The future of BPM

Part 8 of an 8 part paper on Business Process Management (BPM)

Introduction

BPM is currently in the process automation or process digitization phase. People are defining, modeling and automating their business processes.

We can directly compare process automation to product creation, and it shows us that creating processes is very similar to creating products.

PRODUCT	PROCESS
Identifying the need	Identifying the process
Designing the product	Model the process
Manufacturing the product	Enter process in tool
Delivering the product	Release process
Monitoring feedback	Monitoring feedback
Optimizing the design	Optimizing the process
Product obsolescence	Process obsolescence

The only real differences are that the product is a three (or four) dimensional object. The process is slightly less easy to grasp. This is precisely the problem the IT industry has been struggling with since its birth. *IT people must be more business like* goes the mantra. Business people must understand IT better claim the IT staff, in response. Perhaps with a business process defined using software terminology, we will manage the understanding gap better, and the process people will straddle the divide.

How much does your process cost?

A product has research and development costs, infrastructure costs (building and maintaining the factory), production costs, advertising costs, sales costs and support costs.

Processes are somewhat different. There is an infrastructure cost (software licences and support). There are also the business analysis and process digitization costs.

The real cost of a business process is none of these things. It is how long it takes to complete. The ongoing design optimization step is key, as is the fluidity of the medium in which processes are defined, all of which enable driving down the cost of the process.

An electronic world uncovers some interesting options for being able to optimize processes. We are given a wealth of timing and other audit information, which can be used by the more advanced technologies available to us. Neural nets can learn to do things quicker, genetic algorithms can subtly change processes, and measure their effectiveness. As BPM products mature, the bleeding edge technologies they use for optimization may well become their differentiators.

BPM Maturity

All software offerings of late have promised to revolutionize business, but the hype of ERP, CRM, EAI and others have left businesses operating as usual with some minor improvements. None have made the sweeping changes imagined, because none have upended the culture enough to make a difference.

BPM may prove to be a greater agent for change because of the depth its fingers can reach into an organization. It is likely that BPM will not be "put in" like an ERP system or a CRM system. It will more likely be an ongoing process of increasing maturity, driven by an understanding of its possibilities, and its integration into the business.

The levels of BPM maturity

1. Awareness
2. Product selection and a few BPM projects
3. Building out BPM into current organizational structure
4. Structural changes
5. A process managed enterprise

Very few, at present, are at level 3, and no-one is beyond it.

Organizing BPM

Standards

BPML was created as a standard modeling notation for business processes. It has a limited following at present, as vendors choose their own process definitions.

Integration points with back-office systems are largely being built using web services, although other methods exist. Web services are easy to understand, supported by standards (XML and SOAP) and easy to call for most application developers.

Business process taxonomies

The taxonomies discussed in present IT departments are largely data taxonomies. They may claim an order is for a customer, and a customer is identified by their name.

A process taxonomy is slightly different, and in size is probably an order of magnitude smaller. It is a list of everything the business does and the people, systems and processes used to do them.

For a simpler business model, work first on the taxonomy, and drive out new processes based on the new taxonomy.

An example of a process taxonomy might be to list the processes around each of the business entities defined in a data taxonomy.

If the data taxonomy defines product and customer, the process taxonomy will have a number of entries for each entity, such as develop new product, establish new product in the market, retire old product, accept new customer.

Business Process Servers and Queries

A moderate leap of the imagination will take us from data taxonomies and database servers to process taxonomies and process servers. A process server will hold a process in some form, and allow queries against it. Business Process Modelling Langage

(BPML), or Business Process Execution language (BPEL), both textual XML constructs, could easily be stored in a relational database. Business Process Notation Language could similarly be held as other graphical notations are today, and Business Process Query Language (BPQL) could be used to query the store.

One day an application will get hold of some data, call a query to find the best process to use, then extract the process and run it.

Emergent BPM

Process Outsourcing

Once a process has been defined and largely automated, it can be outsourced far easier than a manual process.

Furthermore, the benefits of outsourcing will be modeled, simulated and measured long before the outsourcing takes place.

We will see the rise of business processing providers, hiring out their huge processing power. Businesses will call an external service saying here's the data, here's the process, and here are our rules. Some time later, the result will come back with a full audit trail.

The benefits of outsourcing processing will mean less on site IT (processor power, support personnel) for the business. Development will be done on the business processes, but not on the software. That will be the domain of the BPM provider. Businesses have been trying to divorce themselves from the IT burden, by selling off whole streams of work, and even departments to outsourcers. Process outsourcing is far more straightforward.

The better than real time business

Process Management will allow businesses to move beyond the real-time, into the future by running simulations and measuring simulated futures against the ever unfolding present.

Emergence of enterprise architectures

IT and business functions will become inextricably linked. Common architectures will be put in place to deliver the possibility of automation, and common organizational structures will define and support processes, just as common structures support IT or Sales at present.

The development of meta-processes

Six Sigma

Six sigma is a process for aligning business to perfection. It is a process that leads other processes, and in terms of viewing the effectiveness of smaller processes, can be viewed as a meta process.

Without strong process information, meta processes are difficult to implement, but with BPM, they become easier.

Business Dynamics

Auto insurance organizations in the US pay an estimated $34B in material damage claims every year. A rapidly rising portion of these losses constitutes total loss claims. The reason typically used to explain this trend is that a larger number of severely damaged vehicles now have sophisticated systems such as anti-lock brakes, supplementary restraint systems, traction control, all-wheel-drive and other computer controlled vehicle systems. It is believed to be cheaper to total such vehicles in case of moderately severe accidents than to repair them.

Tackling auto insurance bodily injury liability and no-fault claims leakage - Advanced predictive modeling solutions

In recent years auto insurers have adopted new technologies and tools focused on improving the claims process and reducing overpayment for auto bodily injury liability (BI) and no-fault claims.

However, tools such as Colossus and ICE, while useful, have not significantly reduced BI and no-fault claims leakage, especially in more difficult markets. The reason is straightforward: these are average-based guidance tools that have helped but nevertheless been unable to eliminate a high degree of variability in adjuster performance.

Methodologies have been developed around decision support and dynamic predictive models to aid the adjuster and claims manager in a continuous skill building and learning process. The results are drastically reduced claims variability and loss leakage based on timely and appropriate investigation, improved fraud detection, more knowledgeable litigation strategy and consistent settlement value decisions.

Business dynamics (or system dynamics) and process automation will become one and the same. An interesting aspect of this is that one day, companies might not know what their business processes are, just that they are running and efficient. Compared to programming, it is the step from assembler to programming language.

The success of an organization at present appears to be a CEO with vision and drive. When meta processes are commonplace, will we understand success any better? We will certainly have better governance.

The future landscape

Evolution over revolution

Society moves on by evolution and revolution. BPM promises IT evolution and workplace revolution. The potential is to bring the sweeping changes to office work that the production line brought to automotive manufacture, and again robots did to the production line.

When the production line was created, jobs became monotonous. When robots came, those monotonous jobs disappeared. People worked to service the robots. Today, a people staffed production line would not be economically viable. Tomorrow, the people staffed office may not be viable.

Two conflicting futures exist. In one, the dehumanization of the services continues. We currently struggle through the "Press 1 for…" telephone calls, the lack of single contact for our troubles with bureaucracies. At least at present, we get people. When they are machines, their reason will be programmed according to business rules. Thus the people jobs are lost to machine. Lost jobs means higher unemployment. Economic prosperity for many will fall, and inflation will rise.

The other possible future is that our free time will increase, that people will once again have time to deal with us on a human basis. A person will answer the phone and do everything they can to help us.

In our realigning global world, we are mostly all connected through the internet, or leased line. In a connected world, once things are automated, you can run them anywhere. Language and political barriers become less relevant, which means anywhere will be wherever is cheapest. The net long term result is that cheaper places will get more expensive, and expensive places cheaper. On a world scale, this means a beginning to the end of world poverty.

Of the two conflicting futures, neither is fully likely. There will be a period of readjustment, just as there was when we (in the UK) moved from a manufacturing based economy to a service based economy. There will be a ten to twenty year period of realignment, high emotion and uncertainty.

By then, retirement will be looming, and I'm hoping that rather than working until I drop, I will have some time left to stare out across a shimmering sun filled vista of wind, wave and island paradise, safe in the knowledge that my investments are being automated, managed and processed without my own human intervention. When a robo-waiter comes to take my order, I will be able to tell it precisely how to process my meal to perfection. I'll probably zigbee my cooking instructions in BPML to his autochef. I think I'll store it in my watch. Poached eggs and kopi musang please.

Will things ever be the same again?

Every piece of new software over the years has promised to revolutionize our lives. Few have delivered even an improvement. BPM holds promise. Some will succeed with it; some will fail. What will make

the difference is whether those who succeed with BPM become more successful.

Other Papers in this set

Paper 1: What is business process management?
Paper 2: Why automate business processes?
Paper 3: Business process management terms
Paper 4: How people work
Paper 5: Business process management products
Paper 6: Automation Oriented Architecture
Paper 7: Case studies and common pitfalls
Paper 8. The future of BPM

The author is a solution architect with Clear Technology. The views expressed in this paper are his own rather than those of the company. Much of the underlying argument for BPM was derived from work done by Ian Ramsay and others at Clear Technology, and available on their website www.cleartechnology.com.