



Procession plc, 1a Stones Courtyard, Chesham Bucks HP5 1DE England
Telephone +44(0)1494 781444 www.procession.com

***Simplify IT, More For Less* Procession Makes A Reality**

A White Paper By David Chassels, CEO Procession plc

Background

Research shows that some 70% of the IT budget is spent just holding existing systems in place. Undertaking anything new has been a challenge, as the cynicism from the business about successful projects remains high, with some justification as vendors continue to oversell never mind the debacle of Y2K. Why is it the industry has failed to deliver on some very basic needs for business such as ability to change applications as required?

All this has done little to close the divide between IT and the business. The good news must be that at least the problem is recognised evidenced by commentary headlines *Death of Packaged Apps**, *The Death of the Software Suite***, *The ERP mess we're in****. All this tells us what is old and failing but little is forthcoming about what are the sustainable alternatives for the future and implications.

However there are visionary statements emerging for example Microsoft and SAP are saying in the future the application will emerge from the business model. Software as a Service, SaaS is becoming mainstream recently highlighted by the high profile flotation in the US of NetSuite and of course Salesforce.com with its logo *no software*. Vendors selling Service Oriented Architecture, SOA, as the panacea for the industry but is it? SOA remains largely in the domain of the very large organisations, remains a technical issue and whilst undoubtedly will aid internal flexibility it will be a long journey where business benefits are far from clear.

IT and Business need to close that gap but there is little incentive for the vendors to change and look for something disruptive or a paradigm shift that removes complexity on which such vendors have thrived. Whatever, the next step must deliver exactly what is specified by the business, in their language, future proof to change as the business changes with the ever increasing compliance requirements being addressed yet needs to deliver a competitive edge.

A new approach is required

The problems are clear too much complexity and lack of business driven technology thinking. What ever answer emerges it will require getting back to the basics and understanding how business works. This is where Procession started and recognised at the core is the fact that people are the source of all information that makes any business. Systems are there to manipulate information and support people in their daily tasks. From this simple understanding it is possible to identify such task types. Procession research has shown that at the basement level of business activity a much simpler world opens up which recognises that here are less than 13 work task types that can address any business issue. Logic suggests code these task types once and store in a database to be used and reused as required.

These tasks are split into two types, user-completed and system-completed. The user-completed tasks are tasks that must be completed by the user. The task will sit in one of the user's trays until the user has done something with it. The system-completed tasks are ones that are actioned by the system, i.e. the user knows nothing about them and they work "behind the scenes" supporting users to achieve their business goals. Procession recognised that the user interface had to be embedded into the core offering to allow the presentation of the correct information when required which was identified as one the task types.

User tasks include

* *The Form task* is the task that the user will be mostly concerned about being the interface with any system. This is where data is entered into and extracted out of the database. It can be a “simple” display form or a complex interactive form. This is where the user is identified with related role and recognising the point in the process that requires supporting data to allow the user to complete the allotted task. Such forms are pre-built templates and dynamically created as required delivering the correct information to the right person at the right time.

* *The Normal task* “halts” the process for an off-line activity.

* *The Program task* allows you to “call” applications such as “Word” and “Excel”.

* *The Pending task* places the process into the “Pending” tray of the user concerned. This is a very useful task that is used alongside deadlines and delays in a process.

* *The Report task* enables a report to be generated using an industry standard report writer and based on a previously defined template.

* *The Web report task* is used to hold the path for Java Server Pages to run across the web.

System tasks include

* *The Calculation task* can contain calculations involving almost anything including dates, numbers and strings. As well as specific calculations, SQL commands can be placed here to manipulate the database directly.

* *The Sub-process task* allows tasks to be isolated in contained sub process for ease of reuse or to simplify the build of a large complex process.

* *The Event task* bundles the same task together in multiple runs and waits for another process to action it.

* *The Finish task* tells the system that the process has ended. As far as the user is concerned, the “run” of the process will disappear from the trays. At this point, that particular run will be placed into the “Process History” tray of the manager.

* *The Import/Export task* handles the movement of “bulk” loaded data into and out of the database. It can be both completed by the user and/or the system according to the specifications.

* *The Server Side Message Queue task* handles communication between the database and many other external systems, such as legacy systems. It’s more popular use is in the sending of e-mails. This is a very versatile and important task.

These task types cover all the eventualities encountered in a business and all that is required is that each task is configured to its specific need and linked to form a process template. To aid simplicity this is all fronted by a graphical model/designer allowing both set up of the data design and build by simple drop and drag and opening up task objects to allow configuration as required. The joining up of the task types is achieved through task links and here lies much of the power in creation of business applications including rules.

What has happened is that business logic has been separated from delivery technologies that become plug and use, allowing flexibility in choice. Once the business logic is tested the application is built at a click of a button through and through a declarative technique the application is created direct from the graphical designer with no compiling or code generation. Being entirely data centric changes can be rapidly

implemented. Thus the interpretation gap between IT and business is effectively removed. Build of applications are in the hands of business professionals with IT in support for the vital delivery with the IT architecture and communicating with legacy as required. By thinking at this very basic level in business the results are quite profound. The end result is a global first a *unified* framework that incorporates

Process, rules, calculation and state engines

Workflow

Audit trail

Time recording

Real time reporting

Presentation layer with TAG library

Roles and performers

Management hierarchy

User interface dynamically created linking people, roles, task type and data via forms

Automatic population of custom documents, letters, e-mails, messages etc with required information on pre built templates.

Simplified table creation in Database

Process change with full version control

Thus the build process has been simplified and allows very rapid build of custom and flexible solutions giving a lot more for much less. All sound too simple? Yes it is that simple but of course does not remove need to understand the business process and a good methodology to co-ordinate knowledge flow to build good applications.

The Implications

This new approach by Procession is proven and allows new thinking when planning how to take the business forward with new supporting applications. Firstly the specification time is reduced considerably and written in business language through a step-by-step approach. Because this builds self-contained solutions it allows an evolutionary approach to roll out new applications. Most organisations have invested in core legacy/accounting/ERP systems, which do a sound job but were never designed to be agile or reflect the needs of people. The build of *task-oriented applications* as described fits around these static systems recognising that people actually work in relatively small teams to individually or collectively achieve business goals. This is where the competitive edge requires software agility and where interactions now cross the traditional company boundaries. It is also the area of greatest risk in terms of breaches of compliance leading to costly mistakes!

This truly is a new way that takes business software to a new level where business knowledge drives application development. It raises a whole new standard which buyers should now demand for their future systems.

Questions for buyers to ask of such 21st century business software applications to aid the selection process

*Ask about Human Interaction capability. This should include human connectivity with goals, time management and state for real time reporting for measurement and dynamic support. Is it embedded in the solution or is it separate?

*Are process, workflow, rules, state and calculation engines contained in one development tool? If not how do they handle these essential requirements?

*Can solutions handle multiple asynchronous flows of work? If so how?

*How are business rules written and incorporated into a business process? Can end users change as required and can rules be applied in real time either globally and/or regionally?

*Do they hard code to deliver custom solution? If so does this need to be altered when the business process needs to change?

- *Can the business analysts or process consultant build the application cutting out the interpretation gap?
- *Can an application be built direct from the detailed business model? If not how do they ensure what is specified is delivered.
- *Can a working prototype as a first pass of the solution be built quickly to test requirements and engage end users for feedback?
- *Can real time information be accessed with audit trail and time recording on all critical aspects?
- *How is management hierarchy with security handled?
- *Are user forms dynamically created recognising people, the user role, the task type and populate with required data for the work in hand. If not, how is the user presented with information?
- *How are documents created e.g. letters, e-mails, messages etc? Are they automatically populated with relevant data and is this capability fully incorporated into the end-to-end solution?
- *Can the resultant applications be split into “groups” with differing requirements supporting shared services with both global and regional reporting?
- *Can they change the core process without disruption and with full version control?
- *Can they provide when required an exact record in a business format what has been deployed?
- *What capability is there to allow users to make decisions at run time as how to undertake a process?
- *What capability is there to allow the process to self adjust as circumstances change?

Conclusion

Whatever happens the current software offerings are not sustainable for the long term needs of business. This new business software by Procession supports evolution not revolution or the big bang projects from which business has suffered and paid handsomely for in the past. Projects will be highly business focused, deliver quickly with tangible results with flexibility to change when required by the business. This puts future application development led by business knowledge by business professionals. Business logic and fundamentals have not and will not change and the simplicity of separation as described is a long over due move.

When assessing new systems look for a tightly integrated system that mirrors exact requirements as opposed to a well-integrated set of application modules.

Finally SaaS is a growing trend but should not dilute the capabilities as described. Given that the future technology led communications are likely to improve as will computing power for example in the growth of grid computing, all of which will remove some of the current attraction of SaaS making it more of a financial decision. Therefore before entering a SaaS contract ask if it is possible to switch to conventional ownership of your applications. If not possible maybe restrict SaaS to less critical applications and keep the salient and critical processes under the ownership of the business recognising where the competitive edge exists. Good processes are assets in any business but if they remain inflexible they could quickly become liabilities, something Procession addresses with its capabilities to change as required by the business.

Acknowledgements

- * By Erik Keller, Wapiti LLC, SandHill Opinion, 26 May 2006
- ** A Sand Hill Group Webinar, 18 December 2007
- *** By Dennis Howlett, Irregular Enterprise, ZDNet.com, 15 August 2007