



Using Analytics – automating processes and extracting knowledge

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Process Used and Survey Demographics

While we appreciate the support of these sponsors, we also greatly value our objectivity and independence as a non-profit industry association. The results of the survey and the market commentary made in this report are independent of any bias from the vendor community.

The survey was taken using a web-based tool collecting responses from 276 individual members of the AIIM community during the months of September and October of 2016. Invitations to take the survey were sent via e-mail to a selection of the 193,000+ AIIM community members and through various social media outlets. Survey demographics can be found in Appendix 1.



About AIIM

AIIM has been an advocate and supporter of information professionals for over 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.

— Bob Larrivee
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Introduction

Beyond “big data” style business intelligence, analytics is driving auto-classification, content remediation, security correction, adaptive case management, and process monitoring and modeling. The first step for many analytic processes is capture and recognition – from paper, and from other multiple inbound channels.

Something to consider when discussing analytics for process automation and business insight, is that information can and is being captured from multiple sources, including social media, blogs, websites, and even remote devices – the Internet-of-Things. According to 27% of our respondents, content analytics (CA) is seen as essential now, with 59% citing they see it as essential within the next 5 years.

Regarding the capture of data from remote devices, 43% of respondents indicate data is being captured from security systems (access readers, cameras, etc.) and from facilities equipment (HVAC, lighting, etc.) by 25%. Additionally, 51% of our respondents are capturing data from peripheral devices like multi-function copiers, etc.

In this comprehensive report, we take an in-depth look at the take-up of analytics applications, the success factors and outcomes, integration across repositories, and the issues, benefits and ROI resulting from analytics use. Above all, we look at the progress of organizations moving towards the incorporation of analytics to automate their business processes, and extract valuable customer and business knowledge to enhance their decision-making processes.

Key Findings

General

- **Twenty-seven percent of respondents see content analytics as essential now.** Fifty-nine percent see it as essential within the next 5 years.
- **Fifty-nine percent of respondents feel that their organization is good (40%) to excellent (9%) at ECM.** Fifty-eight percent admit they are poor at using auto-classification.
- **Thirty-nine percent of respondents are challenged with poor insight into their business operations.** Forty-three percent are addressing challenges related to duplication of content creation.
- **Sixty-four percent of respondents see content analytics as a way to improve productivity and remove manual steps.** For 62% content analytics is seen as a way of providing business insight.
- **For 43% of respondents, data is being captured from security systems (access readers, cameras, etc.) and from facilities equipment (HVAC, lighting, etc.) by 25%.** Fifty-one percent of respondents are capturing data from peripheral devices like multi-function copiers, etc.
- **Twenty percent of respondents see content analytics as the way to go and are proactively working on it.** Fourteen percent see it as useful but no one is currently assigned to investigate it further.

Inbound/Process/Search

- **Twenty-five percent of respondents say their processes are flowing faster and more smoothly as a result of using inbound analytics.** Fourteen percent cite improved governance and compliance.
- **Content analytics is driving auto-classification for tagging and routing to archive by 22% of respondents.** Twenty percent indicate they trigger inbound processes based on content analytics used for inbound content.
- **When it comes to assigning security and access controls, 25% are using auto-classification for this purpose.** 21% are using it for metadata allocation and correction.
- **Six percent of respondents utilize contextual search across multiple repositories.** For 22% it is simple search across multiple repositories that are still prevailing.

Business Insight

- **Sixty-one percent of respondents feel the intelligence derived from content analytics is most useful in providing better insight and decision-making capabilities.** Thirty-seven percent feel it is improved product or service quality.
- **Fifty-two percent believe automated content curation would be very useful.** Eighteen percent indicate they are using it on websites, blogs, and news feeds (3%), subscribed libraries (6%), and internal resources (9%).
- **E-discovery with contextual analysis plays a role for 7% of respondents.** For 13% e-discovery tools are in place without contextual search capabilities.
- **Fourteen percent of respondents use automated analysis on social streams, communities, news feeds, and inbound communications.** Automated analysis of helpdesk conversations is in the plans of 15% of respondents.

Application Use

- **Thirty-two percent of respondents indicate having more than one content analytics application in place.** Fifteen percent say they are currently planning for it.
- **When it comes to content types being analyzed, 27% say they have a wide variety across multiple repositories.** Twenty-one percent say their content is not “big” but they are using complex analytic techniques.
- **Regarding linkage to transactions or structured data, 40% of respondents say they have tied their blog content projects to multiple transactional systems.** Thirty-two percent say they link to singular systems like ERP, Finance, and HR.
- **Return-on-Investment for big content projects has been realized within 12 months for 26% of respondents with 10% of those indicating ROI within 6 months.** Forty-four percent are measuring processing times for ROI and 39% reduction in manual processes and activities.

Opinions and Spend

- **Forty-two percent will be spending more on inbound workflow automation over the next 12 months.** Forty percent of respondents plan to spend more on content analytics for business insight.

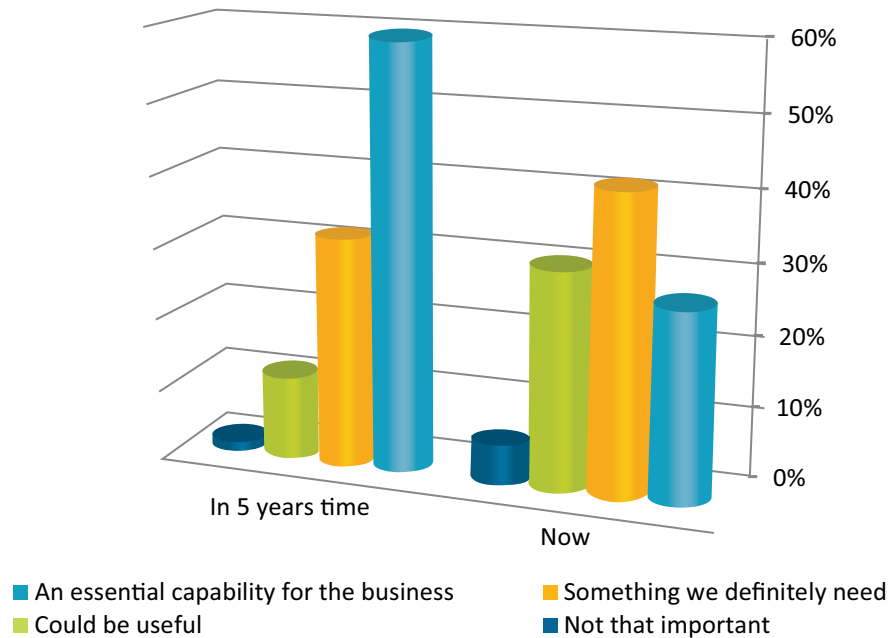


In General

In business today, it is vital that you respond to and meet your customers’ needs quickly, exactly, and in their context. If you do not, someone else will, and they know it. That is why it is imperative for you to build and maintain an information ecosystem that not only links your information resources but also enables you to gain valuable insight into your operations, customer interactions, and predict future demands. It is no longer enough to deliver what they need now, you must anticipate future needs and have them ready before your customer asks or even knows they need what you are offering. You must think like the customer and perform in ways that keep them coming back for more.

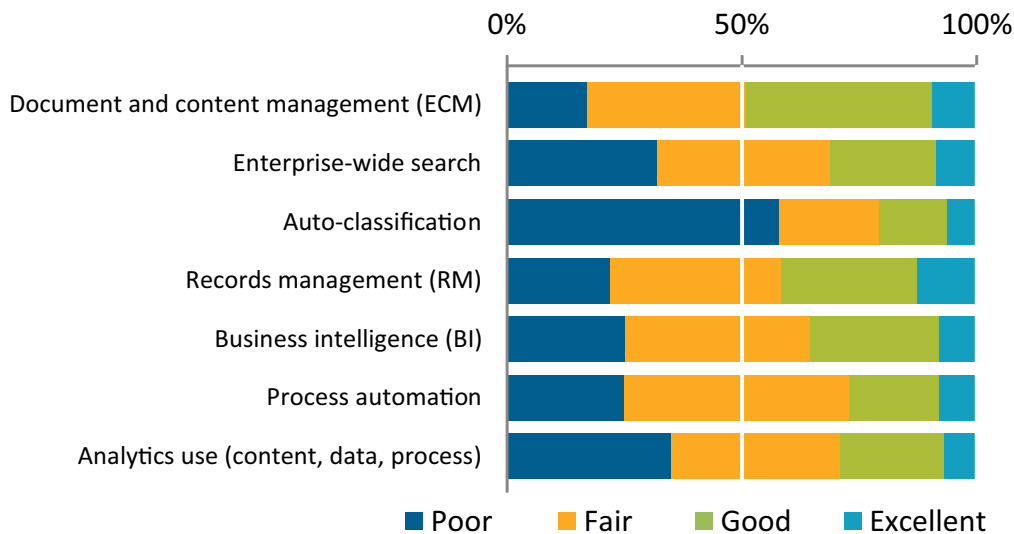
Just as in your personal life, when you find a service provider who has exceeded your expectations you will return for future services and promote their excellence to others. So too must your business organization meet and exceed your customers’ expectations. This requires detailed analysis of buyer trends, delivery channels, and interactions between you, your suppliers, and your customers. This is where analytics delivers great benefit. When we polled our community 27% of our respondents say CA is essential to their businesses now, 42% say it is something they definitely need now and 59% say they see it as essential within the next five years. (Figure 1)

Figure 1: How important would you say content analytics is for your organization?



Turning attention to the more common elements of managing information, we look at some of the more traditional capabilities like Enterprise Content Management (ECM), Records Management (RM), etc. According to 49% of our respondents, they characterize their organizations as good (40%) to excellent (9%) at ECM while 13% say they are excellent at RM. When it comes to use of auto-classification, 58% say they are poor at this, indicating they either have this capability and are not using it to its fullest, or they are still working with manually intensive processes. (Figure 2)

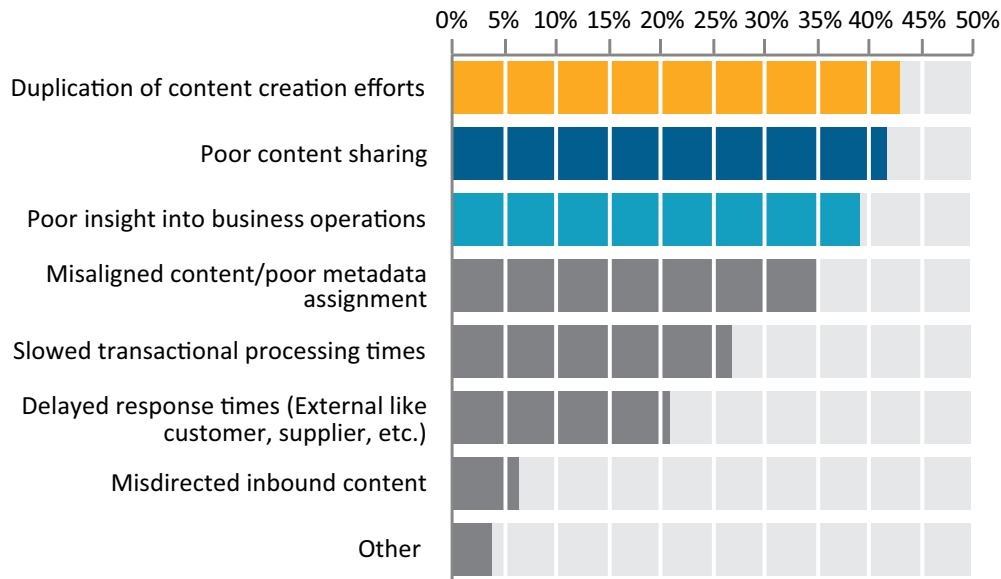
Figure 2: How would you best characterize the following capabilities across your organization?



Looking at the day-to-day business challenges organizations are dealing with, duplicative content creation is the top challenge for 43% of our respondents, while 42% say it is a poor ability to share content. Along with this, 39% indicate they have poor insight into their business operations. (Figure 3) The question here should

be one of why is there duplication of content? Where and how could it be created and shared from a single source, and how do you monitor its activities to gain better insight? For example, who creates it, who uses it, where is it accessed from, and how is it used?

Figure 3: What business challenges are you facing in your day-to-day operations?

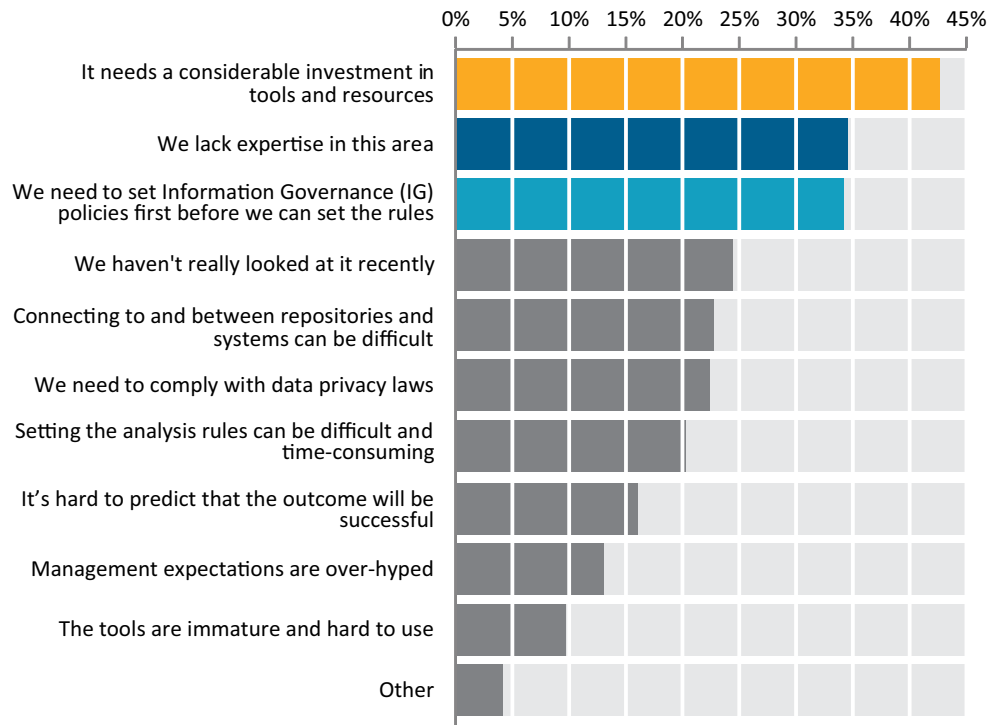


“The question here should be one of why is there duplication of content? Where and how could it be created and shared from a single source, and how do you monitor its activities to gain better insight?”

When we asked about the top three challenges and issues related to the use of content analytics (CA) and any CA projects, 43% see considerable investment as a challenge, with 35% citing a lack of expertise needed to make it all happen. For 34% of our respondents, information governance (IG) is seen as the first step before implementing CA practices and technologies. (Figure 4)

While it may be surprising to some that IG has taken precedent over technology, in many cases, this is a key to success, in that technology alone, while it can bring benefit, is merely a tool and greater benefit is gained when there is a solid information management ecosystem and infrastructure in place that allows maximum use of technology. Automating a business process helps streamline, but when it is based on business rules, it further enhances operations through automation and extends decision-making capabilities.

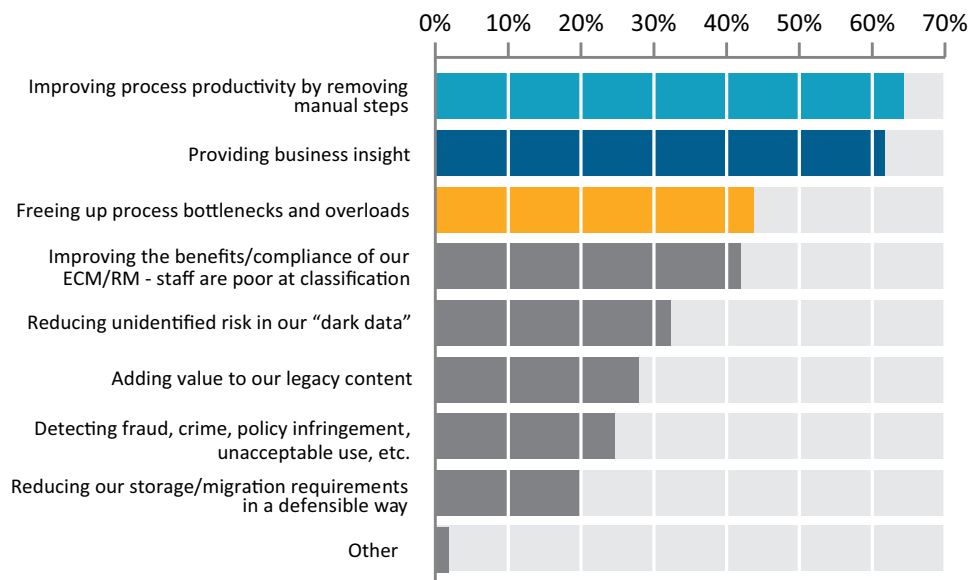
Figure 4: What are the biggest issues for you with content analytics projects?



Drivers

We have seen the business challenges related to analytics use and projects, but what is driving them? What is it that is moving organizations to discuss, plan, and implement analytics project? For 64% of our respondents, it is process productivity and automation that is driving the need for content analytics with 44% seeking to free up bottlenecks and process overloads. When it comes to gaining better insight into their businesses, 62% of our respondents tell us this is what is driving their analytics projects. (Figure 5) It is clear that analytics is playing a role, and whether you want to gain insight or improve operations there is a connection between these that will improve all of this provided you have a clear focus on the overall business problem and objective for analytics.

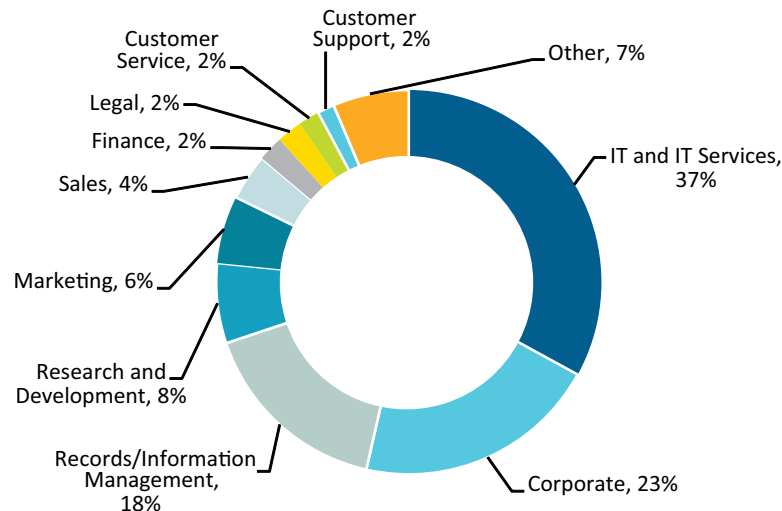
Figure 5: What would be the biggest drivers for content analytics in your organization?



The reason behind analytics projects and who is driving them are often based on perception and organizational protocol. In many cases, the business organization identifies the need and hands the project over to IT. This is true for 37% of our respondents who indicate that IT and IT services are driving their analytics projects followed by corporate (23%) and records/information management at 18%. (Figure 6)

This could reflect the perceptions uncovered earlier that content analytics are tool intensive and therefore seen as a technology initiative more so than a business initiative. Though they should be working hand-in-hand to resolve business problems and improve operations.

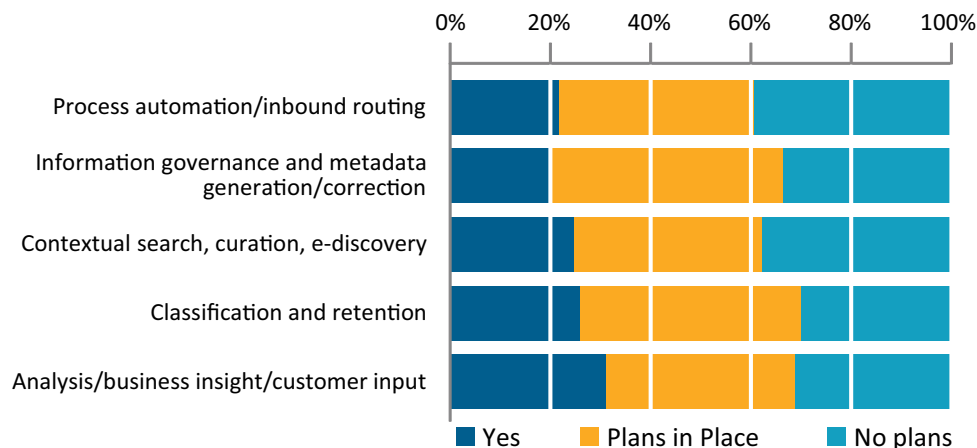
Figure 6: Which department is driving your analytics projects?



Use

The one question that many ask is related to how analytics is being used within an organization. When we asked this question 31% of our respondents cited current use of content analytics for business insight and customer input. Forty-six percent of our respondents indicate plans to use analytics for information governance, metadata generation and metadata correction. (Figure 7) Ideally, these would be part of a larger discussion that addresses metadata, governance, and the resulting benefit of gaining greater insight as a result of the way information is organized and managed.

Figure 7: Are you using content analytics for any of the following?

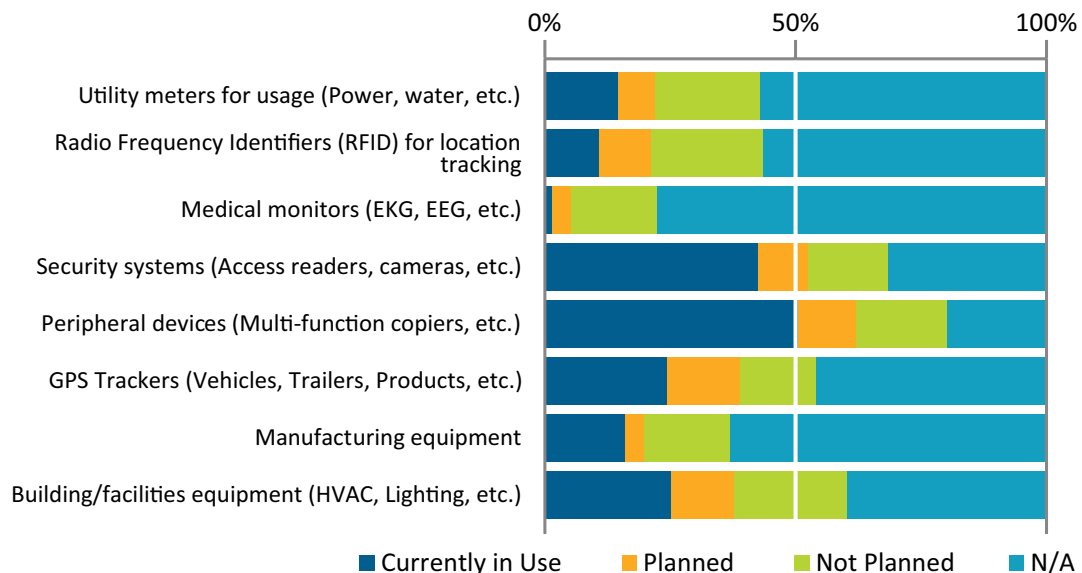


Ideally, a larger discussion that addresses metadata, governance, and the resulting benefit of gaining greater insight as a result of the way information is organized and managed would be all-inclusive.

As we know, information and data is coming into business organizations from all types of devices and in all types of formats. In fact, when you look at the broader spectrum of the Internet-of-Things, the source of information extends to remotely connected devices that include security systems, health monitors, and more. When we asked our respondents about capture from remote devices, 51% show they capture from peripheral devices like multi-function copiers, etc. For 43%, data is being captured from security systems that include connected access pads and cameras, while 25% say they are capturing information from facilities equipment like HVAC systems, lighting, and more. (Figure 8)

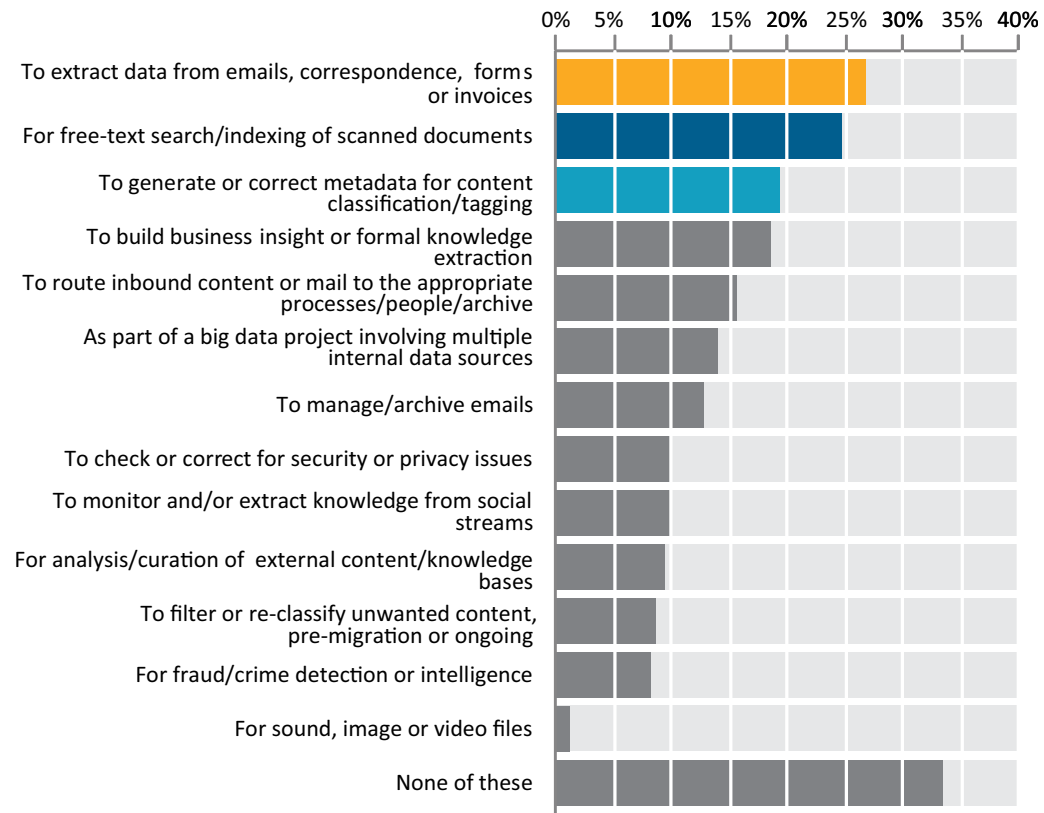
The point being that in our world today, information capture must be viewed through a multi-channel lens that spans beyond traditional documents, spread sheets, and presentations to any device or social media outlet where relevant information is created and accessible for analysis.

Figure 8: Do you capture information from remote connected devices?



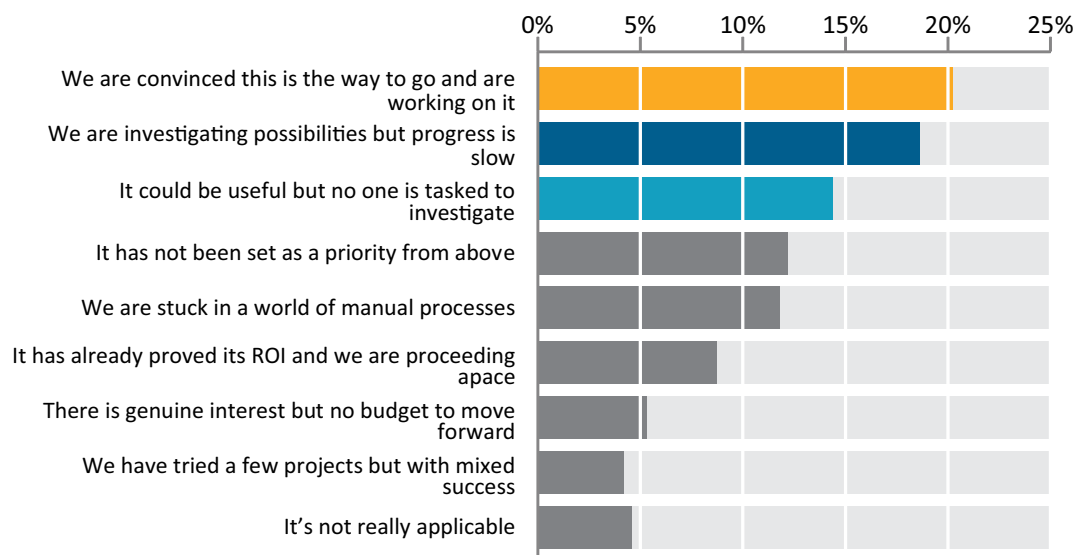
To a degree, we could say that monitoring a device, like a utility meter, is monitoring structured data. We know what it is, where it comes from, and have an expectation of what to do with it when we receive it. So what about content and information like emails, inbound correspondence and other varieties considered unstructured in nature? When we asked to identify the top three uses of content analytics on unstructured content, 27% of respondents say their organizations are extracting data from emails, correspondence, forms, etc. Metadata correction and classification are in use by 19% while 25% are using analytics for free text search of scanned documents, signaling the need for improved findability combined with more robust and in-depth search capabilities. (Figure 9)

Figure 9: Are you currently using content analytics on unstructured content in any of the following ways?



As we see, there is movement by business organizations to embrace the use of analytics for various reasons. The real question is how well are they really doing in their efforts to move their projects forward? Twenty percent of our respondents say their organizations view analytics as the way to go and they are proactively working on it. For 19%, investigation is slowly underway, and 14% agree it is useful, but there is no individual or group yet assigned to explore the possibilities for their organizations. (Figure 10) So while there is interest, a sense of value, and a desire, this brings us back to the perception that analytics requires resources, skills, and expertise that may be lacking.

Figure 10: How would you best describe current progress in your organization towards the use of content analytics?



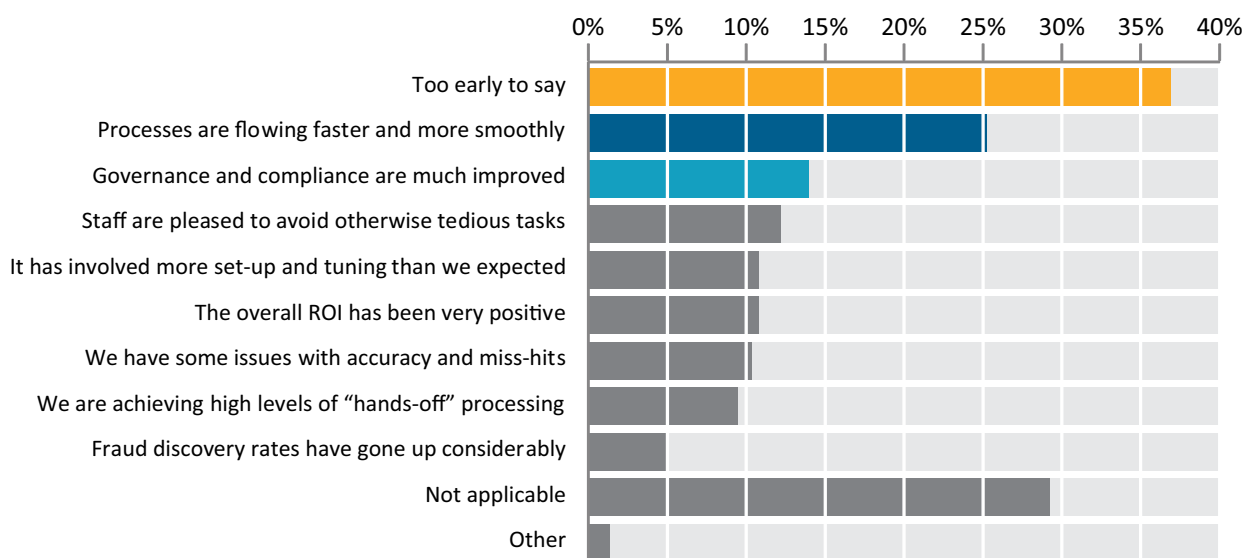


Inbound and Processes

Before anything can be analyzed, it must first be captured and brought into our business operations and processes. The best way to capture information and a direction many organizations are taking, is to capture that information as early as possible in a process, at first touch point. This is also the best time to identify, analyze and act upon the captured information.

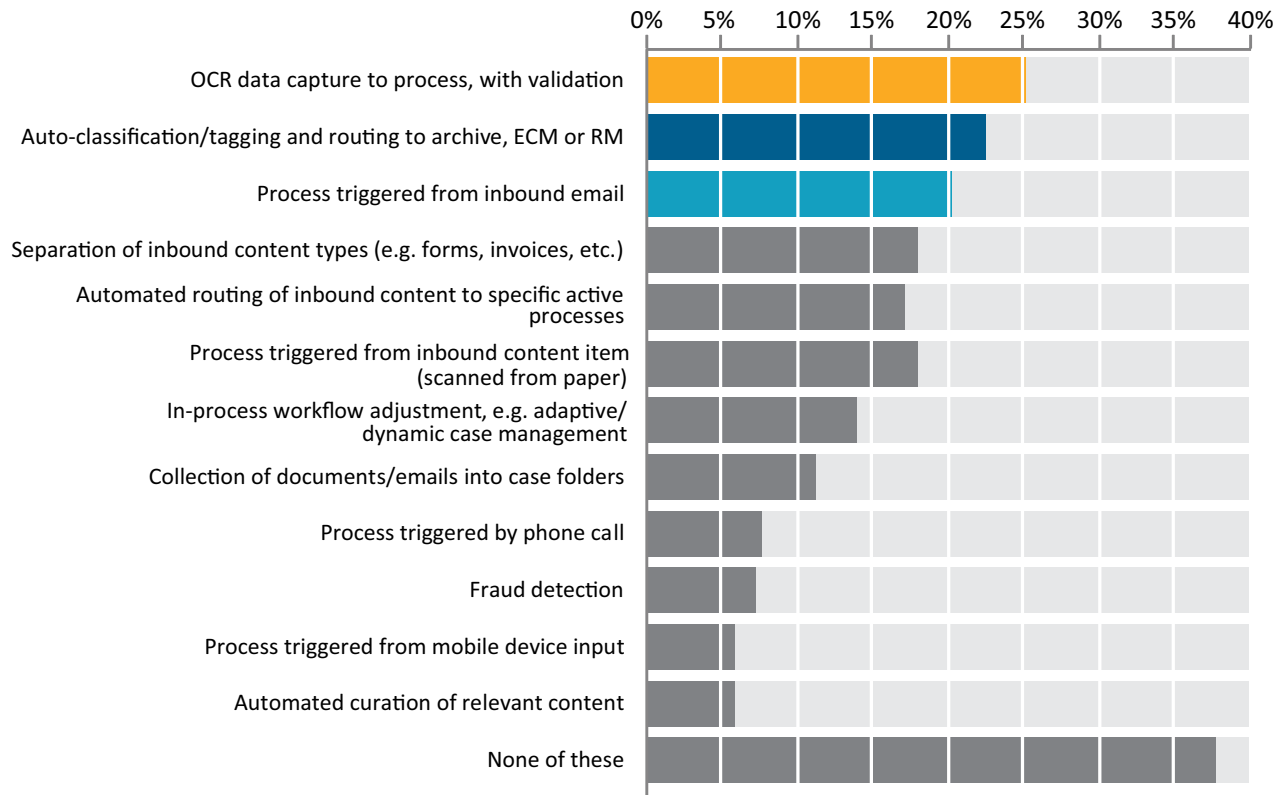
When it comes to inbound analytics, a quarter of our respondents say that their processes are flowing faster and more smoothly as a result of their analytics projects, while 14% are seeing improvement in governance and compliance with nearly that number citing their staff are pleased that they can now avoid what are considered to be tedious tasks, which for many is classifying, tagging, and storing inbound information and an indication that auto-classification is in use. (Figure 11)

Figure 11: How would you describe the success of your inbound analytics projects?



So what is it that these organizations are doing with their inbound content when they apply the use of content analytics? Data extraction using OCR for the purpose of capture to process with validation is in use by 25% of our respondents, while 22% cite auto-classification, tagging and route to archive is the direction for 22% with 20% saying they are triggering processes based on inbound content. (Figure 12) The message here being one of applying content analytics to inbound content with the goal of improving operational efficiency, streamlining processes, and automating the capture of inbound business information.

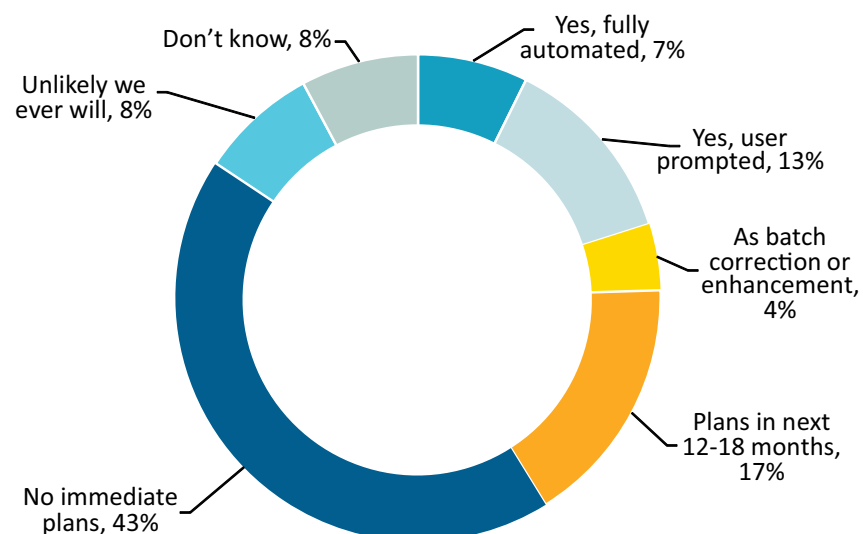
Figure 12: Are you using content analytics for any of these inbound content functions?



A common turn in the discussion of inbound content is toward email. While many organizations still choose to ignore it for the most part, there is a great opportunity to capture, identify and classify inbound email automatically, ensuring it is managed and maintained as a corporate information asset, which could mean it is a business record.

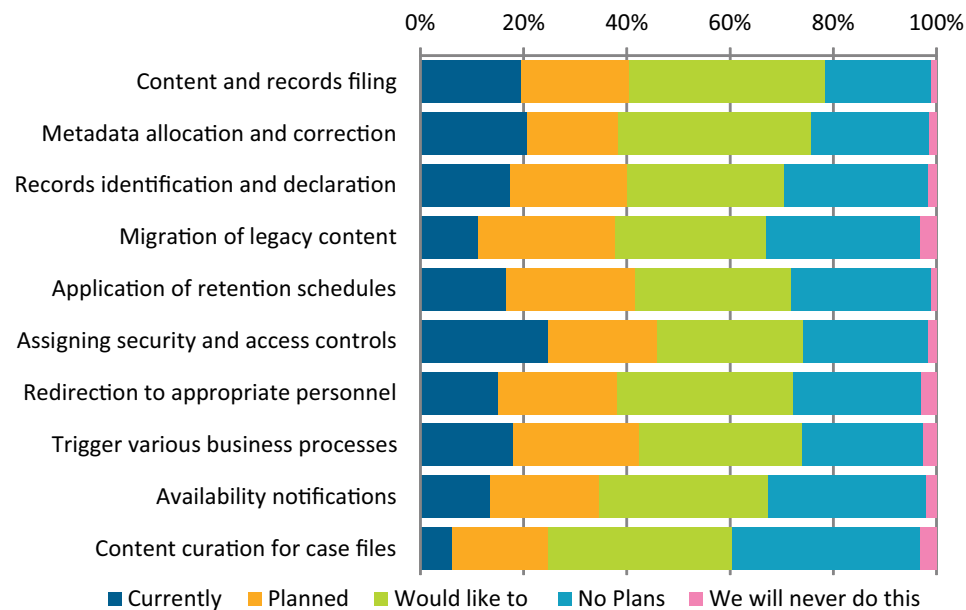
When asked about their handling of inbound emails using auto-classification, 7% of respondents say they are fully automated in this respect with an additional 13% using user prompted auto-classification. Looking ahead over the next twelve to eighteen months, 17% of our respondents say that auto-classification is in their plans. (Figure 13)

Figure 13: Are you using auto-classification for filing or archiving inbound emails?



While auto-classification of email can deliver great benefit and efficiency, the opportunity does not end there. For example, 25% of our respondents say that auto-classification is being used to assist with the assignment of security and access controls, metadata allocation and correction (21%) and 27% are planning to use auto-classification for their migration of legacy content. (Figure 14) These are all prime examples of looking at business operations, identifying issues and opportunities, then applying the technology to address the issues and take advantage of the opportunities.

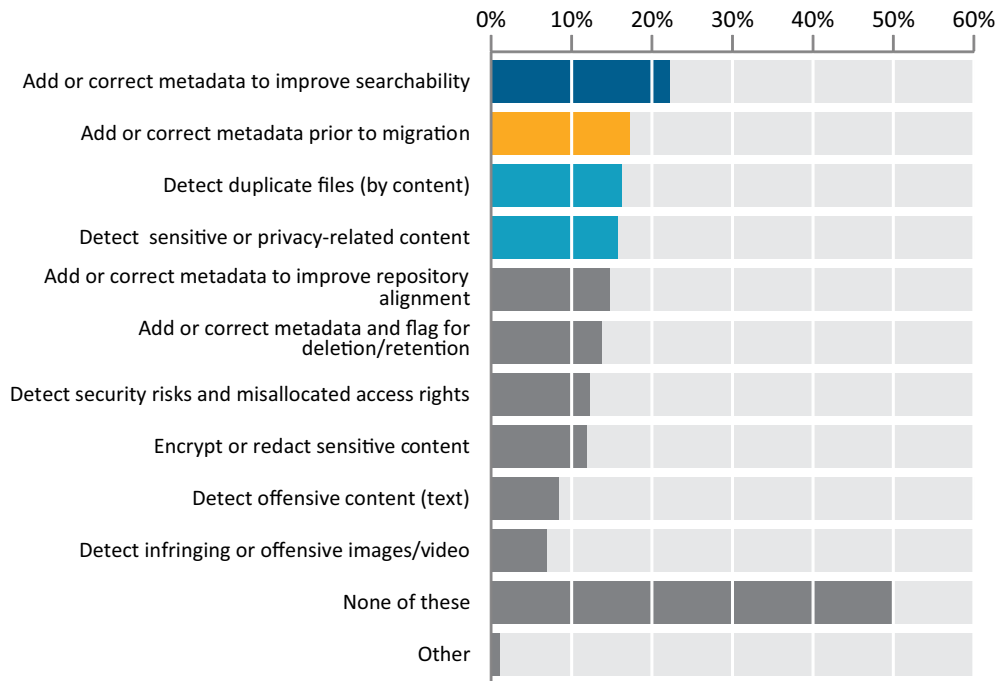
Figure 14: How would you describe your organization's use of auto-classification to assist staff with the following?



Organizations should identify issues and opportunities for auto-classification, then apply the technology to address the issues and take advantage of the opportunities.

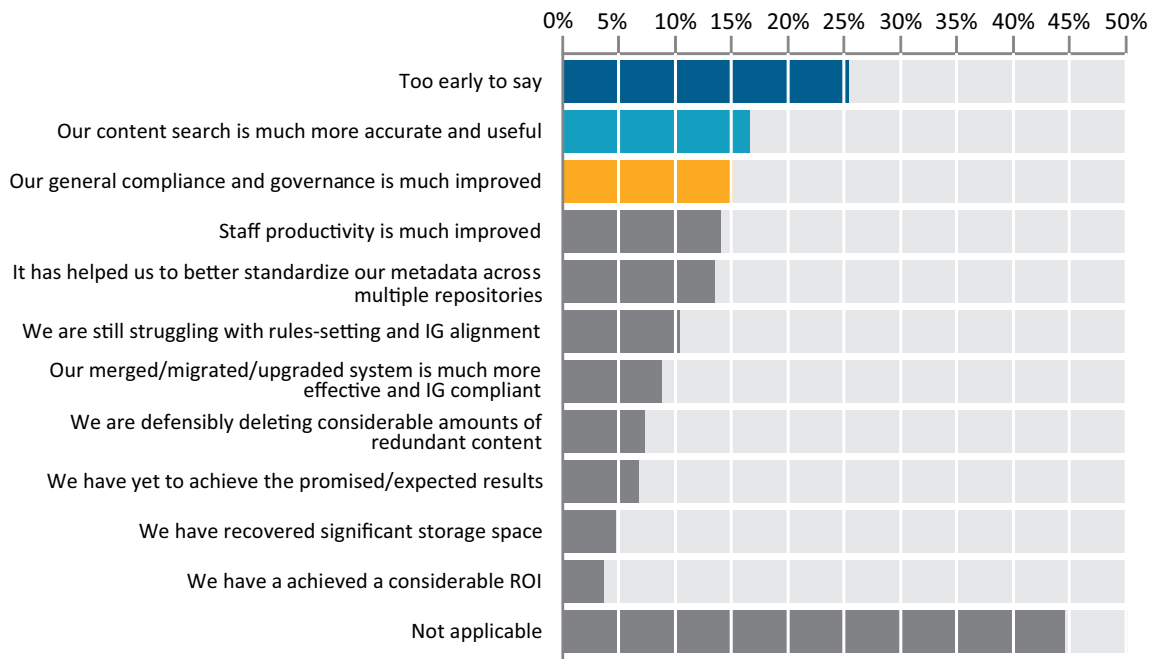
High transactional environments operating in a batch-processing mode also gain benefit from auto-classification by applying and correcting metadata for searchability as indicated by 22% of our respondents. Additionally, there is benefit to be gained by using auto-classification to add or correct metadata prior to migrations (17%) ensuring higher accuracy levels, and also to detect duplicate files for cleansing and sensitive information for protection as indicated by 16% of our respondents. (Figure 15)

Figure 15: Do you use automated or batch agents to perform any of the following functions?



This leads us to further investigate the results achieved in using auto-classification for metadata correction, which of course would be based on the objective of the project. While the majority say it is too early to tell (25%), seventeen percent of respondents cite that their search capabilities are more accurate and useful, while fifteen percent indicate improvements in compliance and governance. (Figure 16) The message is clear that results are being realized and that in order to measure success, there must be some metrics in place to measure against.

Figure 16: How would you describe the results of auto-classification use for metadata correction projects in your organization?



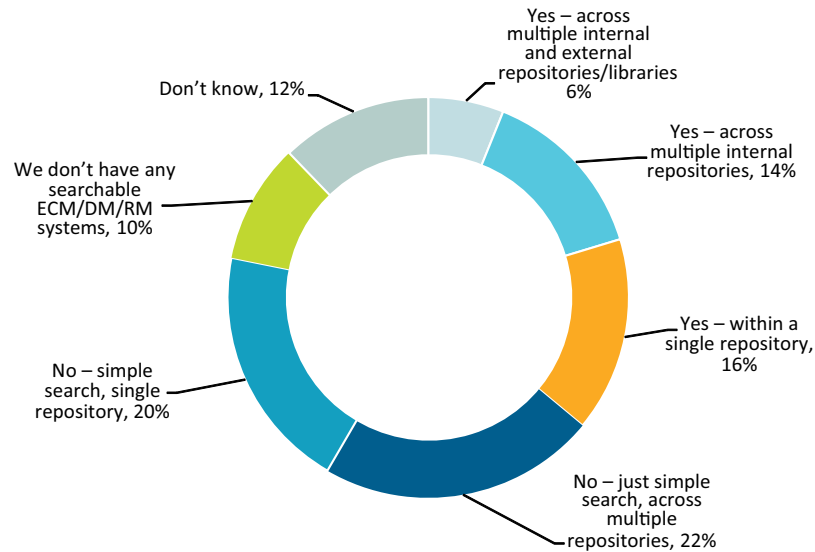


Search

Given that search accuracy and usefulness is seen as a measure of success, we now look deeper into search as a whole in relation to content analytics. As we know, there are many forms of search like keyword, free text, Boolean, and search with contextual analysis, something of great benefit in times of litigation discovery processes.

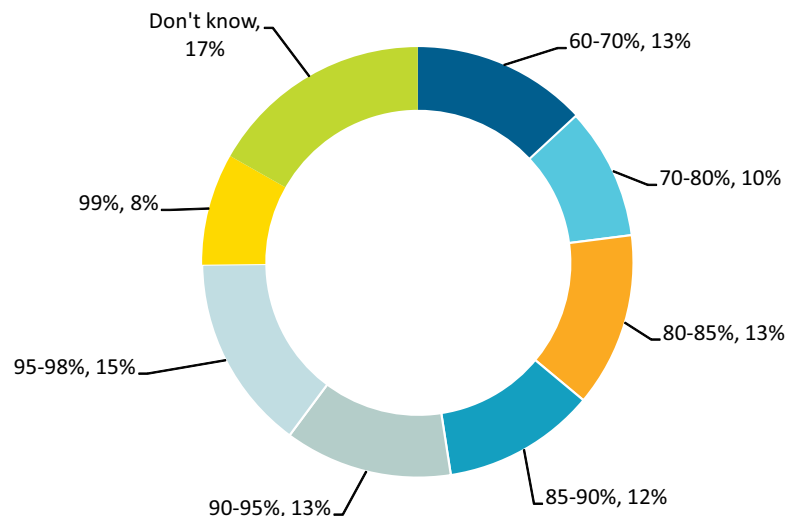
It is the latter that typically surfaces to the top of a discussion regarding the benefits of analytics in relation to search. When we asked about contextual search, only 6% of our respondents indicate the use of contextual search across multiple internal and external repositories with 14% indicating it is in place across multiple internal repositories and 16% within a single repository. (Figure 17)

Figure 17: Do you have a search capability that includes contextual analysis (as opposed to simple free text or keywords)?



Findability is of course tightly coupled with how accurately information is identified, classified, and stored, thus the reason more and more organizations are looking to technology and auto-classification methods to gain a level of accuracy, consistency, and quality across their information assets. When asked about the accuracy expectations for classification be it by human or machine, eight percent set a high bar to achieve at 99% accuracy, while fifteen percent set the bar of acceptability at 95-98% accuracy. (Figure 18) This of course indicates that the majority feel less than 95% accuracy rate is acceptable with 13% setting their bar at a 60-70% acceptable accuracy rate.

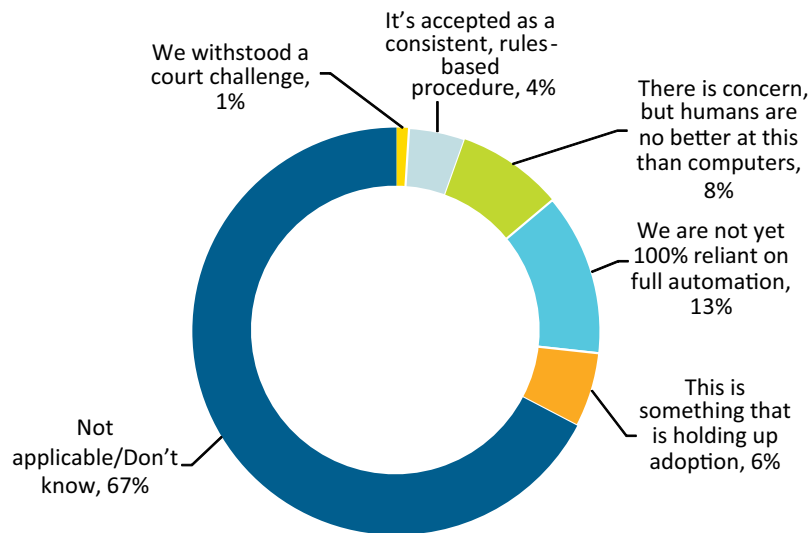
Figure 18: For emails and general content, what would you consider to be an acceptable accuracy of classification within your organization (human or automated)?



So if there is this range of acceptability from 60–99% accuracy in classifying information, one might ask the question of legal or compliance challenges in relation to the use of auto-classification of emails and other corporate records prior to deletion. In this regard, 1% of our respondents indicate their organization has in fact withstood a court challenge of this practice. While that may seem insignificant, it is an indicator that well planned, managed, and defensible practices are possible. For 4% of our respondents, auto-classification is viewed as a consistent; rules based procedure while 6% say it is holding up their adoption and implementation of auto-classification. (Figure 19)

Across many organizations, there is human reluctance, as with any new technology being introduced for the first time, which reinforces the need for cross-departmental discussion and governance regarding acceptable use and practices. This is not an IT alone initiative; it is an organizational initiative that requires cross-departmental input and acceptance.

Figure 19: Have you encountered any legal resistance or compliance questions regarding auto-classifying emails or other records pre-deletion?

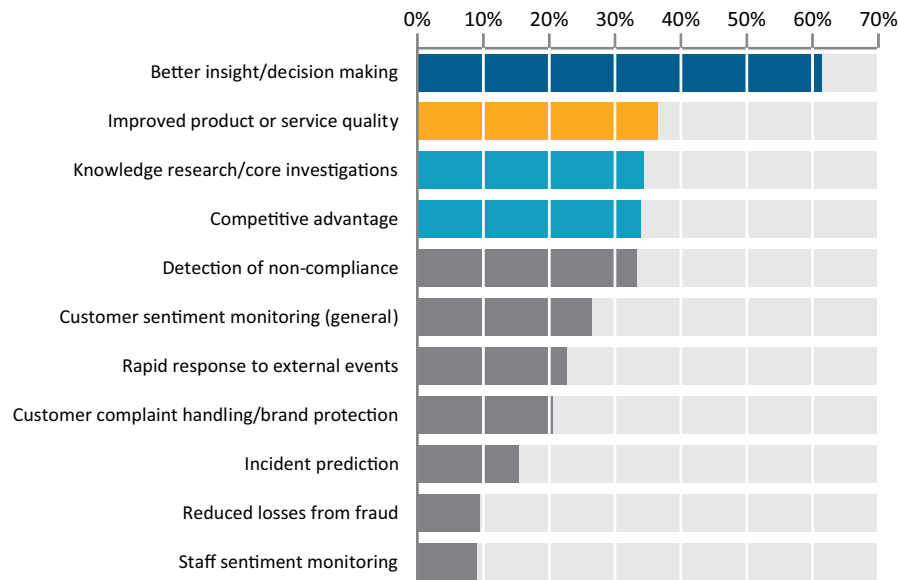


Business Insight

Being able to produce a clear vision of an organization's information assets and processes is imperative to improving efficiency, agility, and responsiveness. As cited by 61% of our respondents, the most useful of the top three business advantages of intelligence gained as the result of content analytics, is the provision of better business insight and decision making capabilities. This is followed by improvements in the quality of products and services (37%) and the help it provides in knowledge research and core investigations, and maintaining a competitive advantage (34% each) as shown in Figure 20.

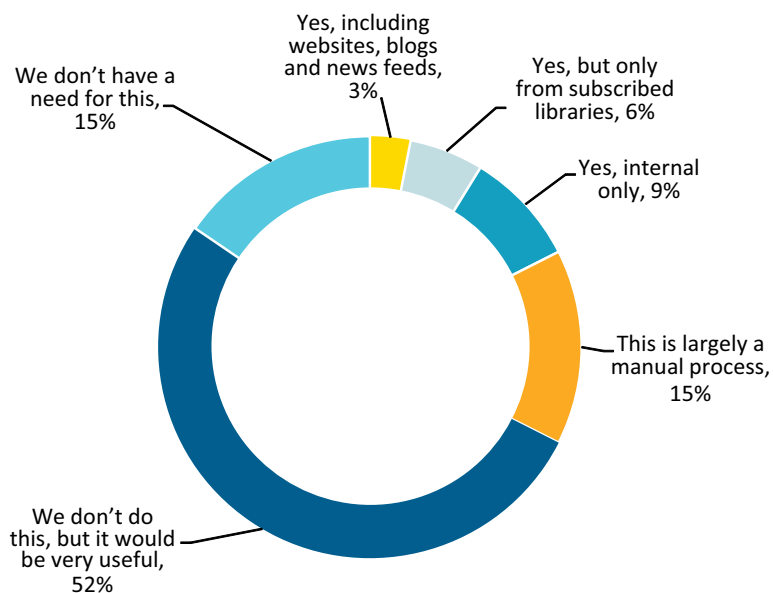
Of course one could say that all of these are intertwined in the sense that improved knowledge research and investigative capabilities result in gaining better insight for enhanced decision making to improve the quality of products and services, therefore maintaining a competitive advantage.

Figure 20: Which of the following business advantages would be the most useful to you based on intelligence derived from content analytics?



An additional point of recent and growing discussion related to analytics, is that of curation or more specifically, automated curation of content and information based on a set of parametric or profile values. In case management, this could be the case profile and any information entering the information ecosystem is automatically identified, classified, tagged, and presented as potential additions for that particular case. Fifty-two percent of our respondents see this as a useful tool while 9% indicate they are already doing this across internal resources and 6% with subscribed libraries. When looking at external resources for curation, 3% of our respondents indicate they are using curation with websites, blogs, and news feeds. (Figure 21)

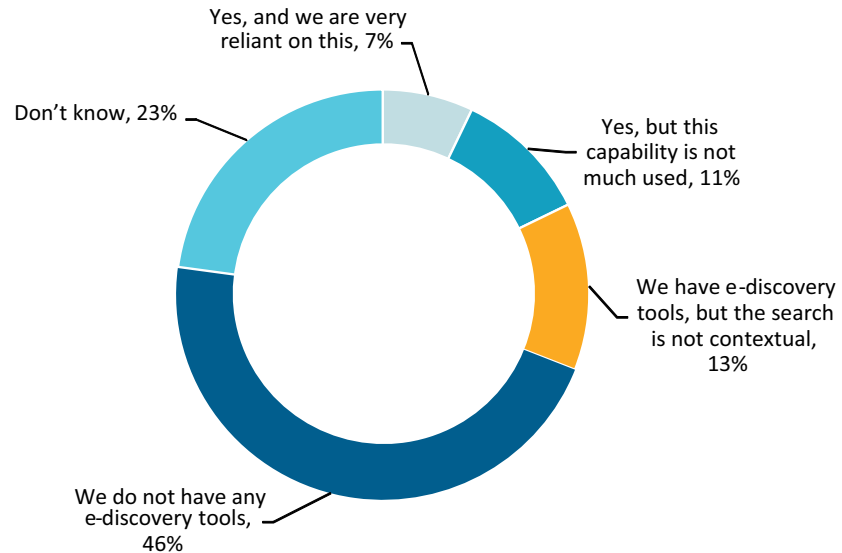
Figure 21: Do you use content curation to automatically create custom libraries and alerts from multiple external and internal sources?



Curation of information not only provides a collective view of information it also helps to simplify e-discovery efforts as a result of the collections created. In other words, it can help reduce the number of locations to search for requested information, and with the use of contextual analysis, present information in a more proper light. We asked about the use of e-discovery tools with contextual analysis capabilities, and find that 7% of our respondents are reliant on these.

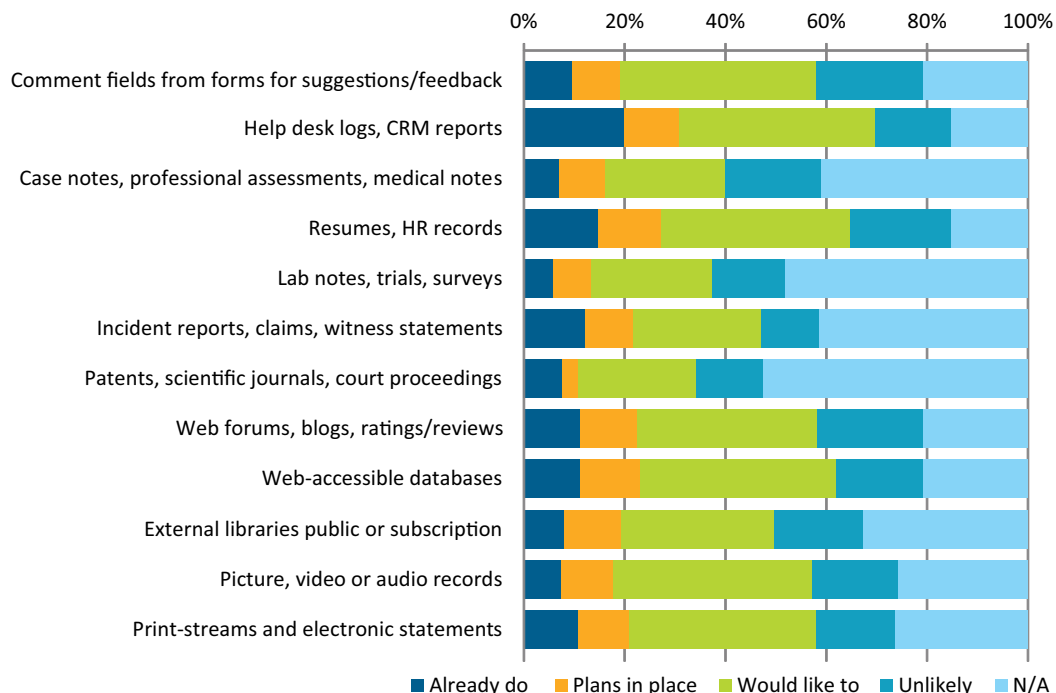
Eleven percent indicates they have e-discovery tools with contextual analysis but do not use it well and 13% have e-discovery tools without contextual analysis. (Figure 22)

Figure 22: Do you have e-discovery tool(s) with contextual analysis capability?



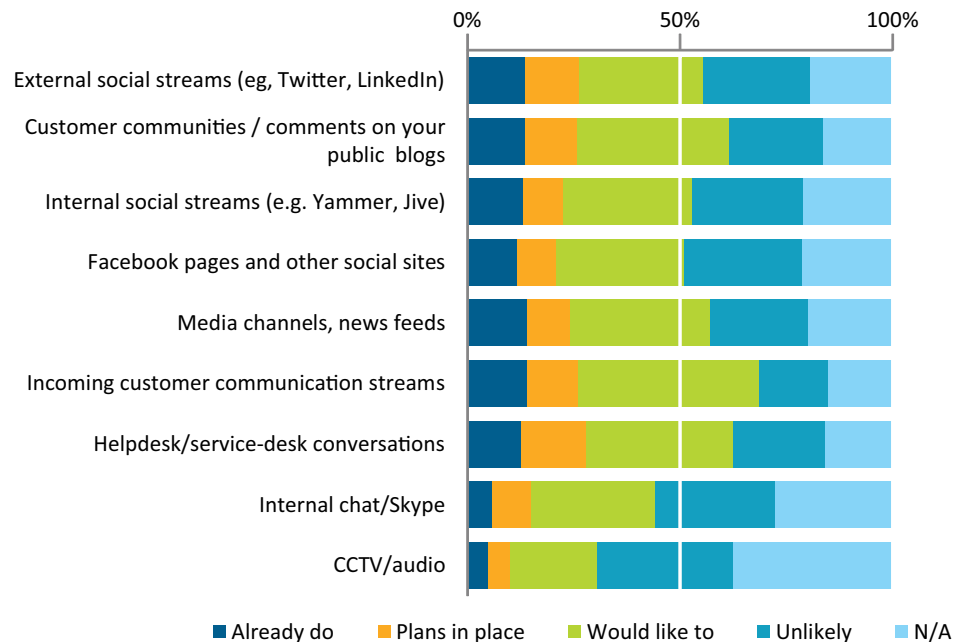
We discussed knowledge or intelligence extraction earlier for decision-making and business insight, but now we turn that attention to extraction from specific content types and to solving business problems. When we asked about the types of content being analyzed, we find that 20% of our respondents are analyzing their help desk logs and CRM reports, while 12% are analyzing incident reports, claims, and witness statements. In many cases, this type of analysis can be used to identify patterns, trends and anomalies that influence the actions and directions that need to be taken by the organization. Human Resources is the focus of 15% of our respondents who say they analyze resumes and employee records, most commonly to identify qualified candidates and support compliance with employment regulations. (Figure 23)

Figure 23. Have you considered analyzing any of the following document or content types to extract business intelligence or solve problems?



So if there is a need to analyze information, and the opportunity to automate that process based on business needs exists, one might think that organizations would line up to take advantage of that capability. Yet, only 14% of our respondents are using automated analysis on social streams, various communities, news feeds, and inbound communications. This is an opportunity missed, not to mention the potential advantages of being able to automatically monitor and analyze internal resources like helpdesk conversations, which is in the plans for 15% of our respondents. (Figure 24) While a large number of respondents feel automated analysis of various information sources would be beneficial, it is likely they feel unqualified to initiate a project, or have the perspective it will be too costly and time consuming.

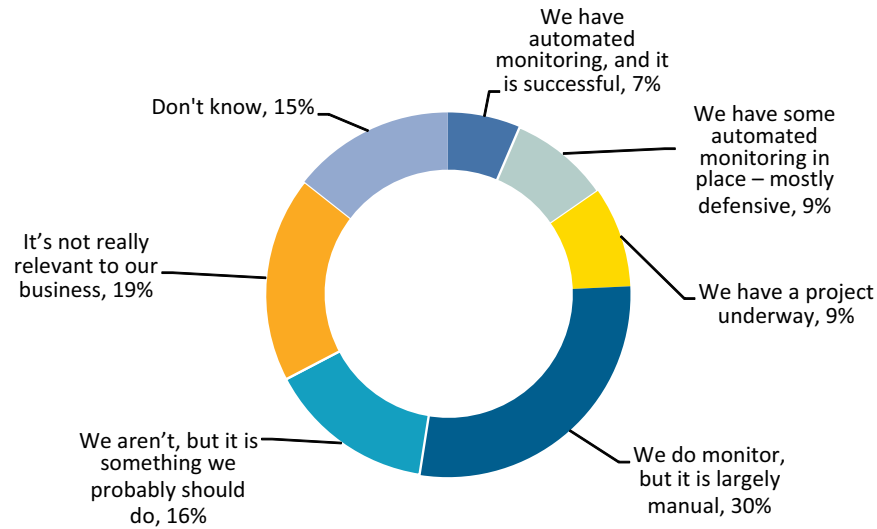
Figure 24: Have you considered automated analysis of any of the following to extract live or near-time business intelligence?



In today's fast paced world of communications, in particular social media, collecting business intelligence dictates the need to monitor and analyze these social outlets to gain insight into customer sentiments, trends, and expectations. Consider the transportation industry where a top tier client socializes how poor service is on a particular trip or day. The negative impact would be considerable when read by thousands of followers and the organization would want the situation rectified and the client experience turned into one of satisfaction.

When we explored the monitoring of social media, 7% say that are successfully doing automated monitoring so with 9% indicating this is done for defensive purposes. An additional 16% say they should be monitoring social sites. (Figure 25)

Figure 25: How are you monitoring external social streams (e.g. Twitter, LinkedIn, Facebook)?

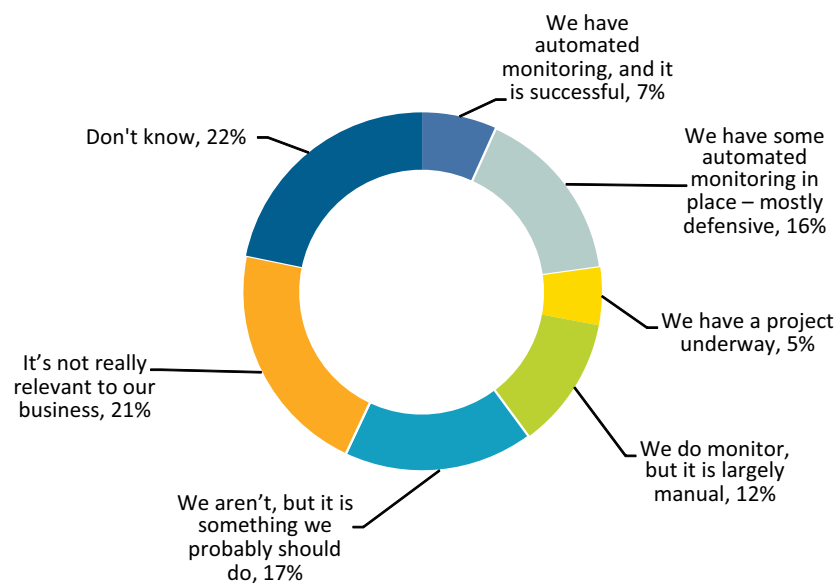


The need to monitor social media and external social streams is clear to many organizations, it is the method that seems to be in question with the concept of automated monitoring beginning to surface more steadily.

Social media is not the only monitoring that needs to be done in this age of the Internet-of-Things. For many organizations there are remotely connected devices feeding information back into the information ecosystem. For example, the facilities department monitors and regulates temperature based on remote device readings. In transportation, tracking devices monitor progress and location of trucks, trailers, and the goods they are carrying, and in healthcare, heart monitors and even glucose meters provide real-time information to Doctors and Nurses. In the utilities sector, water and power meters no longer require human verification, as they too deliver digital feedback to the parent company and appropriate systems.

With this in mind, we asked how organizations are monitoring these remotely connected devices. Similar to monitoring social media, 7% indicate they have successful automated monitoring in place for remote devices. In this case, 16%, as opposed to the 9% for social media, indicate they do this for defensive purposes. (Figure 26)

Figure 26: How are you monitoring remotely connected devices (Monitors, meters, access pads, cameras, etc.)?

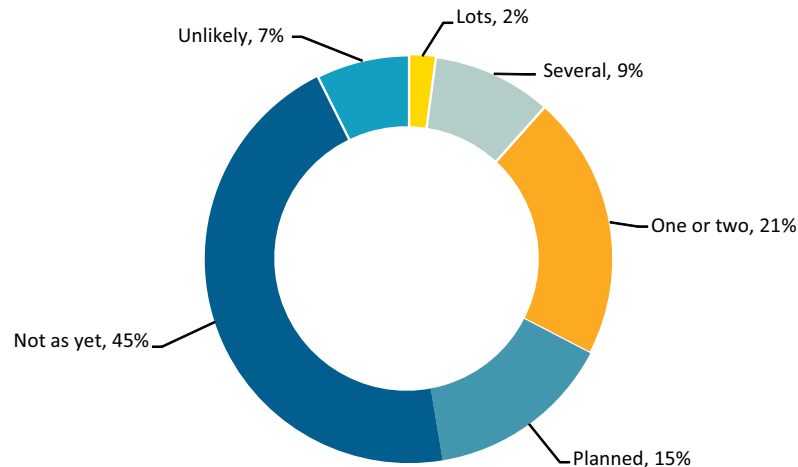




Applications

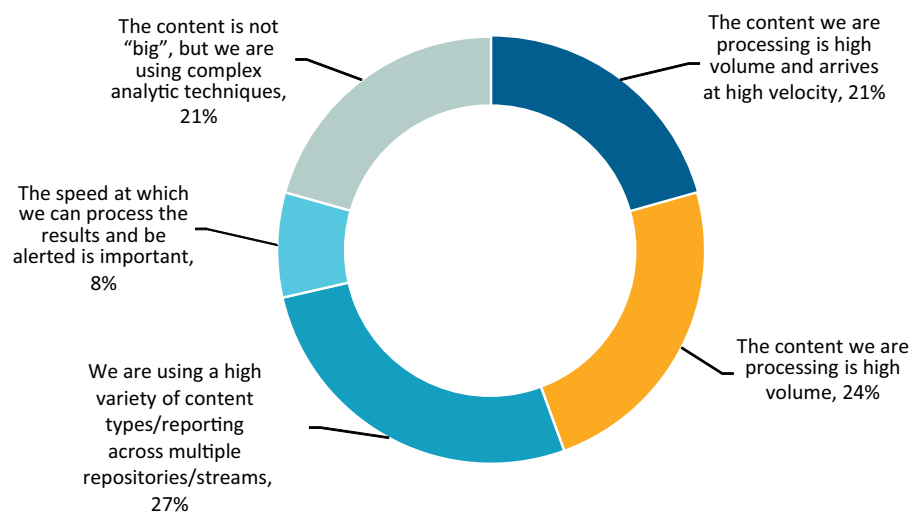
We know there is investment being made in content analytics and that systems are being bought for this purpose, the questions is to what extent? When we asked about the number of systems in place, 32% of our respondents indicate they have more than one application in place with 11% indicating several or “lots”. Additionally, 15% are planning for it. (Figure 27)

Figure 27: Do you currently have one or more active “big content” or “content analytics” applications making use of unstructured or textual data for business insight?



It stands to reason that if business organizations have several applications in place, one would investigate the content projects to uncover where the focus lies and how analytics applications are being used. In the case of 27% of our respondents, content projects span a wide variety of content types and multiple repositories while 21% say they do not consider their content to be “big”, but that they are using complex analytics techniques to analyze their content assets. (Figure 28)

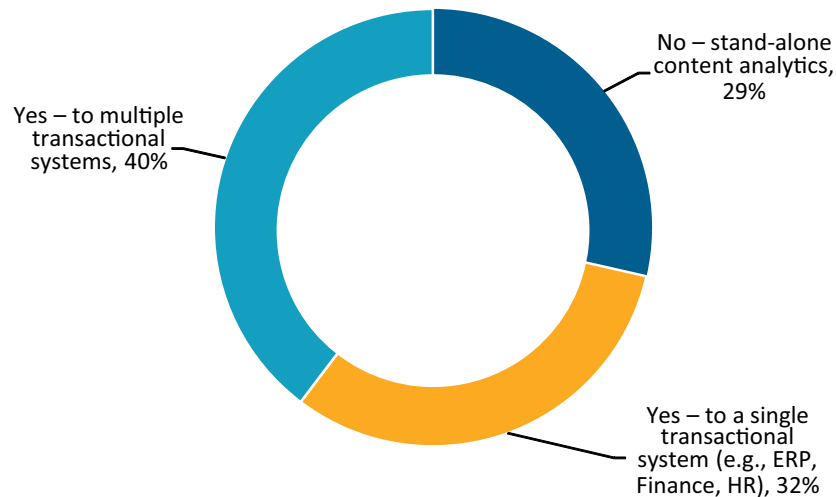
Figure 28: How would you characterize the content that you are using for your big content project?



Analysis, while important, is only part of the overall discussion. What you do with the data, and how you bring it all together is also essential to success. It cannot and should not be siloed, and drives more benefit when linked to other data and systems. When we asked about linkage to other transactional or

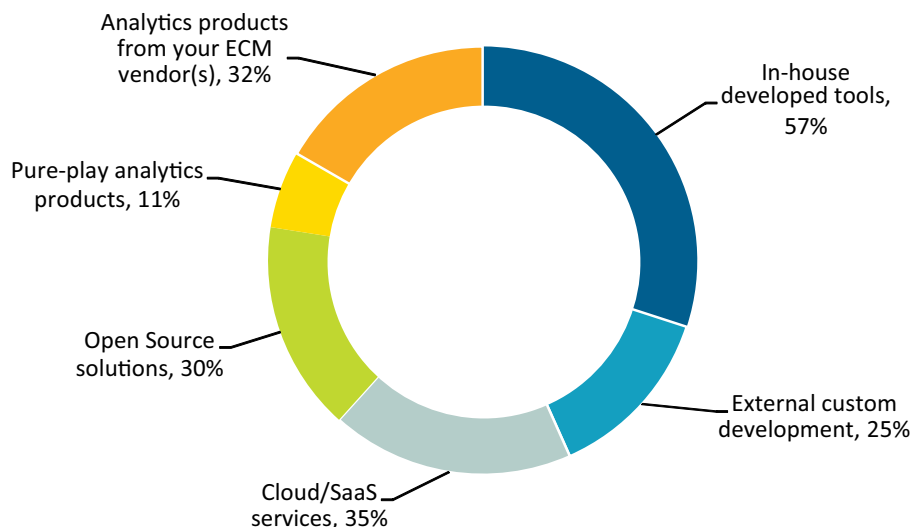
structured data, 40% of our respondents say their analytics are tied to multiple transactional systems with 32% indicating ties to a singular system like ERP, Finance, or HR. (Figure 29)

Figure 29: Does/do your big content project(s) involve a link to transactional or structured data?



Keeping this in mind, the next element to investigate is one of the tools being used. According to 57% of our respondents, in-house developed tools are the preference while 35% say they use cloud services and 32% use solutions purchased from their ECM provider. (Figure 30) Given the number of in-house identified here, this could reflect a lack of understanding as to what is available on the market or a general reluctance to fully commit to a third party offering.

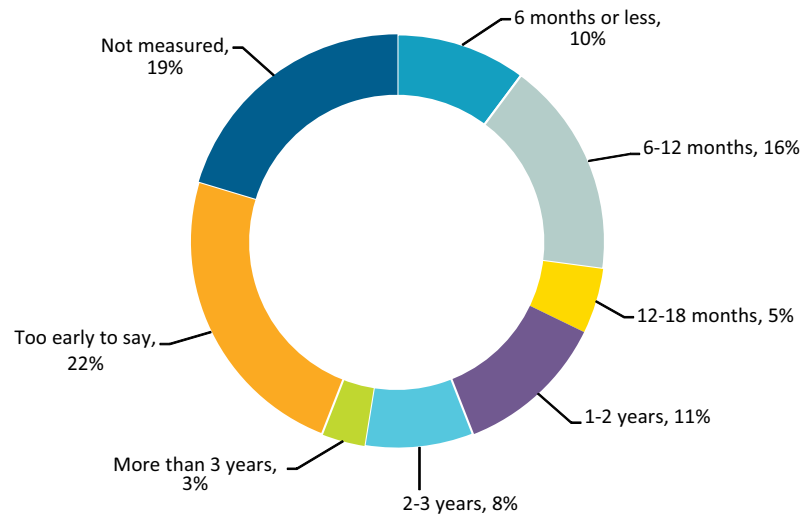
Figure 30: Which of the following are you using for your big content project(s)?



So the tools are in place, data is being extracted, to some level the data is linked to other systems, but what does it mean in terms of return-on-investment (ROI)? Once the effort and mechanisms are in place, how quickly can a return be realized – or should it? Our respondents tell us that 26% realized ROI within twelve months, while 10% of those say it was within six months that they began to see ROI. (Figure 31) Another 5% said ROI was realized between 12-18 months. The point is that provided goals are set, metrics are determined, and you can measure results, in this case, according to 31% of respondents,

expect to see ROI within eighteen months. What is surprising is that 19% of organizations are not measuring their ROI, which then begs the question of how they determine if a project is a success or failure?

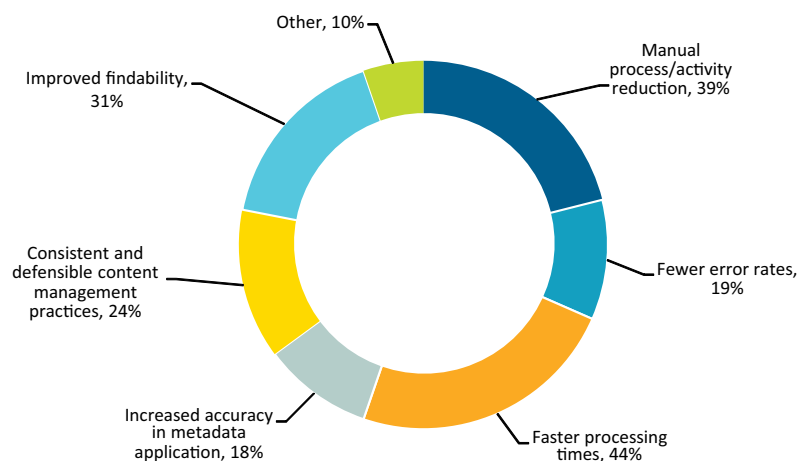
Figure 31: How would you rate the ROI from your big content project(s)?



ROI can be achieved within 18 months, provided goals are set, metrics determined measurements taken to assess how well a project is delivering and if corrections are needed to achieve the goals.

So if ROI is being realized within 18 months or less, what are the measurements of success being used? Our respondents tell us that the top two elements they are measuring are reductions in manual processes and activities (39%), and faster processing times (44%). This seems to be a logical view since it stands to reason that if manual processes and activities are eliminated or minimized, and replaced with automated processes, processing times should improve in both speed and consistency. (Figure 32)

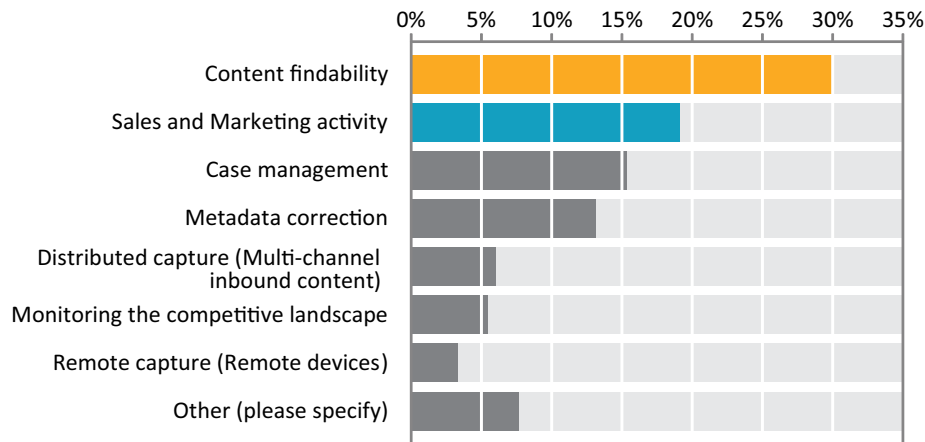
Figure 32: How are you measuring the ROI of your analytics projects?



Diving deeper into how measurements are determined, we asked about the focus for the initial anchor analytics projects. Thirty percent of our respondents say their focus is on content findability with 19% focusing on sales and marketing activities. Fifteen percent have focused on case management activities. (Figure 33) The message here is one of focus. There must be a specific goal and focus in mind in order to properly determine

project success and ROI. Whether that focus is sales and marketing, case management, or resume processing, there must be a target goal and related business problem in mind, for the project as technology for the sake of technology use often fails to meet expectations.

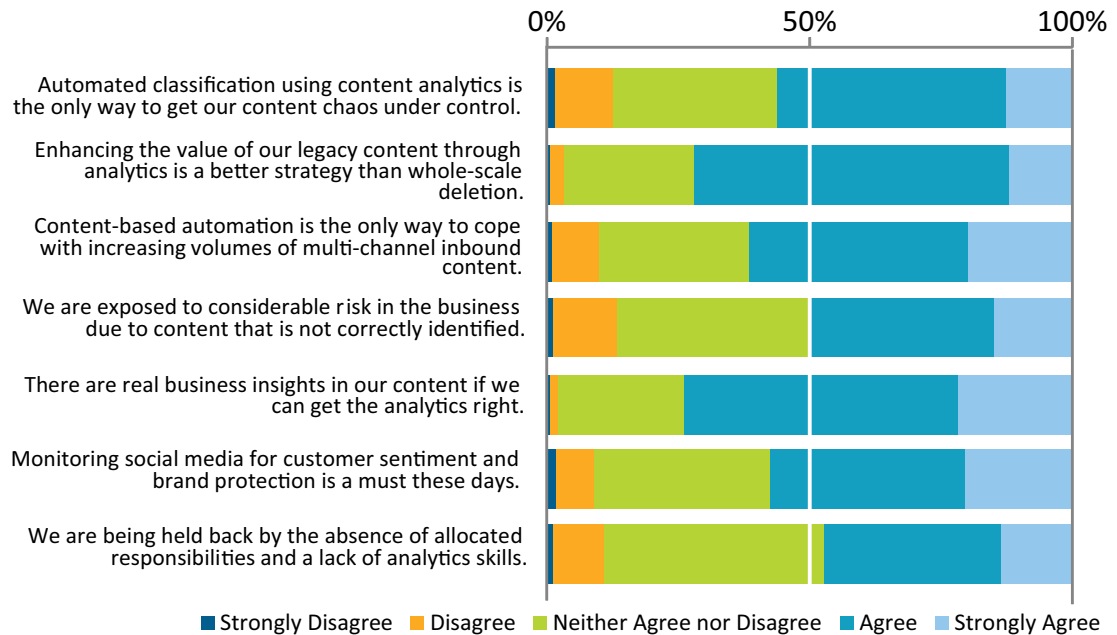
Figure 33: Where is your focus for your initial anchor project?



Opinions and Spend

One's perceptions of a product or service influences whether or not a purchase will occur. In the same way you will or will not buy a product or service in your personal life, organizational perceptions influence their purchase decisions. When we asked about the perceptions of analytics, 52% agree and 22% strongly agree that there is real business insight to be gained if they get their analytics right. The indication being there is a definite sense among the community that there is a perceived benefit to analytics use. Figure 34)

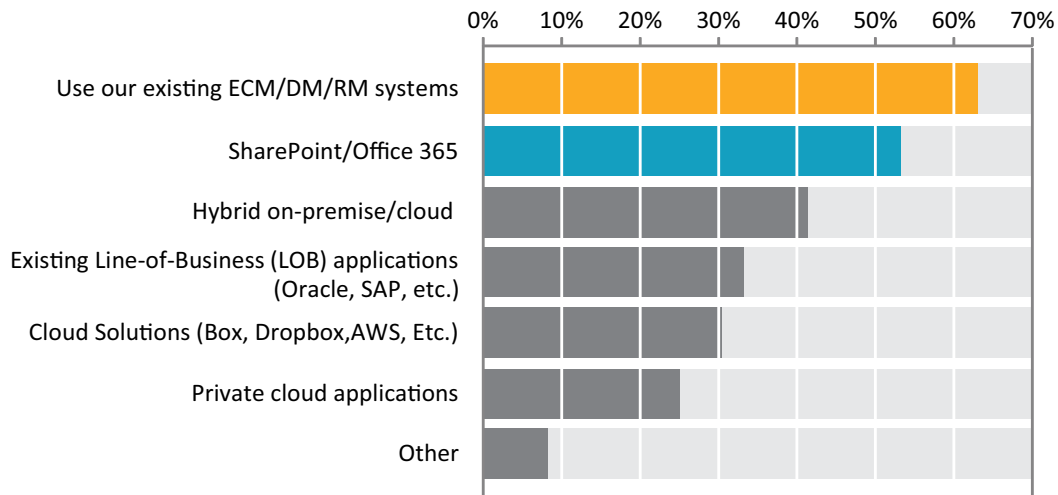
Figure 34: How do you feel about the following statements?



Perception drives purchase decisions and adoption. It is important to know and understand the user perceptions about products and services for projects to succeed.

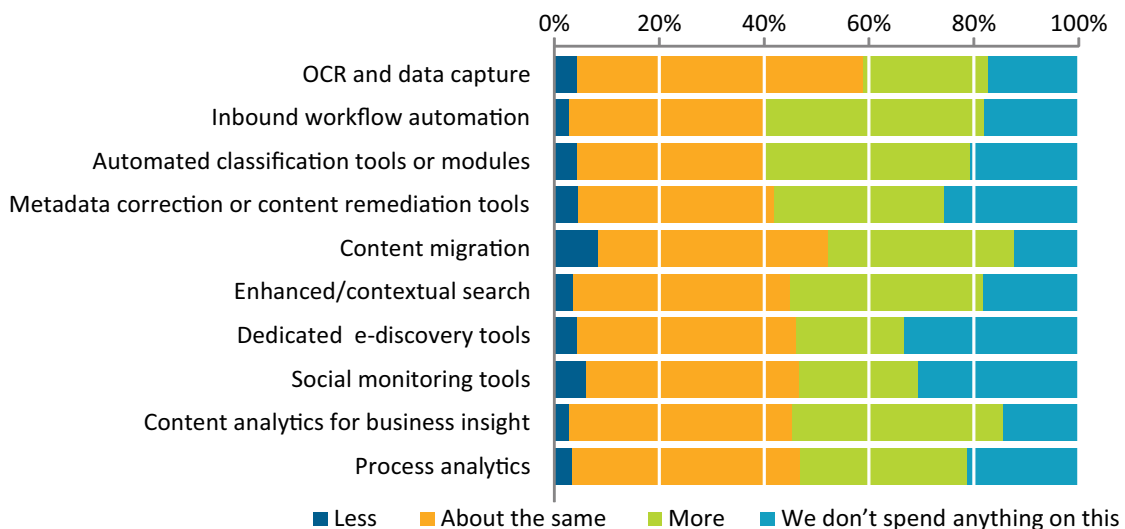
Given there is perceived value in analytics, and recognizing there is exponential growth in the volumes of information available and being captured, we asked for the top picks of how this growing mass of information will be managed going forward. Sixty-three percent of our respondents say they will rely on their existing ECM/DM/RM systems while 53% indicate they will turn to SharePoint and Office 365. Use of a combination of cloud and on-premise systems – a hybrid – is in the mix for 41% of our respondents. (Figure 35)

Figure 35: In your opinion, how will your organization manage their increasing volumes of information going forward?



So what does this all mean when it comes to where money and resources will be spent over the next 12 months? Our study finds that there will be increased focus and spending by 42% of our respondents on inbound workflow automation with 40% indicating they will increase spending on content analytics for the purpose of gaining better business insight. Additionally, 39% say they will increase their spending and efforts on auto-classification. (Figure 36) There is definite opportunity for growth and technology adoption in relation to the use of analytics for automation and insight provided there is clear definition of project goals.

Figure 36: How do you think your organization's spending on the following products, applications or modules in the next 12 months will compare with what was actually spent in the last 12 months?





Conclusion and Recommendations

The time has come for businesses of all sizes and types to delve deeper into their business operations, gather and analyze more detailed information about their customers, and utilize their information assets more intelligently. This requires planning, focus, and commitment to continuously improve upon what is in place. This requires information and process analytics in ways once dreamed of and today is a reality.

It is also a time to view the enterprise more holistically, with an eye on types of information to be collected, where it comes from - the Internet-of-Things – and how it can be used beyond its original intent. For example, the information collected from healthcare devices not only provides data to the Doctor; it can also be used in aggregate to identify patterns or anomalies across patients. In similar fashion, the utility meters provide usage data, but can also serve to identify trends in different regions and can be used to develop and offer new products or services. When it comes to social media, analytics can identify potential issues arising based on customer comments, and also identify shifts in buying patterns.

In my view, the time has come to take off the blinders, look beyond traditional boundaries of business content and leverage business information more intelligently. Replication and duplication of information can be eliminated. Information identification, collection, classification, and analytics can be automated to the degree where based on set criteria, business decisions can be made, records managed, and processes initiated, without human oversight. Yes there is an investment to be made, and yes there is expertise required, but this was also true when computers first came into the business world.

Our research proves that it is very possible to move an organization forward using analytics to extract knowledge and automate business processes and activities. It also shows that organizations are taking this very seriously with trailblazers proving the theories, additional organizations becoming citizens of the growing analytics community and outlanders quickly realizing they are falling behind and could risk extinction.

I encourage you to ask these following recommendations and assess just how your organization can increase knowledge extraction, business insight, and automate processes based on analytics use.



Recommendations

- Identify a potential business process where analytics is or could be used today.
- Assess where the process slows down, what information is involved, and the sources of that information.
- Identify who is in charge of radical process review in that area, and seek endorsement for policies on analytics use.
- Ensure that existing processes are taking full advantage of OCR, data capture and integration with core enterprise systems.
- Position the capture process “right at the door” in order to capture as early in the process and as close to the first touch point as possible.
- Look beyond the corporate walls and traditional forms of information to include social media, and the Internet-of-Things as primary sources of information.
- Develop a strategy to leverage captured and analyzed information across multiple departments and for multiple purposes. While the data collected from posers meters is used for billing, it can also be used in product development. Security and access readers not only control access activity, the information gathered can be used as a preventative measure to identify potential threats of unauthorized access attempts.
- Establish a continuous improvement program that will periodically review and refine those changes you make now. When a project ends, it should be the beginning of an on-going process improvement practice that looks for ways to improve upon the foundation you have set and extend those capabilities to other departments within the organization.
- If you are unsure of where to begin or how to begin, seek professional assistance and/or training to help you set off on the right path. Look to your current suppliers and service providers for guidance. Turn to your professional associations and peers to find advice and training that will teach you best practices. It is better to take a step forward and learn, than to take no step and fall behind.



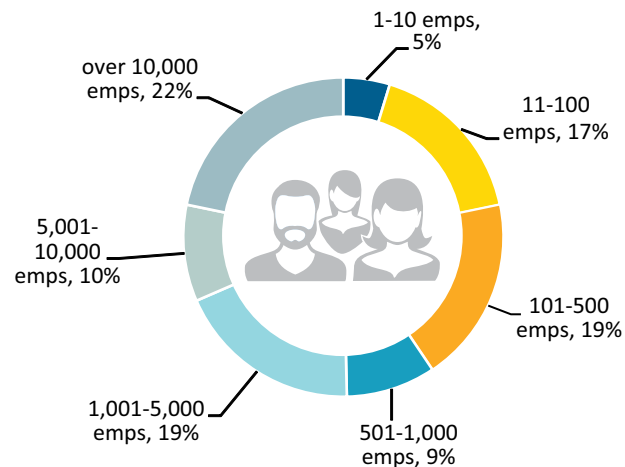
Appendix 1: Survey Demographics

Survey Background

276 individual members of the AIIM community during the months of September and October 2016 took the survey using a web-based tool. Invitations to take the survey were sent via email to a selection of the 195,000+ AIIM community members.

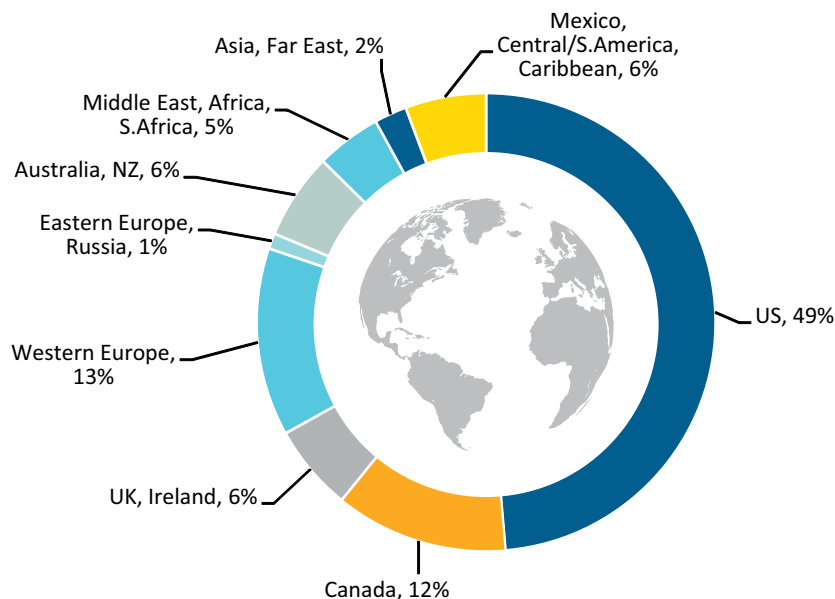
Organizational Size

AIIM survey respondents represent organizations of all sizes. Larger organizations over 5,000 employees represent 32%, with mid-sized organizations of 501 to 5,000 employees at 28%. Small-to-mid sized organizations with 1 to 500 employees representing the largest segment of survey takers at 41%.



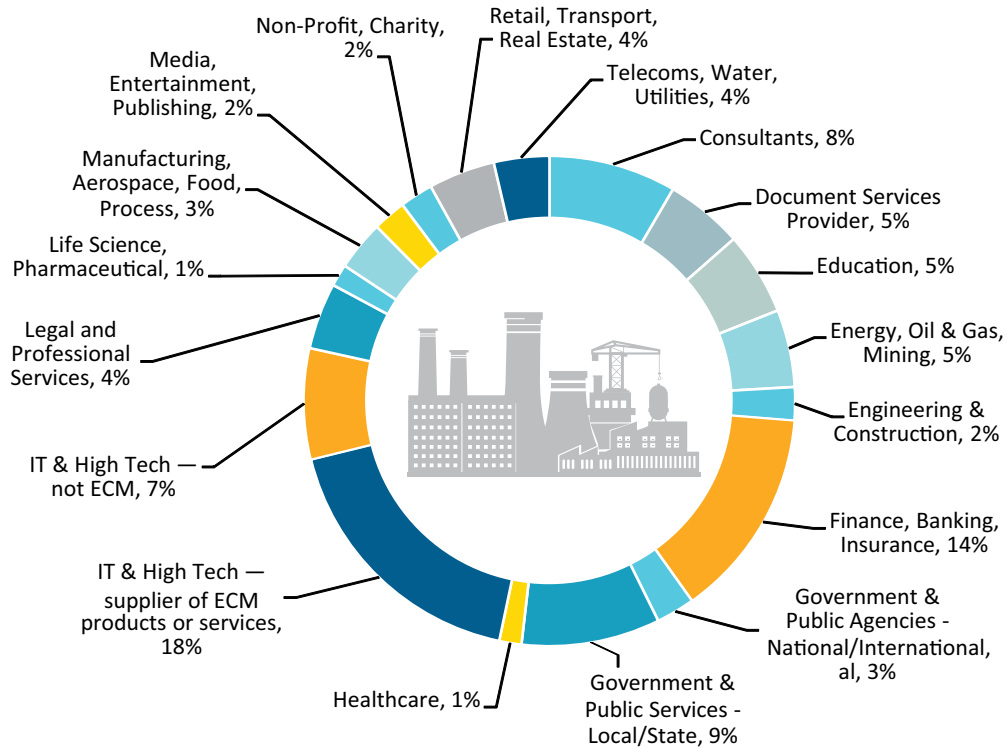
Geography

Sixty-one percent of the participants are based in North America, with 25% from EMEA-R, and 14% rest-of-world.



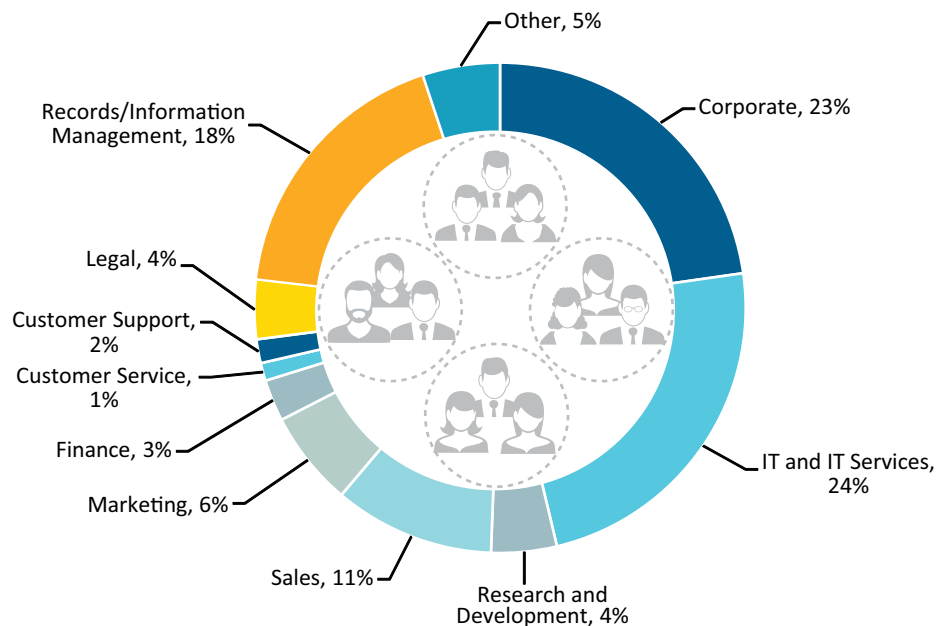
Industry Sector

Local and National Government together make up 12%, and Finance, Banking, and Insurance 14%, IT and hi-tech non-supplier 7%.



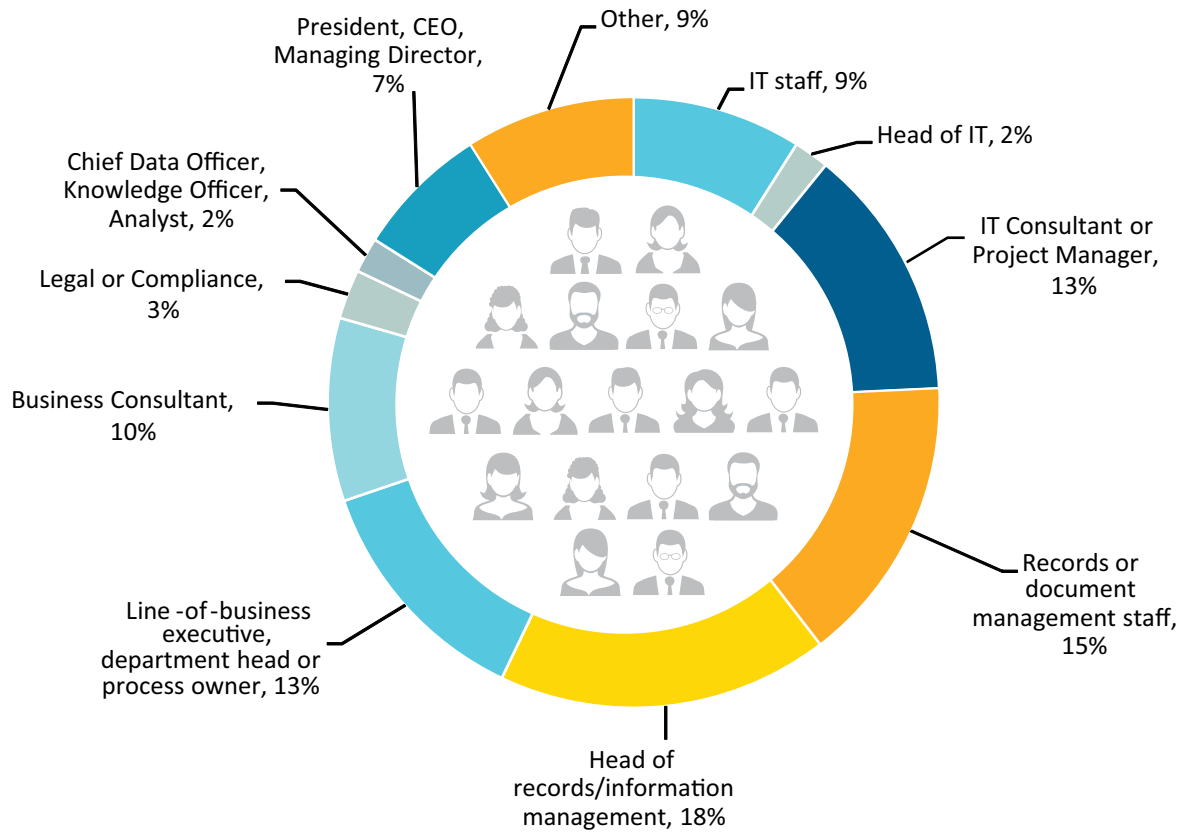
Departments

24% of departments represented are from IT/IT Services, 23% corporate, and 18% records and information management.



Job Roles

15% are records and information management staff, 18% heads of records and information management, 22% C-level Executive, President, CEO, and Line-of-Business Executives.





Appendix 2: Selective Comments

Do you have any general comments to make about your capture systems and mobile capture deployments? (Selective)

- It's a must to survive, we have just noticed and started.
- Need a playbook for best practices from start to ROI: way too many options and variables, and it isn't cheap.
- Our company is falling behind due to a lack of aggressive strategy in this area.
- Content analytics is a critical solution to improving our content understanding
- At a small law firm, one has to make do with the tools one has. That means really learning the RM and DM programs to maximize search and content management abilities.
- The hardest part is selling the business value, convincing C level execs that an investment of this type of tech will increase profits

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