



The case for smarter Case Management

Neil Ward-Dutton, Research Director

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Summary

Knowledge work is at the frontier of competitive advantage

Competitiveness based on price, or even based on product features, is nowhere near as sustainable as it used to be. Recognising this, smart companies are increasingly attempting to instead differentiate themselves through services that add value to products, and through the delivery of exceptional customer experiences. By doing this companies hope to avoid getting caught in a global “race to the bottom”.

Your company’s ability to capture, share, develop and operationalise knowledge – in a way that clearly ties into delivering effective services and experiences – has rapidly become a very important factor in its ability to thrive. ‘Knowledge work’ has long been a topic of interest to management consultants and theorists; but its effectiveness has never been more important.

Case Management provides ideal support systems for knowledge work

The first business support systems were essentially record-keeping machines, focused on processing payrolls and managing customer records; and although today’s ERP and rigid workflow systems are orders of magnitude more sophisticated, fundamentally they still have very structured ‘expectations’ about the context in which their functions will be used. They are not suited to knowledge work.

To support knowledge work optimally, what’s needed is an approach that starts with the ability to clearly set definitions of work goals and outcomes, and then be able to specify work guidelines and constraints in a way that shapes how work gets done – rather than specifying precise patterns of work that must be carried out when stimuli for work occur. Case Management is an approach to coordinating work and information sharing that fits these requirements.

Advanced Analytics, Decision Management and Document Management technologies all add value

By implementing a Case Management technology platform you can create flexible, goal-driven ‘systems of coordination’ that make your knowledge workers much more effective. These systems will help teams respond to unpredictable situations more predictably, faster.

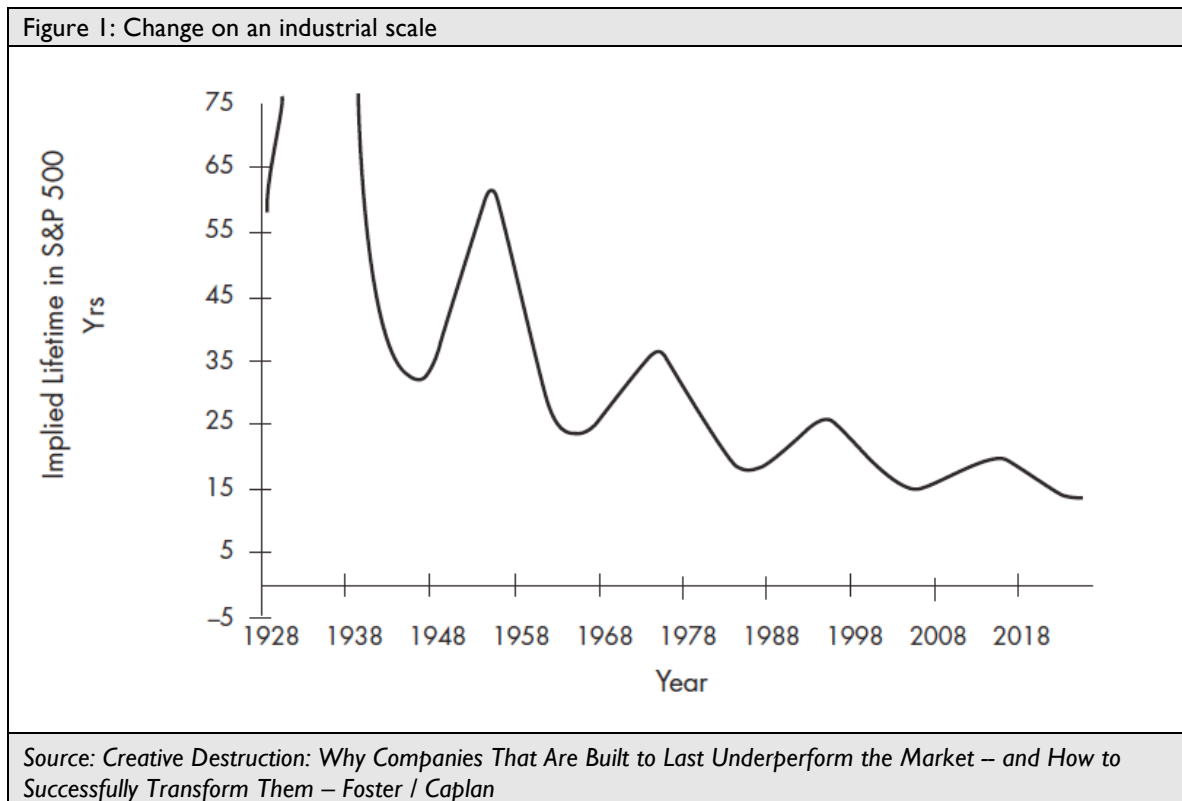
However core Case Management capabilities still have areas where they fall short, particularly in the context of operational scenarios where responsiveness to situations or customers is critical. Inconsistent decision-making, excessive review and rework and wasted time spent working with information are all dangers.

By augmenting core Case Management capabilities with Advanced Analytics, Decision Management and Document Management technologies you can overcome these challenges.

The case management imperative

Knowledge work: the frontier of competitive advantage

Figure 1 shows how the average lifetime of a company in the Standard & Poor's 500 index of leading US companies has decreased over time. To spell it out: the average lifetime of a company's presence in that index has fallen from around 75 years in the 1920s, to around 15 years today. Industry dynamics and corporate performance outcomes are becoming ever more extreme.



That's an external, financial performance view of how business has changed in the past century. If we also look at a structural view of what individual businesses have done recently, partly as a reaction to the change illustrated in figure 1, and partly contributing further to it: fuelled by the globalisation of competition, companies regardless of their area of industry have spent the last 5 to 10 years getting out of the business of "owning stuff". They've been selling off infrastructure assets and outsourcing the management of those assets; and working with partners that can give them economy of scale in supporting business activity areas such as accounting, HR, facilities management and so on. At the same time businesses have also sought to use automation to drive up efficiencies, and have centralised support functions around simplified and automated processes to gain internal economies of scale.

Correspondingly, when you look at how companies value themselves and their assets over the past few decades, there's been a dramatic shift – away from a position in 1975 where the majority of company value came from tangible assets like stock, plant and machinery, facilities and so on; to the situation we have now where the majority of company value comes from intangible assets like intellectual property¹.

This shift in corporate value is a reflection of the strategic shift that organisations are making around the world – again fuelled by the globalisation of competition. Smart companies realise that they not only have to drive efficiency, maintain competitive pricing and deliver great products; they have to focus on how they can deliver exceptional experiences to customers. This in turn points to the need to look afresh at customer servicing capabilities, and how these integrate with other parts of your business (marketing, sales, operations) – to ensure that the promises you make are actually delivered or even exceeded.

Great services and experiences need to be knowledge-driven; they can't be delivered purely through the performance of rigid processes and rote work. Your company's ability to capture, share, develop and operationalise knowledge in a way that clearly ties into delivering effective services and experiences has rapidly become a very important factor in its ability to thrive. 'Knowledge work' has long been a topic of interest to management consultants and theorists; but its effectiveness has never been more important.

Whether the knowledge workers we're talking about are call-centre agents and customer service reps, clerks, operations experts, engineers, senior underwriters, investigators, planners or managers, the ability to maximise the effectiveness of their work – and integrate its output into the operational infrastructure, processes and platforms of your company – is something you must pay serious attention to.

Traditional support systems don't work for knowledge work

In trying to increase the effectiveness of knowledge work, and increase its integration into commercial services, the big challenge is that the support systems that 60 years of information technology have given us have fundamentally been driven from an industrial perspective on work. The vast majority are not suited to what we want to do here.

The first business support systems were essentially record-keeping machines, focused on processing payrolls and managing customer records; and although today's systems are orders of magnitude more sophisticated fundamentally they still have very structured 'expectations' about the context in which their functions will be used. Since the 1990s – with the advent of client/server computing, business process re-engineering (BPR) and the rise of enterprise resource planning (ERP) – the big software systems that companies invest millions in have become more closely aligned to business process considerations, but they have not become much less rigid.

Following the wave of technology investment and corporate re-engineering that accompanied the introduction of BPR, and the subsequent wave of interest in document management, workflow and ultimately business process management (BPM) technologies, most companies are now in a situation where they have landscapes of core business support systems that – in terms of supporting how work gets done – primarily do one of three things:

- Take no direct account of processes – instead providing information management services that support them in some indirect way (this is the domain of most packaged application suites, business intelligence tools, and so on).
- Provide a reference library of process diagrams or models that can be read and shared, but take no active role in supporting people's work in line with them (this is the domain of enterprise architecture, process architecture and business process analysis tools).

¹ Ocean Tomo Intangible Asset Market Value study, 2010 - http://www.oceantomo.com/media/newsreleases/intangible_asset_market_value_2010

- Embody processes and enforce them, by actively driving the coordination of work in line with process models (this is the domain of workflow and BPM platforms).

The last of these three categories of systems come closest to what we want – that is, to help us increase the effectiveness of knowledge work, and increase its integration into commercial services. However in most true knowledge work scenarios, structured business process thinking – particularly if it is applied too strictly and too granular a level within business operations – becomes a straitjacket that causes more problems than it solves. Many BPM and workflow platforms encourage such structured design approaches, so they still miss the mark.

Case management: embracing exceptions, exploratory work, dynamic structures

To explain why structured business process thinking can lead us down an unhelpful path in supporting knowledge work, consider what ‘quality’ means in the context of three distinct kinds of business activities (as highlighted in figure 2).



The first activity in figure 2 is a manufacturing activity; this domain, of course, was the domain that spawned scientific management by process. In this kind of activity, management is significantly aided by a couple of important features: it's possible to specify what quality looks like; delivering quality means executing a well engineered detailed plan repeatedly; and improvement is about eliminating waste in production.

The second activity in figure 2 is vastly different in nature. In handling an emergency – let's say we're talking about a fire or ambulance service's work – it's quite straightforward to determine what a high-quality outcome looks like: it's about minimising injury or loss of life and so on. However in contrast to a manufacturing activity, delivering quality can't be done via a prescribed method. Of course delivery can't be chaotic either; fire and ambulance personnel have huge amounts of training and experience in best practices that are associated with particular features of particular emergencies (for example, how to safely get people from second-floor windows). Advance knowledge provides ‘work plans’ which are assembled, configured and tweaked in the moment to deliver a high-quality result.

The third activity in figure 2 is different again. Here, we're talking about complaint handling, and quality is not as easy to define as it might immediately appear. A simplistic view would suggest that delivering high quality is about resolving all complaints to the full satisfaction of every customer; but the reality is that from the point of view of the business handling the complaint, not every complaint can be or should be treated equally. In this kind of situation, delivering quality is actually about dynamically trading off the effort and cost of dealing with any individual complaint against the business' market and customer management strategies and policies. As with our second example, delivering quality might mean doing something very different from one complaint to the next.

In knowledge work scenarios like the second and third examples from figure 2, trying to model the work using highly structured, predefined processes leads you to see exceptions everywhere. But these exceptions aren't really exceptions; they are symptoms of the fact that a dependence on highly structured models of work is misplaced.

At the same time, though, it would be a huge mistake to duck the responsibility we all have to try and increase the effectiveness of knowledge work just because it's not predictable. Intranets filled with memos and paper policy manuals are better than nothing; but they're not able to play any direct role in driving work effectiveness.

What we need is an approach that steers a middle path between being overly prescriptive and being too 'hands off'. We need to start with the ability to clearly set definitions of work goals and outcomes, and then be able to specify work guidelines and constraints in a way that shapes how work gets done. Rather than specifying precise patterns of work that must be carried out when stimuli for work occur, our approach needs to be about working within guidelines and constraints to deliver on well-defined outcomes.

Case Management is the right foundation for supporting knowledge work with technology systems

Case Management technology platforms and approaches provide exactly the systems infrastructure that's needed in these scenarios.

Case Management is a systematic approach to supporting the optimal performance of knowledge work in line with stated goals.

In a Case Management environment work is not carried out according to prescribed process definitions; instead the resolution of cases is explored in a guided fashion by teams of case workers working towards a clear goal, leveraging codified patterns of practice, and complying with rules that specify key business constraints.

In other words: a Case Management approach to supporting and managing work fits situations where the goals of a given type of work are understood – but where the precise tasks, ordering of tasks, and stakeholders needing to be engaged with the work are not completely understood at the outset. Moreover a Case Management approach fits situations where knowledge – some tacit, and much in the form of documentation as well as structured business data – needs to be captured, acted on, organised and stored, both to aid the successful resolution of a situation and to provide an after-the-fact record of what work was done.

In the next section we lay out the main concepts a Case Management system implements which together support effective knowledge work. Following that, we then go on to highlight how complementary technologies add further value to core Case Management technology capabilities.

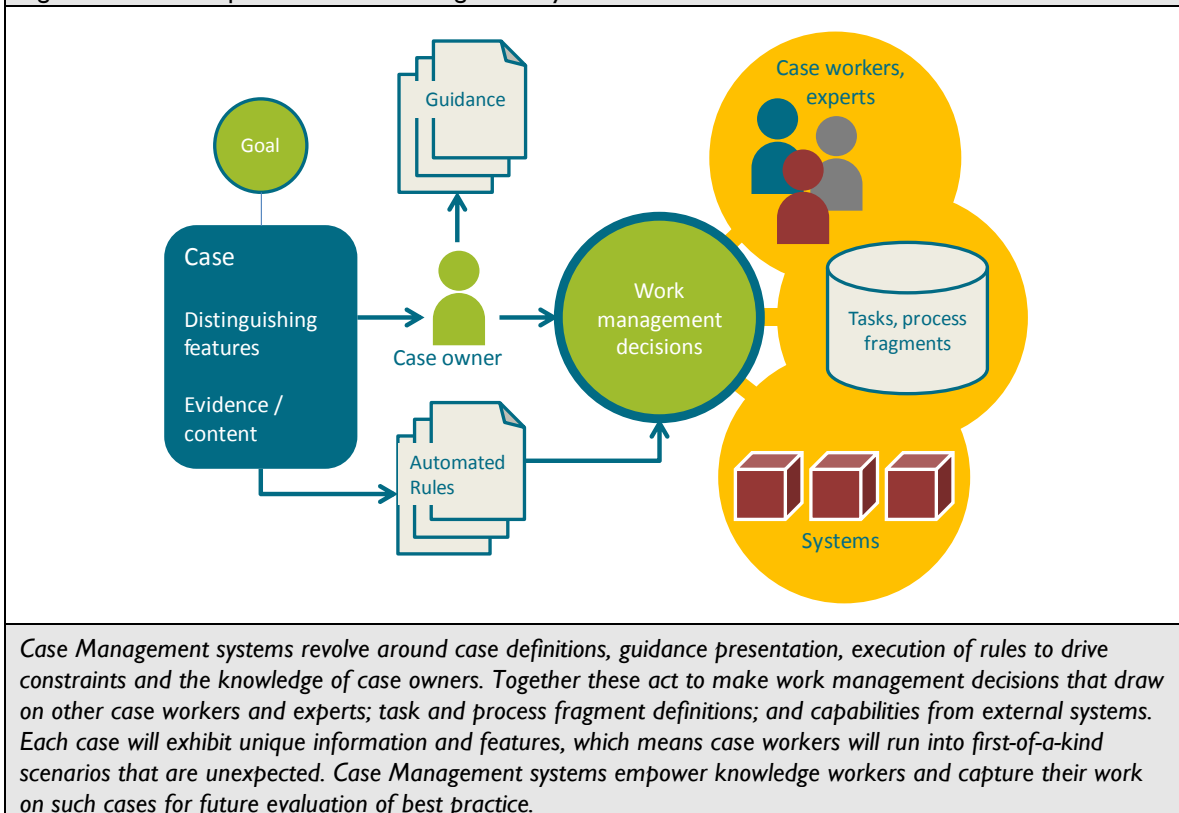
The case management core

In systems that get created to support highly structured, prescribed process work, not surprisingly it's the definition of a business process that takes centre stage as the core organising structure for operation of the system. Business information – in both structured and unstructured forms – tends to be thought of as something that's plugged into the system to assist with the execution of a particular task.

But if we're going to create systems to support knowledge work scenarios, what core organising structure can we use? It makes no sense for a process definition to be the architectural 'centre' – because there can be no concrete business process model that governs everything. The core organising principle for operation of the system has to be a blend of those things that *do* help support workers as they carry out individual tasks and drive cases forward – namely information about goals, guidelines, and definitions of work plans and constraints. These things are brought together in an overarching container called a 'case'. In an inversion of the process-centric approach, in a system that supports knowledge work it is task definitions (and potentially compound task definitions, in the form of work plans) – rather than business information – which are 'plugged in' to support the progression of a particular case.

Figure 3 provides an illustration of the main concepts that typically come together in a Case Management implementation and how they relate to one another.

Figure 3: The main parts of a Case Management system



The first thing to note is the representation of the **Case** on the left of figure 3. The simplest way to think of a Case is a container that is used to collect and manage pertinent business information over time – but it's also more than that. Each Case has a particular type that has certain distinguishing features, and that also associates it with a clear goal.

The next thing to note is the **Case Owner**. Case Owners, referring to guidance that is made available within the system, makes work management decisions that then shape how work gets done within the particular case in question.

Work management decisions are intimately linked to, and constrained by, pools of available **caseworkers and experts**, each of whom may be enlisted to work on cases; they may also leverage predefined **tasks and work plans or process fragments**. Tasks and work plans may be automatically associated with the Case on its creation and as work unfolds. The ways in which case work is automatically planned out 'on the fly' might be set according to the case type and distinguishing features; but it might also follow from the nature of the work that gets done as the case unfolds. In either situation it's driven by pre-specified **business rules** that are interpreted by a **rules engine**. Lastly of course work management decisions need to be carried out in the context of reference information stored in **external systems** such as ERP, CRM, Business Intelligence (BI), Asset Management systems and so on.

Crucially, Case Owners and the teams they work with have the freedom – within constraints – to take work in unplanned directions in order to handle any unexpected features of a case that come to light, to respond to the occurrence of relevant external events, or to respond to the need for action as the outcome of real-time analytic processing. As a simple example: in insurance claim handling, if a third party enters the picture after a claim is first identified and seeks to claim on the insured's policy, there may be multiple complications in tying various threads of work together.

On resolution of any given case, a Case Management system should be able to gather together all relevant case information – as well as a history of all the actions and actors involved in the resolution of the case. Sophisticated Case Management platforms also make it easy for records of resolved cases to be converted into work templates for future cases.

Case Management platforms and principles can be applied in any business activity scenario where there's a need to drive the effectiveness of teams of knowledge workers in support of clear goals, and where the overall work requirement is something that's repeated frequently; but where the structure of the work needed cannot be sensibly anticipated or designed outside the operational environment. Examples include the management of legal cases; complaints; insurance claims; repeatable projects; service provision (in environments where service provision needs multiple resources to be coordinated); and problem resolution.

Augmenting core Case Management to drive effectiveness further

By implementing a Case Management technology platform you can create flexible, goal-driven 'systems of coordination' that make your knowledge workers much more effective. These systems help teams respond to unpredictable situations more predictably, faster.

However the core case management capabilities we've described thus far still have areas where they fall short, particularly in the context of operational scenarios where responsiveness to situations or customers is critical. There are three common challenges to optimal effectiveness that we see in practice:

- **Inconsistent decision-making.** In situations where the personnel using a case management system are all highly-trained, highly-experienced and kept rigorously up-to-date with guidelines and policies it's possible to get high consistency in case outcomes; but organisations don't always have the ability to work in this way. In customer service scenarios, for example, staff turnover may be quite high, and staff may be highly distributed – making rigorous training and testing tough to execute. Even with relatively expert staff, in high-pressure situations it might not be possible for individuals to gather enough information in the time available to make decisions consistently with each other and with best practice.
- **Excessive review and rework.** To counter challenges associated with inconsistent decision-making and also to ensure policies and procedures have been properly complied with, teams working with case management systems frequently implement additional quality management processes that wrap around the core work required for resolution of cases; at regular intervals or when triggered by certain thresholds, quality managers review case work and kick off rework cycles as required. The amount of effort going into case review and rework can sometimes be 'dark effort' – not well understood or costed – and because by definition it needs to be carried out by senior people, it can be very expensive work.
- **Wasted time spent working with information.** Even in case management systems that are linked to document management platforms, it's not necessarily true that all the information relevant to resolving a case will be easy to find and easy to update. If you work with a platform that makes simplistic assumptions about the relationships between tasks and information – namely, that tasks connect to information sources, update information and then disconnect – the resulting systems are likely to fall short in their ability to bring documentation into the heart of the work environment. The result is typically that knowledge workers spend considerable time hunting for documents pertinent to a case, finding the relevant information and updating the information where needed.

The maturing of Case Management technology platforms, together with the maturing of other complementary business improvement technologies, means that the core Case Management concepts can now be augmented in three valuable ways – through sophisticated integration with Advanced Analytics; Decision Management; and Document Management platforms. These three augmentations help address the three challenges outlined above; if you're exploring the potential that Case Management technology can play in your business, you should also consider the value of these augmentations.

Analytics: augmenting to provide insight and drive improvement

Advanced Analytics technologies can be applied to core case management capabilities in two ways.

Firstly, analytics technology can be applied in an 'offline' capacity with the aim of monitoring aggregate performance of work to resolve cases. Here, an analytics engine is used to aggregate historical performance information and highlight performance variations across time, across casework teams and across different case types. By collecting sufficiently detailed information from the case management technology environment as case work progresses, analysts can drill down from headline performance reports to discover patterns of work that typically give rise to performance problems, and explore ways to consider improving performance in those situations.

Secondly, analytics technology can be used in an 'online' capacity, with the aim of surfacing insights that provide additional guidance and context for knowledge workers as they work to resolve cases. Similarity analysis techniques can be applied to cases as they are created, and the results provided to case owners as case work starts. By highlighting other (now resolved) cases that are similar to the case currently being worked on, the case owner and other case workers can quickly gain useful insights that may help progress the case at hand. Taking this a step further, the same techniques can also be applied in a very targeted way at particular decision points in the progression of a case (for example in a decision to submit a particular insurance claim for fraud checks) – with analytical insights showing, in context, how the current decision under consideration was taken in other historical cases similar to the case currently being progressed.

Thirdly, analytics technology can be used 'at the edge' of the case management system, acting as a real-time agent that processes situations and events to ascertain their relevance and importance, before triggering events that in turn lead to case creation and pre-population. Example scenarios here include investigations of various kinds, as well as patient care planning in healthcare.

Decision Management: augmenting to improve effectiveness

The ability to specify and install automated business rules that work 'behind the scenes' in creating, ordering and assigning tasks that case owners and workers need to be complete in the resolution of a case is a core capability of most case management platforms. However the power and value of automated business rules is extended further when you consider using a combination of core business rules functionality and 'event management' functionality together. In this combination of technology capabilities (called Decision Management), event processing software 'listens' for event messages sent by other technology systems, platforms, databases, devices and so on; looks for patterns of events that could signify certain business conditions or situations; and triggers automated rules that instigate actions in other technology systems. You can think of this technology as being like a police, ambulance or fire service call centre – but for business systems.

Using Decision Management technology in concert with a Case Management platform means you can elevate the role of business rules beyond simply being useful ways to specify decision policies within case tasks and work plans, to that of a vehicle for the effective processing of case work in complicated, distributed, federated business environments. Combinations of event and rule definitions can be used to create chains or webs of linked cases (to make it easy to specify plans for quality sampling, exceptional reviews or escalations, and so on); or to link case processing work with other technology systems – meaning, for example, that observed patterns of events from a distribution network, or a hospital's systems, or an airport's flight management systems, can automatically open and assign cases that are assigned to teams to resolve problems.

Document Management: augmenting to bring information to work

The simplistic view of the need to integrate work coordination environments with Document Management platforms revolves around the assumption that a process references a document; updates it in some way; and then 'forgets' about the document when the process is finished. In the kinds of work scenarios that Case Management platforms are useful for addressing, however, once cases are resolved they can't simply be 'forgotten about'! It's frequently imperative that even some considerable time after a case has been resolved, a knowledge worker can explore a closed case and see which documents were accessed, how they were changed and by whom – for e-discovery or audit control reasons for example. What's more, ideally changes that are made to documents stored in a Document Management repository – but outside the scope of a case – need to have the potential to update the status of a case in a Case Management environment. In many scenarios cases may have long lives (perhaps measured in years); documents related to cases may have to remain actively available and associated with cases for long periods.

On top of this requirement for two-way referenceability and signalling between cases and electronic documents is the need to be able to potentially have multiple teams interacting with the same source documents within the scope of multiple separately managed cases (with these cases quite possibly managed by different organisations). For example, in healthcare, multiple care teams may independently need to access medical history and other data related to the same patient; and to be able to update that information independently but consistently.

What's more, documentation relevant to a case ideally needs to be immediately available, without the need to search document repositories and so on. All these requirements depend on sophisticated integration between core Case Management capabilities and Document Management platforms.

Your next steps

In this paper we've seen that Case Management as an approach and as a technology platform is an ideal fit for business requirements relating to your company's ability to capture, share, develop and commercialise knowledge in a way that clearly ties into delivering effective services and experiences. We've also seen how three specific augmentations to the core of commonly-available Case Management capabilities – relating to Advanced Analytics, Decision Management and Document Management – can help you address challenges that commonly arise in Case Management scenarios: inconsistent decision making, excessive review and rework, and wasted time spent tracking down and working with information.

But how do you get started on a case management journey? Although this paper doesn't aim to provide an in-depth guide to your first steps, here are some useful pointers.

First, you need to figure out if Case Management is the right approach for the kind of work you need to improve in your organisation. If the work you're considering exhibits the following symptoms, then you are likely to need to pursue a Case Management approach to improve it:

- The work is difficult to model as a structured process because there are many, many exceptions to be modelled.
- The need to respond to certain kinds of stimulus occurs frequently, but the overall predictability of the work 'recipe' required to meet the need is low.
- The current work environment revolves around knowledge work interspersed with many manual handovers, delays in getting access to information, problems with sharing information, and so on.

Second, unless the need for Case Management is well-understood and there's visibility of the need at the highest level (perhaps because of a 'burning platform'), you will need to build a business case for investment. When looking at the benefits and returns that a Case Management investment can bring, be sure to consider the following:

- **Productivity improvements.** These will come from a combination of reduced time required to coordinate teams to resolve cases; reduced time required to find and update case documentation; reduced need to train personnel outside their work environment; and reduced need for correction of mistakes.
- **Service improvements.** With a platform in place that can monitor the progress and completion of cases, additional benefits will accrue. For example knowledge of work bottlenecks will help you uncover opportunities for further improvement; and gathering statistics that give you confidence of your ability to service requests in certain timeframes mean you also have the ability to make explicit service level promises to your customers.
- **Customer experience improvements.** In scenarios where cases spring directly from customer requests or needs, the ability to deal with cases effectively and flexibly won't only improve the productivity of your personnel; they will likely improve your customers' perceptions of your organisation and its ability to meet their needs. This should over time feed through to increased customer satisfaction and loyalty.

Third, you must ensure that as you start to design case management systems, you centre your work around the existing knowledge of subject-matter experts. Designing solutions exclusively around process models won't work; instead, you need to design core Case Management elements as inter-related networks of work roles, policies, outcome goals, measurement metrics, tasks, task dependencies, and other guidance.

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