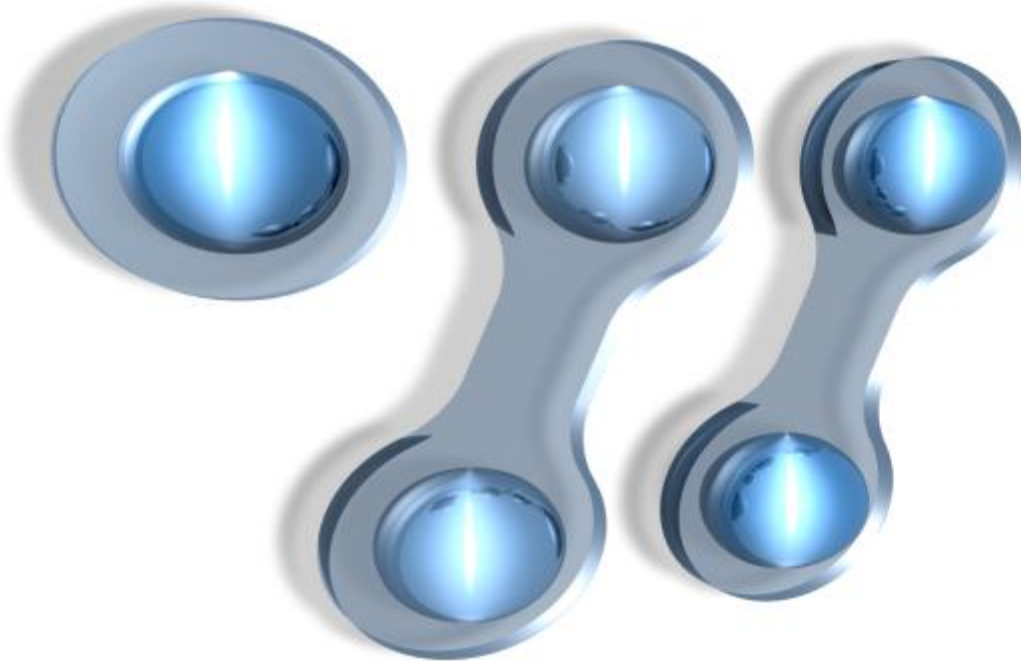


Workstream Automation Limited

WHITE PAPER – WORKSTREAM BUSINESS SUITE



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1. INTRODUCTION

1.1. The IT Revolution and the Business Process – the last 15 years

Technologies such as email and the web led to early gains in business processes, which were further improved with the advent of business specific software and early workflow solutions. However there are still challenges ahead...

We have all seen large gains in productivity over the last 15-20 years – as the trend towards information technology has gathered pace. It started with simple things like email, teleconferencing (including the likes of Skype and MS messaging) ,remote accessible shared desktops – all of these allowed a large workforce to accomplish more from afar. These ‘ad hoc’ gains in productivity were further complimented by ‘vertical’ enterprise software that became experts in their particular business silos.

This first wave of technology was what we call an ‘ad-hoc’ attempt at **industrialization** of the business process. Based on vertical software and bound together with the glue of email, a lot of business processes became more efficient than they were before.

The next step was the advent of Business Process Management software that attempted to orchestrate the business process at every level. If you can give forethought to the design of the process, then the software could enforce its running. BPM or ‘Workflow’ therefore became the mantra of this mid-section stage of industrialization of the business process.

This leads us to ask – what are the challenges up ahead for the Enterprise?

1.2. The Remaining Challenge

Most companies have already optimized their processes, further gains require Agility, Performance Visibility, Control and Risk Governance – but there are many pitfalls as some of our examples show...

BPM software available today do an effective job of ‘Industrializing’ the business process. By this we mean that human-driven processes can be enforced using a set template in a way reminiscent of processes for mass production and quality we see in manufacturing.

However, this industrialization alone does not guarantee success. The following aspects of BPMN software are challenging and have been the causes of demise of many well-intentioned attempts at process industrialization:

| ASPECT | The CHALLENGE | WHAT WE MEAN - AN EXAMPLE |
|---------|---------------------------------------|------------------------------------|
| Agility | Agility identifies the speed at which | Company ‘X’ has spent a fortune in |

| | | |
|---------------------------------|--|---|
| | <p>processes can be defined then implemented in an effective way. This lets the organization compete effectively by jumping at new opportunities.</p> <p>Most top performing organizations have already reached a high degree of efficiency for their core processes – competitors can still gain an advantage by being able to respond QUICKLY to market forces and incorporating change in their processes while still enforcing them.</p> <p>The Challenge in this space has been the traditional gap between IT and business. Before anything new can be implemented it must go through a rigorous ‘IT implementation’ phase, and this usually ends the destruction of the business opportunity.</p> | <p>building workflows that tie together customer requests (which required paperwork) together with a back office that delivers the request.</p> <p>However, Company X’s business is being encroached by competitors who are focusing on the younger technology savvy crowd. The new client set is used to the iPhone, Facebook etc and shy away from paper centric processes and want instant delivery.</p> <p>Company X cannot modify its processes quickly enough to keep this market segment happy – and faces potential loss of this business.</p> |
| <p>Performance Visibility</p> | <p>Perhaps one of the most important aspects of BPM . In a nutshell – ‘how are we doing right now’, in terms of time and quantity on all processes in the pipeline.</p> <p>Real insights into the nature of problems can only be gained via access to flexible KPIs and Dashboards that monitor all aspects of a process.</p> | <p>Company ‘Y’'s core business is to create ‘widgets’ – however these widgets are really outsourced, mass volume business processes which require processing within an agreed SLA. The solution has been the development of custom monitoring software that allows near-real-time monitoring of the time taken at each stage of the processes. But when it comes to new processes, it requires months of work before the same degree of visibility can be attained over new processes. This represents a loss of revenue for the company many times the overall cost.</p> |
| <p>Control & Governance</p> | <p>It’s not just about ‘quick’ - it’s also about managing the process well. The best companies can enforce rules for compliance and make them operational rapidly as well. However many organizations find that putting in - and maintaining – an adequate set of rules on all operational processes is mired with pitfalls.</p> | <p>Company ‘Z’ has implemented a process for rapidly accepting new customers. The first stage requires many checks to be performed – however the various vested interests in the organization have forced such a ‘round - robin’ of discussions and changes that the new ‘rapidly’ automated process for accepting customers takes a year to implement.</p> |
| <p>Risk & Auditability</p> | <p>To gain an advantage here, it is crucial that levels of quality assurance and audit are built into the process from the start.</p> | <p>The Compliance Department of company ‘W’ requires the ability to carry out compliance audits on many processes</p> |

| | | |
|--|---|--|
| | <p>You can't start with the process and then try and retro-fit processes around audit and compliance.</p> <p>Also, compliance and quality checks need to be performed on processes <i>as they are being performed</i>. It is no good to be able to see last weeks or last month's process data.</p> | <p>within the organization. However the data required to carry this out is often not available. The 'audit' therefore degenerates into a request for IT to provide various reports related to many transactions – and usually takes a month to complete, with many opportunities for information to be fudged along the way by intermediate workers.</p> |
| | | |

1.3. The EAI and SOA Movement

EAI and SOA were the supposed answer to silos and a building block approach – however in practice they have often been the cause rather than solution of the problem...

To overcome the silo's environment – (any organization today comprises many systems each engineered to focus on its own area of business expertise – for example core banking systems, CRM systems, accounts and ledgers, HR management systems) – another endeavor undertaken over the past 10 years has been the focus on 'EAI' (Enterprise Application Integration) and 'SOA' (Service Oriented Architectures).

The first attempted to tie various systems together. However, this led to such a reliance on the often 'hard coded' connections between systems, that a particular IT environment became a web of systems sometimes beyond the control of even the IT department to manage effectively. Agility went out of the window because nothing could be changed without breaking something else.

The SOA movement was an attempt to fix that. A Service Oriented Architecture meant that each application in the enterprise would expose its capabilities as a set of services – which could then be affectively tied together using a 'process' orchestration engine.

So, in theory your business applications were like a set of Lego blocks. You could combine them together to build the solution you wanted.

But although the theory was right, SOA based business software was slow to evolve and implement. You needed all the business applications you had to conform to an acceptable standard. Also, connecting up the Lego blocks was a non-trivial task, and required a heavy technology involvement. This in effect itself meant that the focus on agility and speed were hard to materialize.

And SOA had little if any impact on the business model when it came to real-time visibility, compliance and quality and other aspects which were core to ensuring success.

1.4. The 'Underground IT' Movement

Excel and Access continue to be used by departments – often as an attempt to avoid the entanglement and complexity of undertaking BPM initiatives – this 'guerrilla movement' or 'hidden IT' delivers results but by violating the core requirements of BPM ...

Many departments have adopted internal business processes which are independent of their IT departments – because they know that the expense and effort required to implement any process will be very large, and to be effective they require some degree of automation. Spreadsheets and tabletop databases have become popular in this space.

One key aspect of such underground movements is the fact *that the processes work*. This is because they have evolved over time, and been implemented by the same people who will use them. This is an opportunity as well as a threat.

They represent a threat to the organization because the information stored, and the process followed is not under the management's control. In many cases it is not even documented.

Hence, the reliance of such tools, poses a significant risk to the organization.

2. THE WORKSTREAM DIFFERENCE

The reason such underground IT projects are undertaken has much to do with the simplicity and freedom from formal processes inherent in tools such as Microsoft Excel and Access. Business users generally know exactly what they want and are able to convert it into lists, tables and macros which assist them in their daily tasks.

This therefore points the way to an approach for building and maintaining processes. What if there was a way in which processes could be put together with the simplicity of excel and yet conform to a formal process documentation standard? What if you could deploy the process as easily as putting together an email? What if such a process can then be made available not only to the relevant department in question but also all interested parties, without resort to tools more complicated than a web browser? What if that process was then as visible in terms of performance and compliance as anything that requires IT 3 months to develop?

The Workstream business process engine has been designed to work just in this way. Simply put, the business puts together the business process in a simple to use process designer (like Visio), which



documents as well as defines the business flow of the process. The process defines the tasks and the roles that perform them. It also acts as essential documentation for the process itself.

Users then publish the workflow to the Workstream process engine (a central server that they access via their intranet using any browser) – and the process is active. End users send and receive work via an over-the-web accessible INBOX (not much different from an email inbox). Work arrives and leaves from their inbox as forms – published within the Workstream system – which incorporate data entry rules as well as higher level constructs such as checklists, reports, sub-forms.

2.1. Agility

Any changes required can be made to the process in question ‘on the fly’ – i.e. real business processes evolve (due to the competitive agility and changing business needs already discussed above). Workstream allows users to make changes to the process while it is running – in terms of either the process flow, or the forms attached to the process – in real-time. The engine takes care of any and all changes required to the actual database. Existing processes can continue along older paths while newer ones use newer pathways.

The end result is a level of agility that is hard to match with anything other than ‘Hidden IT’. Unlike hidden IT though, the BPM software still allows you to conform to each of the points we raised above.

2.2. Performance Visibility

Anyone logged into the Workstream System can instantly see his or her performance quantified by a few key process performance metrics – how long am I taking, vs. everyone else.

Workstream has extensive real-time monitoring dashboards that allow deep visibility of process performance. Dashboards can show simple metrics – such as a ‘good, bad and ugly’ meter that tracks the real-time performance of SLA driven processes. You can then drill down to see details (via further charts) of the stages in a process which are causes of delays. The dashboards highlight problem areas – such as which tasks are currently taking more time, and you can drill down to see the captured data, view operators comments or even see the value of financial or other fields behind the troublesome tasks. This deep visibility allows you to understand and solve the causes of delays on a real-time basis.

2.3. Control & Governance

Build your process by dragging in the relevant checklist for conformance. You don’t need to know when you are building your process what needs to be checked for – just that a compliance (or other) check is required.

Then add the list of compliance checks when the process is up and running. The actual checklist can be added to as the system is running – and they will automatically appear in forms as live processes continue on.



2.4. Risk & Auditability

Many BPM engines store information in a way that makes reporting hard. With Workstream, the data you capture with your forms is organized into tables in a relational database – and these tables connected using relationships.

For example, if you have a customer form which contains many orders, then Workstream will automatically link the orders to the customer record – making it easy to find ‘How many orders were placed by this customer in the last 2 years ?’

Workstream has a deep reporting capability that allows a customer to drag and drop the fields in a process – and correlate them by the stage reached in a process as well as by dates etc. Anyone can do this – and see results on-screen instantly.

When you are happy with the results, export the resulting report to Excel or PDF, or just store it online to share with your workers.

This makes it easy to look at processes data from a risk and audit point of view. For example, answer the following questions at the click of a few buttons:

1. The status of financial transactions by time, by user and by process stage
2. Who made what change to any data in any form

3. APPENDIX

3.1. About Workstream Automation Limited

Workstream Automation was created in 2003 by a team of experienced IT and business professionals. It delivers tools and methodologies that help clients analyze, improve and implement business processes, and gather key insights into their business by the use of innovative process monitoring and intelligence technologies. Besides serving clients directly, we also work closely with other partner consulting firms. We help them serve their own clients by providing our innovative process optimization tools and quality support and training modules. Workstream is headquartered in the UK and has offices in USA and Pakistan.

3.2 Workstream Products

Workstream Business Suite provides the complete approach to improving, monitoring and automating business processes. WorkstreamBusinessAnalyst (WBA's) intuitive graphical user interface helps users to rapidly develop process maps, perform analysis through easy-to-understand detailed graphs and deploy re-designed processes efficiently. The core of our process monitoring and automation business comprises the QualityTrack™ (WQT) and RapidAutomator™ (WRA) products. WQT is an innovative process tracking solution that allows businesses to monitor the real-time performance of their business processes, while WRA allows them to convert their business operations into web-based workflows. The WorkstreamProcessRepository (WPR) consolidates all processes into a central web-based location, where processes can be collaboratively viewed and edited by anyone with a web browser and the right access level. It maintains version control and graphically displays changes, allowing administrators to review and approve changes.

3.3 About the Author

Urooj is a UK based consultant specializing in technology and operational process improvement, with a degree from Imperial College, London. He has worked with Accenture, JP Morgan Chase, Morgan Stanley, Deutsche Bank, RBS, Santander and Bank of America / Merrill Lynch, and is now CEO of Workstream Automation Ltd, a company that produces IT tools for business process management based on real-life experience at these and other organizations. Urooj is continuously engaged in using the latest technology trends to analyze, measure and improve business processes.

Urooj specializes in conducting system and functional evaluation of technology systems and the IT organization as a whole, using structured methodologies such as the IT Capability Maturity Model (which evaluates the IT organization along seven different dimensions), the Application Portfolio Optimization methodology (for evaluating the functional and strategic fit of all technology systems) and the Architecture Assessment Model (which evaluates technology architecture within an organization).

Urooj has a Master's degree from Imperial College, London, and lives and works in the UK, where he has been a keen IT specialist for the past 24 years.