Driving business agility and visibility with Process Intelligence

Neil Ward-Dutton

February 2011

Process Intelligence has received a lot of attention over the past couple of years, but we find that despite this, there's still a lot of confusion out there regarding what the true focus and scope of this thing called "Process Intelligence" actually is. Some people see Process Intelligence as simply the next iteration of what's often called Business Activity Monitoring (BAM); we see things a little differently.

Our analysis is that the goal of Process Intelligence should be to ensure an entire company is aligned towards its stated performance objectives by linking business strategy to day-to-day business execution more efficiently and more effectively. We assert that Process Intelligence is not a product you can buy off-the-shelf; it's an organisational capability that requires a blend of new and existing tools for measuring, monitoring and managing your business.

Summary

Linking strategy to execution effectively is essential, but difficult

The ability to effectively link strategy and execution is vitally important in business for two reasons. First, the rapid rate of market change across industries and geographies, affecting companies of all sizes, due to the impact of globalisation and the role of the Internet; and second, the importance of "customer experience", due to the fact that in an increasingly competitive environment, competing on cost alone is difficult for most companies. However, effectively linking strategy to execution is difficult because of the scope, organisational structure and complexity of organisations; and also because most organisations' operations are managed on a departmental, siloed basis.

Process Intelligence is a great vehicle for linking strategy and execution

Process Intelligence is an organisational capability that aims to ensure that companies consistently and quickly apply relevant knowledge, to and within business processes – in order to provide better visibility of performance, support strategy alignment, improve business agility, improve operational decision-making, and identify issues and their root causes. It has a great deal of power for organisations looking to improve their ability to link strategy and execution, and through this increase business agility and visibility.

There is no one 'right way' to get started developing Process Intelligence

There's really no one right place to start with developing a Process Intelligence capability. The place it makes sense for you to start will depend very much on your own pain points and priorities. Broadly speaking, though, it makes sense to start your Process Intelligence efforts while aiming very clearly at one of the three "activity levels" that Process Intelligence works at – execution, management or strategy. A clear focus at one level makes most sense initially – with the caveat that as you progress, you will soon need to start considering the linkages between levels.

Process Intelligence technology exists today, but technology alone won't give you what you need

Much of the technology you will need to support you as you start to develop Process Intelligence is well- established and widely-used – although there are pockets where tools to help are only just emerging. The critical consideration, though, is not only sourcing technology, but using well-founded architectural oversight to pull multiple technology aspects together to support your initiative.

Maintaining a Process Intelligence capability requires a deliberate commitment across your organisation

Using your first steps in Process Intelligence as a springboard to develop a broader, more sustainable capability will require significant commitments from people at multiple levels within your organisation, and their efforts will need to be carefully co-ordinated. A well-rounded governance structure (comprising defined people, policies, and processes), with the committed resources to make its influence felt, will be important as you progress.

The importance of linking strategy and execution

Does your organisation effectively link strategy and execution?

Here's a quick quiz. Do you find any of the following scenarios apply within your organisation?

- Front-line workers don't have the right information, context and facts to make informed decisions for the business, or a customer or partner.
- It's difficult to work out whether or not people are actually following the right procedures and guidelines and equally whether or not those procedures are actually adding value.
- A singular focus by one department or functional unit on its own targets and results has a detrimental effect on other parts of the organisation, especially where a business activity cuts across departmental boundaries.
- It's difficult to respond in a timely and appropriate manner to uncertainty and changes in the business.
- It's difficult to effectively and meaningfully measure the performance of the business.
- Too much emphasis on lagging indicators that provide a rear view mirror of performance without balancing out this view with a more forward looking approach.
- 'Management by metric' creates too many Key Performance Indicators (KPIs), or the wrong set or type of KPIs.
- It's difficult to assess whether a current set of procedures and projects in play is the "best" set for the organisation, given its goals, or whether there are other things that would be smarter to pursue.

If you experience a number of these symptoms on a regular basis, then it's very likely that your organisation struggles to effectively link its strategy-setting work with the day-to-day execution of business. The ability to effectively link strategy and execution is vitally important in business – for two reasons:

- **The rapid rate of market change across industries and geographies, affecting companies of all sizes**. Globalisation and the role of the Internet are driving the pace of competitive change; in an environment where competitive and market conditions are changing rapidly, anything that unnecessarily slows down the recognition of an important new market factor, the analysis of that factor's potential impact and the reaction to it is going to have significant implications for your organisation.
- **The importance of "customer experience".** In an increasingly competitive environment, competing on cost alone is going to be difficult for many organisations to pull off. More and more organisations are realising this, and combining a focus on cost with a focus on delivering great customer experiences. Being able to deliver customer experience excellence is one way of avoiding the commodity trap as a supplier of goods or services: but in today's business environment, customers have very high expectations. Delivering a great experience means you have to be able to be confident that you can deliver personalised service in a timely fashion, to a high level of quality – and also that you can work flexibly to meet the needs and interests of the customer rather than forcing customers to fit in with rigid and customer-unfriendly procedures.

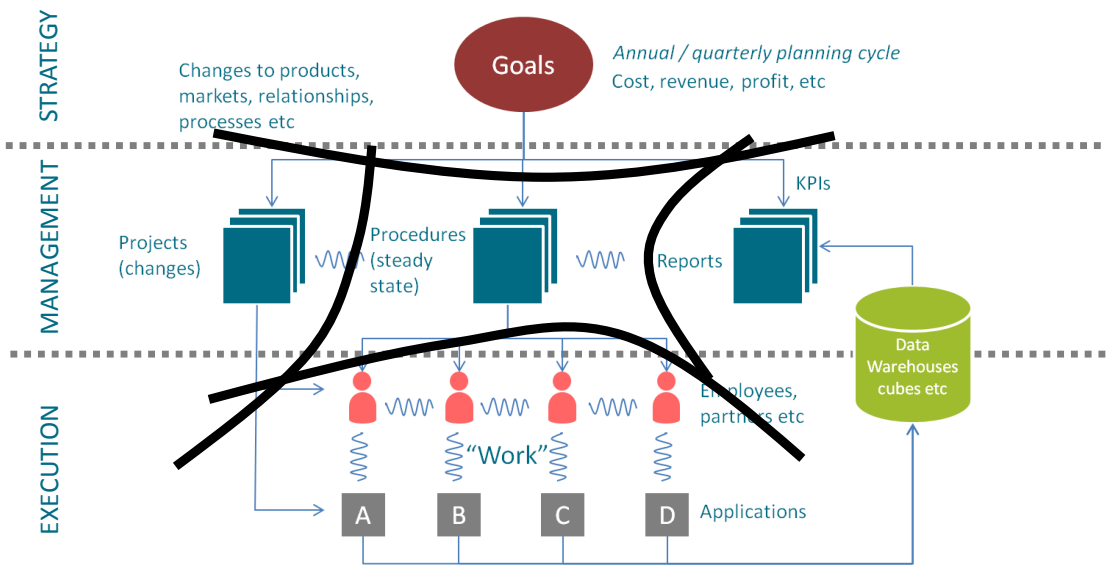
If it was simple to make and maintain an effective strategy-to-execution link, then of course well-aligned, high-performance organisations would be the norm rather than the exception. But it's not. And there are two common reasons why:

- **The scope, organisational structure and complexity of organisations**. Without sufficient alignment business processes will inevitably deviate from the key drivers and goals of an organisation, as it becomes much harder to ensure that the 'right' things are actually being done by the 'right' people. While most companies would assert that they have formulated and developed a strategy, they often fail to link this to the day-to-day execution because there is no systematic way of continually executing on this strategy.
- **A piecemeal, siloed and departmental approach to operations.** Siloed operations are still prevalent in many organisations today, and these silos make it hard to understand the strategic context of departmental or functional efforts. Without this context, employees lack the information to understand the implications of the overall company strategy to themselves – and therefore how their performance and the performance of team or department or unit relates to the organisation's strategic objectives.

The challenge of disconnected responsibilities

Figure 1 shows a very high-level schematic of how strategy-setting is often linked to day-to-day business execution today. As outlined in the figure, the linkages can be very fragmented and themselves siloed: the big challenge comes from the fact that there's no 'big picture' that unites the different perspectives of the individuals and teams that are responsible for driving the organisation forward. Five distinct groups – the senior executives who are responsible for setting strategy; the programme managers who are responsible for setting up and driving change projects; the operational managers responsible for managing 'business as usual' procedures; the front-line staff responsible for day-to-day business operation; and the analysts responsible for monitoring business operations – are rarely very well connected to each other.

Figure 1: Disconnected responsibilities



A big part of the difficulty of effectively linking strategy and execution comes from the fact that five key groups of individuals who should be connected to each other very rarely share a common 'big picture' view of what good performance looks like and why.

Introducing Process Intelligence

Business process thinking is crucial to dealing with today's change pressure points

In an environment where competition is ever fiercer, customer expectations are more informed and more stringent, supply chains are more complex and business and technology are becoming ever more tightly intertwined, a focus on end-to-end business process improvement is absolutely crucial. We see recognition of this time and again in studies of IT trends and investment plans which consistently place business process improvement as one of the highest priorities of CIOs and CEOs.

Globalisation, the drive toward increased transparency and the need for organisations to engage effectively with smart, connected consumers and markets – together with the current economic climate – are driving change programmes where the same five key themes come up time and time again: driving more efficient and effective interaction with customers and partners; driving more business model flexibility; driving better governance and regulatory compliance and better visibility of performance and risk; driving faster and more agile product/service delivery; and driving more effective revenue assurance.

All these five themes link strongly into the need to take a management perspective that looks end-to-end across an organisation's business processes – none of them can be effectively addressed with the implementation of tightly scoped IT applications.

The pursuit of a capability called 'Process Intelligence' has been talked about for a while now as something that has a great deal of power for organisations looking to improve their ability to link strategy and execution, and through this increase business agility and visibility. Let's look at what it means and how it helps.

Defining Process Intelligence

We define Process Intelligence as:

An organisational capability that aims to ensure that companies consistently and quickly apply relevant knowledge, to and within business processes – in order to provide better visibility of performance, support strategy alignment, improve business agility, improve operational decision-making, and identify issues and their root causes.

One of the most important phrases in our definition concerns the application of relevant business knowledge **to** and **within** business processes.

When we talk about applying relevant knowledge **to** a business process, we're talking about how a Process Intelligence framework helps you reason about process effectiveness end-to-end and look for improvements over time. As an example: imagine that an insurance provider makes a customer commitment to deal with claims within a certain time period. In this context, an example of reasoning about process effectiveness is trying to answer the question "are we meeting our customer service targets"? To do this simplistically is simply a matter of understanding the Key Performance Indicator and goal details associated with the customer commitment, and using these as the context for monitoring the time it takes to complete individual instances of the claims handling process. But it's far more valuable to go beyond a naive implementation, and instead understand not only point-in-time performance but also performance trends over time. To do this, you need to be able to continually bring together three kinds of information and analyse them together: reference information (KPIs, goals); historic information (how has this process performed in the past); and real-time information (how are instances of this process performing right now, and what does this say about performance trends).

When we talk about applying relevant knowledge **within** a business process, we're talking about how a Process Intelligence framework helps you reason about particular choices that need to be made as individual process instances unfold. As an example: at our insurance company, a call centre representative might need to handle a change in priority of a particular claim. In this context, one of the key decision points within the process would be answer the question 'should this customer's claim be expedited?' In this scenario, the answer would involve the call centre representative assessing the relevant information available to them in real time in order to be guided in the decision-making process. This again involves bringing together real-time information (such as the current facts about the claim), together with historical information (to provide context about the customer and past claiming patterns) and knowledge of different kinds of claims and risks models that provide recommendations about how to deal with this particular type of claim. Based on an analysis of all these factors, the claim is either fast-tracked or takes the normal claims processing route.

Process Intelligence: how it links strategy and execution

Figure 2 shows how Process Intelligence comprises three distinct but closely linked 'layers' of effort: one focused on strategy-setting, one focused on management activity and one focused on day-to-day business execution.

Figure 2: Three layers of Process Intelligence, and their linkages

Process Strategy Intelligence. Use strategy maps to create KPIs to drive and track performance against strategic objectives. Push down to management level; enable management intelligence to bubble up to strategy level

Process Management Intelligence. ***Apply relevant knowledge to processes.*** Discover and create monitoring models for processes. Analyse performance of processes over time, look for possible optimisations

Process execution intelligence. ***Apply relevant knowledge within processes.*** Apply analytics in the context of individual process cases – in order to optimise decisions and flows of work.

Process Intelligence links strategy and execution through a focus on business process value and performance.

At the **strategic** activity level, Process Intelligence work takes strategic objectives that are created to provide goals for the organisation, and links them to a clear understanding of how key business processes and their performance contributes to these strategic objectives.

At the **management** activity level, Process Intelligence work aims to apply relevant knowledge **to** processes with the aim of understanding how process performance can be optimised. Understanding of process performance over time provides the ability to track progress against strategic objectives.

At the **execution** activity level, Process Intelligence work is focused on applying knowledge **within** business processes where analytics are applied at the point of need. This involves assessing contextual information within a business process which in turn can be used to guide or automate parts of the decision making process – helping to make processes more effective and contributing towards process management objectives.

Getting started with Process Intelligence

The key enablers of Process Intelligence

It's often been said that Process Intelligence is simply the intersection of Business Process Management (BPM) and Business Intelligence (BI) technologies. There is a grain of truth here, but in reality there's more to Process Intelligence than a simple equation.

Operational BI provides part of the answer...

It's true that BI and analytics tools contribute towards a Process Intelligence capability – specifically, providing a foundation for integrating and analysing information for management and strategy-setting activities, and also for delivering actionable insights to front-line workers involved in day-to-day execution. However, although BI and analytic capabilities provide information to support decision-making, in isolation they will fail to contribute towards Process Intelligence because they have no inherent business process context to operate against. Without this context there is a danger that operational BI technology ends up delivering information that's out-of-date, untimely or possibly even irrelevant.

The promise of an integrated Process Intelligence capability requires BI and analytic technology to be deeply woven into the fabric of operational business processes and applications – taking triggers from operational business events and providing timely and relevant information at the point of control and decision-making.

Process automation technology provides part of the answer...

Business Process Management (BPM) technology platforms, or BPM Suites (BPMSs) can contribute towards a Process Intelligence capability by providing a solid base for capturing and encoding process knowledge, and also for monitoring process progress in an operational environment and aggregating information for historical analysis. However there's an important caveat to consider when you look at the potential of a BPMS, and that's that BPMSs tend to be used where process automation is a core part of what the organisation is trying to achieve.

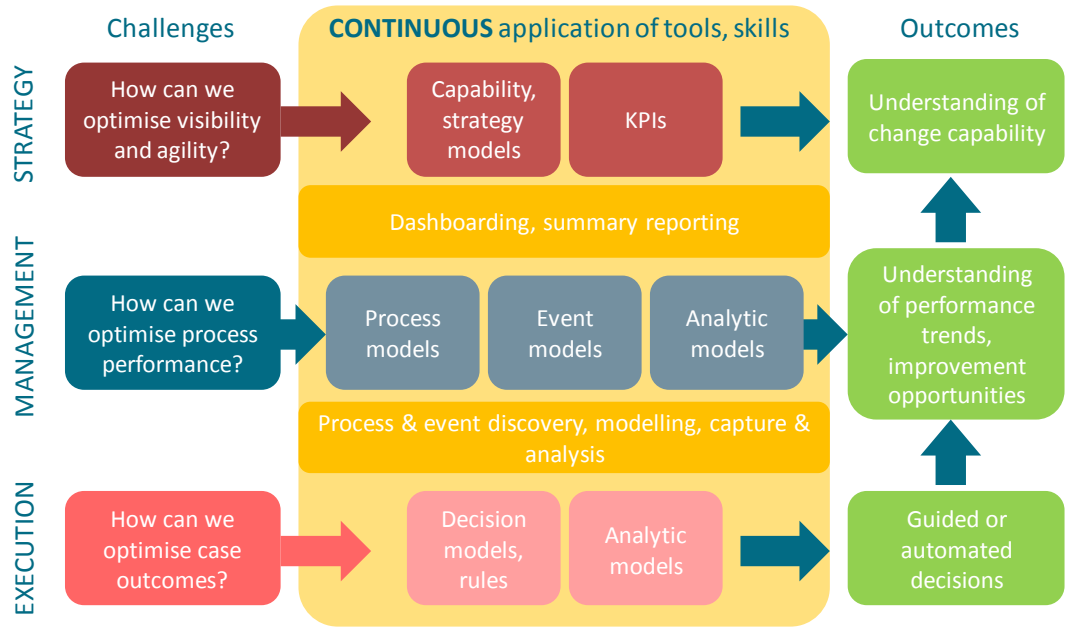
There's absolutely nothing wrong with process automation as a goal, but it's important to realise that if you make process automation your primary focus you may end up inhibiting your ability to create process intelligence with broad enough scope. When organisations start process automation projects, they typically focus their efforts down to particular parts of broader business processes rather than looking end-to-end – whether for cost, risk or political reasons. The result can be that the BPM technology platform is in a position to provide a very rich foundation indeed for Process Intelligence in some parts of a business process – but other parts of the same process become "black boxes" or worse still, invisible and forgotten from a Process Intelligence point of view.

Key Process Intelligence enablers and how they fit together

When trying to create a Process Intelligence capability that will truly link strategy and execution, your goal should be to build a framework that can encompass strategy, management and execution activity levels in an organisation in an integrated way – without a dependency on process automation as a pre-requisite for gaining intelligence.

Figure 3 highlights the set of key enablers that have to come together to build a rich Process Intelligence capability.

Figure 3: Key enablers of Process Intelligence and how they fit together



Many kinds of models – ways of analysing business needs and information and process structures – need to be considered in relation to each other to really drive Process Intelligence forward.

Execution-level enablers

At the day-to-day execution activity level, where the key concern under consideration is how to apply relevant business knowledge within processes, the aim of Process Intelligence is to deliver actionable insights at the point of need or impact. Two of the key components that enable this capability are analytic models and decision models.

Analytics aims to find meaning in data through the discovery of patterns and relationships. A predictive analytic model, for instance, typically uses a combination of sophisticated predictive analytic algorithms, statistical models and mathematical calculations to analyse current and historical facts that can enable predictions about future events. The output from such a model (for instance, a score that can be translated into an option or recommendation) can support and guide decision-making by front-line workers. Sometimes analytic models simply augment a human decision and sometimes the output is part of an automated system that executes a decision.

Decision models are an emerging concept, and are complementary to analytic models here. They provide a capability that allows an organisation to capture and manage the business rules needed to codify, implement and support key business decisions. In other words, they're used to map out the relationships between the different elements of a decision flow. The power of a decision model is that it can help business users understand how decisions are made, what rules are required, how to check those rules for completeness and consistency, and potentially how to change rules.

Management-level enablers

At the management activity level, where the key concern under consideration is how to apply relevant business knowledge to processes, the aim of Process Intelligence is to understand how process performance can be optimised. The core components that enable Process Intelligence at this level are process models, event models and analytic models.

Process models are representations of business processes; process data marts use those process models as their reference and context for aggregating operational events, and provide the link between operational environments and dashboarding and summary reporting facilities.

Event processing infrastructure is the "invisible" glue that holds all this together. Event processing infrastructure detects events in systems and applications that correspond to key points of interest in processes, and forwards those events for use in analytic models and databases. Where you use a BPM technology platform, event processing infrastructure is very likely to be already built into the platform – but it will be specialised for use with that platform. Extending the event model to include systems and applications that aren't directly "under management" within automated processes may be a challenge (though not necessarily – some BPM technology vendors are better than others).

Strategy-level enablers

At the strategic activity level, where the key concern under consideration is how to develop and translate the corporate strategy into a set of measurable goals and targets, the core enablers of Process Intelligence are capability and strategy models.

A capability model provides a reliable and repeatable method for identifying, classifying and exploring what it is the business does rather than focusing too much on 'how' the business does things. A strategy model allows an organisation to consider how a range of possible strategies could be impacted by a variety of external factors and circumstances – and in turn work out which is the most robust.

There's no one "right" place to start

So where do you start with developing a Process Intelligence capability? As you might have already suspected, there's really no one right place to start. The place it makes sense for you to start will depend very much on your own pain points and priorities.

Broadly speaking, though, it makes sense to start your Process Intelligence efforts while aiming very clearly at one of the three "activity levels" that Process Intelligence works at – execution, management or strategy. A clear focus at one level makes most sense initially – with the caveat that as you progress, you will soon need to start considering the linkages between levels.

Getting started with Process Execution Intelligence

Getting started developing your Process Intelligence capability at the execution level will likely make sense if you're trying to answer questions such as: Are the right decisions being made? Is there a sufficient level of consistency in decision-making? Are we prepared for future demand?

The key steps you'll need to take will require you to use analytics tools to capture, aggregate, analyse and predict data and events to build a picture of past, current or future behaviour. Analytic models typically use combinations of analytic algorithms, statistical models and mathematical calculations to analyse current and historical facts that find behavioural patterns that enable predictions about future events to be made. These models support and guide decision-making by providing front-line workers with options or recommendations that can be made.

In some scenarios the analytic model will need to be integrated into an automated system that executes decisions. Decision automation, or decision management, automates and manages high-volume operational decisions: an example is credit card authorisation. Decision management mixes together business rules, predictive models and operational data to deliver targeted decisions at a particular point in time. These rules and decision strategies are captured within a decision model.

Getting started with Process Management Intelligence

Getting started developing your Process Intelligence capability at the management level will likely make sense if you're trying to answer questions such as: Are procedures being followed consistently? How much does it cost to carry out key processes, and is this increasing or decreasing? How much waste is there in key processes? How much "dark process" (sets of activities and tasks commonly carried out within a business process, but that aren't formally documented or recognised at a management level) is there out there? Do processes compete for resources?

The first step on the road to Process Management Intelligence has to be to develop process understanding and documentation through process models. These can be created in two ways: they can be created by business analysts, ideally working in conjunction with 'front line' business professionals, through design workshops where teams explore how work actually gets done; or they can be discovered by 'Process Discovery' tools, using algorithms that pull together correlations from the transactional log files that are created by existing applications and systems in use in the business.

Just by getting a true picture of the business processes that teams actually follow, day-to-day, you are taking steps to developing a Process Intelligence capability. However if all you have is a set of process models, all you have is a map of the landscape – you have no easy way of tracking the business' progress across that landscape to reach its goals, and no way of seeing how "bumps in the road", detours or traffic jams might be getting in the way of progress. To get to the point where you can track progress, the next thing to focus on – to carry the roadmap analogy forward a little – is where you're going to put the traffic cameras. Some monitoring points will be able to be derived from strategy-level KPIs (see below). Other monitoring points are going to be a reflection of your current state of knowledge about particular business processes and particular issues that are impacting process effectiveness. As you gain more Process Intelligence and hone your understanding of the really critical elements of a given process, you may find that monitoring points you initially implement become much less important – and other monitoring points that you initially didn't consider at all become essential.

Once you understand the "as is" structure of the processes you're focused on and have identified monitoring points and thresholds, the next step is to put event monitoring and processing infrastructure in place to actually track the progress of individual cases of processes as they unfold and capture some accurate performance baselines.

Getting started with Process Strategy Intelligence

Getting started developing your Process Intelligence capability at the strategy level will likely make sense if you're trying to answer questions such as: Which of our goals are being met by change projects and operational procedures? Are our plans realistic based on our organisation's current capabilities and processes? Are there any opportunities for "quick wins" in serving customers better or for improving efficiency, or streamlining operations?

One of the first steps must be to describe your organisation's strategic objectives within a scorecard such as a Balanced Scorecard. This typically needs to include different perspectives: examples include an 'internal' perspective that may look to improve the efficiency and effectiveness of the organisation; a 'customer' perspective that aims to improve end-to-end customer-facing processes; a financial perspective that takes into account financial plans and goals; and a learning and growth perspective that outlines how the organisation will achieve its aim for continuous improvement. These strategic objectives are then connected to describe cause-effect relationships within a strategy map. The next step should be to define a set of appropriate Key Performance Indicators (KPIs) for measuring against the specified objectives.

To make the link between corporate objectives and execution, you will need to identify the key business processes that contribute to each strategic objective and measure. This will ensure strategic performance measures are better aligned with key business processes and their outcomes. At the same time, by mapping objectives and measures to business processes rather than functional areas or departments, you highlight opportunities to increase the process-orientation of your organisation.

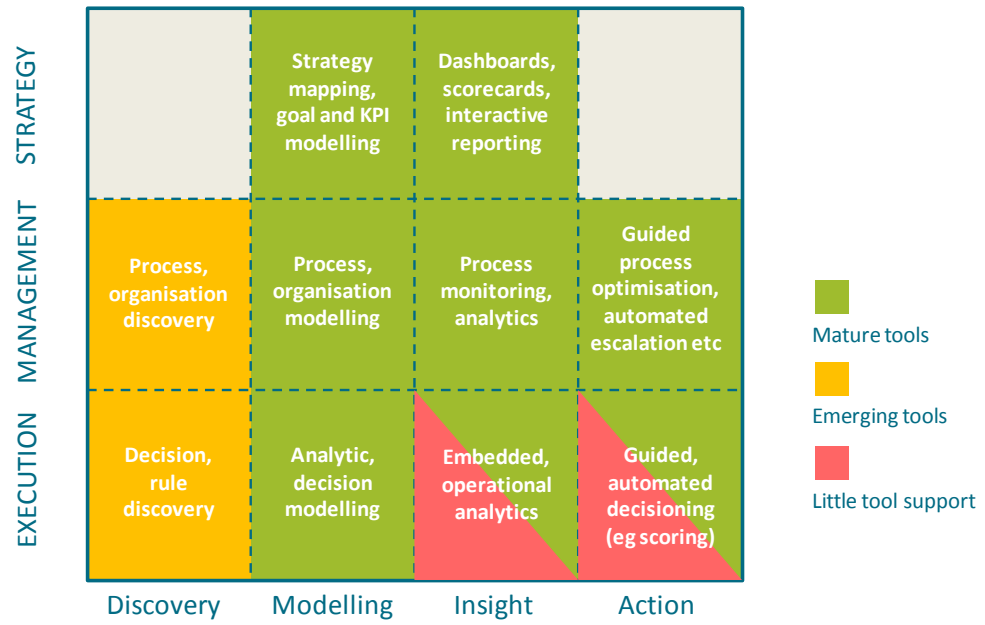
Finally, from a technology perspective, you should work to build out a high-level map of which enablers for Process Intelligence are currently in place at the management and execution levels; and where those enablers need to be further developed. The output from this valuable exercise will provide you with a high level plan for developing and creating Process Intelligence architecture.

Understanding the technology and supplier landscape

A landscape of Process Intelligence capabilities, tools and techniques

To help you dig deeper into the key enablers for Process Intelligence to see which tools and techniques you might need to employ as you take your Process Intelligence journey, we've created a Process Intelligence technology model – see figure 4.

Figure 4: Digging into the landscape of Process Intelligence tool support



Our Process Intelligence technology model segments tools and techniques in two dimensions: across three activity levels (the vertical axis) and across four intelligence development steps (the horizontal axis).

The horizontal dimension of our model outlines four steps in a natural progression towards applying intelligence: discovery, modelling, insight and action. First, organisations seek to discover what you already know and pull that knowledge together; then they more formally design and refine that knowledge into a coherent, structured model; then they apply intelligence tools to uncover insights about work tasks and processes, and reason about those insights; and finally they apply technology that takes those insights and uses them as a foundation for automating or recommending certain actions.

You'll notice that the "discover" and "action" boxes at the "strategy" level are greyed out. This is because it doesn't make much sense to think about tools to help you discover your organisation's strategy; and also it doesn't make much sense to think about tools that drive action out of strategy – understanding the optimum actions that should arise from insights about performance against strategy tend to still be the preserve of talented, experienced, senior professionals (and perhaps consultants).

What support do tools provide today?

You'll notice that for most segments of the model shown in figure 4, the tools and technologies that can be used to support the development of Process Intelligence are already quite mature. But there are a couple of areas where tools support is less mature: we highlight those below.

The first area where tools support is not mature is in 'process and organisation discovery'. Process and organisation discovery tools take historical log data from business applications that are used as part of existing business processes, and filter, associate and correlate data across logs to build up pictures of how processes are actually executed and by whom. Discovery is limited to tasks that are explicitly supported by those business applications – these technologies obviously can't discover tasks if they leave no 'electronic footprint' – but the discovered structures can nevertheless be very detailed and instructive. Although these technologies are relatively new there are a number of vendors now offering them. Be aware, though, that discovery is not fully automated; someone has to do some up-front work to configure the collection agents that trawl logs so that they "know" what log data refers to what business information. Once this is done, though, the discovered process structures – and sometimes the discovered networks of individuals and teams that work at different stages on processes – can be very useful indeed as a starting point for Process Management Intelligence.

Another technology area worth pointing out is 'decision and rule discovery' which, as indicated, has only emerging tool support at this stage. There are a number of tools emerging which support business rule discovery through use of text and data mining techniques; but at this time, we see no explicit support for automatically discovering and building up a picture of how decisions are made, how they are executed and by whom.

The last area worth calling out relates to the 'insight' and 'action' elements of process execution intelligence. As figure 4 highlights, these technology segments are populated with some mature tools, but overall, integrated tool support for these capabilities is only just emerging. As an example of technology capabilities that are mature, there is strong support for embedded analytics in most packaged CRM and ERP systems and analytic applications; and likewise there are areas of maturity in the use of guided and automated decision-making tools – especially in industries like retail and financial services. However, while all these separate elements are relatively mature, the real challenge comes from bringing them all together within an integrated capability where the data, the events, the business processes, the models, and the analytics all work together.

Filling in the blanks

There's one last thing you should take into account when looking at the technology model outlined in figure 4, and that is that in order to develop Process Intelligence in your organisation, you might not need to "fill in all the blanks" of this model with technology. As we've already explained, there are multiple places you can get started developing a Process Intelligence capability – so that will naturally place your emphasis on one particular "horizontal slice" of this model. What's more, within one of those "horizontal slices", you won't necessarily need to employ all the technologies from left to right – at least not in the immediate term. What is certainly the case, though, is that there are logical dependencies from left to right if you're serious about building a strong Process Intelligence capability over time. Trying to drive insight without a sound model underpinning it is likely to cause difficulty, for example; and certainly, trying to drive action without sound insight is a recipe for disaster.

Choosing a vendor: other important questions you should consider

Putting technology features to one side, there are other factors you take into consideration when assessing vendor capabilities. These include:

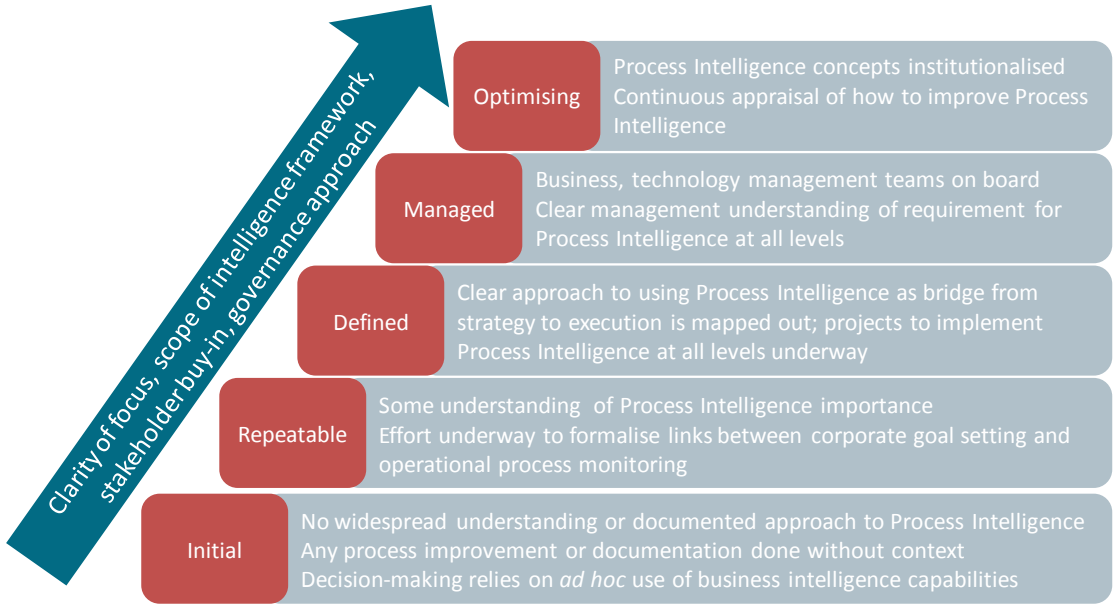
- Support for standards and openness between different tools, platforms and systems.
- A clear demonstration of industry and domain expertise.
- Availability of pre-packaged content, models, reports, dashboards, workflows and decisions flows.
- Availability of consultancy services in areas such as change management, combined discovery, analytics and process automation.

Developing and maintaining Process Intelligence momentum

From process ignorance to Process Intelligence: a maturity model

Once you've considered how you might want to get started in developing a Process Intelligence capability and understood the technology elements you'll need to employ as you get started, the next question is: how do you develop momentum so that you can increase your Process Intelligence capability and maturity, and how can you maintain that momentum?

Figure 5: A maturity model for Process Intelligence capability



Developing the maturity of your Process Intelligence capability means maintaining a clear focus on what you're trying to achieve, broadening the scope of your effort, ensuring that you have developed strong relationships with the relevant stakeholders, and developing solid governance principles and practices.

Let's quickly explore each maturity stage in our maturity model shown in figure 5:

- In the **initial** stage, there's no widespread understanding or documented approach to Process Intelligence within the organisation. Any process improvement project or documentation is created and run without the broader context of linking strategy and execution. Decision-making relies on ad hoc use of business intelligence capabilities rather than a coherent strategy-driven framework.
- In the **repeatable** stage, organisations start to show some broader understanding of the importance of Process Intelligence. We also start to see more evidence of efforts underway to formalise links between corporate goal setting and operational process monitoring.
- In the **defined** stage, organisations have mapped out a clear approach to using Process Intelligence as bridge from strategy to execution; projects to implement Process Intelligence at all levels (strategy, management and execution) are underway.

- In the **managed** stage, business and technology management teams within the organisation clearly understand the value of Process Intelligence as well as its costs and implications. There's clear management understanding of the requirement for Process Intelligence at all levels (strategy, management and execution).
- In the **optimising** stage, organisations have institutionalised Process Intelligence concepts at multiple levels, and there are structures and resources in place to ensure that there's a continuous reappraisal of how Process Intelligence can be further improved.

Transitioning your organisation from one level of maturity to the next involves four fundamental elements of effort:

- Creating a clear focus on Process Intelligence as being a driving force for co-ordinating action and driving evidence-based decisions and optimisations in your organisation – and making as many people aware of that as possible.
- Broadening the scope of your early Process Intelligence efforts to include more areas of business activity, and also to include all three levels of business activity – strategy, management, and execution.
- Securing Process Intelligence buy-in and sponsorship from a group of people with influence and budget responsibility within your organisation.
- Putting a sound governance structure in place, with sufficient resources, to help ensure that your Process Intelligence effort stays on track as it grows and evolves – and that it doesn't get side-tracked, hijacked, marginalised or ignored as it becomes less new and sexy over time.

Maintaining PI momentum through a governance practice

Although we don't intend to focus deeply on governance issues in this report, there's no doubt that in order to build and maintain a strong Process Intelligence capability you do need to establish policies, procedures and practices that people can follow over time to ensure you stay on the right track.

An effective Process Intelligence capability needs executive leadership, management, employees, business processes and IT representatives all working together towards the organisation's aims and objectives – and this means that building a Process Intelligence capability will require a significant amount of time and commitment to get things right; and may involve organisational change. While it still may be possible to achieve a degree of maturity in your Process Intelligence implementation without a governance practice in place, these efforts stand a greater chance of becoming isolated an uncoordinated over time – and may quickly lose their ability to link strategy and execution.

'Governance' might sound as if it's just about some mixture of control, risk management and regulatory compliance – but when a governance practice is run effectively, its key benefit is about increasing an organisation's capacity for continuous improvement. Without effective governance, it becomes increasingly difficult to achieve value from 'improvement projects' over time – because individual improvements aren't necessarily aligned to add value to each other, and in some cases can even end up working against the value that other improvements provided.

A governance practice should be focused on maintaining open feedback loops between the different Process Intelligence activity levels – strategy, management and execution. By helping to ensure that work at each of these three levels 'dovetails' with work and priorities at the other levels, effective governance practice should ensure that business processes can be continually adapted, managed and improved to ensure a virtuous cycle of improvement that links strategy to execution.