

The Benefits of a BPM-Centric Approach in Telecommunications

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Abstract

Telecommunication companies across the globe have a common problem in getting new products to market in a timely fashion and at a marketable cost. Their ability to provision services for customers suffers from similar issues (long lead times, poor quality of service). The World Telemanagement Forum has highlighted these issues (the "lean operator"), and has begun to realise how BPM (Business Process Management) technology can play a major part in addressing these issues. This article expands on possible approaches to these problems and the benefits to be gained.

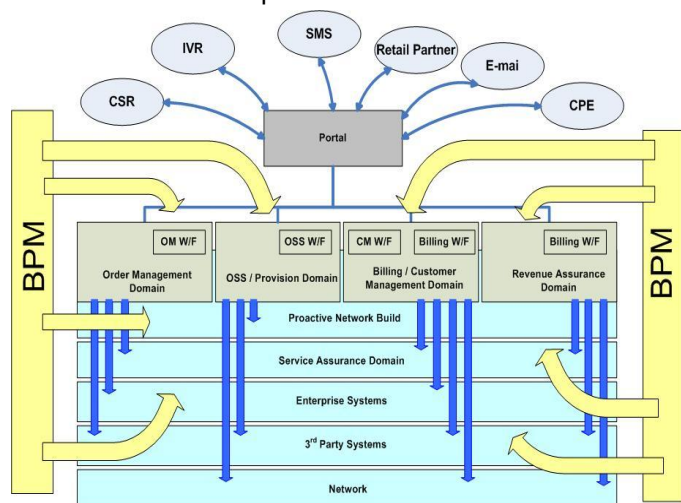
This is the Problem

The deregulation of the Telecoms sector radically changed the face of the US market a few years ago and is now having an ever-increasing impact on the UK and European operators. What we see is a drastically accelerated drive towards lower costs, higher levels of customer service and new product deliveries, all of this driven by the introduction of competition into the market-place. It affects the incumbents in different ways to their new competitors; the existing tier 1 Telco's tend to have significant issues with legacy systems and complex and uncoordinated business processes, whilst the new tier 2/3 companies tend still to be in start-up mode and have immature processes and systems. Moreover, the Telecoms market-place is particularly arcane; delivering a service to a customer typically involves integrated order management with a number of third party suppliers, as well as the complex technical aspects of network planning and provision of service. Add to this the complexities engendered by the very nature of the deregulated market itself, which leads to more and more transfers between operators as customers look for the best deals, and it can be seen that the industry as a whole is facing significant challenges if it is to improve its poor levels of service.

BPM methodologies and technologies can play a significant role in addressing these fundamental problems. This article will outline how this can be achieved.

And this is the Answer!

The Telemanagement Forum (<http://www.tmforum.org/>) has understood the relationship between the industry's problems and BPM since around 2003, when some initial working parties were set up to discuss how best to leverage the capabilities of BPM. The output to date has been some interesting catalyst projects and process templates, but it is fair to say that the capabilities of BPM have yet to be fully exploited. This is largely because BPM has been deployed to date at the domain level, typically to provide control of order management, provisioning or billing. It has also tended to concentrate on what one might call "fair weather" processes, that is where customer requirements are understood from the outset and do not change. In reality, this is rare in the Telecoms environment. In summary, it is my view that the real strengths of BPM have been ignored to date, that is to provide total control of an entire and dynamic Telecoms business operation, in other words the management of an entire customer life-time experience. This includes provision of service, addition of new products and services, transfer of services to other operators, service assurance and, of course, billing. Equally importantly, it also includes proactive network planning and, as a consequence of this, the relationship between network infrastructure provision and individual customer service requests.



In summary, the ultimate solution is a single, enterprise-wide collaborative process that integrates traditional “departmental” workflows with application integration. BPM technologies deliver this capability in the following key areas:

Telecoms processes by their very nature tend not to follow standard process paths, with each process instance tending, to a greater or lesser degree, towards uniqueness. This trend will only increase as operators try to gain a competitive advantage by introducing more and more products and services of increasing technical complexity. This makes the definition of a “standard” process both difficult and largely inappropriate.

The answer is Dynamic Process Management

This unpredictability naturally extends throughout the lifespan of any given process instance, which at virtually every point is liable to external events that may change its course. This could be caused by intervention from:

- The customer (change of requirements, cancellation etc.)
- The enterprise itself (revised business priorities, technical or logistical difficulties etc.)
- Other related business processes that have a knock-on effect on the process in question.

The answer is Dynamic Event Management

Following on from this last point, it is typical that complex processes tend not to be singleton processes, but in reality are a combination of related processes and indeed multiples thereof. In other words, a complex business process might be more properly viewed as a project comprising many internal processes, each potentially interdependent with the other.

The answer is Process Project Management

The solution is a dynamic, event driven, process management methodology and implementation that, in the Telecoms domain, addresses the following key areas:

- **Service Fulfilment**
The total set of activities for delivering an order can rarely be defined completely in advance of receiving the order.
- **Service Assurance**
The resolution of a problem or fault and the proactive assurance of service are activities which evolve as they occur.
- **Network Infrastructure Roll-out**
The build-out of a network is subject to a wide variety of unforeseen circumstances which can alter the required process as they occur.
- **Product to Market**
Products become more and more complex in the deregulated market, e.g. number portability, reverse migrations etc.
- **Performance Improvement**
Only when you have an end-to-end view of your enterprise can you accurately measure performance. Analysis tools not only enable measurement but the identification of process bottlenecks and inefficiencies, and, from this, a cycle of continual process improvement.

The latest BPM technologies cater for the definition of such flexible, yet still controllable and process-managed, solutions. They achieve this by allowing business processes not to be defined in the traditional way in workflow systems, that is as linear processes that are proscriptive and difficult to change, but rather as reusable process components that are event driven and can be inter-related and orchestrated to reflect the true business process, where individual processes are in fact linked to each other and are essentially dynamic in nature.

To sum up...

The potential of BPM has yet to be exploited to maximise its benefits in the Telecoms market. The use of BPM as a “cross-domain” controller enables the proper management, monitoring, auditing and delivery of the complex, inter-dependent services that are essential for a typical Telco operator to deliver new products and services in a timely and cost-efficient manner. Without a BPM-centric approach, the end solution is likely to be unconfigurable and therefore difficult to adapt in the fast-changing Telecoms environment.

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