IMPROVING **BUSINESS** PROCESS **AGILITY**

Singularity

Case Management

using Microsoft® technology

How Singularity leverages Microsoft SharePoint®, Dynamics® CRM and other Microsoft products for enterprise case management excellence

Microsoft® Gold Certified Partner
Singularity is a Microsoft Gold Certified Partner and is focused on providing best-in-class Business Process Agility and Case Management solutions utilizing the Microsoft stack. The TotalAgility™ product supports the Windows Server 2008 and earlier platforms, and has comprehensive integration into Dynamics® CRM 2011, SharePoint®2010 and Office® 2010 (as well as earlier version of all these products where they still exist on a client's premises). The TotalAgility product runs on Windows®7, Vista®, and XP and provides a browser interface which supports all common desktop browsers including Internet Explorer®.

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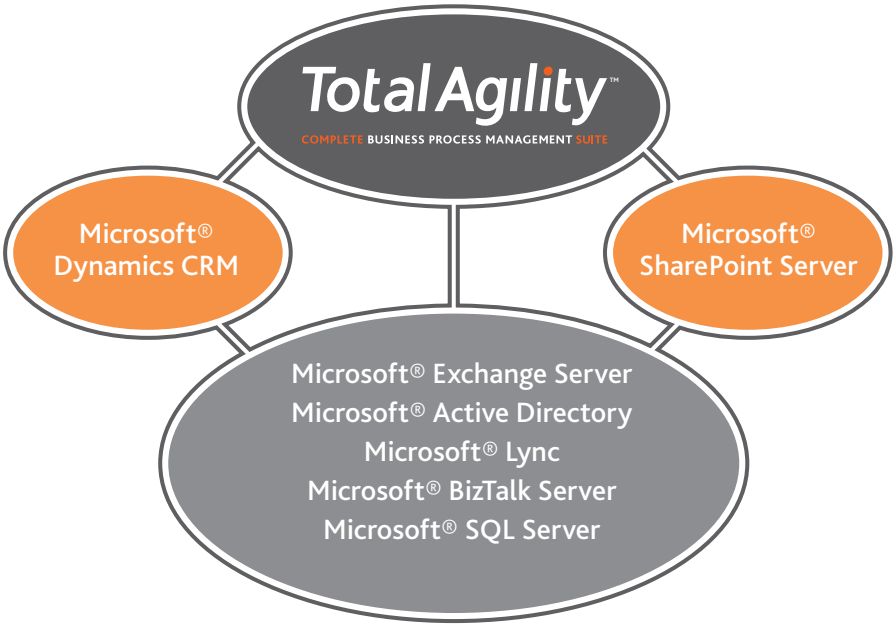

Executive Summary

Organizations often try to implement Enterprise Case Management by extending the capabilities of technology platforms not designed for the purpose. Some Buy Commercial-Off-The-Shelf (COTS) solutions that meet a departmental need today but which cannot extend effectively beyond that initial need. Many more look to utilize Microsoft® SharePoint® and/or Dynamics® CRM for Enterprise Case Management. However, this requires considerable custom software development and the result is inadequate for today's case management needs, lacks the flexibility to adapt as needs change, and lumbers the organization with inflexibility and an unacceptably high Total Cost of Ownership (TCO).

Case management is widely regarded as among the most difficult areas for organizations to support cost effectively and is characterized by a list of demanding requirements. Key challenges to case management solutions include: being goal driven; supporting knowledge-intensive processes; highly variable processing paths; long-running case durations; complex information and documentation requirements; highly collaborative working environments; multiple human participants in fluid and evolving roles; interlinked and interrelated cases; juggling fixed and variable timescales; susceptibility to external/out-of-band events; difficult cross organizational visibility/interaction requirements; demanding security requirements; and, complex coordination of isolated pockets of automation.

Microsoft® technologies provide powerful and valued support for much organizational work today (this paper discusses the relevant capabilities of current Microsoft technology versions, including SharePoint 2010 and Windows Workflow Foundation 2008). Yet complementary technology is required to meet the demanding requirements of case management work. Singularity delivers solutions which leverage the strengths of Microsoft SharePoint, Dynamics CRM and other Microsoft technologies while complementing them with the Singularity Business Process Management Suite (BPMS), TotalAgility, to meet the key challenges of case management. The result is an Enterprise Case Management Platform built on Microsoft-based technologies which delivers on today's challenges, allows cost effective adaptation to future needs as they arise, and reduces TCO.

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Introduction

Case management is characterized by processes which are primarily driven by human workers, often referred to as Information Workers or Knowledge Workers, interacting with long running, complex and often unpredictable processes. While the flow of some business processes is known at the outset, the flow of case management processes is unpredictable - it does not follow a path definable in advance. Case processes are dynamic and it is this lack of predictability that makes them impossible to fully automate. Effective case management processing requires Knowledge Workers to apply their knowledge and expertise to move the case to successful completion. Rather than only automating work, case management technology must support Knowledge Workers as they use their discretion and judgement to get case work done.

Case management is important to many organizations. Large corporations and government departments are faced with an urgent need to increase Knowledge Worker productivity while constraining expenditure on new I.T. infrastructure. Claims Processing, Complaint Handling, Asylum and Citizenship Processing are examples of high profile case management processes where failure to meet challenging targets can have serious consequences for the organization yet where the cost of effectively managing cases is high.

Various technologies have been proposed for supporting case management, including Customer Relationship Management (CRM) and Content Management Systems, Collaboration & Communication technologies. While these technologies play a key role, they are not alone sufficient to address the key requirements of case management processes.

In this whitepaper we define case management, outline the key characteristics of an effective Enterprise Case Management platform and discuss how organizations can complement Microsoft technologies with Singularity's BPMS to deliver a scalable, Microsoft-based enterprise-class case management platform that decreases Total Cost of Ownership (TCO).

The Case Management Opportunity

For much of the past four decades computer automation has been focused on the benefits of automating areas which are well defined and predictable. It has been possible (although not trivial) to design and implement systems which very successfully automate airline booking, e-banking and much call center processing. These processes are certainly complex, but the key consideration is that the underlying processes can be defined at design time, and therefore 'The System' can be built upfront to execute these defined steps.

This kind of approach has created excellent business opportunities for System Integrators and Solution Developers. It has also resulted in old-fashioned clerical roles, sometimes called Task Worker roles, largely disappearing in the developed world as their routine manual work has been automated. However, as these clerical roles have reduced, there has been an increase in roles, staffed by Knowledge Workers, which demand greater skills and knowledge. These Knowledge Workers participate in case management processes which are less routine, more difficult to define upfront and which require a new kind of technology support.

Knowledge Workers have a disproportionate impact on the success and growth of the organizations they work for. As the routine work of "Task Workers" has become cost efficiently automated, the most important processes in most organizations now involve Knowledge Workers and case management processing. These case management processes are often the friction point between organizations and their customers (consider the examples above of Claims Processing, Complaint Handling, Asylum and Citizenship Processing). They add the most value and have the greatest impact on long-term success, and yet the processes and the knowledge required to execute them have generally been badly integrated and are poorly reported.

At the same time organizations now acknowledge that the longstanding approach of building bespoke computer systems using old-fashioned, "waterfall" software engineering methods has led to expensive and inflexible systems unsuited to today's rapidly changing social and market conditions.

Consider an airline booking system – the system which allowed the airline's own agents to book seats for customers is unsuited to the modern internet-based self provisioning system which integrates with car-hire and hotel companies to offer special deals and handle rapidly changing pricing, offers, services, suppliers etc. A new approach, called agile implementation, based on frequent, iterative delivery of new or enhanced systems is quickly becoming the accepted approach in software engineering practice.

The increasing importance of Knowledge Workers in the economy, the need to make those workers more productive, and the need for more flexible software systems have together created a new threshold opportunity for organizations to exploit the benefits of better case management processing.

A report by McKinsey[1] reinforces this message:

> "Companies have been automating or off shoring an increasing proportion of their production and manufacturing (transformational) activities and their clerical or simple rules-based (transactional) activities. As a result, a growing proportion of the labour force in developed economies engages primarily in work that involves negotiations and conversations, knowledge, judgment and ad hoc collaboration – tacit interactions, as we call them. By 2015 we expect employment in jobs primarily involving such interactions to account for about 44 per cent of total US employment, up from 40 percent today. Europe and Japan will experience similar changes in the composition of their workforces. The application of technology has reduced differences among the productivity of transformational and transactional employees, but huge inconsistencies persist in the productivity of high-value tacit ones".

Knowledge Workers and the processes they execute are arguably the most important and fastest growing section of the workforce. Organizations must create an effective Case Management Platform to realize the many benefits available from more effectively supporting this vital segment of the workforce.

For those organizations that leverage Microsoft-based technologies in their Case Management Platform, the benefits include:

- Increased Knowledge Worker productivity
- Increased management visibility and reporting
- Increased organizational flexibility and agility
- Increased utilization of existing systems
- Faster time to deploy
- Decreased training overhead through use of familiar interfaces
- Increased Case throughput
- Lower Total Cost of Ownership (TCO)

Let's look further at the needs which a Case Management Platform must support.

Defining Case Management

A classic approach to business problem solving is for the problem to be rigorously analyzed and defined, and for a software-based solution to be then built and executed. Processes are modeled in a design environment and considerable effort is expended to include as much business knowledge in the "process map" as possible – including conditional branching and the use of complex business rules.

The goal, in this approach, is to automate as much of the process as possible and reduce the requirement for human interaction, thereby achieving an efficiency gain. Known as Straight Through Processing (STP) this approach is effective for certain types of business process but can only address a subset of business problems.

Most people do not work in this linear fashion and many real world processes do not lend themselves to this type of automation. Often a rigorously defined and sequenced series of atomic tasks is not followed – in fact, the very nature of the business process requires the worker to apply their human knowledge and judgement to decide what happens next, who should be involved, what the deadline needs to be, etc. The process can only be progressed when a worker uses their intimate experience of the process and the data, and adjusts the process execution accordingly. This is case management in operation.

1. The McKinsey Quarterly - Eight business technology trends to watch - December 2007

Case management can be thought of as a 'dynamic' process, where changes to the process data can cause changes to the process logic. The Knowledge Worker can also alter the process flow by choosing to invoke additional process fragments at any time. Likewise, in case management the business rules, people's roles, communication patterns, etc may all be subject to change while a case is "in-flight".

Rather than the process flowing smoothly from start to finish, case management recognizes the inherent uncertainty in every process, and the Case worker is given the latitude to apply their own knowledge and expertise to guide the process execution. This can involve for example, requesting additional data, invoking an additional process fragment or deciding which activities need to be performed in which order to progress the case.

Highly complex processes abound in the everyday world. Familiar examples include:

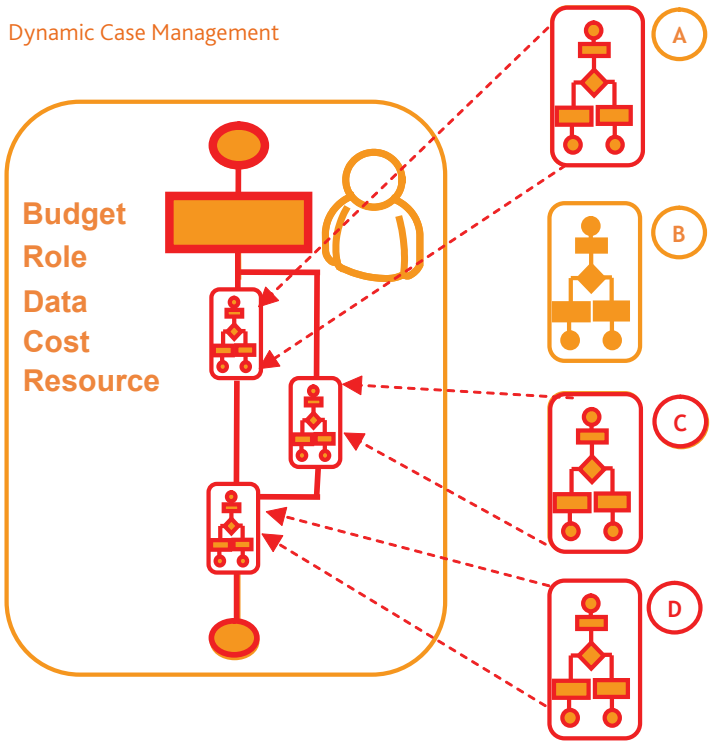
- Mortgage and loan applications
- Planning applications
- Immigration and citizenship applications
- Law enforcement investigations
- New customer on-boarding
- Insurance claim processing
- Securities trading exception management
- Telco service provisioning
- Billing issue resolution
- Moving house or job

To understand how even these familiar processes are complex, consider the processing of an auto insurance claim. The claim can be made up of many parts, but not all of them are required for every claim, and in fact at the start of the process it is not obvious exactly what data is required. Was personal injury involved? – a process segment involving doctors and medical expertise may then be invoked. Is another car involved? If so, have the party's insurance details been captured along with driver's details? Was the person driving also the owner of the vehicle? All of these individual processes can be modeled, but the combination and interaction between them is complex and to a large degree unpredictable. It is this behavior that makes case management a separate and necessary process discipline.

Similarly many citizen interactions with government departments require a complex array of data to be supplied and can result in an unpredictable sequence of steps. For example, claiming payments from absent parents in the UK involves a huge amount of paperwork and interactions between government departments to verify the claim, track down the absent parents, issue payment demands and seek that payment be made directly from a bank account.

In both of these examples it would be impossible to define the exact path each Case will take in advance – these are unstructured processes and the process evolves in real time as it executes. The Case and its flow is not easily represented as a simple flow chart – in reality the process is more accurately viewed as a series of separate processes which are connected together at execution-time by a Knowledge Worker in a fashion that cannot be determined at the outset of the case. This dynamic nature of case management processing is illustrated in the following diagram:

Dynamic Case Management



- Aspects of a Case can be defined before execution begins, at design time, e.g. expected budget, cost, etc
- There are a range of pre-defined process fragments for a Knowledge Worker to choose from, A - D. These fragments are those commonly used, but it is the Knowledge Worker who decides where and when to include them. Other new process fragments may need to be created by the Knowledge Worker while the case is "in-flight"
- Selection is made by a Knowledge Worker based on judgement & experience
- Selection is not mandated in advance - it is dynamically driven by the circumstances of the case
- Data about the case (budget, roles etc.) is shared among independent process fragments, but is owned at the case level by one case in particular

This dynamic case management approach recognizes the essential value which Knowledge Workers provide to the organization - they are key contributors to the overall process rather than being strictly transactional staff.

In light of the examples and discussion above, case management can be defined as follows:

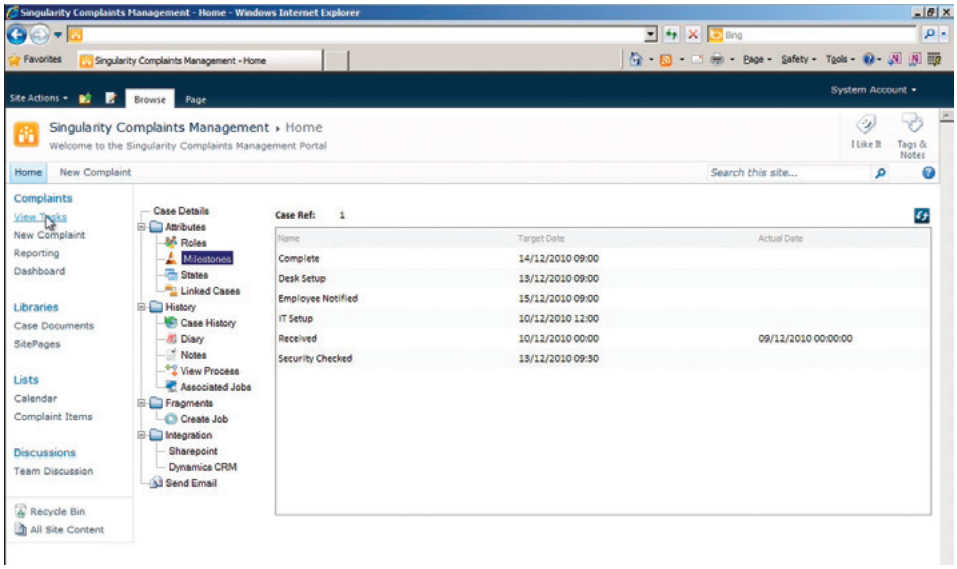
> Case management is the management of long-lived collaborative processes that require coordination of knowledge, content, correspondence and resources to achieve an objective or goal. The path of execution cannot be predefined. Human judgement is required in determining how to proceed and the state of the case can be affected by external events.

The Case Folder

A key concept in case management solutions is that of the Case Folder. The Case Folder is a virtual container inside which the case management process exists and through which all data, documents, information, notes, goals, milestones, linked cases, interested parties, case history, reports, calendars, etc can be accessed. The Case folder is an entity in its own right and serves as an important aggregation point, enabling the most efficient use of Knowledge Worker time and expertise.

An illustrative screenshot of a Case Worker screen is given opposite, with the Case Folder represented as a tree diagram on the left hand side. Clicking on the Tree allows the user to navigate the Case Folder to make rapid assessments and decisions on Case disposition and next steps.

In an environment combining the TotalAgility product with SharePoint, Dynamics CRM, etc., these essential case insights and actionable information are made available in interfaces familiar to Knowledge Workers, e.g. in their SharePoint Portal, their Dynamics CRM interface, or their Outlook Inbox.



An illustrative screenshot of a Case Worker screen

Characteristics of a Case Management Platform

We have seen that handling insurance claims, customer complaints, police investigations, immigration applications, etc. are all examples of case management. While each of these examples is clearly distinct, the case management challenges in each are in fact very similar. Knowledge Workers need to manage a complex set of steps, data, documents, etc. from the start of a case through to its completion. This usually involves interaction with other people in their organization and/or external parties, and it requires the generation of and complex interaction with correspondence, documents and records. The key characteristics common to most case management processes, and the challenges which your organization's Case Management Platform must therefore address, include the following:

1: **Goal-Driven:** Every case is pursued for a purpose. Without a purpose the effort would be groundless, directionless and impossible to deem a success on conclusion.

2: **Knowledge-Intensive:** Typically case management processes require the intervention of skilled and knowledgeable personnel. Staff acquire their knowledge through their experience of working on similar cases and through collaboration with more experienced colleagues, thereby becoming thoroughly familiar with the tacit and explicit rules governing how cases should be managed.

3: **Highly Variable Processes, including Ad-Hoc Processing:** While a particular type of case may share a general structure (e.g. handling benefits applications), it is not possible to predetermine the path that a particular case will take. A case can change in unpredictable, dynamic and ad hoc ways as it progresses through an organization. A Knowledge Worker must be able to skip over unnecessary steps, and jump back or re-do steps. Also, at times during a Case the Knowledge Worker may need to apply their expertise and create an ad-hoc, one-off process as part of the overall case management process. This might involve, for example, ordering new documents to be generated, or requesting that additional information be collected. This process variability and ad-hoc processing is a common key characteristic of case management.

4: **Long-Running:** Cases can run for months or years - much longer than the short interaction cycles handled by standard Customer Relationship Management (CRM) systems. For example, because a case is long running, it changes hands over time, different people work on different aspects and often no single individual has an accurate view of the case as a whole.

5: **Information Complexity:** Case management involves the collection and presentation of a diverse set of documents and records. Emails, meeting notes, case documents and correspondence related to a case must be easily accessible. This can be difficult for case managers to organize and manage efficiently, with the risk that an important record, note or file will be unavailable, lost or overlooked when it is needed. Retrieving the correct information required at a particular decision point may depend on the knowledge of the case worker and the effective linking of electronic and physical filing/storage systems.

6: **Highly Collaborative:** Case workers usually need to coordinate interviews and meetings among interested parties, e.g. the applicant, colleagues, legal representatives. Many cases require a team-based approach, with different specialists working on different aspects of a case, or acting as consultants to their colleagues. Team members need to access case information and discuss this. And people outside the organization, such as clients, 3rd party experts, loosely interested parties, and others must be part of the case community. Increasingly, with the advent of social networking and other community-enabling technologies, the community of parties that a case can engage is expanding further.

7: **Multiple Participants & Fluid Roles:** Staff may leave and case workers' roles may change in the course of a case. There may be several parties involved directly or indirectly and they may play different roles during the case at different times.

8: **Inter-related Cases:** The outcome of separate cases may have an impact on each other. For example, an application for citizenship by an individual may be affected by the success or failure of an application by a spouse or immediate relative. Cases can be explicitly linked or they may be linked by inference and conducted with this inferred link in mind.

9: **Juggling Fixed and Flexible Timescales:** While individual cases may vary in how they are conducted, they may be subject to the same standard and inflexible requirements for case completion time, driven by legislation or service level agreements.

10: **Sensitivity to External Events:** External events and intervention can change the state of a running case, e.g. a phone call from a lawyer, or the unscheduled arrival of compliance documentation, or the enactment of new governing policies while a case is "in-progress".

11: **Cross-Organizational Visibility:** It can be difficult for supervisors to monitor progress or for case workers to do so after handing cases to colleagues to undertake specific steps. For example, when on-boarding a new client the client on-boarding manager may lose sight of the case when it goes to the legal or the Know Your Client (KYC) or Compliance Department.

12: **History & Audit:** Every action performed, every decision taken and every piece of correspondence received has to be tracked, not just for audit purposes, but also to provide guidance for future similar cases. Case workers need access to this history when making decisions, while auditors and compliance officials need the history to ensure policies are adhered to. The case history is the organization's defense mechanism and a key learning tool.

13: **Demanding Security Requirements:** Strict control is necessary to protect access to sensitive information. The scope of this security challenge is unusually wide in case management processes, enveloping many pieces of information/data, many documents and other artifacts, a wide range of case participants in multiple roles and organizations, and many related information systems.

14: **Isolated Pockets of Automation:** Case management is usually only partly automated and there is a disjunction between those pockets of automation. Legacy systems automate slices of the processes, but the end-to-end management of a case still relies heavily on paper documentation, physical folders, and multiple non-automatable artifacts (e.g. original signature copies of legal agreements).

While not exhaustive this list of characteristics captures the essential common aspects of case management processes.

So, is it possible to deploy a suite of Microsoft® technologies that will enable the agile case management practices that your organization needs? The answer is yes and we will now discuss how Singularity complements Microsoft's technologies to do just that.

Case Management using Microsoft® Products & Singularity

Where Microsoft products such as SharePoint and Dynamics CRM have already been purchased by an organization, then the organization has a head start since each can be effectively leveraged as a component in the organization's case management platform. It is important however to understand the relative role of each technology used as a component in your organization's case management platform. Let's begin with a brief discussion of the relation between SharePoint, Dynamics CRM and Business Process Management (BPM), and then discuss considerations to bear in mind when creating the best case management platform for your needs.

SharePoint® as a BPM platform

SharePoint Server is one of the fastest-growing products in Microsoft's history[2] serving a user base estimated to exceed 100 million people. It provides a mix of collaboration, Business Intelligence, Document Management and Portal technologies. However SharePoint has relatively weak, low-level workflow and provides no native Business Process Management support.

To offer case management built on SharePoint would require considerable development efforts to fully support the complex work patterns of Knowledge Workers. Several recent independent analyses, including the Forrester[3] report 'SharePoint and BPM - Finding the Sweet Spot', discuss how SharePoint 2010 can support relatively simple office procedures well but is inadequate for the needs of more sophisticated and complex processing such as those required by case management. And while the Windows® Workflow Foundation (WF) capability that is available within SharePoint makes it relatively straightforward for a developer to build simple workflows, this is not a suitable substitute for a real Business Process Management tool. Indeed, Microsoft recommends the use of complementary BPM tools in this scenario.

SharePoint workflows work best as short procedures - not as complex processes. Where SharePoint excels is at helping organizations organize and store many forms of content and helping users collaborate on work that requires access to that content. However, when processes are required to cross organizational boundaries and interact with other systems some shortcomings of WF and SharePoint become evident and a complementary BPMS is required to bridge these organization and process gaps without recourse to costly custom software development.

BPM and Microsoft® Dynamics CRM

Most organizations have a front office CRM function supported by CRM software. Increasingly the need to view CRM as part of an end to end business process is widely accepted and the need to align CRM and BPM is broadly understood. Microsoft provides the Dynamics CRM platform as an easily customizable platform to allow users to enter and organize customer data. Indeed, Microsoft's emphasis on 'xRM' highlights that the Dynamics CRM platform can be considered a development platform capable of more than just simplistic CRM. However the underpinning technology used for process management is Windows Workflow Foundation (WF) and the shortcomings discussed above in relation to SharePoint arise again when an organization needs to incorporate CRM usage into a broader case management context.

Incorporating non-Microsoft® Technologies

In a modern enterprise Case Workers often work in a mix of Microsoft Products and other legacy / in-house systems. The case management system must have the ability to co-exist with these systems since they are often a key repository of Case data or rules. Microsoft-based BPM software, such as the TotalAgility product, is architected specifically to allow easy and fast integration with these heterogeneous technologies, either through direct interaction using web service or other open access means or by leveraging existing Microsoft technologies for the purpose, such as SharePoint 2010's new Business Connectivity Services (BCS) feature.

2. Press Release, Microsoft October 19, 2009

3. "SharePoint and BPM - Finding The Sweet Spot", Derek Miers, Forrester, March 31, 2010

Architecting your Microsoft® Case Management Platform

The Singularity approach to case management in the Microsoft-based enterprise draws on three core principles:

1: Maximise the value derivable from existing system and people infrastructure.

2: Provide case management workers with a familiar working environment. For example, present SharePoint users with work queues, tasks and web parts in their familiar screens and provide Dynamics CRM users with additional web parts to view the status of a case including real time updates on progress.

3: Increase organizational agility by having the case management processes built and managed using an enterprise class BPM tool. Goals include reduction in TCO by removing the need for custom software coding/maintenance and greater ownership of processes by business rather than I.T.

In the illustrative configuration below, we show the relative technology roles in a Case Management Platform which leverages the Singularity TotalAgility product alongside Microsoft products:

1: Singularity's BPMS handles process design and orchestration, offering the sophisticated process management that case work requires without the need for custom code and while future-proofing case management processes.

2: Dynamics CRM handles front office tasks including customer record creation and update and case data management.

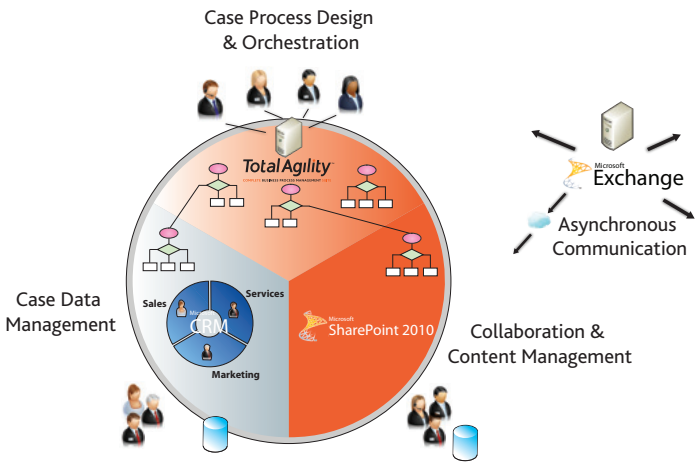
3: SharePoint provides Collaboration & Content/ Document Management, Calendar and Address Book, New/Announcements and Simple Tasks, etc.

4: Exchange is leveraged as an email mechanism for asynchronous communication, complementing SharePoint's collaboration features and Singularity's process orchestration.

Leveraging these, as well as other technology platforms, and providing the results to users in a familiar and easy to consume interface means that case management work is efficiently done and process improvement is supported with minimal impact on the day to day activities of the Knowledge Workers.

This approach promotes systems like CRM from the edge to become a core part of the end to end case management process. Similarly, other enterprise resources such as databases and document management systems are linked into the end-to-end case management lifecycle by the collection of technologies shown, including Singularity's BPMS for the crucial task of case management process orchestration. Applying BPM principles empowers organizations with greatly increased agility while maximizing the value derived from their existing infrastructure of technology and people.

Sample Key Components of a Case Solution



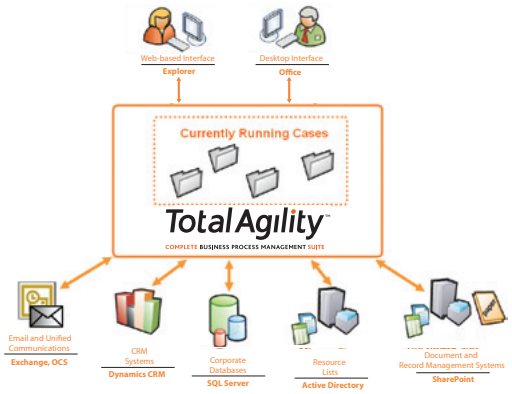
Using the Best Components for the Job

For the user of Microsoft® technologies, the choice of products required must be made based on knowledge of each technology's true capability. Failure to understand the functionality and capabilities of each component can result in expensive missteps, inflexible solutions and wasted time and money.

- Singularity's TotalAgility product is an advanced BPMS that supports, without the need for custom code, the dynamic processes which are essential to effective case management. Because the TotalAgility product is itself built on Microsoft technology and integrates out-of-the-box with a broad range of Microsoft products including SharePoint, Dynamics CRM, Exchange/ Outlook, Lync, Active Directory, and Office, your organization can realize more value by leverage your Microsoft investments more effectively. The result is lower Total Cost of Ownership (TCO) and more effective case management.
- Microsoft provides support for workflow in a number of its products, offering a strong set of tools for simple office procedures. Yet Microsoft has been careful not to market SharePoint or any of its products as a Business Process Management Suite (BPMS) or a Case Management technology. Nonetheless users are often surprised by the costly custom development involved if they attempt to support more complex workflows solely using Microsoft's own products alone. Organizations must be wary of the sometimes unacknowledged risks of custom code development - this expensive approach will result in static and inflexible processes which undermine the many benefits provided by SharePoint's collaboration environment.
- Microsoft's Windows Workflow Foundation (WF) supports I.T. developer-built workflows but suffers from the shortcomings that the BPMS software industry is in business to overcome, including the inflexibility and high TCO that comes inevitably with custom code. And Dynamics CRM, while offering important support for customer-related aspects of case management processes requires the complementary strengths of a closely integrated BPMS if it is to play an effective role in case management processes.

The discussion below illustrates some of the capabilities of Microsoft products, including SharePoint 2010, Workflow Foundation (WF) and Dynamics CRM, and highlights the case management requirements for which Singularity TotalAgility product provides essential complementing support.

- SharePoint Designer 2010 enables business people to build simple workflows but only in a sequential process pattern. Users of Visio 2010 can drop their Visio process designs into SharePoint to create simple working processes of this sequential type.
- Windows Workflow Foundation (WF) allows software engineers to custom code process flows, supporting both sequence and state machine process patterns.
- Some flows within case management work are indeed of these patterns, but no case management platform can rely on these patterns of flow only – case management flows are too complex, unpredictable and varied in their type for this to be practical.
- Process flexibility is essential in case management yet not well enough supported by Microsoft's products. For example, while SharePoint and WF support a subset of process types, the range of processing behaviors required to support case management would require an organization to augment SharePoint and WF with custom WF code to reflect the reality of case work. The Singularity TotalAgility product complements SharePoint 2010 and WF by supporting the full richness of case management processing without burdening an organization with custom code that is costly to build and additionally expensive to maintain and adapt.



An illustration of some of the capabilities of Microsoft products

- Case Management processes span departments, sites, organizations and systems, yet improvements to those processes must be easy and fast to deploy across all those boundaries. Singularity's TotalAgility BPMS provides the speed and ease of deployment required and ensures integrity across all systems. The out-of-the-box workflow capabilities of the Microsoft products cater adequately for confined-scope processing but the horizontal scalability that case management requires will lead to longer, slower and more error-prone deployments. The TotalAgility product separates the case management processes into a separately manageable layer so your case management processes are highly visible and also fast and easy to adapt as your needs change.
- The dynamic nature of case management calls for work to be dynamically bound together as the case is "in-flight". Singularity's TotalAgility BPMS product is designed to support precisely this advanced, dynamic binding and without this capability Microsoft SharePoint 2010 and WF cannot be adequately effective in a case management context.
- It is common practice in the real world of case management to redesign the process used as the case is "in-flight", and then to deploy that redesign for use in this particular case only. Singularity's TotalAgility BPMS product supports this behavior while Microsoft's products do not. Singularity further allows such modifications to be applied to other selected in-progress cases at an administrator's discretion. The advanced nature of case management processing requires these capabilities and Singularity provides this capability without the need for costly custom WF or other software code.
- While SharePoint 2010's sequential workflows can span "site collections", they are effective only if metadata structures between these site collections are harmonized. In practice, this is sufficiently challenging to be, in effect, impractical in many organizations. As a result I.T. departments build custom code to bridge the gaps, locking the logic of cross-departmental processes into inflexible software code that is difficult and slow to change. Leveraging the Singularity TotalAgility product overcomes this constraining and expensive issue.
- Most SharePoint implementations are built to support goal-driven processing in which Knowledge Workers collaborate in unpredictable ways to achieve an objective. The same can be said of many Dynamics CRM implementations. The Knowledge Workers exercise their judgement and must be able to flex the process to meet the needs of their customer. Indeed they should also be able to quickly incorporate new and improved practices as they are learned. These needs are supported by the flexibility which the TotalAgility product can offer to case management processing. The more straightforward procedural processing associated with Task Workers can be largely supported by SharePoint, WF and Dynamics CRM but these Knowledge Worker needs of case management processing cannot.
- Dynamics CRM users have good insight into customer-related information yet lack insight into the case management processes in which they are involved. For example, the insurance company call center representative is rarely able to see within his/her Dynamics CRM screen information about the status of the caller's insurance claim, the expected decision date on the claim, the outcome of decisions taken to date, the status of linked claims from the same caller, etc. This end-to-end customer-centric case management is provided by Singularity's complementary BPMS, the TotalAgility product, which integrates with Dynamics CRM to provide this insight in the familiar Dynamics user interface. Additionally, Singularity ties Dynamics CRM, SharePoint and other technologies together to provide full end-to-end case management insights across all the constituent technologies.
- The era of custom code is drawing to a close, albeit more slowly than industry commentators had hoped. Singularity's TotalAgility product helps eliminate the need for code in case management contexts. By integrating codelessly with Microsoft's products including SharePoint, Dynamics CRM, Office, Active Directory, Outlook, Lync etc., and by removing the need for costly WF code, the TotalAgility product reduces TCO and speed of deployment.

Conclusion

Many organizations seek to use Microsoft® SharePoint®, Dynamics® CRM and other Microsoft products for case management purposes. Yet, while Microsoft technologies provide powerful and valued support for much organizational work today, complementary technology is required to meet the demanding case management requirements we have discussed.

Singularity delivers case management solutions which leverage the strengths of SharePoint, Dynamics CRM and other technologies while complementing them with Singularity's Business Process Management Suite (BPMS), the TotalAgility product. The result is an Enterprise Case Management Platform built on Microsoft-based technologies which delivers on today's challenges, allows cost effective adaptation to future needs as they arise, and reduces Total Cost of Ownership (TCO).

Before deploying your organization's next case management platform, we recommend a well-informed discussion of your needs and of the capabilities of each potential technology that may play a role in your organization.

To discuss your needs further and to explore how Singularity can help you best leverage Microsoft investments for case management, contact us - we'd be happy to share our knowledge and experience with you.

Contact Us

We would be delighted to discuss any aspects of Case Management with you. Please feel free to contact us:

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