

## DIGITAL TAPESTRY

## The Next 50 Years

BPMS MEANS HAVING YOUR BUSINESS PI AND EATING IT TOO



BY PETER FINGAR

**THERE IS SOMETHING WRONG WITH IT, SOMETHING DREAD-** fully wrong that goes all the way back to the beginning, to the advent of business computing in the 1950s. For the past 50 years, computers have been “data machines” providing systems-of-record that record the after-the-fact results of business activity. The methods,

techniques, and mindset of IT today are all about data—the capture, storage, and retrieval of it by software applications.

Early business technologists realized that their data-processing systems must split data from processes because data can be structured so that it is stable, reliable, and predictable—key attributes in building accurate cost accounting systems-of-record. However, only the most basic, back-office business processes are incorporated into today’s IT systems. They represent support activities. What about primary activities, those processes needed to interact with suppliers, trading partners, and customers? These business processes—the dynamic, expanding, contracting, changing activities of the business—are not so stable or predictable; in fact, they are very messy. Because they are so dynamic and such a major challenge to computerize, business processes have been second-class citizens in the world of IT, limiting what has been automated.

Companies are stuck in this data-centric world where there’s an ever-growing disconnect between the business and the technology it deploys. Because the data-centric paradigm of IT won’t take us past where we are today, we must break it. Companies that want to increase productivity and compete for the future must bite the bullet and take on the challenge of making the business process—not data, not the app—the context of IT. In short, “data processing” must give way to

“process processing.”

Business processes can no longer be second-class citizens cast in concrete the way they are in today’s applications. The “business process” must supersede the “application” as primary unit for packaging

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software. But such a lofty objective cannot be reached without a breakthrough that shifts the locus of automation from apps to business processes. That breakthrough is business process management (BPM) and its technology engine, the business process management system (BPMS).

The BPMS is not fantasy, for it, like other true breakthroughs, is based in the mathematics of computation—specifically, Pi calculus—that underpins distributed, mobile processes, as opposed to static relational data. Without this, businesses would be correct in thinking of BPMS as just another buzzword, acronym, or marketing ploy—more hype. The underlying semantics of the BPMS, the business process modeling language (BPML), is an open standard available to all participants in a value chain, but here is the truly amazing part. The BPMS can execute

BPML directly and immediately—no software development needed.

It was not the development of the personal computer that led to the personal computing revolution; it was the world’s first spreadsheet, Visicalc. In the early 1970s, personal computers were the toys of hobbyists and the nerds that loved to tinker with programs written in Basic. Corporations went to great lengths to keep these toys out of their offices, because if they were to be put to any business use, business people would require great effort from IT to program them for each and every user. Enter Visicalc, which gave busi-

ness people direct manipulation of familiar rows and columns of data and the ability to conduct what-if analyses to optimize results. No programming needed; simply design and—presto—

execute. Visicalc took IT off the critical path of personal computing and launched a revolution. Enter the BPMS. The BPMS gives business people direct manipulation of familiar business processes and the ability to conduct what-if analyses to optimize results. No programming is needed. Simply design and—presto—execute. The BPMS takes software development off the critical path of business-process management and off the critical path of business change and innovation. Welcome to the company of the future, the fully digitized corporation, the process-managed enterprise powered by, believe it or not, Pi calculus. **IW**

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