Industry Adoption of Trends

Trend phase: "Initial Roll-out" to "A wide Range of Successful Initiatives"Market penetration: Medium-LowMaturity: MediumBenefit rating: HighInvestment required: Medium - High

<u>Characteristic:</u> Early publicity produces a number of success stories—often accompanied by scores of failures. Some companies take action; many do not. More instances of how the technology can benefit the enterprise start to crystallize and become more widely understood. Second- and third-generation products appear from technology providers. More enterprises fund pilots; conservative companies remain cautious.

Trends are less than 5 years from mainstream adoption. Requires medium level of investment, medium-risk with the potential to deliver industry competitive advantage.

<u>Performance Impact:</u> Industry leaders adopt, invest and develop Industry Practices to outcompete their peers. The Industry Practices improve their competitive parity and standardize core competitive competencies with focus on Performance Model and Service Model.

They are called the industry leaders as they with their advantage of the emerging trends outperform their peers.

Industry Adoption Of The Process Trends:

1. Automation Business Process Analysis or Business Process Analysis (BPA) for the masses — This provides a simpler modelling approach tailored to business roles, rather than technical roles enabling business process analysis (BPA) tools to become popular among businesspeople. The resulting benefits will include faster realization of the desired business performance improvements — and better ability to meet time and budget targets — due to better process understanding, as well as extra insight into process impacts to avoid unpleasant surprises. BPA for the masses is a developing trend toward a simpler modelling approach tailored to business roles, rather than a technical or BPA expert. It is simpler in that it uses familiar business terms, with attention to business goals and outcomes, and less inclusion of technical terms to support implementations. Because this trend will enable business process analysis (BPA) tools to become popular among business people, Gartner refers to it as "BPA for the masses." The traditional BPA tool category has focused on the need of business architects and analysts to collaborate with others, requiring more robust methods and tooling than many business process modelers care to deal with. However, BPA for the masses will be targeted directly at business staff, regardless of position or role, to provide them with easy-tograsp insights into their own business processes. The goal is to capture the informal shadow process, concepts and information that are often missing on more formal in-process modelling and user requirements definitions.

BPA for the masses tooling allows for collaboration around communities of interest to develop peer interactions, knowledge exchanges and consensus building. Harvesting information from common formats such as Excel, Word, PowerPoint (EVP) and Visio is a key requirement, as is the ability to communicate either with BPA traditional models or with common business formats. We expect BPA for the masses to be increasingly delivered via

thin clients on-premises or the cloud through SaaS, as this will allow for communities to grow unimpeded. We see increased use of mobile technology for capturing at the source process-related information, which allows for BPA where needed.

2. **Complex-event Processing** (CEP). CEP is the basis for many Pattern-Based Strategies, particularly those that require continuous intelligence. When combined with BPM, CEP not only helps detect patterns, but also allows an organization to quickly act on those patterns through executable business processes. Complex-event processing (CEP) is a style of computing that is implemented by event-driven, continuous-intelligence systems. It differs from other kinds of computing in two key respects: In CEP, insight is derived by combining information from multiple data points (event objects).

A CEP system uses algorithms and rules to process streams of event data that it receives from one or more sources. It generates new, summary-level facts (called complex events) and puts them in context to identify threat and opportunity situations. This information is then used to guide the response in sense-and-respond business activities. CEP is event-driven because the computation is triggered by the receipt of event data. CEP systems run continuously, so they are available to act as soon as the data arrives. Data is processed immediately upon arrival. By contrast, time-driven and request-driven IT systems store the data when it arrives, and processing is triggered later by a clock (in a time-driven system) or by a request from a person or computer program (in a request-driven system). One can produce complex events in a scheduled computation (time-driven processing) or in response to an ad hoc user query or method call (request-driven processing). However, the term CEP is generally only applied to event-driven processing.

Here, we focus on general-purpose, reusable event-processing software platforms that are customized at development time to implement CEP applications. The core of these platforms is a software engine that runs the CEP algorithms and rules. Commercial event-processing platform products typically include development and administrative tools; other tools to implement graphical business dashboards and alert end users; and adapters for various input event data sources and output devices.

3. Enterprise-wide Metadata Repositories (EMR). Metadata is defined as "information that describes various facets of an information asset to improve its usability throughout its life cycle." Generally speaking, the more valuable the information asset, the more critical managing the metadata about it becomes, because the contextual definition of metadata provides understanding that unlocks the value of data. Examples of metadata are abstracted levels of information about the characteristics of an information asset, such as its name, location, perceived importance, quality or value to the organization, as well as its relationship to other information assets. Metadata can be stored as artifacts in "metadata repositories" in the form of digital data about information assets that the enterprise wants to manage. Metadata repositories are used to document and manage metadata (in terms of governance, compliance, security and collaborative sharing), and to perform analysis (such as change impact analysis and gap analysis) using the metadata. Repositories can also be used to publish reusable assets (such as application and data services) and browse metadata during life cycle activities (design, testing, release management and so on) In the common sources of Metadata, should meet "enterprisewide" metadata management needs. These include several categories of metadata repositories, such as those used in support of tool suites (tool suite repositories), project-level initiatives and programs (community-based repositories), and those used to federate and consolidate metadata from multiple sources (enterprise repositories) to

manage metadata in a more "enterprisewide" fashion. Here we focus on the state of the repository markets — since there are now many sub-markets — in terms of this need to federate and consolidate metadata in an enterprisewide manner.

We are seeing more and more organizations — even those that already own enterprise repositories — acquiring several other "best-of-breed" repositories, each focused on different communities of users in projects and programs involving data warehousing, master data management, business process modelling and analysis, service-oriented architecture (SOA) and data integration, to just name a few "types of communities." In each case, these community- focused repositories have shown benefits in improved quality and productivity through an improved understanding of the artifacts, the impact queries and the reuse of assets, such as data and process artifacts, services and components. This has resulted in the "subsetting" of what once was the enterprise repository market into smaller "communities of interest," using solutions that are less expensive and easier to manage. However, attempting to federate metadata across multiple repositories to provide an "enterprisewide view of metadata" is no simple task - but a cornerstone of advance process modelling.

4. Process templates. Process templates" is an overarching term that describes prebuilt business process design, execution and management artifacts that accelerate time to solution. They are also known by various names, such as "solution frameworks," "solution templates," "solution kits," "starter kits," "process accelerators" and "process pods." Process templates should be agnostic and vendor neutral. Typically, process templates are graphical and are based on process flows, rules or service- oriented architecture (SOA). The contents vary dramatically vendor or provider. Some offer simple visual process models that are useful in jump-starting discussions about target processes for improvement. Others provide prebuilt detailed process models, technical reference models, candidate service definitions, technical service libraries, rule sets, user interface templates, simulation scenarios, recommended governance policies, delivery and deployment guides, and process improvement methodologies.

Some vendors sell process templates as products, while others treat them as software assets primarily intended for use in professional service engagements. Process templates are not intended to deliver 100% of a solution. Instead, they are meant to be changed by an implementer. A process template can be extended (that is, the implementer can add capability beyond what was provided by the original assets). It can also be adjusted or configured to accommodate the unique requirements of a process. In many cases, process templates are designed to allow business stakeholders to extend the solution, not just IT personnel.

Process templates use models to manipulate one or more aspects of the process. Some templates are broad (including activities, rules, workflows and UIs), and some are narrow, such as a rule set only. Nevertheless, in the BUSINESS MODELLING market, model-driven prebuilt solution content is typically referred to as "process templates." With process templates, the resulting application is driven by the metadata reflected in the process model. This means that the application's behavior is determined by direct manipulation of the explicit process model, rather than through the setting of parameters or by writing code. Instead of parameters, which restrict application behavior to predetermined options only, a process orchestration engine reads the explicit business process model and directly executes it.

5. **Change Management**. The implementation of a Change Management program demands a whole new way of working in an organization, and also implies looking differently at your organization. This is something that many organizations underestimate. Old, existing ways of

working and managing/directing people must be changed. This fact alone begs for a clear change at the management level, but it also requires change at lower organization levels. This new way of working should be accepted, before working in a process-oriented manner can become successful. When organizations decide to implement process improvements and/or Business Modelling, they must not only pay attention to the new possibilities and the factors that stimulate successful implementation. They must also be aware of the restrictions. These restrictions or barriers are often bound to the organization culture, to the comfort one obtains from holding a certain position, and to power and status. Management must deal with these barriers and actively deal with the factors that stimulate implementation as well. Clear and accurate communication is important for successful change management. This implies a need to build integrity and trust, which will have implications for the specific tactics that will be adopted in implementing the changes required. There are many tactics that can be selected from the toolkit for each area, and the actual tactics adopted will need to match the particular business, but if you have a framework from which to select, the likely success of your Change Management project is increased.

- 6. **BUSINESS Alignment.** BUSINESS alignment focused on both reusability and accelerates automation needs an understanding of what alignment is, how to develop an alignment competency and what considerations should be made by organizations to ensure alignment is adequately adopted. Alignment of BUSINESS provides for the policy or strategy of the organization to drive the alignment of BUSINESS portfolios, programs and projects that require the relevant stakeholders (business process owners) to the develop a common understanding of their Business Process so that there is a transformation of business process from As-Is through To -Be. The To-be business processes that have been aligned can then be utilized in enterprise transformation and innovation to enable improved financial measures of performance. Enable replication of the same success across project, portfolio and programs. Independent of the BUSINESS alignment objective is combined with BI MDM, SOA and or Cloud the strategic value and the effect on the organizational performance is significant.
- 7. **Business Process Outsourcing**. This is likely to yield high benefits to business process outsourcing (BPO) providers as well as buyers. In order to gain maximum benefit, a business process outsourcing program should go through a formal close down. There is no point in arguing lost causes once irrevocable decisions have been taken. Staff and companies alike need to accept the new situation and move forward. However, there will be a lot of information generated during the life of the program, and this will have been stored with varying degrees of formality by the team members. This information needs to be formally filed away for future reference. In this light, there are no simple criteria to conduct an outsourcing versus in-house analysis. The benefits associated with outsourcing are numerous, and one should consider each project on its individual merits. Ongoing operational costs that may be avoided by outsourcing are also a consideration. In a nut shell, outsourcing allows organizations to be more efficient, flexible, and effective, while often reducing costs.
- 8. Evidence-Based BUSINESS MODELLING. As organizations gain awareness of the latent business value locked in their backend systems' data stores, evidence-based BUSINESS MODELLING will become a day-to-day management tool rather than the subject of ad hoc initiatives triggered by punctual process performance issues. This shift will lead to the emergence of evidence-based process governance frameworks, allowing managers to effectively set up and steer long-term evidence-based BUSINESS MODELLING programs that deliver measurable value via continuous process improvement. In turn, increased evidence-based BUSINESS MODELLING maturity will spawn the deployment of real-time

and predictive evidence-based BUSINESS MODELLING methods that will allow process stakeholders to respond to fine-grained process performance issues as they arise or even before they arise. In other words, evidence-based BUSINESS MODELLING methods will push the boundaries of contemporary business process monitoring practices by extending them with real-time predictive analytics. Evidence-based BUSINESS MODELLING will also enable continuous process auditing, whereby compliance violations are detected on a day-today basis, in contrast to contemporary post-mortem process auditing approaches.

Combined, these developments will bring BUSINESS MODELLING to the level of modern data-driven marketing approaches. Ultimately, every business process redesign decision will be made with data, backed by data and continuously put into question based on data.

- 9. **Governance**. Governance in organizations is not a new trend, as a matter of fact are few industries not demanded to proof compliance in multiple areas. Governance in terms of monitoring, evaluation and audits are part of all organizations daily tasks. The trend we have seen for years emerging and now with the advanced abilities of process intelligence, evidence based process mining, rules modelling and performance management has Governance become a part most organizations apply. By tackling Compliance as well as continuous improvement via Governance, the organizations have an agile way to easier to respond to regulatory change, enable faster decision making and link it to the continuous improvement loop.
- 10. **Business Architecture and Enterprise Architecture.** Business Architecture and Enterprise Architecture should be an integrated part of the enterprise modelling, engineering and architecture concepts **There multiple** benefits and different ways to combine the disciplines to create the needed business transformation and innovation, that could achieve the quality and longevity for Enterprises. The key distinction for Business Architecture as a discipline is added focus on flexible and dynamic process design and process orchestration and automation through architectural enablement. In addition to reduced costs through continued improvement and automation, Business Architecture also provides the foundation for converged and agile business and IT responsiveness and is the key to applying the principles.

The success of interlinking Business Architecture with EA derives from the proper coordination between planning and execution of the overlapping principles in the approaches. This in turn requires a company understanding of the EA and process lifecycles of the enterprise and the establishment of appropriate collaboration between EA and Business Architecture governance approaches to ensure interlinking of the described approaches.

Whereas value management, business process management and enterprise architecture each have value on their own, we have described how they are naturally synergetic and work best when used together for better business performance and value outcomes and strategic alignment of business and IT. When these approaches are used together, performance drivers and operational excellence and thereby possible improvement areas are provided by the Business Architecture context that outlines where to change the input-output model and provides an understanding of where to create the value and how and where to measure performance. Business Architecture provides the design principles for solution transformation, and the rest of EA provides the discipline for translating business vision and strategy into architectural change. Although governance principles can apply the needed standards and rules, all are required for sustainable continuous improvement, optimization, and innovation. It is important to realize the value of direct collaboration across the described boundaries. Only when supported by appropriate collaboration and governance processes can Business Architecture and EA roles work effectively together toward the common goals of the enterprise. The key to business-IT alignment and what glues it all together is the processes and activities. The notion of having business process optimization and integration of approaches has been around very long. Yet around the same time that EA and governance became a mainstream topic in the context of business and IT alignment, the focus in many process optimization communities shifted subtly to Business Architecture to go beyond an optimization approach.

11. **Case Management.** In the last few years, the enterprise content management (ECM) and business process management (BPM) markets are converging into a common use case, which has been called case handling, case management, or adaptive case management. The goal of case management is to make knowledge workers more productive by empowering them with control over the process outcome; providing them with full visibility and ability to manipulate all process data; and allowing them to collaborate to manage and evolve to completion each process instance. This trend is an evolution of the document centric case thinking as well as process thinking that is motivating vendors to provide a deeper integration between ECM and BPM technology. Vendors are incorporating collaboration technology for knowledge workers to manage the data and outcome of each process instance. The result is that BPM products are becoming more flexible, better integrated with ECM technology, and providing better collaboration environments for knowledge workers.