



NPI for Life: Collaborate for Better Products

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Article

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NPI FOR LIFE: COLLABORATE FOR BETTER PRODUCTS

Summary:

What is happening with old style product launch processes? What was good and should be kept? What needs to change? We find there is a time for speed to market, and a time when “speed kills”. New processes must balance the need for speed against the time required to capture all views and identify all issues so that the new product performs as expected (for the company and the customer). Everyone must work together –building teams as well as technologies. Service providers can no longer afford separate impact assessments on [Network, Operations, marketing]; now we must measure based on the impact on the company as a whole. In the TeleManagement Forum, NGOSS and eTOM are providing standardized structure to the way products are catalogued and managed. But their most advanced work is occurring in the newly conceived new Service Delivery Framework. But will organizations adopt the necessary process discipline to govern product introduction successfully?



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New Product Introduction (NPI)

Ask engineers and product marketing directors, there is no greater professional satisfaction than guiding a new product from conception thru to successful launch. Creating a novel, successful product is often the most rewarding experience in a career. For executives shepherding the process, it provides the unequivocal thrill of accomplishment in a job otherwise often cluttered with politics and compromise. And for two decades now the mantra of survival in telecom is “more new services.” So how come everyone uniformly hates the classic telco New Product Introduction (NPI) process?

We see a lot of marketing around the notion that fielding new services is essential to each service provider’s survival. To a lesser extent we also see this extolled for vendors of equipment and OSS or BSS applications. There is also a lot of hype about various new approaches to assuring rapid and successful new product introductions. “Time to market” is a universal cry. “Innovate or die” is another popular catch phrase. Yet so is “the customer is king”, and the currently popular “customer experience management”.

We all know that “speed to market” does not always equate to “good customer experience”. Speeding up product introduction can introduce significant flaws in the products, or the supporting processes, or the infrastructure systems. These flaws can cause the product to fail. In today’s world of oversight and litigation, product failures cost not just lost revenue and lost market share, they can also bring fines, penalties, and adverse judgments in litigation. And can destroy vendor-buyer partnerships.

We all also know that customers have demonstrated time and time again that speed to the next big thing is not as critical as a product that works as expected. They will wait (at least a little while) for a product that works as promised and is available at a price point *they* believe provides value for money. Successful NPI is truly about finding that balance between speed and performance.

Many product introductions simply fail. Several studies of product introductions in the last decade of the 20th Century found four out of five failed to furnish the expected positive returns for their company. Almost half of the product introductions actually lost money:

“An ongoing study conducted by PDMA shows that over 40% of product introductions are considered failures. 46% of the money spent by companies on the conception, development, and launch of new products is spent on losers.” [Dave Brock, Partners In EXCELLENCE]

Watching a product you nursed fail is a heart-wrenching experience. And it is no better to be part of what appears to be a successful launch, which upon further analysis is found to actually reduce customer satisfaction. A good example of this was the introduction of performance reporting and utilization measures on data network circuits. High circuit utilization was not a measure important to the customer; did not necessarily save the customer money or improve their service levels. It didn’t even necessarily save the service provider money either. Not a success story as launched.

Today, the emphasis on balancing speed and performance is reflected in the shift to “Time to Money” rather than the old “time to market.” This measure looks past product launch to the point in time when the product is actually profitable – when it has sufficient market acceptance and uptake, supported by efficient processes and systems. It also reinforces the concept that product introduction requires participation of the entire company. But more importantly, it acknowledges that failures in marketing or in support can doom an otherwise stellar product.

Recently, a sizable legal settlement went against a telecom vendor who rushed a product to market with significant flaws and further, did not properly support the product as the flaws became evident. This



settlement wiped out any success story with adverse consequences on the company's bottom line. An even more painful example is the impact of WorldCom's stated goal of bringing novel products to market every three months. This placed enormous pressures on its employees, provided an easy target for Wall Street to criticize, and as a result tempted the executives to take the actions we all now know contributed to a real disaster: 160 Billion dollars in equity gone and the lives of thousands ruined. So heed, this is not just about the best way to for example, bring working IMS to market, but about one significant process revision that is necessary to survive in the new competitive world order – Collaborative NPI.

Where to Start: Customer or Technology

In the eighties, we saw a great transformation in American business that was perhaps best represented by turnarounds of two great companies: IBM and Chrysler. This transformation had at its root a concept called "customer first". Iacocca taught that 'style makes the first sell, but reliability makes the subsequent sales.' IBM put marketing before engineering and instituted customer surveys and focus groups as a necessary gating stage in the introduction of a new product. These changes invented today's Business Development role as the lead group of NPI. Both these corporate turnarounds were accompanied by widespread corporate changes in process and culture. Both became legendary examples of corporate reinvention. Yet today, IBM is more a service company and system integrator than it is a technology leader and manufacturing giant. And Chrysler went yet again to the auction block.

A focus on customer, while a necessary advance, was not sufficient to ensure a good product. In fact, as a product ages, customer driven requirements can bloat a product with so many features, it loses its focus, and worse becomes too complex to remain agile. This problem can be seen in the OSS/BSS application market. Products like Trouble Ticket Systems have become so onerous to implement that changes to support a new network environment can take 18 months of IT labor.

Despite the commitment of business development teams to listen to their customers, most new product introductions in telecom are driven by technological change. Indeed, most of the evolution of the networks has been and continues to be driven by technological invention. At their heart, service providers know this. The big service providers experiment with every new technology that comes along. If it is just an idea, they will talk about it in their planning teams; if it is tangible, they will make room for it in their labs. This is good for the industry.

But not every technology gets introduced – nor should it. Some just do not work efficiently or economically. For some (technology or service provider) the cost of change is too steep and too abrupt for the service provider to buy in - at this time. It may not mesh with existing network technologies. The younger startup vendors may not have the legs to survive the long planning, test, and purchase cycles typical of service providers. And this testing time is not going to get shorter any time soon. Service providers must try to ensure that the technology does work as promised, and that it can deliver the profits expected. While in the nineties, we introduced a new data network every two and a half years, today this headlong rush of new gear, new gear, has been throttled by lack of capital. And this is perhaps good, for a quality network should last and too many new network technologies just continues to confuse the customer.

Technology must be crafted into products that are meaningful for a customer in any case. Simply, customers choose what to buy. Jerry McDowell, one of the most successful business development professionals in Telecom OSS, has a favorite quote, "It does not matter until someone buys it." To succeed, the technology must have, or lead to, something the consumer recognizes, and wants – be it IT or Ops buying the OSS vendor's product, or the enterprise customer ordering capacity in the provider's network. Identifying this need correctly is where the business development teams can make a difference.

So neither “technology first” nor “customer first” is the correct, long term approach. It’s all about balance...

Gates

During the ‘customer first’ process revolution, the NPI process became a widely recognized structure. In this structure, a sequential series of product/customer explorations were set forth to answer specific questions and establish key product enablers and features. Milestones were established that allowed a company to judge progress and predict product ‘fitness’ and to decide whether to continue toward launch or not. Because a product must pass through this review in order to continue, these milestones were called Gates. Some time ago, in the article Speed Kills, LTC advocated the following NPI phases, as providing a metrics-driven and complete approach that would enhance the probability of what we now call “Time to Money”:

- Phase 0 - The Product Identification & Concept Development Phase
- Phase 1 — Feasibility: What is this product – and could it fly?
- Phase 2— Planning & Justification: The Devil Is in The Details
- Phase 3 — Design and Development: New Products Begin to Take on Life
- Phase 4 — Testing and Validation: Becoming Comfortable with the New Product
- Phase 5 — Full Production and Market Launch: Going Forward with Full Confidence

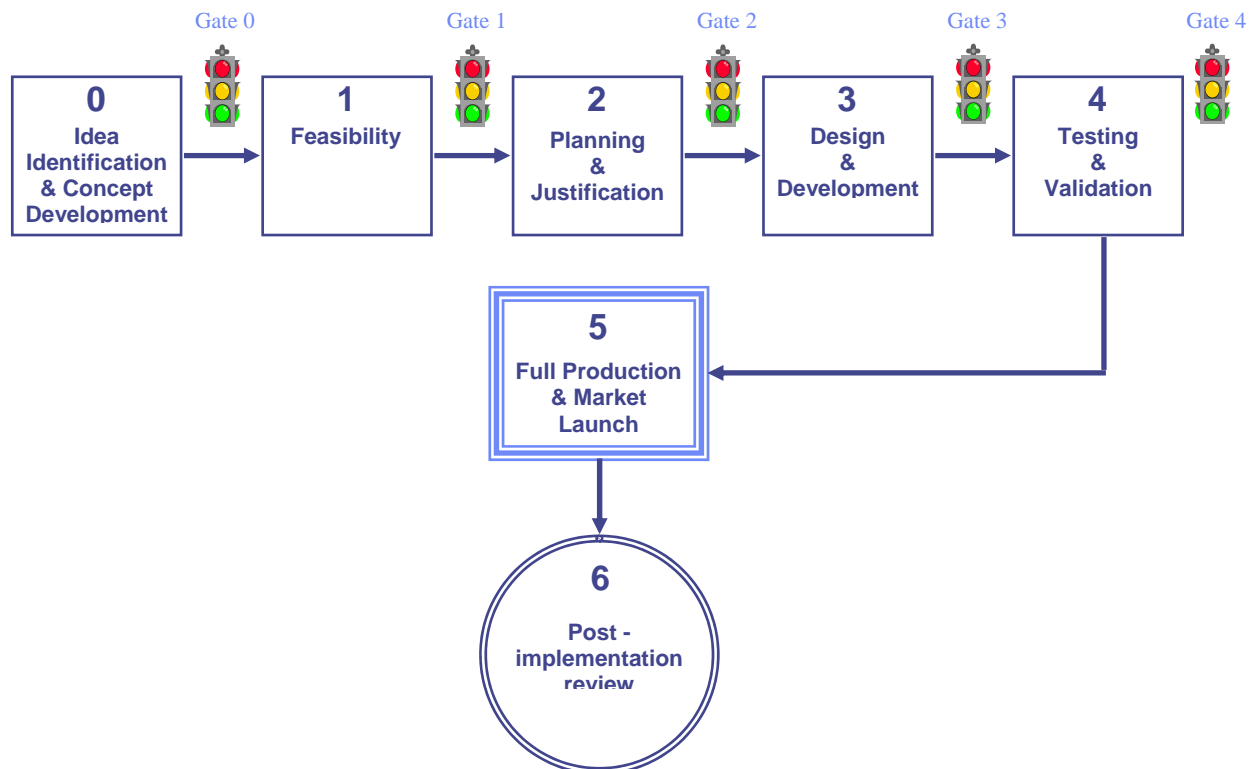


Figure 1: LTC International's classic process for NPI

At the end of each phase is a Gate: a specific review using performance tests that objectively determine whether or not a product should progress to the next phase. Associated with each Gate is a governance team and an outcome owner – who must certify the benchmark for passage was met for the product to progress. If the performance metrics are not met, the project is terminated – immediately. It is really important to note that this termination is considered a success: it has successfully saved the company from squandering resources on a product that upon further analysis was not shaping up to yield the profits expected. This is the whole point of a good NPI process: get the best possible products to market as quickly as possible. Don't let a mediocre, or failing idea tie up people, money, and time. If the “go” and “no go” criteria are set at the outset, then no ego need be damaged in initiating the termination action if the Gate Score is in the “no go” zone.

Today, this notion of Gates is under siege. In a desire to become ‘nimble’ and ‘agile’, to speed products to market as fast as possible, many companies are wondering if the NPI process is just too burdensome. Have NPI gates become too high a hurdle for companies under competitive pressure? (Never mind that Gates were rarely used correctly...more on this point follows).

One network equipment manufacturer was so sure that its gating process was inhibiting innovation and at the root of its declining market share, that it decided to remove all of those nasty checks and balances – just let the design teams get on with it. ‘They’ll know a good idea when they see one’. This Company decided that this dramatic shift in policy needed to be introduced to employees in an equally dramatic fashion. They had each Gate name etched into a large pane of glass. Then they lined up all of the glass Gates, and in a special meeting with its employees (and with real time video conferencing for those in other cities) proceeded to smash each of the offending Gates into smithereens. The executives were delighted with themselves.

The employees were stunned. While few would disagree that the gating process should be made simpler; none agreed that the improvement was to have no process at all.

“Introducing a new product can complicate workflow, add billing processes, alter ordering procedures, change support requirements, impact network traffic, etc. Advance discussions can enable each group to determine the most efficient way to support the product, instead of expensive scrambling and work-around at the last minute. The failure to coordinate and plan with all affected departments almost guarantees that, at best, your launch will be severely compromised and, at worst, that it will be an utter failure.” – LTC International, **Speed Kills**

The fortunes of this company did not improve, so it is reasonable to conclude that the old and stogy gating process was not to blame. The notion that “gates” must mean tedious oversight, or must lead to Analysis Paralysis, was, and is, simply wrong.

But we have some sympathy for the frustration that these executives were expressing. They hated those interminable interdepartmental product planning marathons. They hated having to arbitrate arguments over features, budgets, and resource allocations. They hated having promising new products run into glitches because some group “came out of the woodwork” with some business critical show stopper. And most of all, they hated to see their bonuses impacted by the lack of innovative and successful products hitting the market. Yet, we suggest that it was not the Gates that they hated...and that improving company wide collaboration may have solved their problem much more successfully than smashing panes of glass.

There are numerous ways to get this balancing act right, and all of them require collaboration between all of the groups required to design, build, launch and maintain the new products. Leave any group out of the

collaboration loop and they cannot be expected to be ready, on time, to effectively support the new product. This all seems very straight forward, doesn't it? There is no reason for a product to fail to launch effectively, or fail to generate the profit margins anticipated in its business case – is there?

There are some loud and strident complaints about the way companies introduce products.

“In the ICT (**Information and Communication Technology**) solution space for large enterprises, the fact is that solution providers use solution design techniques that haven't evolved meaningfully over the last 30 years.” [David Page, Chief Technology Officer for Nexagent, Solving the ICT Solutions Bottleneck in Pipeline Publications, Volume 3, Issue 12]

After 30 years, it seems highly likely that some major changes should be required. Things can certainly be done better.

But do we just abandon all process? Clearly no. Do we stop applying gating criteria that establishes the fitness of an idea or product at transition to each new phase? Also no. Do we need phases and gates? Yes, we are talking about needing a degree of repeatable structure that ensures the company is moving forward with the best of the best ideas.

Let's look at how that balance of speed and performance could be achieved given advances in technology, tools, and new business directions being undertaken by today's expanded telecom ecosystem.

Easy, or at Least Clear, Fixes

1. Use modern tools.

Essential to any chance of success is to get the requirements right. There will be numerous technical requirements which must be documented and *validated*. Do not just pull these from the last RFI you can find. There are corporate targets to be met, there are customer requirements to be met. Who are the intended customers anyway? Are there nested customers like families? What are the problems they face that your product will solve? What are the benefits they will receive? How will they measure your value? How will you measure your value?

The Marketing Service Description (MSD) was designed to capture the needs of customers, and of each involved group in the company. Done poorly, it can be so onerous and bloated that it gets abandoned early in the process – yet it should be the “assembly line” that is used seamlessly from the first concept to the end of the product's life cycle. While it might be a team-oriented document, one way to ensure that the MSD is not done well is to assign it to a team. That old adage: “A responsibility shared is a responsibility shirked” applies here! The MSD must be owned by one person. Another way to ensure a failed MSD is to outsource its development to an external consultant. Why is bringing in a consultant so awful? Well, even if the consultant is very diligent and conscientious, he or she is still an outsider and will not be able to turn over the right rocks quickly enough to find all of the requirements, issues and opportunities. And if the consultant is just of normal human powers, he or she may be thrown out if they come up with a schedule or budget that no one wants to hear. And if the consultant has less than desirable qualities, he or she may think it a good idea to try to spin the engagement out for as long as possible before being found out.

So, how can an MSD be done well, owned by one person, with contributions from all in a timely and thorough manner? The MSD, and any other living document thrives when a collaboration technology is used – like a Wiki. Such tools make it easy for everyone to see what has been done, what remains to be done, and who the owner will be asking for the next contribution. Customer surveys, performance data,

gating reports, budget accruals and more can be held in one easy to access location through the entire lifecycle. No longer just for engineering and marketing; it becomes equally accessible by operations and sales teams.

2. Build governance into the culture of NPI

Diligently applied, a collaboration tool-based MSD can enable the company to accurately set priorities and manage progress. No matter how efficient the process and the supporting tool, if its use is not enforced by company policy and company culture, it will not be used. Products will be rushed to market with little more than wishful thinking to support their success. “Too busy”; “too hard”; or our personal favorite, “but it’s strategic”, will all be excuses why the product must just be rushed to market without adequate governance and preparation.

And there are other structural reasons why this last minute rush occurs. Key people are expected to be able to support several high priority projects at one time. Key people get pulled away to fight fires (and remember rewarding that type of behavior simply encourages arsonists...), and people with essential input may often watch and wait to ensure that a project looks like a winner before participating.

These are all signs and symptoms of a dysfunctional company.

These behaviors must be fixed first before any new NPI process can be expected to succeed. Sadly we find anti-progress forces present in just about every company. Basically, no progress can occur until a company faces up to its issues and the executives commit to their solution. At the Spring 2007 TeleManagement World in Nice, Barbara Lancaster felt that executives from service providers and telecom vendors were committing to this change. What they must understand is that facing the problem is only the necessary first step. Cultures must also change. A success-oriented company will be capable of applying success-oriented disciplines – and smart enough to recognize them.

Subversion is deadly, but even more difficult to correct is today’s general organizational structure which while not “bad” in itself, leads to non-productive results for the full company. Many authors, yours included, have written and spoken at length on this.

“The problem with service creation environments in the telecoms sector is... Business and IT are essentially at odds and working to their own agendas rather than those of the customer or the business as a whole. The net effect of this disconnect is that unique relationships between all of the departments involved must be forged every time a new service is created. This makes the creation of that service an unnecessarily long and complex process... not only do the different departments not fully appreciate each other’s capabilities, they don’t use a common language to communicate and they also don’t have a standard set of components with which to work.” [Brian Naughton, VP Architecture and Strategy for Axiom Systems in Pipeline Publications, Volume 3, Issue 12]

A governance team must be perpetually vigilant.

3. Properly support “Best Practices”

In an article, we can only touch upon a few of these business practices that can be applied by success-oriented companies:

- *Align activities tightly to the corporate strategy:* Not magic; no Elves and the Shoemaker fairy tales here. As in LTC’s methodology and Kaplan and Norton’s *Strategic-Focused NPI*, turning strategy into action requires: Specifying the desired outcomes and the acceptable means of

achieving them. Laying out the activities required to accomplish this goal. Measuring exactly only that which is carefully aligned with the goals and activities of the strategy. Putting in place conformance practices for regulation and oversight. Rating everyone who participates based on process success and outcome quality. Providing for a continuous cycle of learning and growth that identifies and leverages intangible assets such as knowledge sharing. Defining and planning for sustained change. Motivating success based on rewards for meeting desired outcomes. As with creating a business case, promises made should be promises kept. Management must keep a tally of what performance is expected and hold the post mortems after product release that measure accumulated success.

- *Creating a Real & Rigorous Business Case:* Unfortunately, many managers do not know how to create or even read a business case. For them, a business case is simply a scenario of how the product will be used. Instead a formal business case is a description of how the new product will *make a difference* for the company. There are specific approaches and technologies that are used to provide as accurate a prediction of this difference as possible. For now, we stress that business cases must be based on honest numbers and not written to spin and justify a pre-determined decision. The business case is not just done before everything starts to get a budget allocated. While a business case does include the expected level of resourcing and resource costs, this is just an element of total cost that feeds the computations about eventual benefits. The business case must be adaptive; it is a prediction of future outcomes based on best available current knowledge. This should be a continual process of examination. When more knowledge is available, such as when the project progresses, better estimates and predictions can be made – so the business case should be a living document that is updated at least at every NPI gate, and continues to be reviewed and tuned during the entire lifecycle of the product.
- *Segmentation into large and small impacts:* Not all changes require the same depth and breadth of analysis. Small scale products or projects can move quickly through the NPI process, because they do not have the capacity to dramatically impact the company (positively or negatively). Instead of bundling all changes together in one big planning cycle, create a separate budget and NPI-light process to fund projects from the “Small Changes” bucket. Small changes should be done continuously, outside of procurement cycles. NGOSS provides a process for product assembly and change which can accommodate deployment of small changes. Several NGOSS directed OSS products implement the basics of product catalogs and are expected to improve.
- *Other business tool use* including: Ideation or Brainstorming, requirements capture, process and flow design, groupware such as Groove (both the old and newly deployed as document collaboration applications, and document management systems.

Cross Functional Process Mapping

While the origins of this approach are somewhat obscured, Motorola did give this technique a name and promoted it throughout the telecom industry. Our experience at LTC validates this as the most productive traditional NPI approach, and we find it adapts nicely to NGOSS related NPI. Done correctly and with the necessarily time budget it requires, the controlled and successful introduction of new services and products is likely. Motorola found that by eliminating unnecessary and non-value added work, the typical time reduction in NPI was as much as 90%.

Fundamental to this approach is the gathering and assembly of cross departmental teams who participate in the discovery of goals and requirements and then use these for further design. The methodology

involves the capture of “As is” and “To be” processes. Executives, users, customers and operations are canvassed for these processes. The team members must include specific roles:

- Project champion who provides resources and removes barriers.
- Team leader who organizes and conducts the meetings and who ensures that information exchange occurs.
- Action Item Owners
- Team Members who complete tasks.
- Champions and Independent facilitators; asking difficult questions; confronting inappropriate corporate culture

There were problems with this approach. Teams often got very large – sometimes 40 to 50 in a room - which is unworkable. Nevertheless, it remains the best current approach for getting the strategy, requirements, and processes straight during NPI, especially when the company’s culture empowers individuals to make decisions on behalf of their teams, and thereby keeping team size down to a manageable size.

Product Life Cycle

It is necessary to look beyond just passing through the gates and launching the product, even if those hurdles seem to already be a daunting race. Successful product introduction is not just about ‘getting to market’ but about ‘succeeding throughout the whole life of your product’. The longer the active buying life by the customer of the product, the better success the product provides the corporation.

This extended product lifecycle lasts years beyond the Launch phase. Full NPI analysis and planning includes consideration of all the phases of Product Life Cycle:

- Research (Market and Product)
- Development
- Pre-production
- Full Production
- Maturity (Sales stable but not growing), (in need of a mid-life kick)
- Decline (The slope of the decline graph is not relevant)
- Terminal decline (candidates for killing)
- Withdrawal of the product from the market

As we mentioned, effective strategy includes ongoing assessments and knowledge sharing. In telecom, ongoing information on customer satisfaction is available in the Contact Center. This means that good NPI means having proper Contact Center Analytics tools and processes in place before Launch. This provides critical, empirical “truth” on how a product is being received and what difference it is making to the customer.

Component Infrastructure for Post Modern NPI

The cleanest, cheapest and quickest way to introduce new products is to develop an infrastructure base that is designed toward NPI and full product lifecycle. Many advances in IT technology today support the implementation of a general purpose, reusable infrastructure for supporting products in development and

operations. These new tools are associated with the IT technology advancements of Components and SOA. Our telecom industry has gone further down this path. With the specification of the TMF's NGOSS, many of the processes associated with NPI have become codified and standardized. More products are appearing on the market that implement the components and process of product life cycle. These have had good showing in recent catalyst projects.

The development of component and service technology was in large part driven by the desire of companies and by telecom in particular to create a better approach to delivering software applications and products. Specifically, components were driven by a requirement for significant software reuse. In evolving the concepts and now the technologies for components, the requirement for rapid software product development is now realized in purchasable infrastructures. However, not all the components are yet commercialized, but enough are available to support at least *small* product changes with full tool kits.

NGOSS, one of the most developed process-driven, component architectures, has a well described approach to supporting NPI. Processes in the eTOM describe the lifecycle of products within the telecom space. In the decomposition of these processes a significant number of information artifacts (SID) have been modeled. These are gathered into what NGOSS calls Abstract Business Entities (ABE) which is the NGOSS equivalent of an application. Specifically the NGOSS "Product & Offer Development & Retirement" process provides for the following services:

- Gather and Analyze New Product Ideas
- Assess Performance of Existing Products
- Develop New Business Proposal
- Develop Product Commercialization Strategy
- Develop Detailed Product Specifications
- Manage Product Development
- Launch New Products
- Manage Product Exit

These processes are not necessarily sequential. Instead the service architecture supports event driven entry and reentry as required. As more NGOSS components become available, we expect that large NPI offerings will be supportable via this approach. In fact, we recommend using this technology now for large product service offerings (even with the approach start up costs) such as IMS and fiber-to-the-home so that incremental service improvement will be supported by these tools.

Modern SOA and Web services, SaaS and Virtualization are related IT technologies which are consistent with component enabled NPI and which promise significant additional improvements in the future. Eventually it will be possible to automate the entire IT delivery of a product service based on demand within architectures approaches such as self-* (self-star) systems.

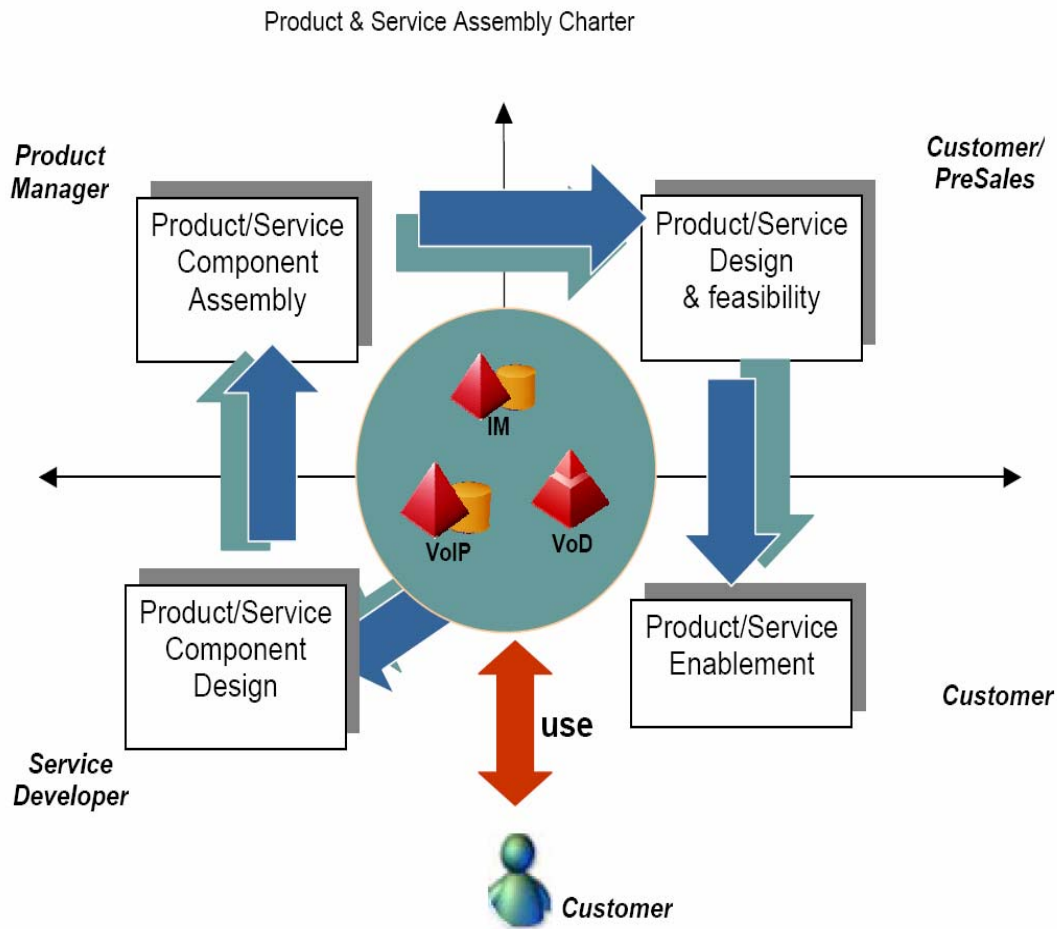


Figure 2: Use of components in streamlining NPI (taken from the TMF SDF)

Today, just the technology of NPI product catalogs, common data models, and service assembly is commercialized. These new advances facilitate production of a product factory suitable for managing service product improvement to a large product domain offering. Further they can leverage existing service components for bringing the next large product domain into existence cheaper and faster. In 2006, TMF Catalysts demonstrated the Product and Service Assembly Initiative (PSA) last January. In the PSA, an active catalog closely couples the processes of service design, creation and execution by deconstructing every piece of data in a service provider's product catalog into a component library made up of "building blocks" of information. Each component is made aware of how it must interact with every other component in the catalog - each component becomes reusable.

This approach is culminating in the future Service Delivery Framework.

Service Delivery Framework (SDF)

We all know that designing and delivering new services to the telecom customer is no longer just about rolling out new network technologies. Increasingly, services are moving up the value chain and the network is just a platform for delivering consistent and quality, personalized services anywhere the

customer needs them. A successful NPI must address the intersection of IT technologies, media & content, and communications networks. This represents an explosion in the outlets a network must provide to reach every customer, anywhere and anytime, with an implosion of content services drawn from both the internet and every media producer and format available.

With TMF's experience with component service standardization, gained in developing NGOSS, a reasonable next step was to tackle the creation of a plug-n-work support structures. This ongoing project is the definition of a Service Delivery Framework. Keith Miller, MD of Pendragon Consulting Ltd., who originated the SDF program in the TMF, explains:

“The TM Forum's SDF programme is the final step in bringing true real time services such as content and media into the new world of Telco's and content providers. It will create a standardized way of assuring and billing that will accelerate the provision of new content and media services while simplifying the user experience. This step by the TMForum will be key for the industry by finally coupling service creation environments and content delivery together with the OSS/BSS infrastructure - eliminating today's separate multi Billion dollar stovepipes.”

From the beginning, the TMF realized it could not create all the information or component designs necessary and should instead act to provide a collaborative reference framework for designs collected at large in the industry. As such, OASIS, W3C, IPsphere, OMA, ITIL, ATIS.TMOC, TISPAN, CableLabs, and IEEE/NGSN were mined for parts. The TMF provides its experience in service composition and design and in the technology of management (OSS/BSS). This content was overlaid into the SDF Reference Framework, which couples the 'development and management of services' with the 'run time delivery of services'. This represents a significant advancement in the conceptualization of a service – that services can be composed and delivered in very short timeframes – when these leverage a consistent infrastructure of common resources, processes, and management. This becomes the replacement for stovepipes.

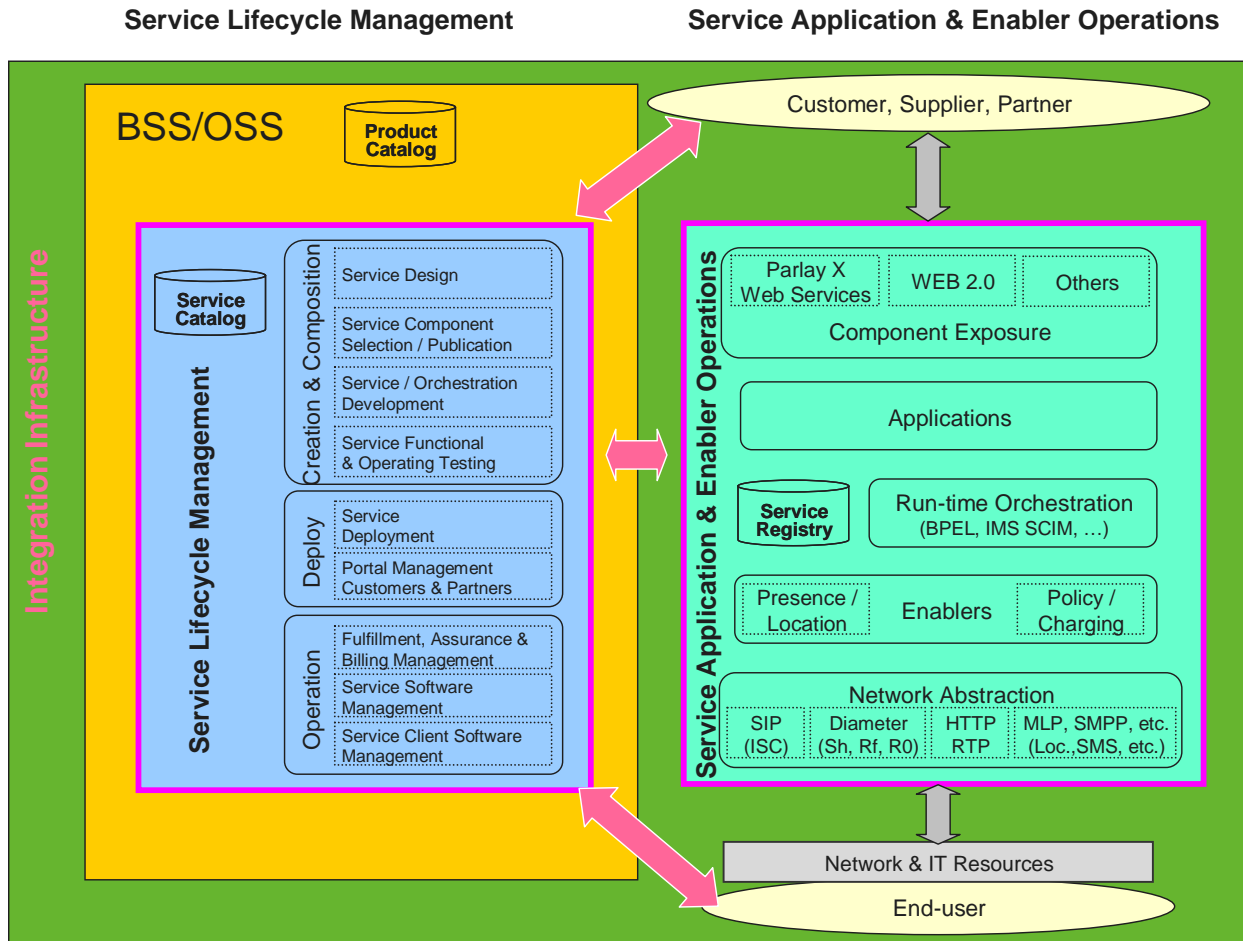


Figure 3: TMF's preliminary SDF Reference Model (copyright TMF 2007)

The TMF has been working on their SDF for a year now – lead by Jenny Huang of AT&T; Dave Milham of BT, and Johan Vandenberghe of Alcatel-Lucent. Keith Miller whets our appetite to see their first results, “The architecture team will report back at the end of Sept with an agreed SDF architecture.” Watch for TMF document *TR139 – Service Delivery Framework (SDF) Overview* which will peg level 0 and 1 of the reference architecture and explain its relationship with NGOSS elements such as eTOM, TAM, and SID.

Most important, the conceptualization of an SDF is based on the assembly of components from a wide range of suppliers. SDF requires vendor-provider partnerships. But it is still not magic, still no Elves working away all night...it still requires governance and facilitation of the NPI process. Just having components does not solve the problem. For just a simple example, think through call recording in an anywhere, anyhow, any network world. Where should call recording occur for a PC to mobile phone call? Facilities will exist for smartphone recording, desktop recording, or network resident recording on each transit network. If media is involved, who manages the digital rights? There will be many components which can be used in the solution of any service composition, and policy associated with the uses of each. Additionally, the more cooks, the tougher the quality control. When there are more players in the chain, there must be better architectural and executive leadership so that all work consistently

together. This cannot just be the service 'owner'; independent facilitators and auditors will be required to govern in what becomes a Cross Functional Process. These players will still leverage gates.

New technologies like the SDF will place additional pressures on getting current corporate partnerships streamlined. How often have we heard: "Procurement is my enemy." Why? Because Procurement processes are designed to efficiently get to the lowest possible price for a shipment of lug nuts, or other tangible something. And that mentality, and monetary incentive, does not work well in a service industry where dozens of partners must work collaboratively to achieve a successful "purchase". The result is that today's Procurement groups get to make decisions on which vendors are "on the list" and which are not - without having the specialist knowledge to understand when and how that may cripple their company's ability to compete. Just as the NPI process must be as streamlined and agile as possible, so must the Procurement department adapt their processes to become a useful part of the service partnership world.

So we need a measured balance between competition and cooperation. Our common goal, buyers and vendors alike, must be to create "innovation networks" that incorporate large numbers of cooperating suppliers and partners. This becomes the [New Telecom Ecosystem](#).

"The nature of the innovation process is changing as firms become less vertically integrated, and the co-ordination of processes in each link of the chain becomes increasingly critical." [Centre for Technology Management, University of Cambridge]

Final Words

In considering the big push to only buying COTS packages as the way to get out from under long project cycles, high customization costs, and higher integration taxes, there is even more emphasis required on *re-engineering the business*. That's because of course it is the "old" approaches that are institutionalized in the current systems and processes - and data structures, and reports, and in the performance metrics.

So....while a move to COTS (component or traditional), especially where the packages conform to the SID, the TAM and NGOSS process models, does promise a way to shorter, cheaper, easier-to-integrate solutions, those benefits can only be achieved if the business transforms too. And that leaves lots of room for the pessimists and obstructionists to point out the hundreds of details involved, and the oh-so-high risks of trying to change all of those things. So executives are reasonable in asking the question: 'Maybe just tweaking our custom one off system isn't such a bad idea after all....hmmmm?'

You must decide. But bottom line, there is no shortcut that does not include knowing precisely what is needed by the whole business. The old systems need audits just as the new need creations need assessments. Why this particular product, what does implementing/changing it entail; who is affected; and what difference will it make if successful? How will we know if it is or is not successful? This analysis is not just done once to justify a project, instead it is an ongoing activity throughout the lifecycle of the product.

Tracey and Wiersema in [The Discipline of Market Leaders](#) classify successful companies as those maintaining focus towards: product leadership, customer intimacy, and operational excellence. A company can lead with one of these strategies, but must have a culture of collaboration, and of pragmatic management discipline to succeed. A good NPI is one of those essential disciplines.

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