced where customer integration is induced by strengthening relationships along project lifecycles and between projects (cf. Hadjikhani, 1996; Cova et al, 2002). Thus co-creation of value, derived from integrated solutions occurs in two ways. First, technical and service development occurs through coordinated collaboration over the project lifecycle, and second, impact of the project in use which occurs post-completion.

Methodology and Methods

An interpretative methodology was applied. This respects information provided and the context of its collection (Denzin, 2002). Interpretation also recognizes subjectivity and embodied value judgments of the actors and the research process (Sayer, 1992). This includes how facts are selected and articulated in different ways (Krige, 1979). Respecting actor perceptions enriches understanding of attitudes present, the strengths and weaknesses of organizational activities, yielding meaning to generate outcomes that are important without giving preference or precedence to general patterns or particular factors that shape reality (Smyth and Morris, 2007). Both types of evidence were found in addressing the research question: *to what extent does a systems integrator invest in the development of integrated solutions at the front-end?*

A case study method was applied (Yin, 2003). A case study was conducted of one of the UK operations of one of the largest global IT hardware and software providers. It employs 12,000 people in the UK. A large part of customer provision of bundled products and services uses projects as the delivery channel. Customers are drawn from the private sector, for example retail and financial services, and from central government, such as defense and security, education, and health sectors. The firm is divided up into regional operations over the global operations.

Information was primarily collected through an initial multi-actor conference call to i) provide company and research background information, ii) scope the parameters of research issues and questions in order to inform detailed data collection. This was followed up with half-day intensive workshop. It was divided into presentations and a discussion forum using a Q&A format. The firm participants were the director of business development, a senior finance manager and senior procurement manager. The business development director presented an overview of the firm, then each of the three presented for twenty minutes how their function was conducted and their role within the function. This was followed by the Q&A part of the workshop. Two researchers facilitated the Q&A. It was designed to maximize interaction. There were twelve relatively open-ended questions asked that were generated prior to the Q&A section of the workshop. The questions fell into three categories: marketing, finance and procurement to help evaluate coordination and integration – see Appendix A. The solicited information acted as a basis for follow up questions and stimulated a high degree of open-ended discussion. The workshop format acted as a type of co-created research process.

Findings and Analysis

The Overview

The firm was described as “risk averse” in character. Marketing is set up within the European region to sell through “market facing units”, thus taking an “industry, sector or customer focus” on a regional basis. This provides means to manage business development and operations on a focused basis. Matrix management is organized under four service lines:

1. *End-user services* – a range of business solutions
2. *Business and application services* – application solutions
3. *Hosting network services* – managed infrastructure solutions
4. *Technology product group services* – product and hardware provision

The service solutions are therefore based upon manufactured products that are mobilized in conjunction with other services to yield product and service bundles delivered through projects (cf. Wise and Baumgartner, 1999). The managed services mean that the firm is also embedded in the co-creation of value in use alongside the customer as sponsor and end-users (cf. Vargo and Lusch, 2004, 2008).

The firm acts a systems integrator, drawing upon internal provision and externally sourced providers through procurement. They have four global partners, two of whom are also direct competitors in bidding for some customers and their projects. This represents a type of co-opetition between these organizations (cf. Zineldin, 2004). The degree of internal coordination, especially between business development, finance and procurement, was examined in relation to providing integrated solutions using internal as well as external resources and capabilities.

The firm claimed to have excellent customer satisfaction. An interview survey solicited 100% satisfaction levels for service performance, however this concerned delivery, excluding cost and performance in use, which are major loci of the high failure rates among IT projects (e.g. de Bakker et al, 2010). The firm has found that most of its customers purchase integrated solutions on the basis of a 23-month payback, presenting a real challenge to developing solutions of adaptive replication and leads to considerable pressures to seek the lowest price during bidding. This stimulates a twin pressure where price is the most dominant purchase factor for the choice of project business provider:

1. Low price is likely to compromise quality of inputs on a project-specific basis and for investing in project and organizational capabilities to be rolled out at programme level to generate long term value propositions;
2. Low price increases the risk of perceived project success in use as the quality of inputs and their integration into value propositions can be compromised.

Price is a key factor for selecting providers among customers. Customers typically weight price to be between 60-90% among the selection criteria. This can be viewed as a continuum of transactional-transformational procurement. Project businesses can influence customer decision-making depending upon the extent to which a transactional marketing approach is used in any one market. In this case, the firm reported there is variance across location and customer sector concerning price sensitivity, providing scope to develop differentiated value propositions to varying degrees that are not cost and price based.

There is tension found in practice concerning the role of cost. There is conflict between the corporate strategy of continuous improvement and price. The firm placed emphasis upon cost reduction rather than greater value for money through adding value or improving content. The firm had identified a way through this conflict. Business development presented an approach for reshaping business and society from the corporate strategy. This constituted the business development message for projects of integrated solutions. Yet the content is less than is promised in the message and probably less than value propositions actually contain under close scrutiny. Thus the message consequently becomes largely rhetorical by default if not by marketing design. This is examined in more detail when the business development function is addressed.

The Finance Function

Within this overall picture, the finance function in the UK employs 200 people distributed across four main centres comprising: (i) central management service, which is the cash flow management element and was described in terms of "money in and money out"; (ii) cost control, which was described as accounting to manage the cost base; (iii) accounting for the human resource, especially pertinent to projects where people are moved on and off, which induces a highly variable cost profile; and (iv) financial planning which deals with investment and other fixed overheads. Finance was described as fulfilling a "need to be the conscience of the company". The finance mindset was therefore one of control and policing other parts of the business. Finance portrayed itself as being creative in identifying innovative financial solutions for projects and in operations and thus saw itself as having a transformational element within its activities that is was reticent to allow for other functions, namely business development and procurement. Thus it was not geared to capability criteria and their development to enable the business but was essentially transactional being informed by managing the controls, such return on capital employed (ROCE) as a key means of generating annual profit levels – low margins by accelerating the same working capital via effective cash flow management to yield a high cumulative annual return.

The use of ROCE by the finance function does not aid assessment of business development or their efforts to lever value propositions. Service elements in sales are difficult to attribute in advance to ROCE. Business development had once been assessed and rewarded against ROCE, but there was scant linkage between the two. It was considered fair and failed to act as a motivator of personnel. Sales generated by volume, value and strike rate can have perverse results incentivizing personnel to pursue projects and customers that meet individual targets but not the profile of projects strategically desired by the firm and set out in the marketing strategy. Lead generation is assessed in order to yield a better fit and alignment, however, finance measure the leads against budget targets, thus indirectly re-introducing some of the original problems again.

Business intelligence for selling is a cost and business development is viewed as a functional cost and thus an overhead rather than investment. This corroborates other findings in project management research (Smyth and Lecoeuvre, 2014). In terms of investment in programmes and projects the firm has to prove ROI retrospectively yet marketing does not. The consequence is that marketing is transactional in accounting and monitoring terms, based upon project-specific measures, such as strike rates by type of integrated solution, rather than being able to argue for investment in capability development from the organization or induced from projects to be subsequently rolled out across programmes (cf. Davies and Brady 2000; Brady and Davies, 2004). There appeared to be little opportunity to develop capabilities for integrated solutions, whether for standard replication or adaptive replication. Products and service offers were largely inherited – a business legacy. However, the marketing and business development function are able to secure investment if it meets strategic targets for the mix of services and attendant solutions. This appears to be more geared to future expansion of current activity rather than developing capability, hence remains largely transactional rather than transformational. Finance measures of marketing were recognized as needing improvement.

As finance is interested in costs and investments as inputs rather than yield, thus being able to demonstrate ROI from the operational end will have little effect on the ability to justify further investment to improve capabilities from business development and client satisfaction perspectives. Finance, in line with the general character of the firm, is very risk averse and very transactional in its leadership role in serving and running the firm. Indeed the finance function uses its power and position to control rather than serve the business (cf. Srinivasan and Hanssens, 2009). This was described as a "healthy tension between marketing and finance" and transactional finance remains dominant as the "conscience of the company" – the policing role finance performed, which traps the organization in a predominantly inward looking transaction-led approach, constraining learning and development opportunities throughout day to day activities. But perhaps more significantly, an inward looking approach restrained strategy development via the identification of areas of the business that could be better coordinated and marketed strongly as robust solutions to unique client problems.

The Business Development Function

Business development is described as the selling function within marketing. There is a claim to have moved away from a marketing mix paradigm, described in terms of pushing products and services in the market, to a relationship marketing paradigm based upon pulling in customers, which involves developing service ideas and integrated solutions. A relationship approach is also considered cheaper because it became possible to secure contracts formed of bundled services that are larger than hitherto was the case. This reduces business development costs. Business development is therefore now more targeted and less transactional. Yet business development claim to be still financially assessed upon cost per sale, the transactional approach of valuing leads in the pipeline by converting these into estimated sales value or bid prices. This contrasts with a relationship marketing approach where equal or more weight would be placed upon estimated *customer lifetime value* (CLV) – the customer at programme level as well as the project as the unit of consideration (Smyth, 2015a).

Customers do not always understand their requirements. Some need help to articulate these. The challenge is to get as high up the customer hierarchy to the key decision-makers. This is stated to help understanding customer needs as well as improving the strike rate. It is also a good position in which to try to sell on a partnership with the key alliance partners. It further improves the potential to sell in-house solutions and hardware, rather than outsource to the supply chain. Conceptually and in principle in practice this places the business developers in a good position to identify and configure value propositions that offer integrated solutions. It is at this point that a misalignment between the rhetoric and reality appears – the service gap.

The finance function has been identified as constraining investment in capabilities for developing integrated solutions. There are conceptual opportunities to replicate solutions provided these are adapted in context and for use. This is achieved through tailored services and customized content, which has been termed adaptive replication (Miraglia et al, under review). The firm minimizes adaptive replication. It minimizes opportunities to use relationship marketing principles to add value in terms of inputs and offer propositions that enhance the potential to realize co-created value as conceptualized in the service-dominant logic. The reality is that business development managers try to keep the service line offers as standard as possible. In other words, the firm essentially has a menu of standard service offers and products. Business development managers pull off the menu the products and services closest to the stated requirements of the customer and present these as integrated solutions. There is no or minimal customized content, except where the customer demands it and the context requires it. The tailored services are also minimal. Configuration is seen as a matter of effective project management rather than serving customer need, and thus an inward-looking, risk averse profile manifests. This is conducted on a project-by-project basis. The programme level and CLV are not considered.

The prime focus is the project rather than customer management in relation to CLV. What is valuable to the firm is the brand of blue chip customers – "king pin marketing" – as this furthers their ability to secure large projects based upon track record with previous large customers sector by sector. There is client management at the project level in the form of key account management (KAM). Traditionally, KAM spans exchanges and transactions and thus conceptually resides at the programme level in project businesses. It is confined to projects in this case, although some of the firm's most complex projects constitute programmes of work due to their complexity. Yet, this still excludes long-term customer management on and between projects (cf. Hadjikani, 1996). Business development does not interface or manage the KAM role. Projects are the unit of consideration, and business development is functionally confined to trying to prequalify and win bids. The function is largely insensitive to other processes. Their resource base also limits the possibility as the finance function closely monitors and controls business development expenditure. The stated reason is to protect margins so that not too much is spent at the front-end or subsequently, yet this is based upon transactional reasoning of price-dominated competition where value propositions are undifferentiated – customizing and tailoring services to maximize the potential value. Reputational value and repeat businesses as profit sources appear not to be considered from this viewpoint.

The risk averse character of the firm, dominated by financial criteria to control rather than serve internal functions causes the firm to be slow responders in the market and to customer demands. There was repeated acknowledgement that the firm loses business this way. Review processes hold responses up in business development. This feature is in alignment with being risk averse and the transactional assumption that suppliers take the lead and customers are predominantly passive recipients of predetermined products and services.

The Procurement Function

Procurement manages 2000 suppliers that are very diverse by content and size. Procurement has reviewed ‘make’ and ‘buy’ decisions with a revised policy to prefer internal suppliers. This has increased the sales of product sales even where clients have preferred or have other propriety products and services packages. They now try to persuade the customers to buy their products on the basis that it is cheaper for them, even though there may be interface problems in use.

Procurement has recognized the need for better governance and the need to be flexible and have rapid response. This is because the procurement function was perceived as “an inhibitor rather than a contributor” to providing customer solutions. This is conducted within the function rather than in tandem with business development.

Suppliers are prequalified based upon strategic alignment with the corporate strategy. They have an approved supplier list based on technical, commercial, price and due diligence (corruption, privacy, environmental) and other corporate social responsibility elements. Suppliers retain their position in supply chains by demonstrating innovative responsiveness. Detailed accountability is cost based, savings being the primary key performance indicator (KPI).

The approach is primarily transactional with some limited features of relationship marketing practices. A relationship team had been introduced into procurement in recent months before the workshop, which had an additional remit to lever value. There was limited dialogue with business development. Thus, the ability to align supply chain capabilities with value propositions for particular projects and for particular customers was constrained.

Overall, the procurement function was more closely aligned with the transactional approach of finance, although recent developments have empathy with the relationship marketing approach.

Discussion

The financial function is dominant and drives a largely transactional business model. This conceptually aligns with a marketing mix approach with the emphasis upon a production orientation based upon inputs. The evidence of high levels of replication is derived from drawing upon a menu of predetermined product and service solutions.

The extent of integration is a product of the extent to which the combination of solutions drawn from the menu is applied on a regular basis to form value propositions. In other words there is experience and standardized management practices that emerge to coordinate replicated solutions. The standardized capabilities supporting this approach contrast with the generation of capabilities to develop integrated solutions in the asset specific market of projects (Davies and Brady, 2000; Brady and Davies, 2004).

Systems integration is required to configure combinations, especially unusual ones, into effective work packages and services from suppliers (Davies et al, 2007). However, it was found that integration is production orientated along transactional lines rather than responsive to customer needs. Adaptation is therefore limited and thus adaptive replications of organizational and project capabilities to customize content and tailor service in delivery is largely absent (cf. Miraglia et al, under review). Routines serve transactional coordination (cf. Jarzabkowski et al, 2011) rather than value integration in transformational ways (cf. Parmigini and Howard-Grenville, 2011).

Applying the marketing lens, the evidence contrasts with the more transformational approach claimed to be used in business development. Relationship marketing is largely confined to rhetoric of developing customer facing integrated solutions to align the message with need.

Relationships are developed to improve management of the pipeline of work, whereby the firm targets larger projects of greater complexity than hitherto the case.

These are not characterized as B2B relationships of high levels of interaction and dialogue using relationship marketing and management principles (cf. Grönroos, 2000; Akaka et al, 2013; Smyth, 2015a,b). Relationships are therefore not built as a means to develop value propositions and services rendered (Grönroos, 2000). The approach also limits the ability to co-create value in two ways. First, the potential value is constrained for its realization in context and use (Vargo and Lusch, 2004, 2008; Akaka et al, 2013). Second, relationships are not nurtured to enhance co-creation through joint innovation and collaboration at the front-end, nor for joint problem solving and managing emergent requirements during execution (Smyth, 2015a).

The transactional approach was most prevalent in the finance function and this function was the most powerful through the exertion of investment, overhead and cost controls. As a result and regardless of other strategic and transformational aims, objectives and targets were short term. Many of the controls appeared to be informed by shareholder value drivers (cf. Srivastava et al, 1998), raising again the issue as to whether the finance function drives or serves the firm (Grönroos, 2000; Srinivasan and Hanssens, 2009). Medium and long term interests of the firm involving investment in organizational and project capabilities to enhance value propositions, deliver integrated solutions and co-create value were largely absent on the ground.

The configuration of integrated solutions, their presentation in value propositions and delivery during execution is facilitated by the systems integrator role (Davies et al, 2007). Evidence from the case firm shows a lack of internal integration. The root of the lack of integration is the transactional approach, largely driven by the finance function. While there is transformational intent in the firm strategy, manifested in the marketing strategy along the lines of relationship marketing in order to drive business development, this was largely manifested on the ground as rhetoric due to exertion of financial policy and controls in the firm, which constrains marketing and business development (cf. Smyth and Lecoeuvre, 2014). The procurement function was more aligned to transactional controls yet its strategy was moving towards a transformational one and will face the same issues regarding finance. Either the financial function has to change or the marketing strategy and other transformational policies should revert to a transactional approach or there will be increasing dissonance and misalignment between functions.

The lack of cross-functional integration is causing a lack of current coordination to develop integrated solutions and constrains the development of capabilities to generate integrated solutions. This in turn affects the capability to lever value from the supply chains to generate the potential to integrate value propositions and enhance co-created value in context during execution and in use (Vargo and Lusch, 2004, 2008: Akara et al, 2013). In sum, a lack of internal coordination restrains both internal and external integration of the firm in the systems integrator role (Smyth, 2015a, b).

Conclusions and Recommendations

The research set out to find out *to what extent does a systems integrator invest in the development of integrated solutions at the front-end?* There has been a research focus in project businesses upon internal integration through a systems approach and external suppliers through chain management. There has been scant attention paid to the supply side at the front of the front-end, which starts with business development. This research has made an original contribution, building on previous work on the systems integrator role from a marketing perspective (Davies et al, 2007) and examining the detailed outworking in terms of cross-functional working to develop value propositions that are delivered as integrated solutions.

The main thrust of the findings are summarized as:

- There is a lack of investment in specific project to customize and tailor value propositions, hence scant adaptive replication to develop integrated solutions to best serve customers;
- There is a lack of investment from the firm to develop capabilities at programme and project levels in the organization and from past project to enhance value propositions for the future, differentiate the service solutions and increase the potential for all organizational actors to co-create value;

- The lack of internal functional coordination led to constraints in identifying areas of the business that – if coordinated – could form integrated solutions;
- Transactional policies, especially driven from the finance function are misaligned with transformational objectives in the firm strategy and compromise their realization, further constraining the development and delivery of integrated solutions;
- A service gap exists between the rhetoric of service and solution provision and the delivery in execution caused by the misalignments at the level of transactional-transformational approaches, and thus the level of marketing mix-relationship marketing approaches, reinforced by the lack of dialogue at the finance-marketing-procurement interface.

A single case study is rich in context yet has limitations for identifying general patterns. There is a need to further examine other contexts and cases. This leads towards recommendations for further research:

1. Examining further contexts and cases is the primary recommendation for further research. A repeat lack of investment in the development of integrated solutions in the front-end may highlight the need to re-evaluate the feasibility of integrated solutions.
2. A more detailed exposition and influence of the finance function by discipline and operations is needed in relation to business development, including resultant issues of power and control.
3. Business development in B2B asset specific markets needs to develop more robust conceptual models for its applied practices and supporting metrics to facilitate interaction and dialogue with other functions.

The third recommendation is normative for inductive conceptual development and prescriptive in application. It is suited to action research. There are further recommendations for practice:

A. Transactional approaches tend to better serve financial objectives and shareholder value at the expense of customer service and value, while transformational processes can develop marketing and service solutions that serve customers and financially robust growth. Firms will benefit from greater strategic clarity and alignment in their business model development at firm and functional levels.

B. Routines need to facilitate cross-functional coordination at the front-end to identify value propositions that can deliver integrated solutions based upon adaptive replication.

C. Marketing as a function that informs business development that applies relationship marketing principles remains poorly articulated even in a large leading global firm, potentially affecting the ability to facilitate value creation through value propositions and co-creation. This may have general applicability and serves as a signpost for all firms to audit strategic and tactical alignment of strategy and actions.

Appendix A

Marketing

1. What is your marketing strategy and does it give you a competitive edge?
2. How do you ensure you understand customer requirements to deliver added value?
3. How do you win support from finance and procurement for new marketing initiatives?
4. Does your approach to customer relationships management change before and after a sale?

Finance

5. How does finance department measure the success of marketing effort?
6. What is the relationship like between finance & marketing?
7. How do you allocate financial resources between projects and programs?
8. How do you ensure the compliance of the finance department with the sustainability objective?

Procurement

9. How does procurement strategy connect or align with marketing and financial

strategy?

10. On what bases you choose your supplier?

11. How do you maintain good relationship with suppliers (especially when they are competitors)?

12. How do you assess your department performance? It's independent evaluated or interdepartmental assessed?

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