Thinking Tri-laterally About Business Processes, Services and Business Models: An Innovation Perspective

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Abstract

We propose a new, integrated "way of thinking" about processes, services and business models. The starting point of this paper is that "getting things done" is the set of services the organization employs. These services are often broken, ineffective and/or misaligned with client/users needs. Any attempt to pre-emptively or reactively respond to market change or internal transformations must invariably rely on some of these (broken) services while, at the same time creating new ones that, in turn, make use of pre-existing services as building blocks. It is argued that services (both internal- and external-facing) are two things: a business process (the "how" of a service), and a mini-business in its own right (the "why" of the service). Each service has clients (the "who") that, through choice or mandate, solve some, or all, of a problem they have. In short, a service (and its underlying process) represents a "value proposition" to the service consumer (client) that enables them to "get their job done." A service is, in effect, a mini-business or "business within a business" and therefore is implicitly governed by a business model of the process/service owner, the "CEO" of that business. Adopting this perspective affords a fresh way to view "process" innovation. It can be top-down by considering its business model. Or middle-out, where a specific service for an internal or external client is examined for innovation potential. Or bottom up, where the business process that delivers the service is modified and, in so doing, alters the characteristics of the service being delivered to the client.

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1 Services and Processes

1.1 Service Architectures and Composition

Many alternative "fundamental" building blocks of an organization have been proposed and justified to serve various needs. Robert Anthony's seminal book (Anthony, 1965) provides an early framework. Porter's equally seminal framework is certainly one of the more widely cited and used (Porter, 1998). Another is Steven Alter's "Work Systems" framework (Alter, 2008).

This paper adopts a different perspective; one that's most closely aligned with what is termed the "service oriented enterprise" (SOE; Khoshafian, 2007) and its variations, e.g., value-stream architecture (Whittle & Myrick, 2004) and a substantial refinement and extension of the "Think Service—Act Process" work of Welke (2005). The basic premise of these is that any purposeful (teleological) system, such as an organization is, from an execution perspective (how it does what it does), a collection of services of varying levels of scope and specificity (granularity). Larger, so-called end-to-end services that fulfill customer needs are at one end of the granularity spectrum, while rather narrow services such as an order-approval, database request, or an ERP-based shipping receipt event entry are at the other end. Larger services of the "end-to-end" variety are typically composed of (and rely on) lower level (more granular) services.

Creating or adapting the larger, end-to-end services is, in SOE thinking, a matter of composing or re-composing lower-level, available services. Don't have what you need to achieve the service offering in mind? Then create a new one, modify or extend an existing one, or find an alternative service provider that has what you want. Just like your customers' do.

To take a classic example of this, consider Virgin Mobile (Sawhney, Wolcott, & Arroniz, 2011). It offers a mobile phone voice and data service to its targeted customers (primarily teens and young adults) consistent with its youthful, innovative brand.

To offer this service (sign-up to on-going voice/data provisioning) it could have created all the secondary, tertiary and lower level services associated with payments, accounting, network connectivity, etc. Instead, it has chosen to wire together (compose) existing services from other service providers to achieve the bulk of its "end-to-end" service offering to its customers, and to differentiate its offering by selecting a very few bespoke services that distinctively meet their clients needs, thereby offering a unique value proposition to its mobile customers.

In general, an organizational service architecture, with decreasing levels of granularity, might appear as shown in Fig. 1 below.

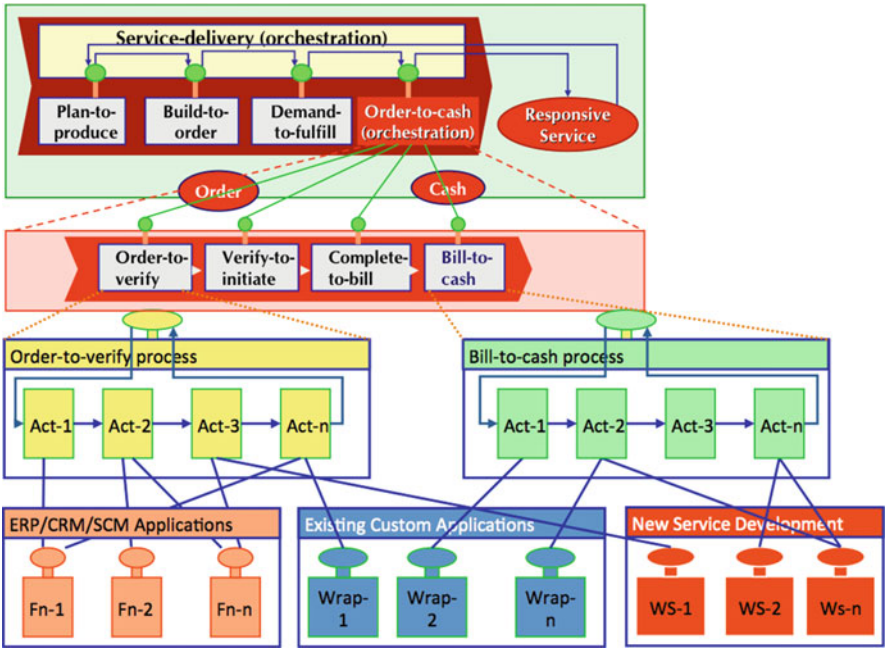

Fig. 1 A service-oriented enterprise view

1.2 Service Types

The word "service" invariably evokes different notions of what the term means and what it embraces.

For some, such as those in information technology, it could mean a very well-defined interface definition that, when correctly invoked and initiated, returns a pre-specified set of values based upon an equally well-defined set of input values. This interface is defined by a "service definition" and the means by which it gets from input to result (a method).

Or, it could mean an outsourcing service arrangement, where the invocation, results, and other aspects are governed by a contract that includes an SLO (service level objectives) and related SLA (agreement, typically with penalties).

At the other end of the spectrum are services designed to respond to prospective users (clients) with vaguely defined/formalized needs that nevertheless have a problem they wish to have solved. One example of this might be a client that wants a "killer" design for a product or service, or an associated marketing campaign to increase awareness of same, based upon some as-not-yet-well articulated objectives and needs. Or, it could be an internal client whose problem is to find out what the current accounts receivable aging's are by arrear days and customer.

What's common among all of these examples is a client with a problem-to-be-solved (PTBS) seeking a service (and service provider) and the discovered/offered/

mandated services making or inferring a claim to be able to solve such problems (Christensen, 1997). What's different among them is the degree of specificity of the clients initial PTBS and the underlying flexibility of the offered service to accommodate this lack of specificity. This gives rise to various service types.

Invariably, in any discussion of services, the idea of "products' arises. A product is something that entity A sells (transfers ownership) to entity B (the customer). It doesn't "solve" the PTBS directly in most cases. However, in some cases merely owning something such as a house or a Bentley automobile "solves" the problem for the client (e.g. prestige or access). Setting these kinds of "owning solves the problem" solutions aside, the client will then have to treat the ownership as a means-to-an-end to solving their PTBS. They will either have to use the now-owned product to solve the original PTBS themselves (means to an end) or hire (as a service) someone who will do this for them. Services, on the other hand, aim to solve a problem (however vaguely or narrowly defined) on a one-off, non-ownership basis (you own the solution but not the means by which it was produced).

An example is hanging a wall picture. What problem does the picture pose for the consumer? Answer: fasten the picture to the wall in a particular location. Do I need to own a hammer (product purchase) to do this? Obviously not. "I could, for example, rent a hammer, a glue gun, a stick-on picture hanger, etc. However, I probably can't rent the fastener or stick of glue so I'd have to purchase and consume these. So, if I have recurring PTBS's of the same type for which the solution is the same (fasten something to a surface using focused force) then I might want to invoke "me" as the service provider to solve the PTBS (and possibly save something regarding time, cost, convenience, etc.)" with "I could rent a hammer or a glue gun (service) but I would still have to invoke another service (me or a professional) to solve the actual PTBS – hang a picture.

Services, on the other hand, are solutions to a current problem. They are sometimes (in the marketing literature) referred to as "value co-creation" (Vargo, Maglio, & Akaka, 2008). In short, that means that the consumer (invoker of the service) and service provider interact (generally, over time) to define an acceptable solution to the service consumer while at the same time providing value to the service provider in terms of payments, knowledge, brand enhancement, etc.).

1.3 Service Typology

There are many other ways to "classify" services including: the organizational area served by the services, it's granularity, its mode or channel of delivery (e.g. web-based, walk-in bricks-and-mortar, etc.), its alignment to generic functional areas of an organization (marketing, accounting, etc.) or a typology of the customer's problem to be solved. None of the latter classification schemes are particularly generic, but do serve the purpose of "key wording" a specific, pre-defined service definition or offering. A somewhat comprehensive attempt at this is Kalakota and Robinson (2003).

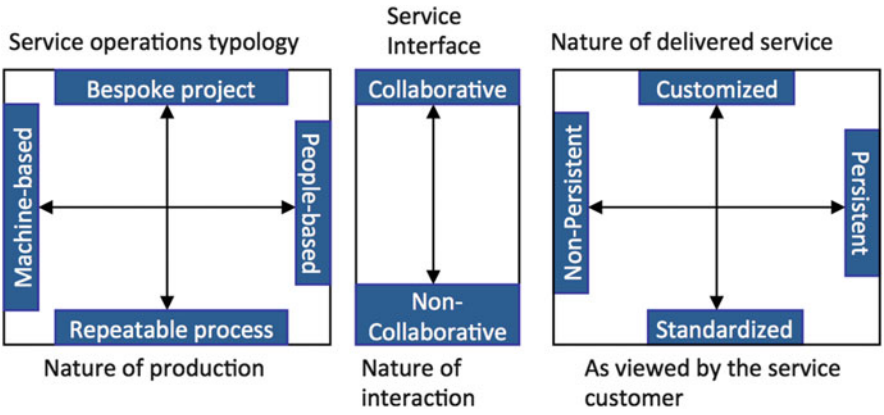

Fig. 2 Generic service typology

An alternative approach is to take a client/provider interaction view. This can be done from several perspectives: the service consumer, the service provider, and the interface between the two. Some common dimensions appearing in the literature adopting this view are given in Fig. 2. We note from the diagram above, is that services can be classified from either the client or provider perspective (with the preferred interface type defined by either).

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We adopt the perspective that a service is, in the first instance, something sought by a client (so-called "outside in" thinking) and therefore should be defined in terms of the nature of their problem to be solved. How, operationally, the provider chooses to respond to this need (services operation typology) is up to them.

What we can derive from this is a service definition and delivery "n-tuple" to the customer based on: <customized, standardized>, <persistent, non-persistent>, <collaborative, non-collaborative > as our high-level choices for the nature of the service provided, and thus the manner in which the underlying service execution mechanism (business process) functions and is prosecuted.

Stated somewhat differently, we observe the client interaction continuum as one characterized by the degree of a priori specificity in the result to be delivered:

1. Is it tailored to their specific needs, or is it providing a pre-defined result
2. What is the level of interaction needed to achieve the result they're seeking, within the limits of results possible

Is it a one-size fits all solution, a configurable solution, or one that's tailored (mass customized) to their specific need? This leads to the simplified classification of service types, based upon how the customer's problem is solved, shown in Fig. 3.

Fig. 3 Basic service types

1.4 Process (Execution) Typologies

From the execution (process) side one must match the behavior of the process execution to the type of service it is offering. Or, more precisely, the nature of the process execution (how it receives inputs and delivers results) gives rise to the service attributes above.

Again, there are many process typologies and, not unsurprisingly, they tend to focus on the same attributes as their (dual) service typologies, namely: type of result produced, functional area they belong to. For example, an oft-cited process typology is the MIT/NIST "Process Handbook" project (Malone, Crowston, & Herman, 2003). It enumerates processes as shown in Table 1. The APQC process classification framework (AQPC, 2014) is a different classification system that's more aligned with SOE (service) thinking than named process categories.

Here we're interested in more generic (abstract) execution typologies. For this, we find the Business Process Management System (BPMS) literature more helpful. In this domain it's generally acknowledged that, in broad terms, process execution types tend to fall into standard, fully pre-specified and modeled processes, more flexible "case" management approaches, and fully adaptive (emergent) adaptive case management (Swenson, 2010) and "HIM" (Human Interaction Management; Harrison-Broninski, 2005) approaches.

These are summarized in Fig. 4.

2 Service-Process Duality and Alignment

2.1 Service-Process Duality

In various branches of science it's common to look at a problem through complimentary lens. For example, a difficult "inventory problem" solution can also be looked at as a mixed integer-programming problem. Or either of these perspectives on the problem might be re-stated as a dynamic programming or systems dynamics simulation problem. A reason for doing so (aside from solution method awareness) is that what becomes an intractable problem in one representation may be more readily solved using a method (and its techniques and tools) from another solution

Table 1 Example processes from the process handbook

Account management	Customer acquisition	Manuf. capability development	Program management
Advance planning & schedule	Customer inquiry	Market research & analysis	Promotions
Advertising	Customer requirements	Market test	Property tracking/ accounting
Assembly	Customer self-service	Materials procurement	Proposal preparation
Asset management	Customer/product profitability	Materials storage	Publicity management
Benefits administration	Demand planning	Order dispatch & fulfillment	Real estate management
Branch operations	Distribution/VAR management	Order management	Recruitment
Budget control	Facilities management	Organizational learning	Returns & depot repair
Build to order	Financial planning	Payroll processing	Returns management
Call center service	Financial close/ consolidation	Performance management	Quality control
Capacity reservation	Hiring/orientation	Physical inventory	Sales channel management
Capital expenditures	Installation management	Planning & resource allocation	Sales commission planning
Check request processing	Integrated logistics	Post-sales service	Sales cycle management
Collateral fulfillment	Internal audit	Problem resolution management	Sales planning
Collections	Inventory management	Process design	Service agreement management
Commissions processing	Investor relations	Procurement	Service fulfillment
Compensation	Invoicing	Product data management	Service provisioning
Component fabrication	IT service management	Product design & development	Shipping
Corporate communications	Knowledge management	Product/brand management	...
Credit request/ authorization	Manufacturing	Production scheduling	Zero-based budgeting

perspective. These restatements of the problem through the lens of a different perspective are commonly referred to as "duals" of the original scenario or problem statement (Wagner, 1975).

To "make the case" for service and process being "duals" of one another, we need to examine this from both the service and process perspective. Can and should a service also be viewed as a process, and conversely?

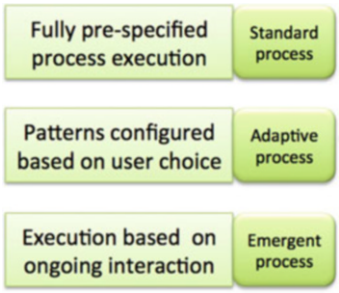

Fig. 4 Process execution types

2.1.1 Service to Process Duality

A service, regardless of type, is initiated by a customer, either directly or indirectly (e.g., some form of pull request based on time or another external event), and in turn delivers an outcome that hopefully provides the customer with a solution to the problem they invoked the service to help solve. How this is accomplished may be a "black box" to the customer, or some shade of gray to white transparency, depending upon their degree of engagement in shaping the need and form of solution as well as the "visibility" of the underlying service execution. Seen from the service provider's perspective, once a service is initiated, a series of actions are set in motion to refine and then respond to the initial customer's request. This "series of actions" we assert, is generically referred to as a (business) process. In other words, a process, whether it's fully pre-defined or ad-hoc, is how the provider of the service to the customer attempts to deliver the solution sought by them.

2.1.2 Process to Service Duality

Similarly, an existing (business) process can be seen as a set of activities (and associated tasks, events, gateway branches, roles and other representational artifacts that represent how the process operates) undertaken by an organization to "solve" a customer's problem. The service definition (customer, problem to be solved, etc.) is the process' raison d'être. However (and this is a big "however") boundaries around processes and the names arbitrarily given to the contents within such a boundary (as in, say the MIT process framework) may not have well-defined customers, problems to be solved or solutions provided. In many cases, where arbitrary boundaries of a process are defined, it's generally possible to modify the boundaries so that the preceding is true—having a specified customer as the process initiator, their defined PTBS, etc. We'll refer to these as "servitized" processes. That is, the business process is well aligned with its customer, their PTBS and a solution to the customer's problem (the process result or outcome) in the form of a service the customer invokes.

A reasonable question to ask at this point is "why?" as in "why bother to adjust process boundaries to align them with customer service needs?" Why not, instead, stick with current organizational labels such as "accounts receivable process," or "complaint handling," "requisitions," "project planning," "compliance" or a myriad other labels often used to (vaguely) reference and define business processes? While

a more detailed answer must await a subsequent section, the short answer is that without a service-to-process alignment the customer isn't clearly defined, the problem being solved and tendered isn't defined and thus any justifications for improving or innovating the process itself can only be done through the lens of the actions taken and not the value of their result to the end-user (customer). This myopia, in turn, leads to so-called process improvements, but rarely to process innovation.

2.2 Service-Process Alignment

2.2.1 Forms of Service-Process Alignments

From the preceding we can now postulate that the service-process duality assertion manifests itself as a design consideration. That is, if we align the three broad categories of process execution types with the three types of service interfaces that can be offered we get the model shown in Fig. 5.

As stated before, this is not a highly nuanced model of either process execution types (or their underlying technology architecture) or of service offering types, but it illustrates the basic idea.

Regardless of the categories on either side, it implies that as we change the nature of the service behavior in going from "here's what you get," to "we'll figure out and then do what you need done" you change the basic nature of how the underlying process organized, designed and executed. Conversely, if you decide on a particular approach to how processes are to be executed (a high-level, service-process design choice), you constrain the flexibility of the service offering to its client.

2.2.2 Service-Process Alignment Implications

There are a number of implications that can be drawn from the preceding alignment model. Below is a short list of some of these:

1. Deciding how one wishes a service to behave, whether stated in terms of degrees of collaboration and co-creation of value, or in terms of the "market of one" tailoring of the delivered result to the clients needs, is a design decision that in

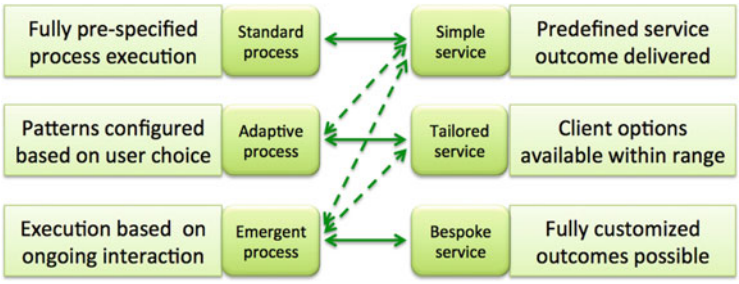

Fig. 5 Service-process alignments

turn directly affects the type of process execution approach taken. And, conversely.
2. Nearly all processes begin life as emergent (or ad hoc) processes in order to understand the actual client needs. These are nowadays referred to as "adaptive case management" processes. As time passes and these needs are better understood, the process execution becomes more rigidified (to allow for such things as repeatability, efficiency, oversight, regulatory compliance, etc.). But, at the same time, the agility of the process (and its service's ability to adjust to changing customer needs, diminishes).
3. Hybrid models are possible in that one can have an emergent approach to the service interface, but that process can in turn draw upon internal and external services that are, in fact, "simple" services with standardized process executions.

We next turn our attention to the final aspect to be considered in this proposed integration of ideas, namely business models.

3 Service Business Models

We begin here with the assertion that any service, whether it's consumed internally (by organization members or processes) or externally (by a customer), represents a 'mini-business." And, as such, it has an implied business model—its raison d'être. And therefore, invoking the by the service-process duality argument, any business process or the service(s) it defines has an implied business model as well. Normally, and to the extent a business model is developed at all, it is applied to the major value streams of an organization, i.e., the principal, revenue-producing products and services. However, there's no reason why this thinking can't be scaled to suit any service within the organization. As we will try to demonstrate, there are several good reasons why this point of view should be applied.

There has been a great deal of discussion in both the professional and academic literature over the past decade regarding what is meant by a business model, how best to capture it, and whom its customers are. There are many excellent frameworks and summaries on business models, including an "older" but integrative summary on business models provided by Al-Debei and Avison (2010). A summary of the current the "state of the art" is provided in a whitepaper by Krcmar (2011). Of the numerous available process model frameworks, we adopt the work by Osterwalder, et.al. (Osterwalder, Pigneur, and Tucci (2005), Osterwalder and Pigneur (2010)) on Business Model Generation. These authors view a business model in terms of a "canvas" consisting of a set of interacting concepts shown in Fig. 6.

Osterwalder and Pigneur also provide a "sub-canvas" to enable practitioners to more fully elaborate their "value proposition" for the offered service, called the Value Proposition Design or "VPD" (Osterwalder, et.al. 2015) (Fig. 7):

From a business model perspective, on the client side (outside-in perspective), each customer consuming the service has a problem-to-be-solved (PTBS), directly related to their job-to-be-done (JTBD), that governs the service he/she elects. From a

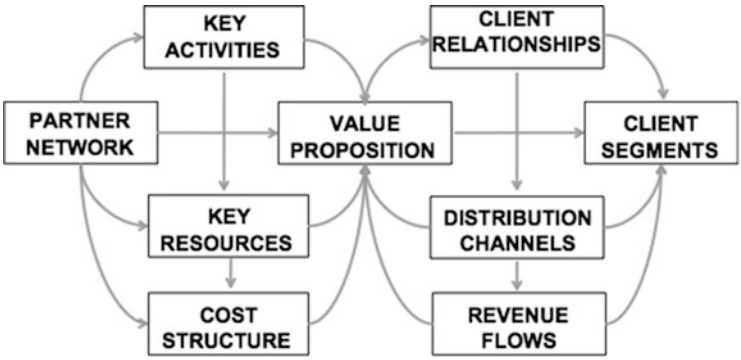

Fig. 6 Business model concept associations

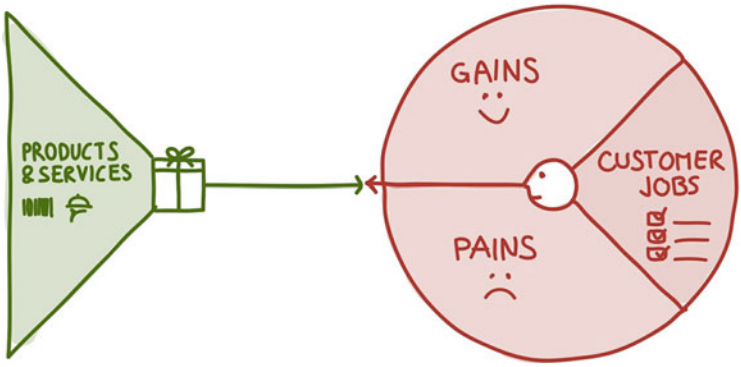

Fig. 7 Value proposition customer-facing elaboration

provider perspective, you're offering to the internal (to the organization) or external (revenue-generating customer) your service and underlying business process, a solution response to this customer's PTBS; that is your "job-to-be-done" (JTBD). You differentiate yourself by a superior value proposition delivery and execution that successfully differentiates, in the minds of your internal or external customers, your service/process approach to their job-to-be-done.

4 Business Model–Service–Process Innovation

The term "innovation" has many meanings and interpretations. At one end of the spectrum it has been used to refer to a multiple times improvement in one or more characteristics of a pre-defined result or offering. For example a 3× reduction in cost, a 5× improvement in reliability, a 10× improvement in cycle-time or a 4× improvement in customer satisfaction. In short, an improvement in one or more dimensions associated with the delivery of the same solution, as seen either from

the consumers' perspective (value metrics) or the process owner's perspective (process metrics). This is sometimes referred to as "incremental innovation."

At the other end of the innovation spectrum is what's termed "radical" or "disruptive" innovation wherein one imagines a service offering that solves a problem that others aren't solving and, perhaps, the potential customer isn't even aware they have this need. Examples abound, such as Apple's introduction of the iPod and smartphone, or Skype's introduction of consumer VOIP. And, of course, the Internet and the World Wide Web. What made many of these more compelling is that they represent services as platforms for other services (and thus additional innovation) and, of course, network effects.

Both ends of the innovation continuum, as well as steps in between, are applicable to services and processes (and their associated business models). It depends on the perspective and tools you bring to the innovation/improvement task. If one begins with questioning and re-thinking the value proposition being offered, one moves towards the disruptive end. If on the other hand, one brings a Lean/Six-Sigma perspective (and tools) one moves towards the improvement end of the continuum of innovation.

4.1 Innovating Business Models and Service-Process Offerings

Any pre-existing business process, and (through the duality assertion) service offering, competes in a market of other, overlapping service offerings (both internal and external) that offer a value proposition to the internal external or external client with a problem-to-be-solved. In other words, the process owner (the "CEO" of the service-process offering he/she is responsible for) is in competition with other value propositions that offer to (partially or completely) address the customers' problem-to-be-solved.

As a process owner, your first (and arguably primary) job is to define what the value proposition(s) are for the service-process you're internally (organizational customer) or externally (customer facing) offering and responsible for. And then do a competitive assessment of your service offering's value proposition relative to its peers. An appropriately formulated Google search can easily identify a range of offerings for a particular PTBS that "compete" with an organization's internal and external service offering(s).

The key issues here are:

1. What is your value proposition relative to an internal/external customer's PTBS?
2. On what basis do you differentiate your offering from those of others (e.g., scope of solution, client perceived transaction cost, cycle time, support. . .)?
3. How should you differentiate your offering so as to dominate those of others that offer a similar (perceived) value proposition to the customers you're seeking to attract or retain?

Given answers to the above, how should you redesign, configure and implement the underlying business process to compete with external offerings? Or, going beyond these "improvement" dimensions, how do you "head to where the puck is going" and expand your addressed PTBS, or define and respond to the "under served," and/or disrupt your view of delivery before competitors do this for you? While an organizationally mandated "sole source" requirement for internal offerings (only) may exist now, such protection is, at best, short-lived.

The value proposition, expressed or implied, is an obvious starting point for any innovation efforts. Who is the current customer? What is the problem they're using your service (and underlying business process) to solve; or alternatively, what job are they trying to get done? Once this is established, then one can begin to ask "unfreezing" questions such as: how might we be able to solve more of their problem or complete more of their work? What do they do before they use our service? What must they then do after using it to complete their work or solve their problem?

This is precisely the type of questions that slowly revolutionized the travel industry. Airlines, for example, once viewed their service as providing seat reservations. But this is but part of the PTBS—hotels are needed, transportation may be needed, meals, entertainment, and so forth. In short, the original value proposition greatly expanded from booking a seat to putting all the pieces together to solve the problem of having a pre-planned trip. To do this they not only used some of their own internally managed services, but employed external services from others. But to the travelling public, they represented a "one-stop" shop.

Alternatively, external providers now do many employee services that were once provided internally, by the organization. Why? Because the internal service (e.g., employee benefits, legal services, small item purchasing, employee travel) fail to adequately solve the employee or employers PTBS. And, at some point, the gap grew large enough that rather than innovate the internal service they began using services that had already been innovated. Even many previous "core" services of organizations, such as customer support, manufacturing and logistics have met similar fates. The old adage, "innovate or die" applies with equal force to company's internal- and external-facing services and underlying processes.

4.2 Innovating with Service Composition

While one can think about developing new service offerings (and thus new processes to support these services), in reality many organizations use a combination of internally existing services, along with externally available services to "wire together" new service offerings. What the end-customer sees is a new service offering from that organization. Under the covers, there's a business process (typically supported by a BPMS or equivalent) that orchestrates these services, while putting an organizational face on the end result. We previously noted Virgin Mobile as one that has done this masterfully. But many other examples abound. Travel services, such as Priceline or Kayak. Or, financial information services such

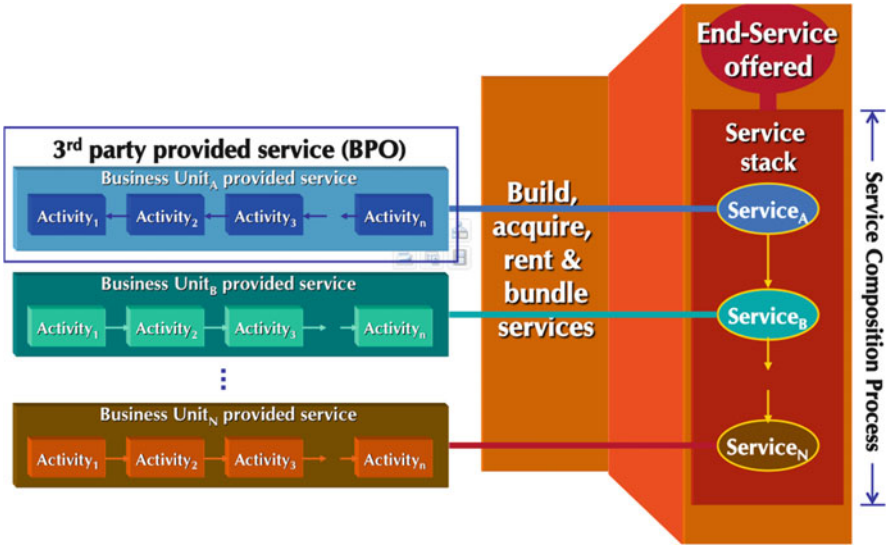

Fig. 8 Innovating with service composition

as Yodlee (who, in turn, sell their composition services to yet other financial organizations such as Fidelity on a "white label" basis).

The basic pattern for this looks like (Fig. 8):

4.3 Process Innovation and Improvement

The line between improvement and innovation blurs when focusing primarily on the process itself. For sure, one can sometimes dramatically change process characteristics such as resources consumed, availability of the service, cost, reliability, cycle time and consistency/quality of the results. These are metrics that may or may not have meaning to the consumer of the process, although they often have value to the process owner (in terms of the metrics they are evaluated on for purposes of performance evaluations). If you're truly focused on "innovation" then as an innovator you will need to go beyond process-owner metrics of improvement (and associated process improvement techniques and tools) and attempt to grasp what the consumer of the process-supported service actually needs, now and in the future, to solve their PTBS and get their "job" done. As already noted, there are many methods and techniques that address various aspects of process improvement, as well as questions one can reasonably ask regarding the process to stimulate thinking. An older such compendium is provided in Tom Davenport's book on "Process Innovation" (Davenport, 1993). A list of thoughtful questions the author often uses to stimulate discussion at this level comes from "The 7 R's of Process Innovation" (Shapiro, 2002).

5 Summary and Conclusions

5.1 Business Model–Service–Process Connection

This paper argues for a tri-partite view of business model-service-process thinking and innovation. The directional view adopted: process → service → business model (bottom up), or business model → service → process (top-down), or starting with the service (middle out) depends upon whether the object of interest is that of a customer trying to solve a problem, or a process owner seeking to rationalize (and improve or innovate) the process they're responsible for.

From an inside-out (or process first) perspective, it is argued that any business process presents itself to its consumer as a business service that attempts to solve the customers' problem. That "service," in turn, exists for the purpose of meeting and satisfying a customer's need; that is, to solve a problem they have (PTBS) and, by invocation, to get their job to-be done (JTBD) in solving their problem. Moreover, the service can appear to its consumer as a progression from rigid (a one size fits all solution) to highly tailored (a customized or "bespoke" solution adaptively tailored to each customer). And, these presentments (solution approach alternatives) are a function of the underlying process execution type chosen.

The organization has an evolving collection of such services (and underlying processes), with a presumed clientele drawn from either internal or external customers. Regardless of demand origin (internal or external) there are competitors to the offered service. For example, the organization could provide its own payroll service, but there are external competitors such as (in the US) ADP or PayCom (and, in large organizations, competing internal units) that solve the same problem (i.e., how to reimburse individuals for the time they spent on adding value to current or future organizational offerings or: Contribution-to-Compensation). If it's internal service competition, then the solution could be "shared services" (single internal provider). If it's external competitors, then the issue becomes one of service differentiation, based upon characteristics that matter to the client. In the end however, it's all market competitors and client perceptions of the best fit between service offerings and their perceived job to be done.

Conversely, an organization, with an existing client base, may be interested in better differentiating its offerings to external customers so as to gain or retain market share, and/or rationalize the processes they perform internally, by defining both their customer and business value and whether or not an internally delivered solution is competitive (viable).

Either way, a business model of a service and its underlying process helps to sort out the intent and competitive positioning of any service being contemplated or offered.

5.2 Interaction Effects

Regardless of the directionality of the business model, service and process taken, there are significant interactions that should be proactively managed. If one adopts an outside in (client first) perspective, then it is argued that a business model of the proposed service offering should precede its detailed definition. And the service definition should precede a choice of the process execution type and finally its process execution model.

Conversely, if a specific business process is under improvement scrutiny whatever reason (e.g., cost reduction, lean and/or six-sigma related process improvements), it should be cross-defined as an offered service, and then when so-defined, the service should be examined through the lens of its implied business model, by making that business model explicit.

In summary, a business model, service or business process, whether proposed or existing implies the existence of the other two. Each provides a unique and equally important perspective on the offering that offers both comprehensive definition and critique, and presents valuable insights into improvement and innovation opportunities that are not afforded by any single perspective.

5.3 Conclusions

This paper argues that business models, service definitions and business process models are, in effect, different perspectives on the same underling phenomenon. While these three concepts have hitherto been treated separately in both the literature and in practice, this paper asserts that they are, in fact, different views of the same artifact, with each contributing complimentary insights that the other perspectives diminish or set aside.

Working between the three perspectives can create more challenges than a single perspective view. However, the natural complementarity of these three perspectives suggests that ignoring this trifecta may have business consequences and/or process execution consequences. Conversely, more adequately accounting for all three views can lead to a far greater emphasis on innovation as well as improved implementation outcomes by more fully taking into account both the intended client of the solution offered, the market of competitive offerings as well as the alignment of the process that delivers this value, through the service, to the market of customers for it.

References

Al-Debei, M. M., & Avison, D. (2010). Developing a unified framework of the business model concept. *European Journal of Information Systems, 19*(3), 359–376.

Alter, S. (2008). Service system fundamentals: Work system, value chain, and life cycle. *IBM Systems Journal, 47*(1), 71–85.

Anthony, R. N. (1965). *Planning and control systems: A framework for analysis* (180 pp.). Boston, MA: Harvard Business Press.
APQC. (2014). *Process classification framework (Version 6.1.1)* (p. 25). Houston, TX: APQC. free PDF downloaded from http://www.apqc.org/pcf.
Christensen, C. M. (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Boston, MA: Harvard Business Press.
Davenport, T. H. (1993). *Process innovation: Reengineering work through information technology*. Boston, MA: Harvard Business School Press. ISBN 0-87584-366-2.
Harrison-Broninski, K. (2005). *Human interactions: The heart and soul of business process management*. Tampa, FL: Meghan-Kiffer Press.
Kalakota, R., & Robinson, M. (2003). *Services blueprint: Roadmap for execution*. Boston, MA: Addison-Wesley.
Khoshafian, S. (2007). *Service oriented enterprises*. Boca Raton, FL: Auerbach Publications.
Krcmar, H. (2011). *Business model research: State of the art and research agenda*. Working paper of Technische Universitat Munchen, Chair for Information Systems, Munich, Germany.
Malone, T. W., Crowston, K., & Herman, G. A. (2003). *Organizing business knowledge: The MIT process handbook*. Cambridge, MA: MIT Press.
Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. John Wiley and Sons, 1st edition, Hoboken, NJ, USA.
Osterwalder, A., & Pigneur, Y. (2013). *Value proposition designer*. TBD (in press).
Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems, 16*(1), 1–25.
Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2015). *Value proposition design: How to create products and services customers Want* (1st ed.). Hoboken, NJ: Wiley.
Porter, M. E. (1998). *Competitive advantage: Creating and sustaining superior performance*. New York, NY: Free Press.
Sawhney, M., Wolcott, R. C., & Arroniz, I. (2011). The 12 different ways for companies to innovate. *Sloan Management Review*, *47*(3), 28–34.
Shapiro, S. (2002). The 7Rs of process innovation. *The 24/7 Innovation Thought Leadership Series* (3 p.). Retrieved from www.24-7Innovation.com
Swenson, K. D. (2010). *Mastering the unpredictable: How adaptive case management will revolutionize the way that knowledge workers get things done*. Tampa, FL: Meghan-Kiffer Press.
Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal, 26*(3), 145–152.
Wagner, H. M. (1975). *Principles of operations research: With applications to managerial decisions*. Englewood Cliffs, NJ: Prentice-Hall.
Welke, R. J. (2005). *Think service, act process: Meeting today's demand for innovation and agility* (37 p.). HowDoUPress. ISBN: 978-0-9835439-1-6.
Whittle, R., & Myrick, C. (2004). *Enterprise business architecture: The formal link between strategy and results*. Boca Raton, FL: CRC Press.