

How People Work

Part 4 of an 8 part paper on Business Process Management (BPM)

The work people do can be thought of as the application of knowledge in a context, following a sequence of tasks contained within a workflow.

Knowledge	The knowledge I need to do my job
Context	The context I am working in, eg adding a customer, or processing a customer's insurance claim
Sequence	The processes laid down by my employer for doing my job
Workflow	The passing in to and out of my area of responsibility

These four aspects of work are further supported by wrapping the workflow in a transaction. Transactions require messaging across a network (of people) to function.

The entire stack is now:

Knowledge	As above
Context	
Sequence	
Workflow	
Transactions	The wrapping of workflows into transactions that have defined start and commit points, and rollback possibilities.
Messaging	The means of coordinating the transactions
Network	The medium through which the messages move

To truly replicate the roles people have in business, an automation tool must be a master of the top 5 layers. It must hold knowledge, apply it within a context, provide programmatic constructs such as sequence, branching, loops etc, contain sequences of work within a flow between a group of people, and manage all of that within a transaction.

Modern programming languages provide much more than the basic constructs. A reasonable list might be sequence, conditional branching, structured loops, concurrent threads, inter-thread communication and synchronization, instance initialization, manipulation of variables and data types, throwing and catching exceptions, waiting on a lock and resuming afterwards, testing a predicate on several fields, logical and math operations, subprogram calls and assigning and freeing up storage, software and hardware resources.

An automation tool must support all of the programming nuances that any other programming language does, and on top of that provide a means for defining the stack of work that people do, and the knowledge required for them to do it.

We are not software structures

We work concurrently. We collaborate, sharing unstructured and structured information. We follow sequences of pseudo logic, often doing things differently to those around us, and in a different order. The human race has come to dominate by this, allowing organic growth. The comparison of slightly different alternatives has allowed us to improve.

Software, on the other hand, is a sequence of hard coded steps based on Boolean logic. We have traditionally programmed our processes into our software, each one at a time, which is why our costs are so high, and changes so difficult.

BPM software attempts to enable changes in process to keep track with changes in the business environment. This is the fundamental difference between process software and all other software. We have moved a level of abstraction above data, to process. In doing so, writing software becomes a process configuration exercise, more uniform, and easier to rework.

BPM software attempts to remove software production from the critical path of business change, while reducing costs by doing what the people do.

Comparing Automation and Outsourcing

There is another method of reducing costs, which is to get less expensive people to do what your people do. Outsourcing is a very popular method of cost reduction at present. It is directly comparable to automation as both can produce more people-work for less money in the long term. Both require an initial outlay, both are unknown territories with experts

at every turn, and both require very careful management.

Outsourcing	Automation
Dependent on HR managers	Dependent on IT managers
Inter-country problems	IT problems
Foreign languages	Foreign languages
Requires investment in offices and personnel	Requires investment in IT
No increase in accuracy	Increase in accuracy, repetition
More processes because of more people, often with a different culture	Processes are repeatable
No increase in process speed	Increase in processing speed
No increase in flexibility to change processes	Increase in flexibility to change processes
Decrease in customer satisfaction	Increase in customer satisfaction
Same training required	Less training required
No better compliance	Better compliance
Worse governance	Higher governance (e.g data protection)
No better auditability	High auditability
Churn is someone else's problem	Higher skills mean lower turnover

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