The Forrester Wave™: Dynamic Case Management, Q1 2011

by Craig Le Clair and Derek Miers
for Business Process Professionals

January 31, 2011

The Forrester Wave™: Dynamic Case Management, Q1 2011
Pegasystems And IBM Lead, With EMC, Appian, Singularity, And Global 360 Close Behind

by Craig Le Clair and Derek Miers
with Connie Moore and Andrew Magarie

EXECUTIVE SUMMARY

In Forrester's 57-criteria evaluation of dynamic case management (DCM) vendors, Pegasystems, IBM, EMC, Appian, Singularity, and Global 360 led with the most dynamic, visionary platforms. Pegasystems excelled with strong capability in all process areas — particularly service requests — supported by a sophisticated rules engine that automates case progression. IBM's strong content management capabilities and strategic positioning lifted it into the Leader category. EMC demonstrated powerful DCM capabilities focused on its traditionally strong content management offering. Appian shone with its emphasis on collaboration supported by the new Appian Tempo interface. Singularity demonstrated a long-term commitment to and vision of DCM, underpinned by strong support for complex timelines and skills management. Global 360 completed the Leaders group with its user-centric, persona-based interface, complimented by automation and event management capabilities. Strong Performers included Pallas Athena, Sword Ciboodle, and Cordys — all offering robust platforms that provide innovation in different DCM areas. ActionBase ranks as a Contender, filling the gap between email chaos and process-centric DCM.

TABLE OF CONTENTS

NOTES & RESOURCES

Forrester conducted full-day lab-based product evaluations in August and September 2010. We also interviewed 25 vendors and 30 user companies.

Related Research Documents
"The Forrester Wave™: Business Process Management Suites, Q3 2010"
August 24, 2010

"Untamed Business Processes: When Even The Best Intentions Go Awry"
August 21, 2009

"Dynamic Case Management — An Old Idea Catches Fire"
December 28, 2009

A NEW GENERATION OF PEOPLE-DRIVEN PROCESSES DRIVES THE DCM MARKET

In speaking with more than 30 case management references across the US and Europe as part of the research for this Forrester Wave, we found a clear recognition that older process automation approaches based on traditional mass production concepts no longer fit an era of people-driven processes. Moreover, as enterprises move toward an era where relatively fewer skilled resources must now tackle more varied work, jobs get smarter. Key drivers fueling this trend toward smart jobs include an increased need to manage the costs and risks associated with flexible — and even ad hoc — business processes, the need to drive the customer experience for service requests to higher levels, and new demands that regulators, auditors, and litigants place on businesses to respond to external regulations.

Dynamic Case Management Emerges From The BPM And ECM Markets

While some dynamic case management (DCM) products have been available in the market for some time, the current emphasis emerges from existing human-centric business process management (BPM) and enterprise content management (ECM) vendors. While BPM products tend to focus on repeatable, structured processes, case management applies to more dynamic, unstructured, ad hoc processes. The DCM approach presents a stark contrast with the more traditional BPM methods.[1] Out of the box, several core technological features have surfaced as critical to DCM products. In contrast to BPM approaches, DCM products support:

- **The ability to run multiple procedures against a given case of work.** The primacy is with the case rather than an individual process definition. Instead of tracking work items against a standard process, DCM products enable multiple processes to influence the management of an individual case instance.

- **The ability to associate different types of objects with a case.** These objects might include processes, documents, structured data attributes, resources, customer calls, assets, etc. Predeveloped processes would include content and integration with business entities that link to business applications. In a sense, a set of data and documents provide the context for an individual case.

- **Accessible mechanisms that allow end users to handle variation.** Case context may vary considerably, so iWorkers need ways of changing the way the case is handled, using their skills and expertise to interpret the need at runtime and then easily reflecting that in the system.[2] Simple task reassignment is one such facility, but products also tend to include the ability to dynamically carry out ad hoc tasks or associate new process fragments at runtime. Ultimately, users might assemble a case at runtime from a set of predefined template elements.

- **Mechanisms to selectively restrict change on processes.** With the potential for catastrophic missteps in the execution of mission-critical processes, organizations need the balancing capability to lock down certain of their process assets; ensuring compliance on the one hand, enabling goal-centric behavior on the other.

Untamed Processes Make A Key Target

Enterprises use DCM solutions to tackle untamed processes that service a myriad of customer and citizen requests, automate and track "incidents" related to investigations, and meet new compliance demands from a growing number of ever-more-scrupulous regulators. Forrester defines untamed processes as:

> *Untamed business processes form in the seams and shadows of the enterprise, require a balance of human and system support, and cross department, technology, information, and packaged application silos to meet end-to-end business outcomes.*

Dynamic case management platforms align well with untamed processes because they support unstructured and structured content combining human- and system-controlled processes and facilitating knowledge and expert guidance.[3] Business process professionals report that DCM offers great potential to align process outcomes with organizational goals, leverage the unique expertise of iWorkers, and improve agility for case workers, business managers, and IT.

Better Control And Decision-Making Rank As The Top Drivers For DCM

Process owners, stakeholders, and business process pros' top goal for DCM involves more control and insight into the business process and better decision-making from iWorkers and process owners. Case worker efficiency remains important, but the most commonly cited value is process standardization, control, and decision-making support while providing guided flexibility for the iWorker. We found that:

- **DCM provided visibility and control for iWorker tasks.** DCM unlocks and applies corporate knowledge by switching between structured and unstructured process paths and enabling expert guidance.[4] Yet control and visibility must accompany this greater freedom. One auto lending and leasing operation had 50 different case management processes initiated by fax, the Web, or a call.

  > **"**Our cases range from a name and address change to a repayment. Better decision-making for exceptions, a higher percentage of straight-through events, and more standard handling of customers was the main goal of the implementation." (Director, Enterprise project management office)

- **Agility and traceability are key drivers.** For the enterprises we interviewed, the beauty and appeal of dynamic case management lay in flexibility and traceability. DCM solutions can deal with a high level of uncertainty within an untamed process or a more standardized, structured process.[5] This enables the business to capitalize on that uncertainty rather than trying to control or eliminate it. Unlike other BPM-powered work items, a case in a dynamic case management system follows an *unknown* path through different states — where rules, tasks, and calendars will change based on systems events, system controls, and the need to meet

specific goals. Managing this uncertainty requires an unprecedented level of agility and insight not available in most BPM support tools.

DCM Will Change The Balance Between IT And The Business

To understand how the latest DCM platforms would enhance the business's ability to rapidly adjust to business change, Forrester developed criteria for design, development, analytics, capture, ECM, case handling, case guidance, automation, and event management. For the most part, DCM platforms will move significant control to the business by offering a high degree of flexibility for supporting unpredictable processes. We found that:

- **DCM allows more runtime and design time changes.** Using a DCM solution, many potential process changes — typically made by IT-oriented developers in BPM deployments — are made by case workers and managers. For example, case managers for most of the reviewed DCM platforms can change rules, process paths, and work allocation without affecting a change in the case design. As a result, businesspeople will not need to submit change requests to IT. For example, a manager of 200 iWorkers can assign a different region to participate in a workload or can change rules that will affect an enrollment without requiring IT's help.[6]

- **DCM platforms allow case workers to select predefined case steps.** To the case worker, "agility" refers to an ability to change the case path, potentially defining ad hoc tasks, involving other resources, starting another case within the case, or handing the case off to someone else (see Figure 1).[7] Almost all DCM platforms we reviewed had "primitives" in their system to accommodate these sorts of case adjustments. But most DCM platforms restricted runtime options to predesigned tasks. In other words, the case worker had little ability to make substantive changes to the way a case definition drives work. For most of the business process pros we interviewed, this level of process latitude was fine. They really just want changes made more quickly, reducing the dependency on IT in general. One UK central government agency was clear on this point: "We process claims for debt relief, and we don't want our staff altering rules or case logic, or official correspondence. We want those changes to be made by managers or IT, not by the case worker, and we need them fast."

- **DCM provides information in context.** The DCM platforms reviewed for this Forrester Wave evaluation provide strong integration to underlying data and systems, delivering information to the case worker progressively and in context. This solves a big headache for many firms. We spoke with the VP of operations at a large credit card processor, who put it this way:

  "We plan to install case management for customer service. Our CRM system logs all contact, but it ends up being all just history ordered chronologically. When a customer calls in, an operator must cull through a set of notes and figure out what to do. It's just too hard, and we are bringing in new staff constantly that can't do it reliably or quickly enough. This is really inefficient and creates risk, but more importantly, can lead to losing a customer."

Figure 1 iWorkers Can Create New Paths Or Select Predefined States
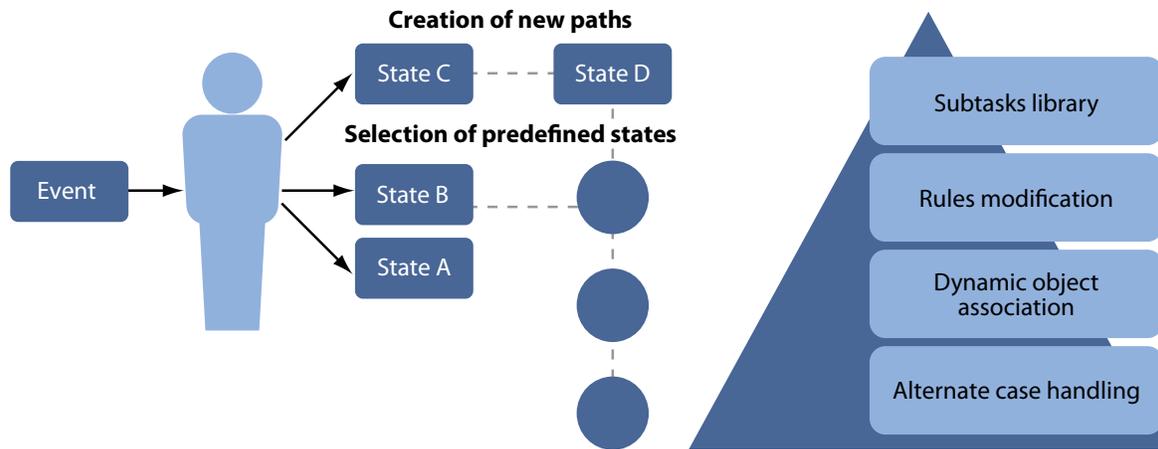
58453   Source: Forrester Research, Inc.

PROVIDERS WORTH WATCHING

Forrester evaluated horizontal DCM platforms, but we did not include many potentially strong DCM solutions. We did not include packaged apps providers with case extensions, selected ECM and BPM providers with strong core DCM capabilities, and "fit to purpose" domain-specific providers.

Package Application Providers With Specific Case Platform Extensions

The packaged applications providers are in a great position to add DCM to their offerings. Their biggest challenge revolves around providing the flexibility and visibility to compete with horizontal DCM platforms. Yet despite their lack of flexibility, packaged app providers remain a strong force in the DCM market. Look for:

- **CRM providers to support the service request DCM area.** CRM providers continue to develop case solutions that provide a solution layer on top of their structured systems to meet cross-department and multichannel customer service needs. Oracle, for example, has case solutions in the government arena to meet human and social services that combine case management features with Siebel's CRM solution. Salesforce.com is gaining momentum with its customer-facing case management solution.

- **ERP providers to support all areas.** ERP has significant opportunities for dynamic case management to support exceptions in order management, investigate purchasing anomalies, and add a solutions layer to manage incidents and investigations. For example, SAP has an investigative case management solution used for credit card and other industries where fraud is commonplace. Forrester expects ERP providers or their partners to fill gaps in untamed processes.

For example, the oil and gas industry can benefit from better coordination of "upstream" activities, coordinating documentation for asset management and emergency response.

ECM And BPM Providers With Strong Core DCM Capabilities

Many ECM and BPM tools form the basis of today's dynamic case management solutions, and several are well positioned to expand in this growing market. Several BPM and ECM providers have assets that could support case-oriented solutions, but as yet do not have fully packaged DCM solutions or a strong focus on the market. Look for:

- **BPM-focused vendors to drive further innovations supporting emerging DCM requirements.** BPM providers will address the more people-oriented and agile approaches required for DCM.[8] HandySoft, for example, is a major BPM provider in the public sector with case processing installations particularly for complaint management. ISIS Papyrus, a European provider and Strong Performer in Forrester's document output for customer communications management (DoCCM) software category, supports ECM, CRM, analytics, event processing, and BPM, and will drive its rich development platform to further align with goal-focused process improvement.[9] Whitestein Technologies and Be Informed have also focused on goal-driven processes (a key ingredient in many DCM deployments), delivering strong, agile DCM platforms.[10] Fujitsu continues to show thought leadership in DCM with strength in process development and flashes of innovation in other aspects of its product stack. Ideate focused initially on one or two niches around health research and will likely expand its cloud-based offering from that base.

- **ECM providers to evolve DCM frameworks.** ECM vendors have a strong presence in case management processes and a significant stake in developing next-generation dynamic case management solutions. For example, Hyland Software will focus on customer onboarding and specific industry solutions such as medical records. Open Text is rapidly enhancing its case management framework and will likely be SAP's "go-to" partner for DCM, leveraging mobile and social capability as differentiators, supported by traditional ECM, BP, and analytics. Perceptive Software, recently acquired by Lexmark, will develop case-based solutions in strong domain areas, such as the educational market. Oracle is advancing DCM based on combining Universal Content Manager with its BPM suites — and will surely make a run at this market. Adobe, while not a traditional ECM player, will drive case applications from a customer experience perspective. All of these vendors deliver solid ECM suite environments targeting DCM use cases.

Custom-Built And Niche Apps That Offer "Fit To Purpose" Value

Many systems integrators and focused niche venders target dynamic case management solutions at their domains. These products are very fit to purpose but may fall short in terms of context-driven dynamic capability and business-side change management. Yet these providers are forming partnerships with DCM platform vendors or retooling their solutions to provide greater flexibility. Vendors to watch span the DCM framework and target (see Figure 2):

- **Investigative case applications.** Investigative bodies — both business and government — know that they will receive hundreds of requests a year to provide information to citizens, regulators, board members, and outside auditors. Yet the exact nature and timing of the requests will be unknown. Many compliance- and audit-oriented case solutions are on the market, and these can be a good fit-to-purpose solutions. For example, EthicsPoint provides issue and event case management for compliance, HR, audit, security and other areas where professionals deal with reports of misconduct. The SAS Enterprise Case Management product enforces best practices and proper gathering of evidence and can reduce the cost of investigations. Similarly, CaseLoad provides court case management software solutions for appellate and administrative courts. The Network (TNW), a provider of governance, risk, and compliance (GRC) solutions, provides case solutions targeted at ethics and compliance for employee relations to communicate, resolve, and mitigate risk issues and incidents. Global Compliance Services also provides case management targeted at corporate ethics.

- **Service request case applications.** Service request processes extend traditional BPM by revolving around structured processes that can be visually mapped but also allow case-based progressions and variations to be added within the flow of the case. Many customer-service-oriented case solutions are on the market with pre-existing integration to contact center systems. For example, RightNow Technologies' case management solution allows you to capture, track, assign, and manage customer service requests from contact through resolution. Panviva's SupportPoint is a business process guidance (BPG) solution with more the than 200,000 users across 37 countries. KANA Software has rapidly developed case solutions for Service Experience Management (SEM). Iron Data and Cúram Software provide human and social services case frameworks for state and federal governments. IntraLinks has cloud-based case management for mergers and acquisition and other high-value nonrecurring business transactions.

- **Incident management case applications.** Incidents stem from an event that can be the simple submission of a complaint or an unexpected accident. Many incident-management-oriented case solutions also exist. For example, i-Sight is a case management software platform configured to manage customer complaints and corrective actions, or employee relations, HR, and ethics investigations. For example, Archer Technologies, acquired by EMC, provides a formal incident reporting and case management solution that enables your organization to report, classify, prioritize, and respond to incidents of many types.

Figure 2 Three Case Management Categories
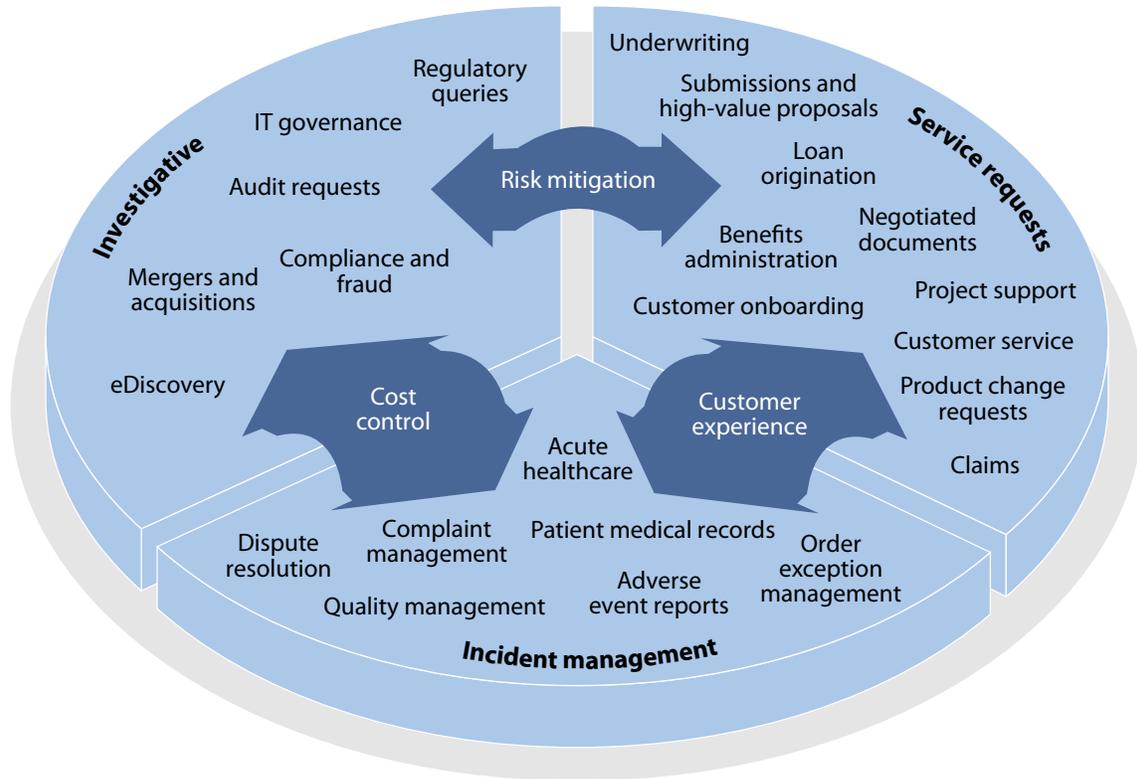
58453   Source: Forrester Research, Inc.

DYNAMIC CASE MANAGEMENT EVALUATION OVERVIEW

To assess the state of the DCM market and see how the vendors stack up against each other, Forrester evaluated the strengths and weaknesses of top DCM vendors.

Buyers Focus On Current Offerings, Future Vision, And Strength Of Installed Base

As a buyer considering dynamic case management offerings, you have a diverse range of solution providers to choose from. For this report, Forrester used a comprehensive set of case-management-specific evaluation criteria to compare the DCM solutions vendors. Forrester also examined past research, user needs assessments, and vendor and expert interviews. We organized the criteria for this Forrester Wave evaluation into three high-level categories:

- **Current offering.** We looked at the strength of the vendors' products across a wide spectrum of DCM capabilities. In addition, we evaluated their support for Forrester's three DCM use case segments: investigative, incident management, and service request. We evaluated how the products supported design, development, analytics, capture, enterprise content management

(ECM), document output for customer communication management (DoCCM), flexibility of case handling and provision of expert guidance, automation and event management.[11] And we evaluated the products' support for global enterprises, the product architecture, usability, and cost.

- **Strategy.** We looked at the strength of each vendor's product strategy and vision and how it intends to support increasingly complex customer requirements. Time-to-value, product strategy, and corporate strategy are also important criteria, specifically with regard to DCM needs.

- **Market presence.** We gauged the size of the vendors' customer bases and evaluated the depth of human and financial resources available to enhance their products and serve customers. Market presence in this report reflects the relative importance of each DCM solution vendor within the overall DCM solutions market.

Evaluated Vendors

Forrester included 10 vendors in the assessment: ActionBase, Appian, Cordys, EMC, Global 360, IBM, Pallas Athena, Pegasystems, Singularity, and Sword Ciboodle. Each of these vendors has met four main criteria for inclusion in this Forrester Wave (see Figure 3):

1. They are often discussed in client inquiries, appearing on client vendor selection shortlists.

2. Their solutions are widely applicable to use cases across three main case management categories, investigative, incident management, and service requests, which demonstrates a horizontal case management platform.

3. They demonstrate an innovative approach to dynamic case management.

4. Their solutions include significant proprietary capabilities in key areas of technology for dynamic case management — BPM, ECM, social technologies, and analytics, for example.

January 31, 2011

Figure 3 Evaluated Vendors: Product Information And Selection Criteria

Vendor	Product evaluated	Product version evaluated	Version release date
ActionBase	ActionBase	v6.2	March 2010
Appian	The Appian Suite	6.5	October 2010
Cordys	Cordys Business Operations Platform (BOP)	BOP-4	June 2009
EMC	Documentum xCelerated Composition Platform (xCP)	1.5	June 2010
Global 360	Case360	11.0	May 1, 2010
IBM	Case Manager	5	GA Q4 2010
Pallas Athena	BPMone	Version 2, Release 1, Service Pack 4	June 30, 2010
Pegasystems	SmartBPM Suite	6.1	March 22, 2010
Singularity	TotalAgility	v5.0	January 2010
Sword Ciboodle	Sword Ciboodle	3.2	July 2010

Vendor selection criteria

Vendors are often discussed in client inquiries, appearing on client vendor selection shortlists.
Vendors' solutions are widely applicable to use cases across three main case management categories: investigative, incident management, and service requests, which demonstrates a horizontal case management platform.
Vendors demonstrate an innovative approach to dynamic case management.
Vendors' solutions include significant proprietary capabilities in key areas of technology for dynamic case management — BPM, ECM, social technologies, and analytics, for example.

Source: Forrester Research, Inc.

EVALUATION ANALYSIS

Our evaluation uncovered a market in which (see Figure 4):

- **Pegasystems, IBM, EMC, Appian, Singularity, and Global 360 lead the pack.** These providers all offer strong platforms that allow their customers to realize the DCM vision. Approaches to the market vary from those that target complex environments with system integrators leading the effort to more complete and integrated offerings, but these providers have all made a strong commitment to offering DCM-specific platforms that form a basis of transforming "untamed" business processes.

- **Pallas Athena, Sword Ciboodle, and Cordys offer competitive options.** These providers offer robust platforms that are well packaged and provide innovation in specific areas important to achieving DCM goals.

- **ActionBase offers an email-centric and Microsoft-oriented platform.** ActionBase stands alone as a lightweight approach to dynamic case management that adds structure to chaotic email. The company's strategy focuses on empowerment-oriented case management solutions.

We intend this evaluation of the dynamic case management market as a starting point only. We encourage readers to view detailed product evaluations and then extend the list of vendors to include some of these or adapt the criteria weightings to fit their individual needs through the Forrester Wave Excel-based vendor comparison tool.

Figure 4 Forrester Wave™: Dynamic Case Management, Q1 '11

Source: Forrester Research, Inc.

Figure 4 Forrester Wave™: Dynamic Case Management, Q4 '10 (Cont.)

	Forrester's Weighting	ActionBase	Appian	Cordys	EMC	Global 360	IBM	Pallas Athena	Pegasystems	Singularity	Sword Ciboodle
CURRENT OFFERING	50%	2.22	3.99	2.84	3.80	3.40	3.79	3.34	4.19	3.73	3.39
Design	20%	2.90	4.10	3.40	3.60	3.70	4.20	3.45	4.50	3.90	3.40
Development environment	20%	2.75	4.00	3.15	3.60	3.00	3.50	3.80	4.65	3.65	4.00
Capture, CCM, and ECM support and security	15%	2.45	3.80	3.40	5.00	3.80	4.50	2.80	3.00	3.20	3.05
Case handling and guidance	17%	1.20	4.05	2.55	3.65	2.80	3.55	2.75	4.50	3.75	3.75
Case-centric application support	12%	2.00	3.75	1.00	3.00	3.50	4.00	2.50	3.50	3.00	0.75
Automation and event management	16%	1.74	4.14	2.94	3.96	3.74	3.08	4.36	4.50	4.64	4.50
STRATEGY	50%	1.59	3.89	3.01	4.11	3.77	4.64	3.36	4.42	4.01	2.64
Product strategy	53%	1.00	4.00	3.00	4.00	4.00	5.00	3.00	5.00	4.00	3.00
Corporate strategy	35%	3.02	3.34	2.34	4.66	3.68	4.66	3.35	3.34	3.68	3.00
Product cost	12%	0.00	5.00	5.00	3.00	3.00	3.00	5.00	5.00	5.00	0.00
MARKET PRESENCE	0%	1.00	2.75	1.00	4.00	2.75	4.00	2.75	3.50	2.25	2.50
Installed base	50%	1.00	1.50	1.00	3.00	2.50	3.00	2.50	3.00	1.50	1.00
Services	50%	1.00	4.00	1.00	5.00	3.00	5.00	3.00	4.00	3.00	4.00

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

VENDOR PROFILES

Leaders Emphasize Dynamic Capabilities

Pegasystems, IBM, EMC, Appian, Singularity, and Global 360 offer strong platforms that allow their customers to realize the DCM vision. We found that:

- **Pegasystems leads with dynamic, "build for change" capabilities.** Pegasystems is particularly strong for the service request area, especially with the addition of predictive analytics and domain expertise acquired through Chordiant Software. The underlying rules capability of its engine enables the incremental automation of the case flow. Pegasystems is well positioned to deliver further dynamic case feature enhancements. Dynamic case management has become a major priority for the vendor as it strives to provide agility for a packaged and legacy environment though advanced rules- and case-based support.

- **IBM will drive leadership in analytics in the dynamic case management market.** IBM can claim the strongest scores across the three DCM use case categories — investigative, service request, and incident management — reflecting the strength and comprehensiveness

of its overall portfolio, which combines BPM, ECM, and analytics. Strategically, its strong partnership ecosystem will help drive the horizontal platform deep into industry solutions across all DCM use case segments.

- **EMC brings together a rich collection of dynamic case management technologies.** EMC has a strong development and business-oriented strategy that leverages its base in ECM and BPM to provide a strong composition platform for case-based applications. A focus on unifying EMC's case composition capabilities and strengthening partner delivery ecosystem will ensure success in the emerging dynamic case management market.

- **Appian provides a strong integrated offering.** Appian delivers a complete integrated suite solution with all the components necessary to build a rich case management application with either an on-premises or SaaS-based solution. Appian has a well-balanced product with strong capabilities across design, development, reporting, content, and specific case automation features.

- **Singularity is an early innovator in dynamic case management.** In the course of this Forrester Wave analysis, Singularity rebranded its product with the release of TotalAgility v5.0. TotalAgility is the name of the product formerly known as the Singularity Process Platform. Singularity links business goals and processes, providing strong collaboration and mobility support for workers to personalize their desktops. It offers a strong event model with clear product support for complex timelines and skills/sampling enhances the offering. Particularly relevant for Microsoft shops, the Singularity product leverages Microsoft Office, SharePoint, Dynamics/CRM, and OCS/Lync.

- **Global 360 features a strong design, automation, and event management.** Global 360 provides an integrated suite designed to address the mix of complex unstructured and structured processes that organizations face. It continues to focus on content-centric case management applications and provide an innovative vision as to how processes are developed based on a "persona" approach that focuses on the needs of case workers and stakeholders and leveraging emergent design principles.[12] Global 360's development focus on the SharePoint ecosystem also shows promise.[13]

Strong Performers: Provide Innovation And Individual Strengths

Pallas Athena, Sword Ciboodle, and Cordys are Strong Performers with robust platforms that may depend on outside help in some areas but provide innovation in specific areas important to achieving DCM goals. In particular, we found that:

- **Pallas Athena develops a deep understanding, allowing it to build a strong customer base.** The product has a particularly innovative UI concept. This provides an integrated user view of the case showing all associated tasks and processes. This perspective enables a case worker to instantly see the state of the overall case (without having to dig deeper) — completed tasks

appear with their completion date, currently due tasks, and the relevant roles responsible for them; those tasks and processes not yet relevant are grayed out. This is then combined with excellent fine- grained routing support and sophisticated control over redo and bypass actions. Numerically, Pallas Athena has one of the most extensive DCM customer bases, with more than 2,000 installations.

· **Sword Ciboodle continues to leverage customer-centric heritage.** The Ciboodle platform has a strong presence in service request domains that users have then applied to other areas of their operations. The product scored particularly well in the development area and provided strong support for automation and event management.

· **Cordys targets complex enterprise solutions requiring strong data integration.** Cordys has a strong focus on the enterprise segment that leverages a BPM and composite application development environment. The overall strong platform has excellent support for the case designer and very high marks for integration capability based on advanced SOA principles. The Cordys platform provides a robust foundation for cloud-based dynamic case management offerings.

Contenders

· **ActionBase fills the gap between email chaos and process-centric DCM platforms.** ActionBase offers an email-centric and Microsoft-oriented platform that depends completely on people for routing and decision-making. It stands alone as a lightweight approach to dynamic case management that adds structure to chaotic email. It's possible to define processes in real time to capture the unfolding situation or leverage specific templates chosen by participants.

SUPPLEMENTAL MATERIAL

Online Resource

The online version of Figure 4 is an Excel-based vendor comparison tool that provides detailed product evaluations and customizable rankings.

Data Sources Used In This Forrester Wave

Forrester used a combination of three data sources to assess the strengths and weaknesses of each solution:

· **Hands-on lab evaluations.** Vendors spent one day with a team of analysts who performed a hands-on evaluation of the product using a scenario-based testing methodology. We evaluated each product using the same scenario(s), creating a level playing field by evaluating every product on the same criteria.

· **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted further vendor validation calls where necessary to gather details of vendor qualifications and product capabilities.

· **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with three to five of each vendor's current customers.

The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and we encourage readers to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve.

ENDNOTES

[1] For example, imagine a letter from a recently divorced bank customer. He wants a change of address so that he can close the joint bank account, to set up two college trust funds for his children, and to take care of the transfer of pension funds. Of course the bank wants to deal with the customer request as efficiently and effectively as possible, but it also needs to take into account regulations (i.e., the pension rights might be subject to final court jurisdiction). Instead of triggering a separate work item for each aspect of the original letter (the BPM approach), a DCM approach would enable the customer service representative to add processes to the single view of the case, handling each relatively simple request with a dynamically bound process definition. The original case then triggers the legal review associated with the pension request (effectively a subcase) and may also involve a 360-degree reassessment of the customer's relationship with bank (a second subcase), which uncovers a jointly held mortgage.

[2] Forrester defines iWorkers as anyone with a computer between the ages of 18 and 80.

[3] A business process — at its highest level — represents a "purpose" or activity that helps an enterprise achieve its goals. Packaged and industry-specific applications form the transactional backbone for most critical business processes in organizations, but they are only part of the story. Most enterprises need many other processes to achieve their goals; processes that often go well beyond the capabilities of packaged

applications. Over time, these processes get approached in tactically haphazard ways, becoming laden and bloated with non-value-added activity. In short, they become untamed. IT gets dragged reluctantly into supporting these untamed processes. The results are not surprising. Weak architectural approaches spawn niche products, and the use of various business intelligence, BPM, business rules, collaboration, and ECM tools that are applied like Band-Aids in an attempt to make untamed processes more efficient. Business process professionals must take a more proactive and strategic approach to addressing these untamed business processes. See the August 21, 2009, "Untamed Business Processes: When Even The Best Of Intentions Go Awry" report.

4   iWorkers are defined as any worker between 18 and 89 that has a computer. iWorkers are challenged by an increasing variety of tasks to manage due to the business cycle and trends in automation and offshoring. See the December 28, 2009, "Dynamic Case Management — An Old Idea Catches New Fire" report.

5   Some DCM platforms achieve this by dynamically combining process snippets and rules at runtime. Rather than attempting to predict all possible paths, firms can leave it to their employees to exercise their judgment in meeting the needs of the situation (or customer).

6   This dramatically alters the ability of the firm to sense and respond in real time. Rather than having to submit a change to IT, which must then go through a formal release and change management procedure that may take several months, the business can affect how work is managed within minutes. Of course, that implies the need for new management practices to validate that such changes are within corporate policies, but the point is that once the framework is agreed, changes are no longer subject to the delays associated with major system changes.

7   A new selected path may have unique aspects that include a UI based on roles (e.g., investigative officer), data models, processes (e.g., create fraud investigation communications or background check), and multichannel customer communications templates for correspondence.

8   This market is a potential development direction for any of the BPM vendors that elegantly handle process adaptability and dynamic change at runtime.

9   To assess the state of the document output for the customer communications market and see how the vendors stack up against each other, Forrester evaluated the strengths and weaknesses of top DoCCM vendors. After examining past research, user-need assessments, and vendor and expert interviews, we developed a comprehensive set of evaluation criteria. We evaluated vendors against approximately 95 criteria. See the June 25, 2009, "The Forrester Wave™: Document Output For Customer Communications Management, Q2 2009" report.

10   These engines manage "case states" applying pre- and post-conditions to control the progression of the work. Processes and tasks automate the repetitive elements and may change these states (as could external systems or events).

11   To assess the state of the ECM suites market and to see how the vendors stack up against each other, Forrester evaluated the strengths and weaknesses of top ECM suites vendors. See the November 12, 2009, "The Forrester Wave™: Enterprise Content Management Suites, Q4 2009" report.

A new generation of document output for customer communications management (DoCCM) technology promises to reduce costs, improve the customer experience, and expand output beyond the print channel. Customer communications management is software used to compose, format, personalize, and distribute content to support physical and electronic customer communications and improve the customer experience. See the June 25, 2009, "The Forrester Wave™: Document Output For Customer Communications Management, Q2 2009" report.

[12] Emergent design occurs when a designer does not understand the entire business problem but starts building a solution. As the business matures, it defines best practices, refining an initial case management solution, structuring elements that were previously unstructured. As a result, the designer continues to refine the overall business operations. See the March 31, 2010, "SharePoint And BPM — Finding The Sweet Spot" report.

[13] The current J2EE platform has SharePoint integration facilities but will soon be followed by a .NET case management version.

FORRESTER®

Making Leaders Successful Every Day

Research and Sales Offices

Forrester has research centers and sales offices in more than 27 cities internationally, including Amsterdam; Cambridge, Mass.; Dallas; Dubai; Foster City, Calif.; Frankfurt; London; Madrid; Sydney; Tel Aviv; and Toronto.

For a complete list of worldwide locations visit www.forrester.com/about.

For information on hard-copy or electronic reprints, please contact Client Support at +1 866.367.7378, +1 617.613.5730, or clientsupport@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Research, Inc. (Nasdaq: FORR) is an independent research company that provides pragmatic and forward-thinking advice to global leaders in business and technology. Forrester works with professionals in 19 key roles at major companies providing proprietary research, customer insight, consulting, events, and peer-to-peer executive programs. For more than 27 years, Forrester has been making IT, marketing, and technology industry leaders successful every day. For more information, visit www.forrester.com.

FORRESTER®