

# Location Intelligence: The New Geography of Business

An international study on location decision making practices



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## EXECUTIVE SUMMARY

More than 80% of all data maintained by organizations around the world has a location component.

Just like the CRM-style analytical solutions of a decade ago, location intelligence offers value to an organization by using sophisticated technology and analysis to help executives and enterprise-level users alike make critical business decisions.

Using economics, demographics, physical geography and other data pertaining to location, location intelligence helps detect patterns, risks, and opportunities often difficult to see in a basic spreadsheet analysis.

For financial, insurance, communications, and retail operations, location intelligence provides very specific benefits, which translate to increased revenues, reduced costs, and improved efficiency for any organization.

Yet many high-level executives still have not embraced this technology.

In an effort to understand these opportunities, BusinessWeek, the world's leading business magazine, and MapInfo, the leader in location intelligence solutions, conducted a survey of more than 1700 C-level executives employed by organizations with 500+ employees and grossing \$50 million or more.

Findings show that while more than half of these individuals, all involved in making technology decisions for their organizations, cite technology as critical to their organizations, fewer than 20 percent currently purchase cutting-edge technology.

Even more interesting is that 64 percent believe location intelligence can improve business processes/decision-making and 21 percent are planning to investigate it further in the next year. Thirteen percent of respondents stated they were already using it or currently evaluating it.

In conclusion, the benefits of location intelligence are becoming better understood and seriously investigated or utilized by decision makers in a range of vertical markets. The white paper explores the benefits of location intelligence, offers real world results, and shares key findings from the BusinessWeek Research Services survey on the technology gap that business leaders must overcome to compete more effectively.

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## The Growing Importance of Location

Robert Kiyosaki, author of the bestselling book “Rich Dad, Poor Dad,” recalls a lesson that he learned years ago from Ray Kroc, founder of the McDonald’s restaurant chain. Following a lecture, Kroc asked a group of MBA students what business he was in. Everyone laughed, thinking the hamburger king was just joking, so Kroc asked again, “What business am I in?” This time, one of the students gave the expected reply: “The hamburger business, of course,” the student said. Kroc promptly told him that he was wrong. “Ladies and gentlemen,” he declared, “I’m not in the hamburger business. My business is real estate.”

Kroc went on to explain to the skeptical students that, while his company’s business plan stated the obvious—that his primary day-to-day activity was, in fact, the selling of hamburger franchises—Kroc’s main interest was the physical location of each franchise. As Kiyosaki writes, Ray Kroc “knew that the real estate and its location was the most significant factor in the success of each franchise.” Basically, the person who bought the franchise was also buying the land under the franchise for Ray Kroc’s organization. Today, notes Kiyosaki, McDonald’s is the world’s largest single owner of real estate, a portfolio that includes some of the most valuable traffic intersections in the world.

### An Undiscovered Gold Mine

Ray Kroc’s legacy as one of America’s most successful entrepreneurs is due to more than his sage business acumen. It also stems from his ability to uncover rich, hidden insights like this one—lucrative insights that might have remained invisible to the untrained mind. Other visionary business leaders, in fields as wide-ranging as financial services, telecommunications, and health care, have been blessed with similar perceptiveness, and their companies have benefited enormously for it. Yet these experiences should cause the rest of us to wonder: what equally valuable insights are we missing in the day-to-day operations of our own organizations?

As it happens, most businesses are immersed in a world of readily accessible data that could significantly improve their companies’ efficiency, effectiveness, and profitability. Unfortunately, only a minority of firms currently takes advantage of this rich mine of data—or, apparently, are even aware that it exists.

And yet that data not only surrounds most modern organizations, but invites their leaders to dig as deeply as they might wish. That data, in short, is an undiscovered gold mine, and it can be collected, analyzed, and deployed much more easily than one might expect.

### The Power of Location Intelligence

This undiscovered gold mine of data includes the demographics, economics, physical geography, and other characteristics that pertain to location—the spatial environment in which a given organization operates, interacts with its customers, and transacts business. Like the proverbial tree falling in an empty forest, this data exists independent of anybody’s taking note of it. The data becomes valuable to an organization, however, only when it is collected and analyzed, and when the conclusions resulting from its analysis are used to inform the organization’s decision-making. For instance, absolute data like a city’s population can serve as a rough gauge of a market’s potential, but only relative data—a matching of store locations to local demographics, or the comparison of a company’s own wireless network to those of its competitors—can yield true location intelligence.

Of course, almost all organizations give at least passing attention to the characteristics of location, whether in evaluating traffic patterns in choosing a franchise location, determining optimal travel routes to and from an airport, or calculating market wages in deciding where to site an industrial plant. There is certainly benefit even in these isolated, often unstructured observations. But assessing the impact of location in this way—call it “location inference”—is a little like stargazing without a telescope. While certain patterns and points of light may be visible to the naked, stargazing eye, the intricate relationships among stars, the evolution of star systems over time, and even hidden celestial features like distant planets and neutron stars become apparent only when one systematically searches the sky with advanced, finely tuned optics.

Although less familiar than giant telescopes and RT arrays, the software and analytical tools necessary for systematically probing location-based data closer to home are just as well developed, and offer willing companies a far richer and more informed perspective on their physical operating environment than is possible with more casual analyses.

At least 80% of all data maintained has a location component

These tools allow companies not only to observe and collect data describing even the hidden, business-relevant features of their location, but also to probe and deploy this data in a way that greatly enhances understanding of the impact of location and, ultimately, enables organizations to dramatically reduce costs, increase revenues, and boost profits. Such tools thus help to translate the notational “location inference” into a much more powerful form of location-based knowledge called “location intelligence.”

### *The Value of Location Intelligence*

Conceptually, location intelligence bears many similarities to the “customer intelligence” concept that grew to prominence during the 1990s and that underlies such well-known technology solutions as customer relationship management software, more commonly known as CRM. The core premise of customer intelligence and CRM software in particular was that, if a company knew more about a particular customer’s demographics, preferences, and buying habits over time, it could tailor marketing offers and customer interactions in a way that would increase the customer’s propensity to buy and, in general, boost the customer’s overall lifetime value. So accepted has the concept of customer intelligence become in the years since then that virtually every business now employs it—some intuitively, others within the context of a formal CRM solution.

As noted, location intelligence has also been part of business operations for decades, at least in a rudimentary form. For instance, long before the advent of computers, delivery firms planned pick-ups and drop-offs so as to minimize travel time and fuel use. Retailers and service franchise owners like dry cleaners and car repair shops typically have taken a number of factors into account before deciding where to locate their businesses.

And, of course, real estate agents have long known that home values are determined primarily by three factors: “location, location, location.”

As obvious as these examples are, they represent only a fraction of the actionable intelligence inherent in a company’s location, and a small portion of the value that can be obtained today from sophisticated location intelligence tools. Location and its business-relevant implications, in fact, infuse nearly all business operations: every organization with a physical presence exists somewhere, and the same is true of nearly all of that organization’s customers and suppliers.

Indeed, according to some surveys, at least 80% of all data maintained by organizations around the world has a location component.

But is location really all that relevant? Consider:

**IN RETAIL**, where a store is located tends to affect sales performance more than any other factor. Great managers, great marketing programs, and even great products often have far less effect on sales than does a premium location. As a result, sophisticated location intelligence tools can help retail owners to:

- Determine optimal store locations
- Simultaneously maximize market share and per-store performance
- Quantify and avoid cannibalization among stores
- Generate detailed site-specific forecasts for operations and strategic planning
- Precisely match media and marketing messages to targeted households
- Determine how well a concept translates from one market to another
- Identify under-performing stores and determine which to close and which to renovate

**IN FINANCIAL SERVICES**, diversification and commoditization have forced down margins to the point that financial services firms, in order to remain profitable, must optimize every transaction and every customer touch point.

Location intelligence benefits these financial services providers by helping them to:

- Maximize individual branch performance
- Evaluate expansion opportunities by determining the optimal number, placement, and priority of new branches
- Optimally allocate branch and sales staff
- Isolate personnel performance problems from intrinsic market problems
- Better understand customer needs and behaviors
- Matching financial product mix to both customer segment demographics (e.g., increased mortgage demand in growing suburbs, retirement planning for Sunbelt areas) and life events (e.g., saving money for college)

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BT (BRITISH TELECOM) WILL REALIZE A COST SAVINGS OF £23 MILLION (\$41 MILLION) over five years as a result of implementing a location intelligence solution for its 17,000 field service engineers. The solution enables engineers to respond to network outages more quickly than they previously could, thereby reducing system downtime and minimizing customer service and engineering costs.

- Identify under-performing branches and determine whether to retain, relocate, or close them

**IN INSURANCE**, underwriters that do not take full account of the locations covered by their policies do not fully understand the risks that they are assuming—and often suffer financially as a result. Hence, location intelligence tools can assist insurers by:

- Accurately assessing marketing potential, better focusing marketing, sales, and distribution management, and maximizing producer effectiveness
- Improving underwriting decisions by providing more accurate exposure analyses
- Increasing competitiveness through more refined and accurate pricing.
- Increasing organizational efficiency and profitability through deployment of “low touch” or “no touch” automated underwriting systems, augmented rules engine technology, and enhanced service-oriented architectures supported by web services applications
- Managing risk on a portfolio basis and complying with regulatory reporting requirements
- Streamlining claims handling processes and providing added-value customer service offerings

**IN COMMUNICATIONS**, many wireless companies have learned a very expensive lesson that even minor variances in location can greatly affect service quality, customer retention, and profitability. In addition to avoiding or minimizing problems like these, communications companies can benefit from location intelligence tools by:

- Analyzing market demand, network coverage, and competitor data in order to optimize network design, build-out, and maintenance

- Providing superior customer service, including identification of emerging trouble spots, calculation of downtimes, and real-time deployment of network engineers
- Understanding customer demand and competitive threats so as to enable creation of market-driven offerings and competitive pricing schemes
- Generating highly qualified sales leads based on service availability and various customer groups’ likelihood of subscribing

As an example, assume a communications company needs to determine the market potential for its service offerings. Using a location intelligence solution, the company might define its trade area and then compare infrastructure and tax boundaries, overlaying them as base layers.

To this information they might add demographics and customer segmentation data and conduct a spatial analysis in order to compare preferences in specific areas with service offerings available in those areas. This unique analysis, when combined with the company’s consolidated data and the right location-based functionality, would allow the firm to deploy services over an intranet or combine them into existing operational systems, thereby enabling the company to make profit-enhancing decisions in a more cost-effective and efficient way.

**IN THE PUBLIC SECTOR**, government agencies are increasingly pressured to perform even while budgets for most functions are stretched more thinly than ever before. Location intelligence can assist these organizations by enabling:

- Attracting, retaining, and supporting local businesses in order to create jobs and strengthen the local tax base
- Planning and development of large-scale public works projects

Ultimately, location ties all of the other datapoints in an organization's operation together

- Evaluating the need for and effectiveness of federal aid resources in human services, economic development, agriculture, and other fields.
- Enhancing disaster forecasting and emergency preparedness and recovery operations
- Improving predictive capabilities for national and homeland security functions

EVEN ON THE GEOGRAPHY-LESS INTERNET, many e-tailors have discovered—contrary to original expectations—that some of their best customers live in less wealthy small towns and rural areas, where physical store offerings are more limited. Additional insights that location intelligence solutions can offer include:

- The optimal matching of product mixes across geographical locations and customer groups
- Optimization and timing of free shipping and other incentive offers
- The effect of time-of-day and time-of-week on purchase patterns in different geographies and across various demographics
- The optimal timing and pricing of Internet advertising, such as search engine keyword buys and banner advertisements

No business would go to market without trying to gain a rich understanding of its customers. The same is true with regard to evaluations of production, distribution, and other logistical matters, each of which can have significant effects on profitability. But historically, the analysis of location data has been siloed within administrative departments or other nonrevenue sectors of a company, or else have been given only notional, “gut instinct,” location-inference consideration. But no longer. A growing contingent of organizations are learning that, not only does location matter, but that fully appreciating the impact and opportunities associated with location can generate significant, bottom-line returns.

And the best news is: implementation of these beneficial solutions is easier and much more affordable than one might expect.

### *Profiting from Location Intelligence*

Ultimately, location ties all of the other datapoints in an organization's operations together. To use a very simplistic example, knowing a customer's age, family status, and buying history can inform, say, a sporting goods retailer's marketing efforts. But knowing further that the customer lives in Colorado Springs instead of, say, Miami or Dallas suggests that the customer might be a good candidate for buying ski gear or high-performance parkas—even if the customer in question has never purchased such items from the company in the past.

Similarly, basic mapping data can tell an insurance provider where its policies are located in relation to a flood zone or other high-risk areas. But only with a richer set of location-specific data could the provider automatically and accurately determine a policy applicant's exact distance from a coastline or waterway, the overall risk exposure, and the optimal deductible—resulting in improved underwriting, customer service, and claims management practices.

These and many comparable examples confirm that location intelligence is just what it appears to be: invaluable organizational intelligence, drawn from both the organization's and customers' locations that can enhance the understanding of the organization's operating environment, and so be used to increase revenues, reduce costs, and improve profits. It is the same kind of value that CRM-style analytical solutions began bringing to customer-facing organizations a decade before.

And like those customer intelligence solutions, which depended heavily on advanced information technologies for their analytical and data-management power, so too are location intelligence solutions now being powered, not by gut instinct and consensus “guessing,” but by advanced analytical and data-processing tools that can detect patterns, risks, and opportunities that otherwise would be invisible to human “eyeball” analysis.

It was in an effort to understand these opportunities—and, more specifically, to gauge the role that technology can play in delivering powerful, business-relevant location intelligence to today's visionary organizations—that BusinessWeek, the world's leading business magazine, and MapInfo, the leader in location intelligence solutions, undertook the current survey.

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MASTERCARD, WHICH HAD LONG OPERATED SEPARATE DATABASE SYSTEMS TO support its phone- and web-based locator services for the company's more than 900,000 ATMs around the world, was spending some \$400,000 each year in order to maintain the dual legacy systems. By implementing a unified location intelligence solution, MasterCard was able not only to eliminate these costs, but also to provide superior service to its tens of millions of customers. Overall, the new ATM locator generated a return on investment estimated at some 1,152% within the first six months.

## Acquiring Technology

As the above section makes clear, location-based decisions are becoming increasingly important for a wide variety of both commercial and public sector organizations. The section also suggests that technology-based solutions may be a valuable means of supplying executive decision-makers with the operational intelligence needed to make prudent choices in this regard.

Determining how to best take advantage of this opportunity, however, requires more than just these general observations. MapInfo therefore joined with BusinessWeek during the summer of 2005 to design a sophisticated methodology and questionnaire that would allow the two companies to compile the benchmark research necessary to support the widespread deployment and usage of modern location intelligence tools.

### Survey Design & Implementation

Respondents for the survey were obtained from the BusinessWeek Market Advisory Board database, an online survey panel consisting of more than 14,000 BusinessWeek magazine subscribers and BusinessWeek Online registrants. The panelists for the survey were specially selected to reflect MapInfo's primary target audience. Hence, only panelists who met the following criteria were asked to participate in the survey:

- Employed by midsize or large organizations (500+ employees), with gross annual sales of \$50 million or more.
- Executives who hold C-level, vice president, general manager, or government or public official positions.
- Individuals who are involved in making technology decisions for their organization.

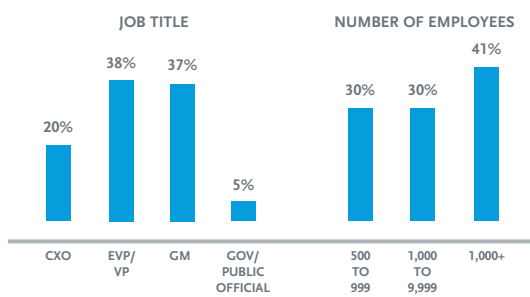
In addition, researchers over-sampled a number of highly location-sensitive industries, including retail services, banking, telecommunications, and the public sector.

A total of 1,700 of these carefully selected BusinessWeek panelists were invited, via email, to participate in the online survey in mid summer 2005. A total of 447 surveys had been completed and submitted, representing a response rate of 26% and resulting in a margin of error of +/- 4.6 percentage points. BusinessWeek Research Services contracted with InsightExpress, an independent third-party research firm located in Stamford, Conn., to manage the data collection and analysis process.

### Respondent Profile

The population of respondents to the BusinessWeek Research Services/MapInfo survey closely matched the desired profile. About one-fifth of the respondents were C-level executives, and the remainders were executive vice presidents, vice presidents, general managers, or public officials. Some two-fifths of respondents came from very large organizations having 10,000 or more employees, and the remainders were equally split among firms with 1,000 to 9,999 employees and those with 500 to 999 employees.

### TOP DECISION MAKERS FROM LARGE COMPANIES SURVEYED



Location-based decisions are becoming increasingly important for both commercial and public sector organizations

Because of the intentional over-sampling of certain location-sensitive industries, respondents from these industries were present in the survey at considerably greater levels than their actual population in the economy. Specifically, one-quarter of respondents came from the retail services industry and another one-quarter from the telecommunications industry. Other heavily represented sectors included banking, travel and hospitality, transportation, and government. More than three-fourths of respondents were from the United States, with the remainder roughly evenly split between the United Kingdom and Australia.

As intended, the majority of respondents played a major role in operational and technology decision-making within their organizations. Almost half determined or managed business improvement and efficiency processes, and similar proportions were responsible for operational management, improving customer service, increasing sales revenue and developing new business, and developing sales and marketing initiatives. With regard to their technology duties, more than two-thirds of respondents were responsible for researching and/or evaluating technology solutions, and roughly half with implementing such solutions or changing business processes as a result of such implementations.

### Technology Acquisition Patterns

The survey began by looking at the most basic question: how did respondents view their organization's perspective, or sentiment, toward information technology (IT) investments, and how did they acquire these solutions. The responses were typical of what one who is familiar with corporate IT operations might expect.

Specifically, fewer than one-fifth of respondents said that their organization purchased predominantly cutting-edge technology applications. Qualitative research, not conducted as part of this survey, suggests an explanation for this behavior: many organizations believe that cutting-edge technology is not yet fully stable, and so poses more risks than benefits for the organization. For that reason, these organizations often prefer more mature, if somewhat less powerful, technology, and the survey appears to bear out this hypothesis. Nearly half of respondents said that their organizations "buy moderately good and sophisticated applications," but that they are "sure there are better ones on the market." A minority said that they either bought only "average applications" or developed solutions in-house.

### TOP DECISION MAKERS FROM LARGE COMPANIES SURVEYED

We predominantly buy cutting edge applications



We buy moderately good and sophisticated applications, but I'm sure there are better ones on the market



We buy average applications that are comparable to industry standards



We buy outdated applications that are below industry standards to save money



We tend to develop our own in-house solutions



We rarely invest in technology



Predictably, these technology acquisition patterns vary significantly according to both industry sector and views on the importance of technology, although the differences are not necessarily in the direction that one might expect. For instance, fully 27% of companies in the service-oriented travel, transportation, and hospitality sector reported that they always bought cutting-edge technology, while just 15% of firms in the data-intensive banking and related sectors indicated that they did so. Despite the heavily technology-dependent nature of their firms, only 17% of telecommunications industry executives said that their organizations usually purchased cutting-edge technology.

Significantly, however, regardless of industry, firms that viewed technology solutions as critical to their organizations' operations and financial success were almost three times as likely to buy cutting-edge technology as were firms that viewed these solutions as merely "useful."

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TAPCO, A MAJOR INSURANCE UNDERWRITER IN HURRICANE-PRONE NORTH CAROLINA, for years had employed manual methods to calculate distance-to-the-coast, a key variable for determining risk exposure. After deploying a location intelligence solution, the company was able to fully automate the process, not only significantly reducing staff time, but also improving the quality and reliability of its risk measures.

A couple of important insights emerge from this initial analysis. First, large organizations tend to be cautious when investing in technology of any type, preferring mature or well-established solutions over more cutting-edge technologies, even if the latter offers greater operational or other business benefits. However, once firms come to realize that more robust technology solutions are critical to their business operations, revenues, and profitability, they become considerably more likely to invest in advanced, cutting-edge technology.

## The Technology Gap

As noted, these findings suggest that most large organizations—even in some technology-intensive sectors like telecommunications—hold moderate views with regard to technology as an enabler of organizational decision-making. However, the BusinessWeek Research Services survey reveals that the relationship between technology intent and acquisition patterns is actually much more complex

### Perception Versus Action

One significant finding stands out clearly from the survey: the majority of respondent organizations believe that technology-enabled solutions are vital to the quality of their business decision-making. This point cannot be overstated. Their spending patterns and caution notwithstanding, the majority of companies in the survey are strong believers in the power and benefits of technology.

Specifically:

- Fully 13% of respondents said that technology was “critical” to their organizations, and another 39% claimed that it was “very useful”—a total of 51%.

- By contrast, just 39% said that technology was merely “useful” to their organizations, and another 5% said that it was “not useful”—a total of 44%.

These responses speak to the surveyed organizations’ intent. Their actual behavior, however, is markedly different. Despite the fact that 51% of organizations say that technology-enabled solutions are either “critical” or “very useful,” only half this proportion (26%) reported that they actually used sophisticated software applications and analytical reporting tools to assist in making business decisions. Another 40% indicated that they use “some reporting tools,” but noted that these tools lacked real analysis engines, while 30% depended “mainly on consensus and committee when making important decisions” and 4% said that they made important decisions based on “gut feel.”

Hence, there exists a very profound “technology gap” between stated intent and perception on the one hand and actual technology acquisition and usage behavior on the other. Specifically, about half of the organizations that said that technology was extremely important to their business decision-making did not actually follow through on this belief and invest in sophisticated technology.

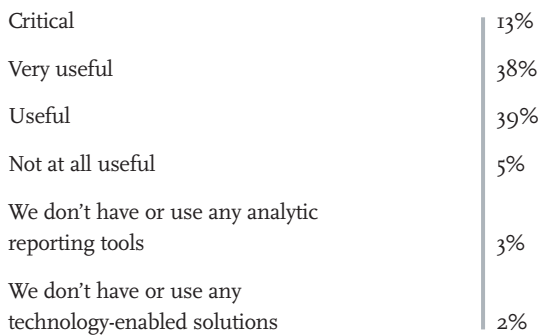
It is worth noting, however, that this technology gap does not exist in reverse: those organizations that do invest in cutting-edge decision-making technology are almost always among those that also place high importance on such technology.

In other words, technology purchasers are highly likely to be strong technology “believers.” Overall, more than four-fifths of respondents whose companies use sophisticated tools to make business decisions said that technology was either “critical” or “very useful” to their organizations, compared to fewer than one-tenth of companies that use only “some” tools and or that primarily depend upon consensus-based decision-making.

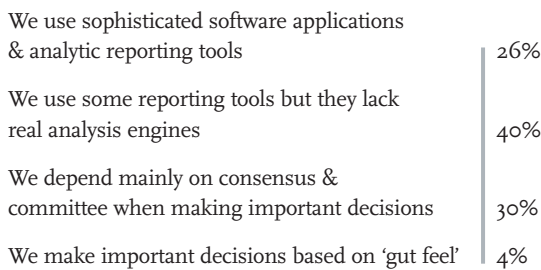
51% of organizations say that technology-enabled solutions are either “critical” or “very useful”

**PERCEPTION VS. REALITY**

*(Perception) How important are technology-enabled solutions when making important business decisions...*



*(Reality) How important business decisions are made...*



**Probing the Technology Gap**

Why does this “technology gap” exist? Why do so many sophisticated and well-managed organizations say that advanced technology is critical to their decision-making and operational processes, and yet these same institutions fail to invest in the technologies most suited to these tasks? The BusinessWeek/MapInfo survey sheds considerable light on these questions.

As it turns out, most organizations experience a variety of both practical and perceptual challenges in implementing more advanced technologies. For instance:

- Respondents in nearly four-fifths of the surveyed organizations replied that integrating the application with multiple databases and platforms was either “very” or “extremely challenging.”
- Some three-fourths of respondents said that adapting existing business processes to utilize the new capability and getting corporate culture to see the benefits of the new application or solutions were significant challenges.

- And some of respondents indicated that finding the budget to fund implementation, training end-users on how to employ the new application, and having confidence in the application’s living up to colleagues’ expectations were serious challenges.

It is noteworthy that there were only small differences in the perception of these challenges among respondents from organizations that viewed technology-enabled solutions as “critical” versus those that regarded such solutions as merely “useful.” The same was true in comparing the responses of individuals from organizations that actually used cutting-edge applications to those of executives from organizations that employed only moderately good applications and those that used only average technologies: the perceptions of the various challenges did not vary markedly among these groups. These results suggest that most organizations perceive significant challenges in implementing advanced technologies, but that those organizations that are truly committed to such technologies and those that have actually implemented them nevertheless manage both to see the benefits of such technology and to actually deploy it, in spite of considerable operational and attitudinal challenges that they face within their organizations.

**Closing the Technology Gap**

Organizations that are considering whether or not to implement advanced technology solutions as a means of enhancing their business decision-making appear to accept the fact that many of the challenges that they face in doing so originate from internal practices and operational structures. Still, these firms also strongly believe that their technology vendors could help them to overcome these challenges in a number of ways.

Most notably, a resounding 94% of respondents said that it was either extremely or very important to have a vendor that “understands the needs of my business.” Equally high percentages declared that it was either “extremely” or “very important” for vendors to:

- Deliver easy-to-implement and easy-to-use technology solutions;
- Have a proven track record in supplying reliable and scalable solutions; and
- Provide technology solutions that help their organizations to save money.

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EAGLE-TRIBUNE PUBLISHING, A PULITZER PRIZE-WINNING NEWSPAPER SERVING more than 100,000 households north of Boston, had suspected that its readership base was changing dramatically, but only after adopting a location intelligence solution was the publisher able to confirm this suspicion—and to lay the foundation for acquiring new and potentially lucrative long-term customers.

Other important factors were the ability to customize solutions and a commitment to being proactive in serving clients. On the other hand, factors such as being standards-based, offering a complete range of technology solutions, and being a market leader were viewed as less important in helping respondent organizations to surmount technology implementation challenges.

The bottom line: larger organizations of all kinds tend to perceive serious challenges in implementing advanced technology. Many such organizations—namely, those that have actually put these solutions in place—appear to possess the internal knowledge, resources, and determination to overcome these challenges. But other companies, equally inclined to favor advanced technology solutions, are evidently less able to master these challenges on their own. But the survey indicates that these organizations may be able to overcome the technology's inherent challenges, and thereby move into the ranks of advanced technology purchasers and users, with the provision of appropriate assistance, advice, and education by their solution providers.

## Benefitting From Location Intelligence

The preceding section documented that a large proportion of respondent organizations see value in advanced technology solutions even if they are cautious in pursuing implementation and even if only a minority have actually done so. An unstated assumption in that analysis was the supposition that these organizations are actually aware of the various technologies that are available to assist in meeting their needs. Given the extensive commitment to technology as expressed in the survey, one would expect there to be, in fact, a considerable depth of familiarity with enterprise-level business applications—and, indeed, there is.

### Technology Mindshare

Among respondents, a large majority said that they were familiar with a variety of high-profile business applications. Leading the list was customer relationship management (CRM) software, with which more than four-fifths of respondents were familiar. Approximately two-thirds of interviewees were also familiar with enterprise resource planning (ERP) software, supply chain management (SCM) software, and business intelligence (BI) software. Other applications were even less well-known. Most notably, only about one-third of respondents were familiar with location intelligence software, with fewer than one in ten saying that they were “very familiar” with this class of software.

Organizations that viewed technology-enabled business solutions as “very critical” were only slightly more likely than those regarding such solutions as merely “useful” to be familiar with location intelligence software. But there were marked differences across industries, with almost half of respondents from the retail sector claiming familiarity, along with more than one-third of responding travel sector and government executives. But fewer than one fourth of respondents from the telecommunications, banking, financial services, and energy and utilities sectors said that they were familiar with location intelligence software.

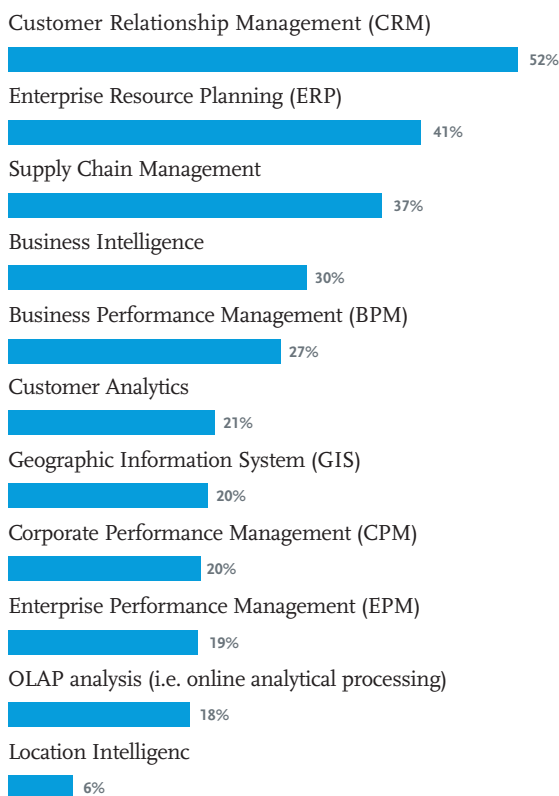
### Technology Investments

These awareness patterns were generally reflected—and, in some cases, even accentuated—when survey panelists were asked whether their organizations had actually installed the applications in question.

More than half of respondents said that their organizations were currently using CRM software, with large minorities also using ERP and SCM software. About one-third had installed business intelligence solutions. By contrast, a mere 6% had installed location intelligence software.

Awareness (of location intelligence) is beginning to solidify, and is poised for significant growth

#### APPLICATIONS INSTALLED



Among respondents whose organizations were not yet using the applications in question, the high-profile solutions also garnered significant interest. For instance, more than half of respondents were either currently evaluating CRM software or were planning to do so within the next year. Just under half of interviewees expressed the same viewpoint on ERP, SCM, and business intelligence solutions. Again in contrast, only 7% of interviewees said that they were currently evaluating location intelligence software, and another 21% were planning to consider it within the next year. One likely reason for these differences in evaluation tendencies: fully one-fifth of respondents considered CRM software to be the “most critical” software tool in their analytical arsenal, with about one-tenth feeling the same way about ERP and business intelligence software. However, only 1% felt that way about location intelligence solutions.

Not surprisingly, the most well-known technology brand names were also regarded as the most relevant technology partners. Microsoft led the list, with three-fourths of respondents saying that the Redmond, Wash., company was one of their top two most relevant technology partners. IBM and Oracle were similarly ranked by more than half of the respondents. Other vendors like SAP, Peoplesoft, and Siebel ranked in the middle ranges of relevance, while business intelligence vendors like Business Objects, Cognos, and SAS were considered to be among the most relevant partners by fewer than one-fourth of respondents.

#### Probing the Location Intelligence Gap

These findings indicate that, like the previously mentioned “technology gap,” there also exists a significant “location intelligence gap” among respondent organizations. Specifically, surveyed companies express a strong interest in acquiring the benefits that location intelligence software provides. For instance:

- Fully three-quarters of respondents said that it was either “extremely” or “very important” that their organizations have the ability to improve business performance.
- More than two-thirds of interviewees said that it was important for their organizations to have the ability to evaluate market potential and opportunities, to optimize resources, and to spot geographic trends.
- Nearly three-fifths of respondents said that it was important for their organizations to have the ability to select sites and close underperforming sites.

Despite this significant interest in the benefits of location intelligence software, actual implementation and investigation of this class of software has lagged behind. A key reason for this “location intelligence gap” appears to be that technology-inclined organizations are just now becoming aware of location intelligence solutions in general and of individual location intelligence software offerings in particular. But the survey also indicated that this awareness is beginning to solidify, and is poised for significant growth in the years ahead. Specifically:

- More than two-thirds of respondents correctly identified demographic analysis as a key feature of location intelligence software, and just under two-thirds accurately described location intelligence solutions as aiding in site selection and planning.

# Location Intelligence:

The New Geography of Business

IHOP, THE 1,200-UNIT RESTAURANT CHAIN, WAS ACCUSTOMED TO MAKING LOCATION decisions based on limited and often fragmented information while failing to capture a variety of highly influential “real world” data. With the implementation of a sophisticated location intelligence solution, however, the restaurant chain was able, for the first time, to efficiently analyze data from more than 60,000 customers at 100 locations, providing a much richer view of the effect of restaurants’ locations on revenues and profitability.

- More than half of respondents correctly noted that location intelligence software could aid in market potential analysis, customer analysis, and sales forecasting.
- Significant minorities viewed insightful decision-making as one of location intelligence software’s prime capabilities.

Thus, just as implementation assistance and support promise to help overcome the “technology gap,” increased understanding of location intelligence technology and its capabilities and benefits is likely to significantly reduce the “location intelligence gap.” Most surveyed organizations already desire the benefits that location intelligence solutions provide: they do not need to be persuaded that these capabilities are useful to their organizations. Thus, as they become more aware both of location intelligence technology itself and its ability to deliver on these benefits, substantial proportions of these organizations are likely to both investigate and adopt location intelligence locations as a key component of their technology portfolio.

In this sense, location intelligence software is in much the same position that CRM, SCM, and business intelligence software occupied at a similar point in their development and implementation lifecycles. These other solutions once were much less well-known than they are today, and so were considerably less widely adopted than is now the case. Their growing popularity and familiarity within large organizations over the past decade has led to sharply increased implementation rates. The same dynamic is likely to take place with location intelligence software: as commercial and government organizations become more familiar with the significant operational and other benefits offered by enhanced location intelligence, adoption of this class of technology is likely to grow substantially in the coming years.

## *Realizing the Benefits of Location Intelligence*

This potential, in fact, is already being realized. As the benefits of analyzing and deploying location-based information have become more well-known, a growing number of organizations have begun to take advantage of these capabilities. Indeed, if one looks at the software installations of Global 2000 corporations, nearly all possess some form of geographic analysis software. And within industries in which location is a particularly critical factor, like retail, telecommunications, and government agencies, hundreds if not thousands of employees make frequent use of these powerful systems. And as they do, they and their organizations are beginning to realize some very impressive benefits.

## *The Growing Benefits of Location Intelligence*

As these examples dramatically illustrate, the benefits of location intelligence are real, and they are awaiting application by decision-makers in a wide variety of corporate and government organizations. These benefits, in short, are an undiscovered gold mine—a gold mine of immensely valuable, business-relevant data ready for exploitation and use. Already, as BusinessWeek/MapInfo survey demonstrates, an understanding of the capabilities and value of location intelligence is penetrating the upper ranks of the world’s leading organizations. But there is much more to come. In the near-term, location intelligence solutions are poised to become a “must-have” technology in a growing number of visionary organizations that are committed to increased growth, efficiency, and profitability.

Most surveyed organizations already  
desire the benefits that location  
intelligence solutions provide



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