



# The Whole Picture – Using Process Intelligence to Extend Business Intelligence

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## Process used and survey demographics

The survey results quoted in this report are taken from a survey carried out between August of 2016 and September of 2016, with 56 responses from individual members of the AIIM community surveyed using a web-based tool. Invitations to take the survey were sent via email to a selection of AIIM's 196,000 registered individuals. 64% of the respondents are from North America and 28% from the Europe, Middle East, and Africa region group, covering a representative spread of various industry sectors.



## About AIIM

AIIM has been an advocate and supporter of information professionals for nearly 70 years. The association mission is to ensure that information professionals understand the current and future challenges of managing information assets in an era of social, mobile, cloud and big data. AIIM builds on a strong heritage of research and member service. Today, AIIM is a global, non-profit organization that provides independent research, education and certification programs to information professionals. AIIM represents the entire information management community: practitioners, technology suppliers, integrators and consultants. AIIM runs a series of training programs, which can be found at <http://www.aiim.org/Training>.



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Thomas LaMonte is an AIIM Market Intelligence Researcher well versed and credentialed in the fields of ECM, ERM, and BPM with a heightened focus on solving the operational problems of today's businesses.

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## Introduction

There is a growing need to pull back the curtain of the enterprise and closely examine critical processes and functions to gain operational intelligence. We do this to make processes more efficient, analyse useful metrics, adjust for bottlenecks, and ultimately improve the business. To meet this goal analytic technologies and specifically, business intelligence tools, have become a mainstay in organizations worldwide.

Business intelligence (BI) tools in a number of organizations work to better quantitate overall business performance, provide insight into what transpires at specific points in time, and enhance organizational visibility with data analysis and trend reporting. Moreover, BI tools and other analytical technologies deliver essential insights to fuel informed business decisions, as well as perform that crucial alchemy turning information chaos into information opportunities. However, BI tools don't offer a perfect image; there exist blind spots in their coverage. BI tools lack process awareness, and as a result, some events in the business go unseen.

The hard reality is this: to be successful in today's dynamic business landscape it is no longer good enough to see into our enterprise processes; we must also understand what we're seeing and take action based on that knowledge. The question is how do we create the proper vantage point to view the whole picture?

In this report, we first take a look at the current perceptions of analytic technologies, the rate of uptake, and the obstructions holding back progress. Then we examine organizational trends in using process intelligence and process analytics to extend business intelligence, and how this heightened visibility is leveraged to provide value to customer communications management (CCM), as well as the enterprise as a whole. Discover how organizations focus the lens of BI tools with process intelligence to see the whole picture, their future plans and procedures, best practices, and challenges you may face.



## Key Findings

### Process Intelligence

- **Sixty-four percent of respondents leverage analytics and process improvement majorly to optimize processes, and for 52% the goal is to improve customer experience.** 43% hold process automation/inbound routing as top priority.
- **When asked to rate importance for the business, 38% view analytics as an essential enterprise capability; CCM mirrors this distinction for 20%.** Approximately 32% of respondents see analytics and CCM as "something [the business] definitely needs."
- **Forty-one percent of organizations polled are committed to utilizing and developing analytics.** 30% acknowledge the usefulness of analytics, but have yet to designate staff for further investigation.
- **In relation to analytics, 27% are investigating possibilities, but concede that progress is slow.** 29% describe a lack of upper management attention.
- **Eighty-six percent of organizations polled are currently or plan to use analytics to increase efficiency of processes.** 47% will use analytics in the future for formal knowledge extraction, and 46% to gain insight into content use.

### Customer Communications Management (CCM)

- **Questioned about CCM priorities, 65% of organizations are chiefly concerned with improving customer service through targeted engagement.** 54% hope to improve worker efficiency and effectiveness.
- **Forty-nine percent of respondents say their primary CCM goal is to help facilitate compliant communications and reduce paper and fax communication equally.** 44% hope to use CCM to develop robust document and process auditing capabilities.

- **Forty-three percent rate upheld compliance standards in communications to be very important.** Integration and migrations prompt neutral reactions for 40% and 38% respectively.
- **Personalized communication is rated to be important to very important by 51%.** 55% feel the same about electronic signatures related to CCM.
- **CCM is currently used to deliver customer bills, statements and financial documents for 42% of respondents.** 55% have plans to leverage process analytics and business intelligence tools, integrate customer communication platforms, and for delivery of communications in a secure manner.

## Business Insight

- **Twenty-eight percent currently analyze incident reports, claims and witness statements, and 23% analyze inbound communications.** 47% would like to analyze web-accessible databases and inbound communications (41%).
- **Automated analysis for helpdesk/service desk conversations is already in place for 24%.** 18% have plans to automate the analysis of media channels/news feeds, and incoming customer communication streams and customer onboarding is on the agenda for 15%.
- **The most useful business advantage derived from analytics for 63% is non-compliance detection.** 48% believe real time process analysis provides the greatest benefit.

## Challenges

- **In regard to pain points accompanying analytics projects, 45% are burdened by a lack of expertise in analytics, and 33% feel the barrier of entry (tool and resource investment) to be too high.** 30% find difficulty connecting to and between repositories and systems.
- **Asked about challenges related to CCM initiatives, 35% of respondents are held back by lack of expertise, and 33% are hamstrung by the need for considerable investment in tools and resources.** 28% struggle due to undefined or unclear goals.

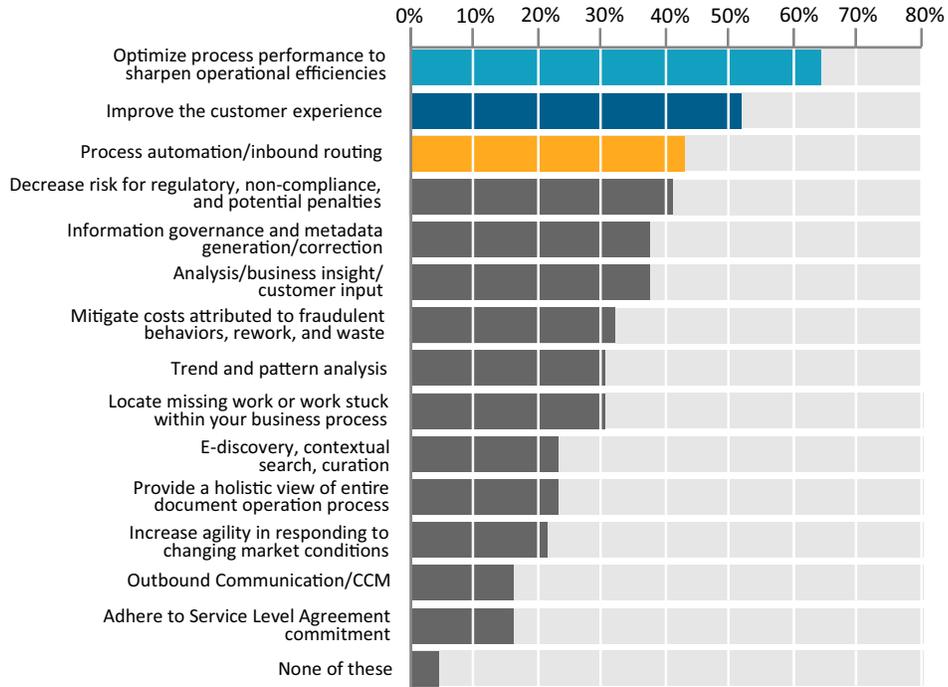


## Perceptions

Organizations today face a number of challenges. There is an ever-present need to remain competitive by becoming more efficient, shoring up operations, and limiting potential risk. These goals are achieved by increasing enterprise agility—ability to nimbly react to changing market conditions—mitigating costs related to fraud, rework and waste, and reducing potential liability and legal forfeitures of regulatory non-compliance. Above all else however, improving the customer experience—quality of communications and satisfaction level—and enhancing the enterprise through optimized process performance are two of the stronger points of competitive differentiation.

The general category of analytic technologies have provided a means to effectively work towards these goals by creating concrete insight, metrics, and data, which work to actively improve the enterprise, stay one step ahead of the competition, and help make confident decisions supported by facts and results. In a recent AIIM survey, respondents were asked what their primary objectives were in respect to analytics and process improvement. Sixty-four percent of organizations polled leverage analytics and process improvement majorly to optimize processes, and for 52% the goal is to improve the customer experience. (*Figure 1*)

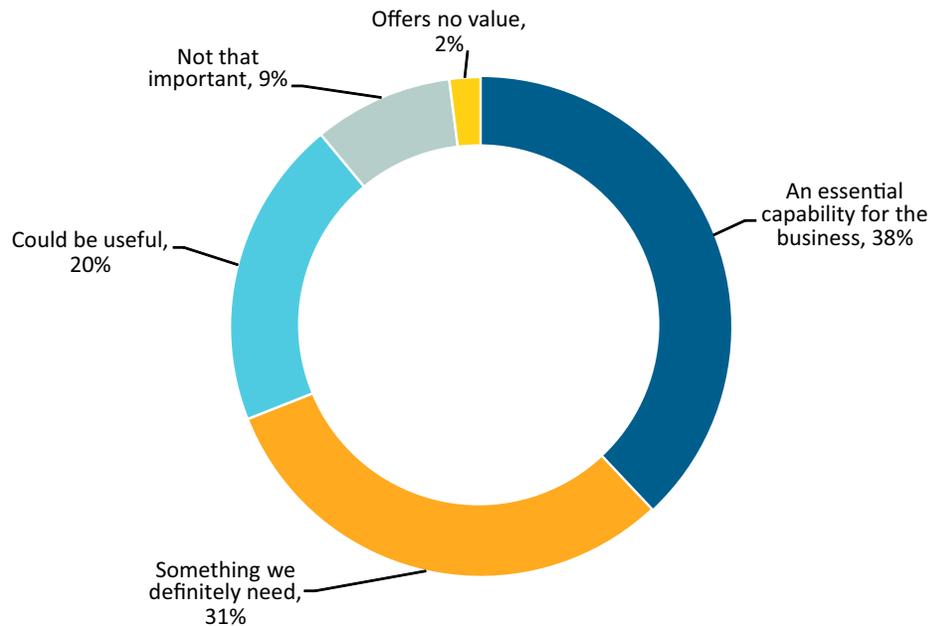
**Figure 1: What are your organization's primary objectives in respect to analytics and process improvement?<sup>1</sup>**



## A Clear Priority

Analytics is fast becoming a fixture in a number of organizations. In fact, when asked to rate importance for the business, 38% view analytics as an essential enterprise capability. In the same vein, approximately 32% of respondents believe that analytics is “something [the business] definitely needs.” (Figure 2)

**Figure 2: How important is analytics for your organization?<sup>1</sup>**



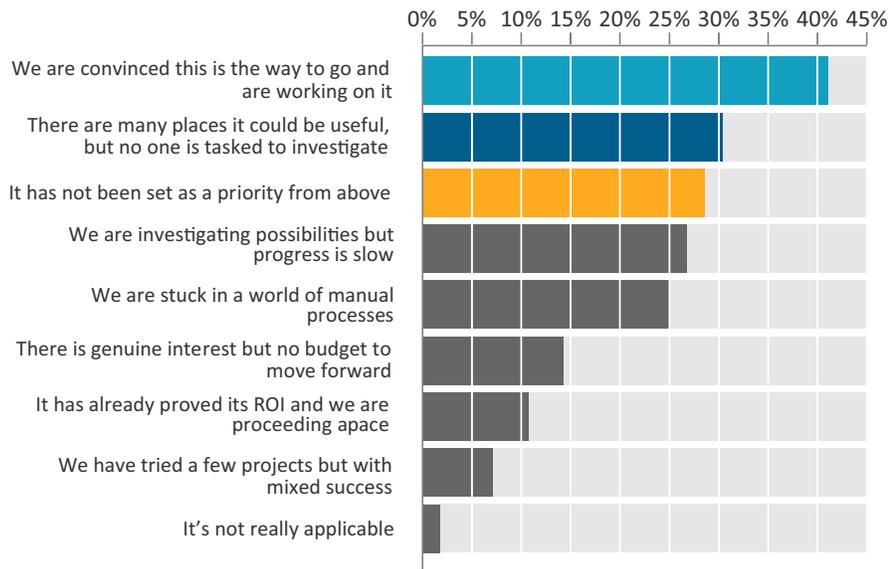


## Progress

On the ground, when asked to describe current progress towards the use of analytics in their respective organizations, 41% of respondents reported that they are committed to utilizing and developing analytics in their companies. (Figure 3)

Analytics is by and large supported by nearly half of the organizations polled. However, a segment of respondents cite challenges instilling the required interest, support, and investment needed for enterprise analytic projects. For instance, while a subset of organizations polled—30%—acknowledge the usefulness of analytics, they have yet to designate staff for further investigation. In addition, 27% are currently investigating possibilities, but concede that progress is slow, and 29% describe a lack of upper management attention. (Figure 3)

**Figure 3: How would you describe current progress in your organization towards the use of analytics?<sup>1</sup>**



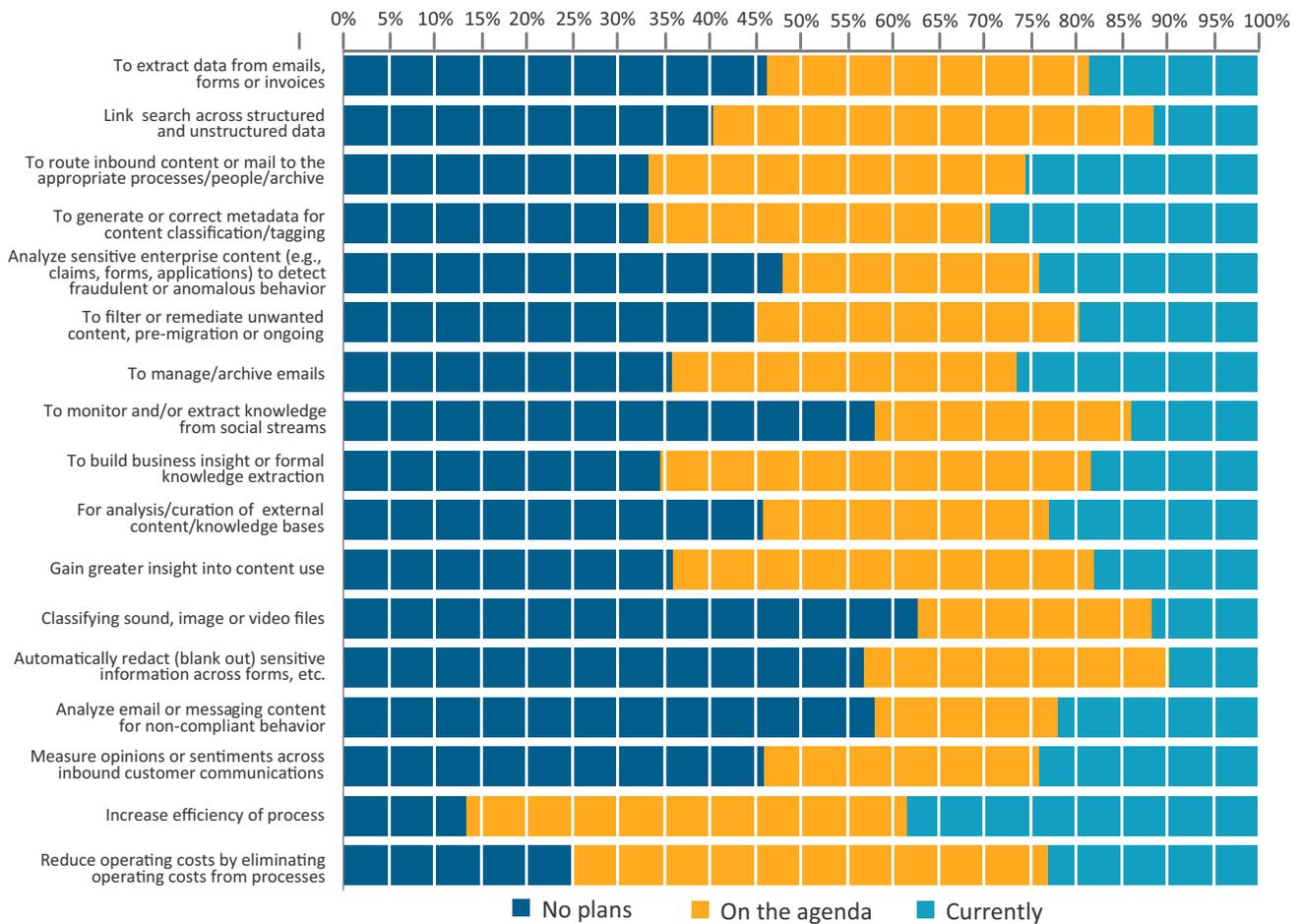
To possibly shift the tectonics in your organization and unearth efforts to implement analytic projects, clearly outline the benefits, possibilities, and opportunities analytics technologies could create for your specific industry, department, and company. Rally for upper management support and involve all relevant stake holders to add momentum to the cause.



## The Road Ahead

Eighty-six percent of organizations polled are currently or plan to use analytics to increase efficiency of processes, 47% will use analytics in the future for formal knowledge extraction, and 46% to gain insight into content use. (Figure 4).

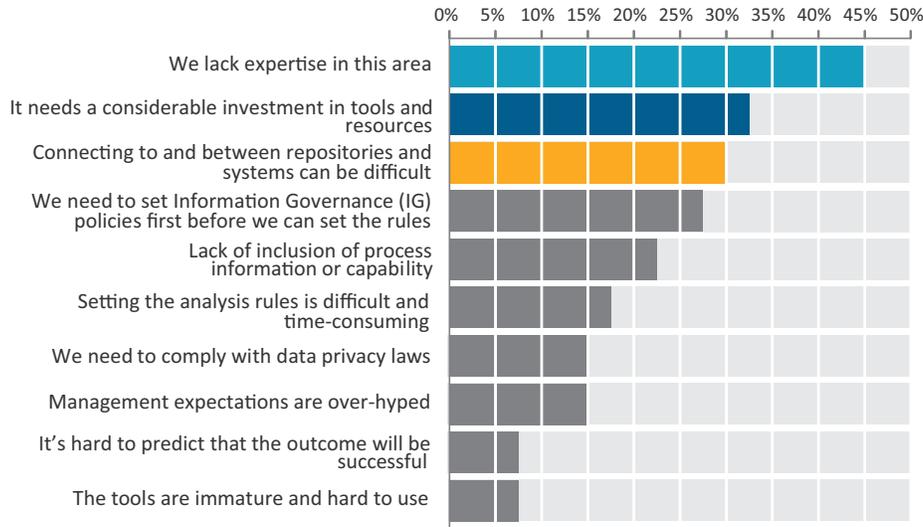
**Figure 4: How do you/how would you use analytics in relation to process improvement in your organization?<sup>1</sup>**



## Challenges

It is important to be cautious of road blocks that could possibly derail plans and ambitions for analytic projects. For instance, when asked what the biggest issues with analytics projects are in their respective organizations, 45% describe being burdened by a lack of expertise in analytics, 33% feel the barrier of entry—monetary and human resource investment—to be too high, and 30% find difficulty connecting to and between repositories and systems. Secondary reasons included absence of information governance policies to guide development, use, and expansion of analytic technologies (28%), the difficult and time consuming process to set the analysis rules (18%), and challenges associated with compliance to data privacy laws (15%). (Figure 5)

**Figure 5: What are the biggest issues with analytics projects in your organization?<sup>1</sup>**



## Business Intelligence

The benefits are clear, and in a number of organizations analytic technologies are on the agenda, if not already in use. Despite potential challenges to get an analytics project off the ground, a near majority of respondents realize the potential value analytics and analytic technologies can offer the business.

We now turn our attention back to the subset of analytic technologies known as business intelligence tools. BI tools encompass the toolkits capable of gathering or reporting on meaningful enterprise data in relation to overall performance. BI tools take a variety of shapes and forms, perform various tasks and functions, but have one outlier attribute that sets them apart from other business analytic technologies: BI tools are predominantly concerned with real time data on business activities to create operational efficiency. BI tools care about the here-and-the-now, provide current information to make critical decisions to run the business efficiently, and help employees perform at the highest level with pertinent and timely insight.



## Not the Whole Picture

BI tools are a critical technology in today's enterprises, but what's important to note, is that they aren't able to give the clearest and total view of enterprise processes and operations; the problem with business intelligence tools is that they don't provide insights into the ways in which individual processes are being completed.

A great degree of depth is lost without the context of process intelligence, insight into how processes are being carried out at different points in time and under a variety of operating conditions; BI tools while effective for operational management were not designed for true process awareness, including the ability to understand what happens in context to processes or the factors influencing their performance quality. This is a significant handicap to overcome, and notably, recent AIIM findings report that lack of inclusion of process information or capability is one of the greatest issues when it comes to analytic projects for 23% of respondents. (Figure 5)

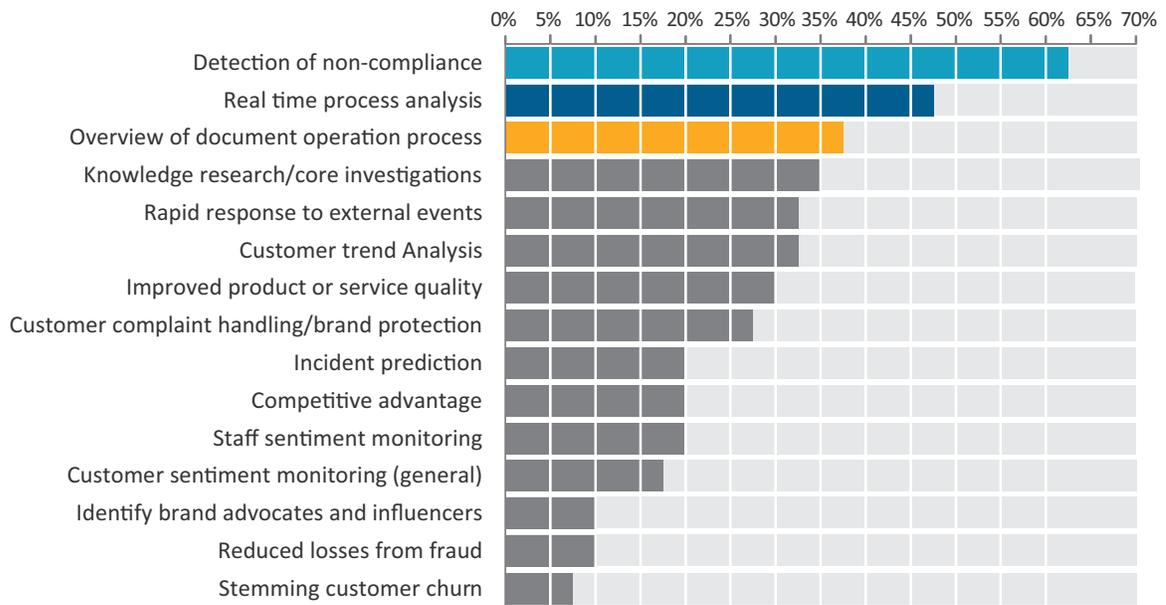


## The Need for Process Intelligence

Process intelligence provides the much needed context BI tools need to view the whole picture of enterprise operations. With the combined view created when process intelligence is crossed with business intelligence, this is not just seeing; this is understanding what is being seen. In this way, to achieve true operational intelligence your organization requires two things: baseline access to relevant data and metrics, and a keen understanding of what that business data means in the grander context of its processes.

Notably, when asked which business advantage would be the most useful to you based on intelligence derived from analytics, nearly one half (48%) of respondents cited real time process analysis as their most valuable business advantage. (Figure 6) To meet this growing demand for process analytics, a number of vendors have begun to provide solutions in the process analytic space, fusing business intelligence with process intelligence to enhance enterprise visibility and create actionable insights to leverage value.

**Figure 6: Which of the following business advantages would be the most useful to you based on intelligence derived from analytics?<sup>1</sup>**



## Customer Communications Management

An effective example of how process analytics can yield valuable insights to improve business operations is seen with customer communications management (CCM). In recent years, an exciting application of process analytics has been used to drive better communication and augment efforts in CCM.

For some practitioners, CCM has pivoted from a conceptual discipline to something more concrete: a measurement based approach relying on analytics to leverage enterprise information assets, while at the same time refining metrical value into real-time insight used to understand customers at a granular level. With this data-focused treatment of content, a CCM strategy can be developed to deliver actionable customer intelligence to cultivate long-term customer relationships.



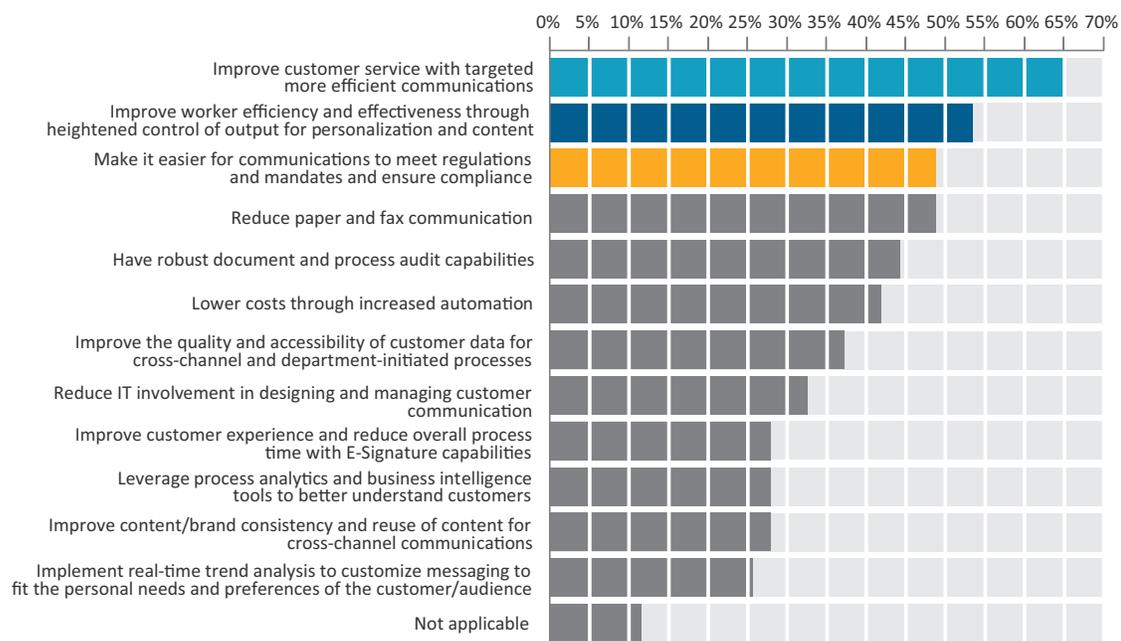
## The Right Message

The communication that resonates best with customers today is personal, relevant, and loud; it needs to matter intrinsically, but it also needs to be designed and distributed in a way to be heard over all the crowded content channels vying for attention. Process analytics is an increasingly effective way to forge this kind of targeted communication, and actionable process intelligence can be used to effectively create the mold to template CCM strategies. In fact, recent AIIM research finds that 51% of respondents rank personalized communication to improve the customer experience to be important to very important in relation to CCM efforts.<sup>1</sup>

In addition, the customer journey is not a linear path. It spans across various channels including web, social, and mobile. Process analytics helps deliver an omni-channel customer experience by identifying siloed information in the enterprise, and monitoring customer trends and preferred channels of communication, as well as which channels are working best and most efficiently. Insight gathered from process can be leveraged to decommission data silos in our organizations and strive for a seamless, omni-channel communications experience for customers. This insight is equally useful to tailor communications to customer habits and needs, double down on successful channels, and improve those falling behind.

Another key concern for CCM is regulatory mandates and compliance. Process analytics provides greater control of communication output, offers better process auditing capabilities, and therefore, helps to ensure compliance of communication. Reinforcing these claims, when asked what their organization's primary objective are in respect to CCM, 65% say it is to improve customer service with targeted and more efficient communication, 49% assert it is making it easier for communications to meet regulations and compliance demands, and 44% feel it is providing robust document and process auditing capabilities. (Figure 7)

**Figure 7: What are your organization's primary objectives in respect to customer communications management (CCM)?<sup>1</sup>**





## Closing Thoughts and Recommendations

Success in business today requires insight and understanding of how our operational processes are running in order to take action for improvement. Monitoring, analytics, business intelligence, data integration, and process intelligence unifies these objectives to create actionable insights, enhancing key business verticals/horizontals, streamlining operations, and benefiting the enterprise at a global level.

The overall feeling in the business community is one receptive to analytics. Thought leaders to end users understand the potential benefits and competitive advantage analytic technologies offer the business, from increased business agility, to more secure compliant processes and business operations, and better informed decision making.

A number of organizations are planning or have already established analytic projects, systems, or activities within their day-to-day operations, creating more visible, adaptable, and efficient processes. Some organizations have experience road blocks, stalls, or delays in their efforts to undertake an analytic project stemming from lack of skills and analytic experience, the high cost of investment, and an absence of senior management support.

There is also an apparent need to not only see within our enterprise operations and processes with analytic tools, but to also fully understand the nuances of what we are seeing. Solutions providing the dual perspective of business intelligence and process intelligence create actionable insights which can be leveraged to improve key business functions. Customer communications management is one such area that is augmented by process analytics, helping to deliver effective, compliant communications.

The takeaway is that process analytics is fast becoming an essential enterprise tool and has the potential to enhance a variety of enterprise horizontals and verticals, as well as holistically improve the enterprise as a whole.



## Recommendations

- *Look out for these best practices in your organization to enhance enterprise visibility and begin to see the whole picture:*
- *Audit performance and evaluate the blind spots of your current analytic systems. Can greater process intelligence help to solve operational problems and meet business goals?*
- *Identify who is in charge early for leading analytic projects, and at every stage encourage active participation of all stakeholders.*
- *If you lack expertise, seek out a trusted advisor to help.*
- *Carefully consider what tools, technology, and changes are required to achieve your goals in the analytics space, and approach future expansion with this knowledge in mind.*

## References

<sup>1</sup>AIIM Custom Survey - Operational and Process Improvement through Analytics – [www.aiim.org/research](http://www.aiim.org/research)



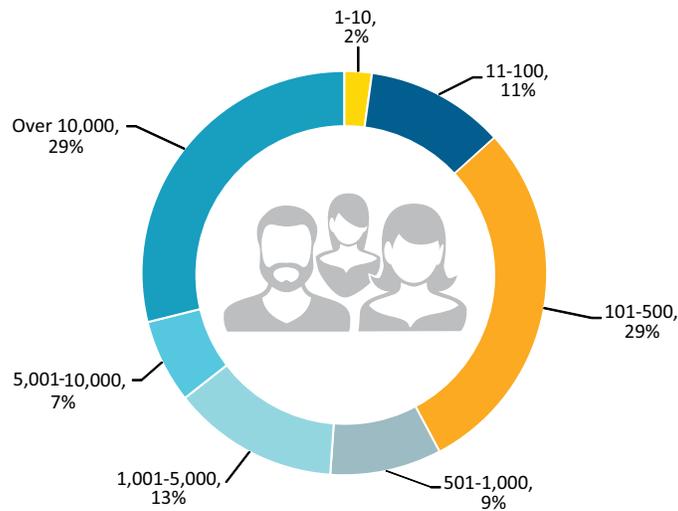
## Appendix 1: Survey Demographics

### Survey Background

The survey results quoted in this report are taken from a survey carried out between August of 2016 and September of 2016 with 56 total responses from individual members of the AIIM community surveyed using a web-based tool. Invitations to take the survey were sent via email to a selection of AIIM's 196,000 registered individuals.

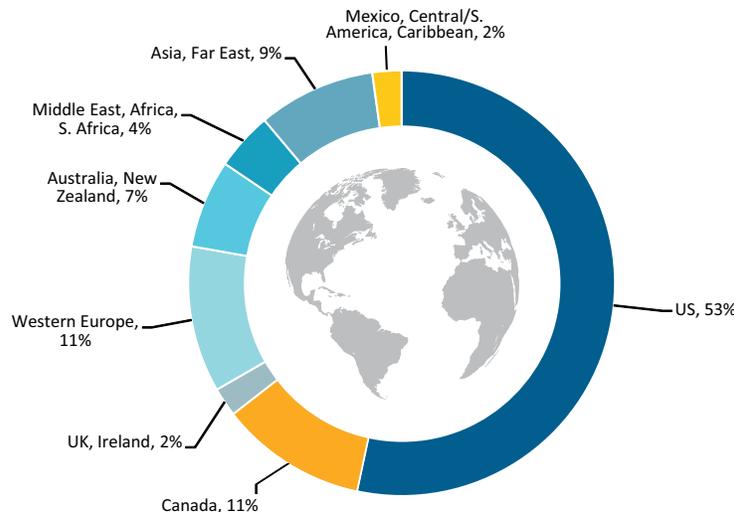
### Organizational Size

Larger organizations (over 5,000 employees) represent 36%, with mid-sized organizations (501 to 5,000 employees) at 22%. Small-to-mid sized organizations (1 to 500 employees) are 42%.



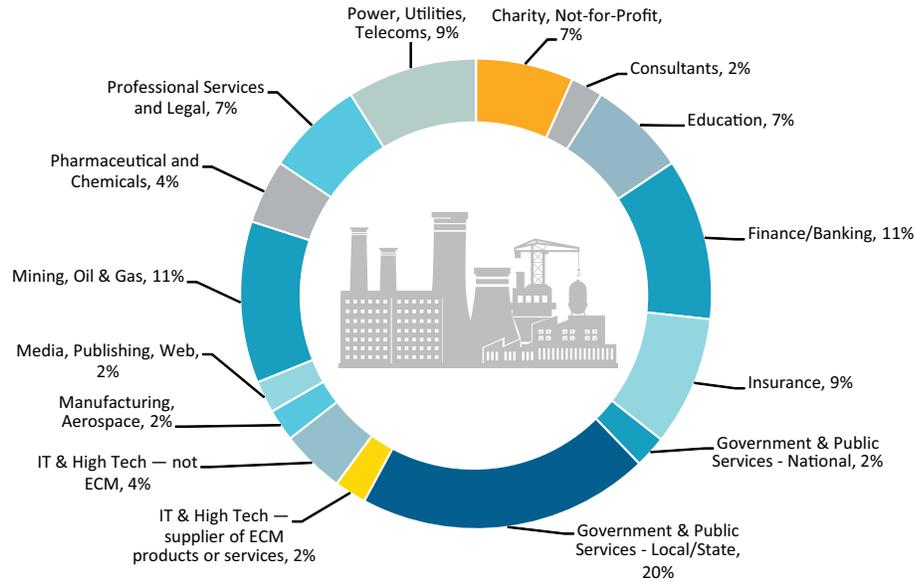
### Geography

The survey was international, with US and Canada making up 64% of respondents, and 28% from the EMEA (Europe, Middle East, and Africa) region group.



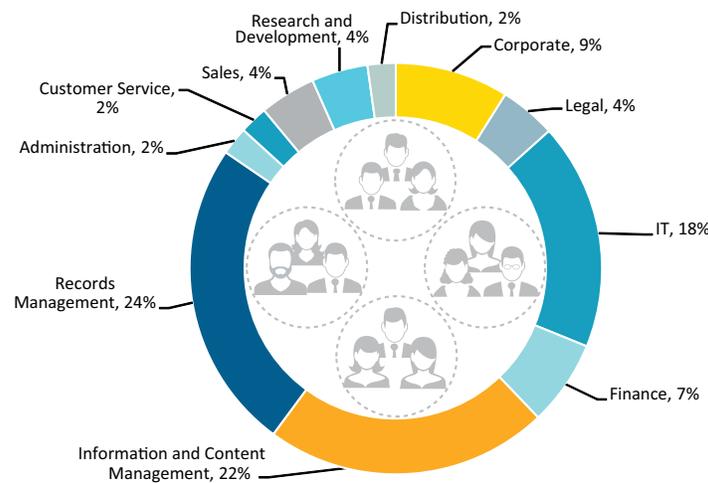
## Industry Sector

Government represents 22%, Finance, Banking and Insurance 20%, 11% Mining, Oil, and Gas, and 7% Professional Services and Legal.



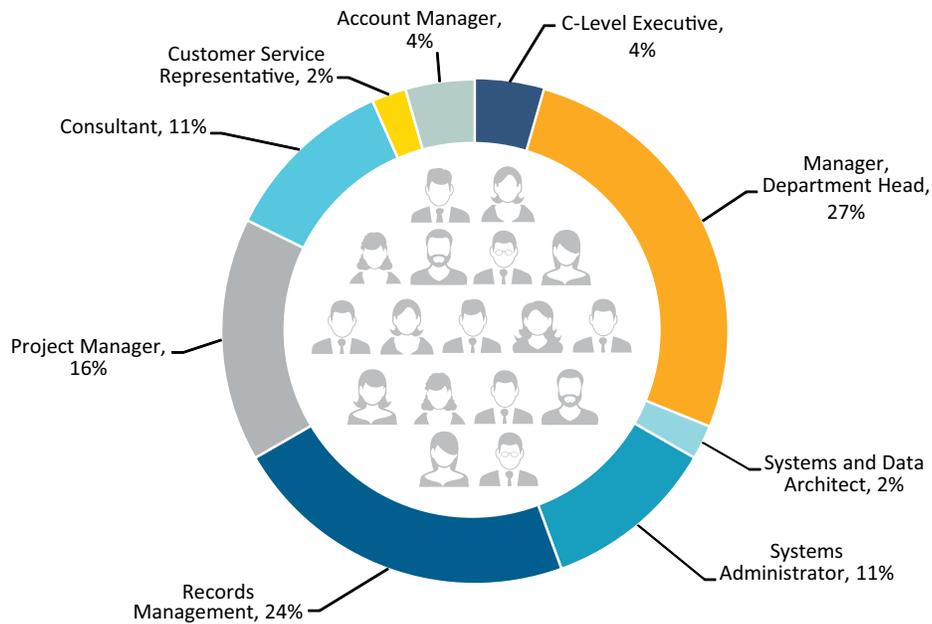
## Department

46% of respondents describe their affiliate department as Records/Information Management, 18% IT/IT Services, and 9% corporate.



## Job Roles

27% of respondents describe their role as Manager/Department Head, 24% say their role is focused on Records Management, while 16% work as Project Managers, and 11% are Systems Administrators.



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