Procession

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A historical technical perspective on Procession Business Technology, where now and the future

At the core of the product is the Procession Engine;

In the early 1990's a programming concept that had been around for some time began to become popular. Called "object orientation" it is a methodology that allows for easier management of complicated programs. Previously, programs were "monolithic" and as they grew, they become more and more difficult to maintain and manage. Consequently the odds of errors being introduced increased dramatically as the program grew. Object-orientation is now the standard way of developing software, supported by languages such as C++ and Java.

The original architects of the Procession Engine realised that object-orientation was the key to managing the execution of complicated processes in a complicated environment. They also realised that most programming time was taken up with writing the procedural code of deciding when and where to interact with a user, when and where to move data, and tracking who does what. If this including the build of the user interface could be automated, the development life-cycle of a process application could be dramatically reduced.

15 years ago The Procession Engine was designed to be object-oriented; that means leading-edge and world class from the beginning when everyone else was just thinking about it!

By being object-oriented, the Procession engine creates a unique "instance" of the process for each user when that user invokes the process. The user does not have to be concerned about other users or "driving" his process. This removes a huge amount of "procedural responsibility" from the process designer.

The second important aspect of the design is that it is *data-driven*, not *procedure-driven*. This means that there is no code generation, no compiling, no exporting, no translating of the process; the Engine *inherently understands* what a process is; tasks, flows, decisions and delivery of the working form to the right person at the right time – you simply give it the unique properties of your tasks, flows and the integrated user forms.

Procession uses the phrase "*the map is the app*". When you draw the process which addresses all required business logic, it's ready to run. What you build as the prototype is actually Version 1! *Nothing is thrown away;* no dummy screens, no hard-coded demos. Build it, show it, change it then deploy it!

15 years ago the Procession Engine was task-oriented and data-driven when no-one had considered this approach!

15 years ago the delivery technology of choice was "client-server" when PCs ran client software that spoke back to the corporate database. This sometimes required a lot of component software on the client and led to what might be termed "fat clients" which needed lots of care and feeding by the IT department.

Today the delivery technology of choice is the web; and so it is with Procession today bringing the application to the user via a standard web browser such as Internet Explorer or Mozilla Firefox. All the user needs on their PC is a browser. This has led to the term "thin client" which removes a huge amount of effort from the IT department. It also allows the deployment of applications anywhere, instantaneously, either inside the organisation or outside.

Procession have web-enabled the Engine by developing and extensive and well-documented "tag library". This is a technology which allows a web-server interact with the Procession Engine without *having to know anything about the web technology*. This means the Engine has not been "interfered" with in any way and remains pure to its core design philosophy.

15 years ago The Procession Engine was state-of-the-art; today it remains state-of-the-art!

What the tag library also gives us, via the web application server interface, is the ability to interact with other systems, including legacy systems. Task types inside the engine and the extensive tag library outside the engine facilitate file transfers, interactive querying, and updating of external databases and systems.

The Process Engine supports the investment in legacy systems, and extends them into the corporate process environment.

Processes cross functional boundaries, so this capability gives the Procession Engine the ability to become a hub, co-ordinating and orchestrating complex processes. This is where real flexibility is required and delivered because of the core design architecture. It allows the legacy, silo or functional systems *to continue to do what they do excellently*, while integrating them into the corporate-wide process flow. This maximises and extends the life of the original investments.

The Process Engine can now act as a hub, co-ordinating and orchestrating complex processes across disparate systems; even legacy ones.

That's today, but what about tomorrow? Technology will always advance, but sometimes not in the direction we should go. The Procession technical team have waited and watched and identified those technologies we should embrace and those we should not. One key to our future is Web Services. This is the set of technologies that will allow Procession to say it is truly open. It will allow other BPM toolsets to interface to us and for us to drive other BPM toolsets. It will allow for a published interface to the Procession Engine so that anyone can interface without the need for extensive and expensive consultancy!

The initial design and architecture of the Engine, with the tag library and web front end recently developed allows Procession to drive the development of the product down the road that is most beneficial and profitable to the company, delivering most value to customers and partners.

Procession represents the start of a new journey for all where business application software delivers custom applications across the whole business exactly as required that supports continuous change.