How Organizations Make Better Decisions
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**Executive Summary**

**Introduction**

I interviewed 57 organizations on how they had improved decision processes. Most were able to identify at least one decision that had been improved. The most striking finding is that organizations employed a variety of intervention types involving technology, organizational changes, and new business methods. Analytical interventions were the most commonly adopted, followed by culture and leadership. In order to implement these interventions, decision analysts had to adopt a more consulting-oriented role within their organizations.

Businesses and organizations have addressed many aspects of their structure and function, but relatively few have given systematic attention to one of their most important activities: their decisions. Decisions, whether tactical or strategic, are critical to the success of every organization. They encompass such questions as what strategies and business models to pursue, which products and services to offer, which customers to target, what prices to charge, and what employees to hire. Organizations that employ poor decision processes and tools will eventually encounter poor decision outcomes, and their performance will suffer.

There are many other reasons why organizations should improve key decisions. The recent financial crisis was a reminder that poor decisions have both company-specific and economy-wide consequences.
Several prominent public sector decisions have also resulted in poor outcomes.

More positively, there are new insights, technologies, and methods that can guide decisions. Scientific advances in neuroscience and behavioral economics provide new insights for decision-making. Relatively new technologies, including analytics, decision automation tools, and business intelligence systems, make it possible to make better use of information in decisions. “Wisdom of crowds” approaches and technologies allow larger groups of people to participate meaningfully in decision processes. Organizations cannot afford to ignore these new options if they wish to make the best possible decisions.

Given both negative and positive incentives, one might expect that organizations would attempt to improve their decisions—that they would prioritize them, examine their current level of effectiveness, investigate new options for making them better, and implement some of those options. Indeed they are doing some of these things, but not in a thorough, systematic fashion. When managers in companies are asked if they have recently improved a particular decision, most are able to describe one or more specific examples. However, very few organizations have undertaken systematic efforts to improve a variety of decisions.

This report describes a research project that investigated how organizations are attempting to improve specific decisions. Most analyses of decision-making address single capabilities, such as technology, leadership, or group process. In this research, the topics addressed were more comprehensive—the idea being to understand which improvements were used most frequently.

**About the Research**

In late 2008 through the summer of 2009, I interviewed 57 organizations by telephone about specific attempts to improve decision-making. The organizations were identified through analyses of secondary literature and with assistance from SAS, the sponsor of this report, and other vendors of data management and analytical software. The individuals interviewed were generally managers of IT functions, heads of analytical groups, or leaders of internal consulting organizations.

After each interview, I classified the responses based on the type of decision, the particular interventions employed, and the results of the improvement effort. An overall tabulation of the frequency of interventions is presented in Figure 1. The research is exploratory, but the results should be indicative of broad patterns of decision improvement activity.
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Types of Decisions Addressed

The specific types of decisions being improved (which were named by 90% of those interviewed) would constitute a long list, but a sampling may be useful. The most common (more than one case) types encountered include:

- Pricing (of consumer goods, industrial goods, government contracts, maintenance contracts, etc.);
- Targeting of consumers for marketing initiatives (by retailers, insurers, credit card firms);
- Merchandising decisions by retailers (what brands to buy in what quantity for what stores, shelf space allocation);
- Location decisions (for bank branches, where to service industrial equipment);
- Treatment protocols and intervention decisions in health care;
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• Which drugs to develop in pharmaceutical firms;

• Student performance decisions in educational organizations;

• Determining which marketing approaches are most effective (in both consumer and business-to-business marketing environments, and an advertising agency);

• Decisions about which potential employees to hire;

• Vehicle routing decisions for transportation companies.

Some companies were not focused on any particular decision, but were trying to create a better infrastructure (normally technological) for decision-making in a particular part of the business (e.g., finance or marketing). However, having a focus on specific decisions seemed to lead to greater degrees of satisfaction with outcomes, and to a greater ability to understand and measure the value of attempts to make better decisions.

Beneficiaries of Decisions

Most organizations probably think of better decision-making as benefitting their own internal organizations. Indeed, that was the case for 71% of the organizations surveyed. However, the remainder (29%) was focused on decisions made by their customers, clients, or partners. They included an advertising agency focused on improving client decisions about their campaigns, a provider of data and analytics to insurance companies for better claims and underwriting decisions (see “LexisNexis Claims Solutions case below), a company providing pricing analytics for its distributors to use, two organizations that help clients with hiring decisions, and a financial services firm that helps independent investment advisors determine customer value.

Some of the companies that are seeking to influence customer decisions have backgrounds as providers of data. However, as data becomes a commodity, these organizations are attempting to differentiate themselves by facilitating decisions, and by providing not only data, but also analysis tools and frameworks.

Of course, influencing decisions among customers, clients, and partners is different from influencing them for one’s own organization. Any ability to force adherence to a new decision approach is limited within an organization, but impossible across different organizations. The best that a “decision engineer” can do is to make the proposed approach easy and effective to use.
LexisNexis® Claims Solutions

LexisNexis Claims Solutions is typical of organizations that seek to influence customer decision-making. This unit of LexisNexis® Risk Solutions provides both data and analytics to property and casualty insurance firms to help them process claims. It helps its insurance customers and their claims investigators to determine whether a claim should be paid or investigated for fraudulent activity. LexisNexis Claims Solutions provides both a score suggesting the likelihood of a fraudulent claim, as well as a recommendation for action based on business rules. In some cases it also employs text mining of claims adjusters’ notes; if the notes say something like “car returned burned,” in combination with other data, fraud may be indicated. The models may also suggest to insurers the likelihood that a claim can be subrogated, i.e., amounts paid on the claim can be recovered from other insurance companies. The primary value is not only in identifying fraud, but also in identifying claims to be paid quickly and facilitating the settlement of meritorious claims.

Unlike insurance underwriting (which another unit of LexisNexis Risk Solutions also supports), claims management still has a major human decision component. Claims adjusters ultimately make the decision in every case to investigate a claim, or to go ahead and pay it. They may have considerable experience, but their work is almost always improved by the use of analytics and data that LexisNexis Risk Solutions offers. Still, getting buy-in from adjusters can sometimes be difficult. As Ernie Feirer, head of the LexisNexis Claims Solutions unit, points out, “They wonder how a predictive model can be better than they are.” Feirer’s goal is to identify and educate a champion within each customer organization who will aggressively advocate the use of LexisNexis Claims Solutions tools. “It’s a conservative industry,” Feirer notes, “but also one that makes decisions based on data. When customers see the data on how this approach to claims decision-making can improve their performance, they usually want to adopt it.”

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Interventions in Decision-Making

A key aspect of this research was to identify and categorize the interventions that organizations have employed in attempting to make better decisions. The fourteen specific types of interventions mentioned in interviews and classified in the data are (listed in the order displayed in Figure 1):

- Analytics: use of rigorous statistical or quantitative analysis;
- Changes in culture or leadership that affect the decision;
- Efforts to gather, integrate, or improve the integrity of data;
- Changes in the business process of which the decision is a part;
- Education of decision-makers or affected parties;
- The use of human decision-makers to override or augment computer-based decisions;
- Changes in the roles or behaviors of analysts that facilitate the decision process;
- The use of special formats to display or report information;
- Changes in the roles or jobs of front-line personnel as a result of the decision;
- Changes in organizational structure or roles related to the decision;
- Use of a business or management method, tool, or framework;
- Specific efforts to communicate the process or results of the decision to affected parties;
- The use of computer-based rules to structure or automate the decision to some degree;
- Testing: use of a randomized, controlled testing process to help with the decision.

Overall, this research suggests that when companies attempt to improve decisions, they undertake a wide variety of different interventions. On average, there were 5.6 interventions per company. These interventions were not checked off by survey respondents, but were volunteered by them with occasional prompting. A few other intervention types were mentioned only once, and were not categorized and tabulated.
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The specific interventions are described below, along with the frequencies of their mention as aids to creating better decisions. The relative frequencies of the interventions are listed in Figure 1.

Analytics, Testing, and Data

Interventions involving analytics and data were among the most common of all among the surveyed firms. 84% of the companies mentioned an analytical component of their decision improvement efforts; 66% mentioned some effort to improve data. This was not a random sample, in that some companies selected for interviewing were suggested by analytical software vendors, and the author had done previous work in analytics. Nonetheless, the frequency of use of that decision tool is striking.

The range of analytical techniques employed was quite broad. Scoring approaches based on statistical analysis (usually some form of regression analysis) were common. Other approaches include optimization, behavior-based customer targeting, statistical forecasting, prediction of various phenomena, and one use of text analytics.

Systematic testing was one form of analysis that was being used somewhat frequently by companies; 18% mentioned it specifically in interviews. Testing with random assignment to test and control groups is often used, for example, by companies employing different types of marketing promotions, or by online firms attempting to create web pages with greater customer...
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Alternative web page designs is performed, for example, it is generally assumed that a decision to adopt the winning page will be made. Other analytical approaches may not have as clear a path to a decision.

A prerequisite of almost any form of analytics is high-quality data, so it is not surprising that data-oriented responses were also common. 66% of the respondents mentioned some intervention or issue involving data. The most common were:

- Difficulty in getting a particular type of data, e.g., location data;
- An initiative to create common data around the organization;
- Eliminating duplicate data and records about customers;
- “Master data management” integration projects;
- Achieving “one version of the truth” in particular function or process areas;
- Dealing with too much data;
- Gathering data from channel partners on consumers (see Transitions Optical case below);
- Creating new metrics.

Data management is, of course, a well-known problem in IT management initiatives, and is an important prerequisite to analytics. However, it is interesting to note that decision appeal. One key virtue of testing is that it creates a decision-oriented context from the beginning; if a test between two

Transitions Optical, Inc.
Transitions Optical manufactures photochromatic lenses that darken in bright light. The company’s efforts illustrate both the difficulty and the value of gathering customer data for decision-making in a business-to-business context. Since Transitions sells its products to glasses manufacturers and optical labs, it has no direct contact with consumers. That meant no consumer data to judge the effectiveness of marketing programs.

In 2002, Transitions executives authorized the creation of a customer data warehouse, a process that would take more than 6 years. It meant the gathering of customer data from multiple customers and channel partners. In order to get the data, Transitions had to sign confidentiality and privacy agreements with each customer and partner. The data arrived in 30 different information formats, on such media as paper printouts, email, and even paper napkins. By mid-2006, however, Transitions was ready to use the data to help make some important marketing decisions.

Transitions worked with an external consultant, for example, to assess how effectively its marketing dollars were being spent. It embarked upon a “marketing mix analysis” to determine how well different marketing programs were working, and which channels to the customer were more effective, Maria Zabetakis, the Director of Americas Information Technology, says the data and analyses have been very helpful in supporting marketing decisions. “We can now accurately predict what kinds of ad campaigns will generate what levels of lift for what customer segments. Our management team is very analytically savvy, and we’re firm believers in business intelligence. But we couldn’t have done this without compiling data on our customers’ customers.”
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Soon, since each new decision intervention seems to require new data efforts, and since new types of data are always emerging.

Technology Support—and Overrides of It—for Decisions

The use of data and analytics also implies the use of information technology to manage and analyze the data, and several firms mentioned specific analytical software, testing software, data warehouses, and web analytics/reporting software. Two other technologies were mentioned frequently: specialized information display technologies, and business rule engines.

38% of companies in the study mentioned some use of specialized information displays such as scorecards and dashboards. These tools, which are typically found in the “business intelligence” category, allow decision-makers to see only the information that they need in order to make a decision. Several firms also mentioned specific information display approaches that are not generally supported by conventional business intelligence tools, including the “A3” format for displaying key issues in a particular business domain, and some use of findings from neuroscience to guide how information is presented and digested by the target audience. Only a couple of firms’ representatives mentioned this approach (described in the CKE Restaurants case below), but it may be a bellwether of future attempts to link information and decision-making.

CKE Restaurants

CKE Restaurants franchises, licensees, and operates the Hardee’s, Carl’s Jr., and Green Burrito and Red Burrito fast food restaurants. It is known for its provocative commercials and its “meat as a condiment” sandwiches, including the Pastrami Burger and the Philly Cheesesteak Burger, each of which were systematically tested before their successful introductions.

Jeff Chasney is CKE’s Senior Vice President of Strategic Planning and Chief Information Officer. He noted in a CIO magazine article, “If you’re just presenting information that’s neat and nice but doesn’t evoke a decision or impart important knowledge, then it’s noise. You have to focus on what are the really important things going on in your business.” The article continued:

Chasney goes further to explain that it is “context” or “insight” that matters most when designing and enhancing a BI system. Nobody needs to be flooded with useless data. He advises companies to begin by analyzing how decisions are made in the organization and then determine how the information can strengthen that decision-making process.

Chasney has studied neuroscience for more than a decade to learn how people process information. He presents information to CKE executives in such a way that they will notice and act on it. “We have complex econometric models that explain what’s happening in our business,” he notes. “I try to present them in such a way that they smack people in the face. We don’t want errors in our business because people were focusing in the wrong place.”
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Another popular decision technology allows for the creation and application of business rules. Business rules make possible automated or semi-automated decision processes, and are sometimes used in conjunction with analytics (typically scoring-oriented applications). 23% of interviewed organizations employed business rules in conjunction with their decision intervention. However, a somewhat higher percentage—41%—stated that whether they were using analytics or business rules to guide decisions, they allowed humans to override the recommended decisions. As one engineering company’s representative put it:

We can’t anticipate all contingencies, so we make provisions for overrides. And in case the users are overriding too frequently, our process includes review of the overrides on a regular basis.

A banking executive described the use of overrides with regard to customer fee overrides:

We try to give the rep a “range of motion.” It makes them a lot happier and more engaged if they have discretion in the process. We try to determine a process that has a certain level of human involvement, and then we see how much compliance with policy there is.

In short, there still seems to be a place for human beings in most decisions—particularly those involving customers.

Changes in Business Processes

Perhaps not surprisingly, a number of the interviewed organizations said that they needed to change their business processes to make better decisions. 43% of the organizations mentioned process changes of some type. An analyst at a retailer, for example, describes the process change there:

We had to introduce a new process for our direct marketing campaigns. We created a campaign design committee comprised of all the business owners and the marketing analysts. They come together and review the goals of the campaign, how to measure it, and how it will be executed. We now stage the delivery of optimized offers on a weekly basis to our point-of-sale systems, which has improved redemptions dramatically. We’ve achieved a 200% improvement in incremental sales, which has been a big win.

Other organizations described process changes around supply chain management in an IT firm, lease processing in an auto financing firm, financial processes in a health insurance firm, new product development processes in a testing organization, and so forth. Several firms mentioned process changes for decision-oriented processes made in the context of Six Sigma process improvement programs.
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Financial Services Firm
A financial services firm (that requested anonymity) illustrates changes in the roles of analysts involved in decision improvement. The company’s analytical group reports to a shared strategic services organization, and addresses a variety of decision types, with a focus on customer loyalty and relationships. The company has historically not had an analytical orientation, but that culture is beginning to change.

The group plays a consultative role with its internal clients. As the head of the group explained, “People come to our teams and say, ‘We need you to do market research’ or answer a particular question—but now we ask, ‘What are you trying to learn here?’ Once we know the learning objective, we can provide a variety of alternative ways to help.”

Analytics group members are frequently asked to be members of the project team. One analyst noted, “We start to influence the thinking about how to influence decisions—instead of gut-level intuition, we try to introduce some data and analysis.” The analysts also perform “concept screening” exercises, and in some cases it has killed the launch of bad ideas.

The head of the group notes that these activities require a different set of skills than that usually required of analysts. She notes, “We used to hire based on functional expertise—statistics, market research, etc. Now we look more holistically—it’s decision support. We look for expertise around how to deliver good decisions that is independent of the underlying skill sets. We put a premium on senior management communication, understanding and contributing to business objectives and translating them into learning objectives—listening as well as shaping the learning objectives.”

However, some decision-focused analysts commented that they did not originally have organizational responsibility for identifying and implementing process changes, and that they had to work with other groups to accomplish them. Some analyst groups have taken on the role over time. One head of an analyst group at an IT firm commented:

“We didn’t initially have the franchise to do process improvement—our thing was analytics. But it kept coming up on our projects. So we eventually just made it a part of our standard approach.

Other changes in the roles of analysts are discussed in the next section.

Changes in the Role of Analysts

Decision-makers often don’t develop new decision interventions by themselves; they are often assisted by analysts or internal consultants—and in some cases, external consultants—who help to develop the new decision approach, analyze data, and make use of IT tools. The role of such analysts was mentioned as important by 39% of the organizations I interviewed.

The role of analysts in facilitating decision-making has traditionally been circumscribed to data analysis. However, there is evidence from these interviews that some organizations are using analysts in a broader, more influential role—going even further than the changes in business processes mentioned above (see Financial Services Firm case below). One head of a decision analysis group at an IT firm put it this way:
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I’m not just an analyst, but an analytical business consultant. In addition to analytics, we use clear thinking and problem-solving approaches. We changed the question from “How do we do good analysis” to “how do we help leaders make better decisions.” We help to frame the decision, define the metrics to be used, and help to work out the success criteria. We are also very focused on stakeholder engagement in the decision, and we make sure to clearly identify sponsors and stakeholders, and engage them in the decision. We have changed our contracting process with clients to reflect these new roles.

Several other firms mentioned changes in this same direction. One analyst noted the need to push back on decisions that aren’t well-framed, and another firm said that “courage” was required in its analysts, so that they can “stick by their guns” in debates with decision-makers about the appropriate course of action. Yet another mentioned the need to visit and socialize with the potential users of a new system and analytical approach; previously, she noted, “Hard-core statisticians wouldn’t be caught dead talking to people.”

Of course, these changes have one negative implication: it’s difficult to find people with the necessary combination of skills. As one advertising agency’s analysts put it, we look for highly numerate people who also have strong marketing backgrounds. They also need to be able to establish and maintain good relationships with accounts and account teams. They are really hard to recruit!

Some companies mentioned that they might find it easier to train people for the necessary analytical skills than for the needed interpersonal skills.

Decision-Oriented Methods and Tools

Several organizations mentioned that one aspect of their decision interventions was using a management approach or method that guided aspects of their efforts. Overall, a quarter of respondents mentioned the use of such a method. Most of the methods are well-known approaches to business and management, including:

- The adoption of “enterprise risk management” approaches by an insurance company and its customers;
- The Six Sigma approach to process quality and decision outcomes at a financial payments firm and a staffing firm;
- The use of the “net promoter score” for customer satisfaction decisions at a financial services firm;
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### Cisco Systems

One of Cisco Systems’ major decision initiatives has been to create a statistical approach to forecasting. Because Cisco works with a variety of suppliers and manufacturing partners, it needed more accurate and statistically-based forecasts of how much of each product it is likely to sell. To develop this new approach, Cisco employed a “rapid prototyping” approach to building and implementing the new decision approach. Rapid prototyping involves breaking a large project down into a series of smaller subprojects, each of which has a defined output that is reviewed by the customer of the project.

Cisco’s first step was to confirm that the forecasting tool it selected had the required capabilities in a proof of concept phase. After it passed the test, an initial analytical prototype was created. After it became apparent to sponsors that analytics could improve forecast accuracy, even more accurate models were created in a third subproject. In the fourth, the project team prepared the model for scaling up to production volumes involving 18,000 products. In the next subproject, an automated process was created for producing forecasts.

Anne Robinson, who directs Information and Data Strategy for Cisco’s Customer Value Chain organization, led the project. She points out that “breaking up the project not only ensured that the technology would work, but also helped us get buy-in from the executive sponsor at each stage, and helped us engage the planning community along the way. The prototyping process helped them get what we were trying to do in a way that a detailed specification document wouldn’t have.”

### Organization, Culture, and Role Changes

With all these other types of changes involved in improving decisions, it follows that there would also be changes in organizational structures, roles, and overall organizational culture and leadership approaches. These were among the most commonly encountered of any changes accompanying new decision approaches.

Changes in the culture and leadership of organizations were the most frequently mentioned in this category, with 70% of the 57 organizations mentioning this sort of change or issue. In some cases culture acted as a facilitator of new decision approaches; in others it was a significant barrier. Some

- An economic decision analysis approach popularized and taught by Stanford’s Engineering School and the Strategic Decisions Group, used by an oil company;

- The cognitive science approaches and A3 issue resolution format described above.

In addition, three responding organizations described an approach to developing analytically-focused decision processes that has been widely used in IT systems development, but not widely known in the decisions or analytics literature. Sometimes called “agile methods” or “rapid prototyping,” they involve the creation of a series of short-term deliverables, and frequent review of them by the client and stakeholders for the decision. The organizations that use this approach found that it led to results that better fit the decision-makers’ requirements, and at a faster pace. (see “Cisco Systems” case study above).
of the specific forms that this broad set of issues took in the interviews were:

- A government organization’s representative said that the organization didn’t have a culture of making tough decisions, and he was trying to move it in that direction;

- An engineering organization cited its “data and fact-oriented culture” as a major factor in its ability to transform several key decision processes;

- An oil company cited its “culture of honesty” as a force behind its ability to make tough, analytically-based decisions;

- A testing organization’s representative said that their effort to improve a particular decision had “run up against managerial prerogative” and had required a cultural change making decision-making more cross-functional;

- A pharmaceutical firm’s analyst said that efforts to make drug development decisions more visible had “made things transparent that some people didn’t want transparent,” although senior managers did want that change in cultural direction;

- A banker noted that his company’s decision improvements had moved the culture in a direction that empowered front-line workers—in some cases perhaps too far, he thought;

- A senior analyst at a credit card firm noted that his group is often able to show that existing decisions are ineffective, but “getting senior executives to stop doing things is very difficult.”

Despite the frequent occurrence of these issues, no organization reported that it had entered into the initiative to improve decisions with specific plans to address cultural change; it was generally encountered in mid-process or as a problematic afterthought.

Changes in organizational structure while improving decisions were somewhat less common and were mentioned by 27% of those interviewed. Because new decision approaches often draw on different groups and individuals to play different decision roles than they did previously, it’s not surprising that structural changes sometimes result. Specific organizational changes included creating cross-functional responsibility for a key decision process, creating new school-based teams for improving student performance (see case on New York City schools), creation of new physician groups to determine treatment protocols in an academic medical center, and creation of a new pricing “center of excellence” in a consumer goods firm.

In some cases, companies mentioned the lack of permanent organizational changes around decisions as a reason for the long-term failure of a new decision approach. One company, for example, resisted establishing clear organizational ownership of a new decision process around new product development. Another relied on a charismatic and forceful leader to enforce usage of a new set of decision
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New York City Schools

New York City’s Department of Education is hardly the only school district focused on underperforming students, or even the only one to employ a student performance data warehouse (called ARIS—Achievement Reporting and Innovation System) to assist school personnel in making student performance decisions. It may be the only district, however, to create Inquiry Teams at every school to facilitate those decisions.

Inquiry Teams are part of a cultural change in the Department of Education involving school-level empowerment and data-driven accountability. Their objective is to serve as experts and advocates within each school in the use of ARIS and a “Periodic Assessment” program for students. They help teachers make data-driven decisions about differentiated learning programs for students.

Each inquiry team consists of three to six members, including the school’s principal, one or more experienced teachers, and a Data Specialist with knowledge of ARIS. Their goal is to engage with the rest of the teachers and students with performance problems. According to Betsey Malasardi, an elementary school principal in Queens: “We had time to learn about … all the new technologies. It was a beneficial learning experience. We’re all looking at data as a school wide goal—and we’re doing it together. Teachers have taken the ideas and ran with them. Some teachers made checklists of skills and became leaders in their grades. Our work really goes beyond the team itself.”

and 35% of the organizations interviewed noted that their decision had involved new behaviors at the front line. At a financial services firm, for example, a new approach to determining lease contract value meant, according to a manager:

Associates go from assembly line doughnut hole punchers to exception processors. What’s left is work that really requires interventions. This changes the deal with our workers.

At a bank, a new decision process about cross-selling required front-line representatives to make computer-aided decisions in real time with customers. Under those circumstances, an analyst noted:

Front-line decision-making has to be kept very simple. We just gave them a list of products to cross-sell, listed in order of the probability score that the customer would buy it. If the recommended product was rejected, we moved it to the bottom of the pile. We also created an engagement index for how engaged the customer was with us. An up arrow on the screen meant engaged, in which case they should cross-sell; a down arrow meant that they should ask if the customer is dissatisfied; with side arrows they could use their discretion.

In that situation (as in some other organizations where front-line change tools, but when that leader departed, the desired behaviors were rarely exhibited.

A final set of organizational changes involve new roles for front-line employees. Decisions at the customer interface often must be carried out by front-line workers,
Communicating and Educating about Decisions

The last set of interventions involve two ways to involve stakeholders in new decision processes. One is to communicate the decision parameters and the attributes of the improved process to key stakeholders in the decision—from senior managers to front-line workers. The second is to educate the users of a new decision process on tools, processes, effective behaviors, and so forth.

A quarter of the organizations interviewed had made some explicit effort to communicate with stakeholders about the decision initiative. Exemplary communications approaches included:

- The use of several technologies to portray the results of analyses (see Draftfcb case);
- Storytelling at an entertainment company;
- Emulating the communications approaches of the Finance organization at an online travel firm, because they have experience in preparing narrative-driven quarterly management briefings;
- An analyst at a high-tech firm working on forecasting-oriented decisions had panel discussions with various audiences, road shows with different groups, and a “Forecasting 101” presentation;

Draftfcb is a global integrated marketing communications agency that is part of Interpublic Group. Pradeep Kumar and Karen Gliwa are VP/directors in an analytics group within Draftfcb. The goal of the group is to bring accountability and data-driven insights into campaign and marketing decisions. The group plays a critical role in the agency’s integrated “wheel” team, which typically also consists of core advertising functions including strategic planning, creative, account management and media.

Although analytics and data are increasingly valued by agency teams and clients, their team works hard to communicate insights and ideas in a way that colleagues across disciplines will welcome. Kumar notes, “We do complex analysis, but we need to make it easy for people to absorb.” Kumar and Gliwa, and their fellow analysts, are always striving to identify new tools that will facilitate communication. For example, the team developed Smartwall, a proprietary marketing intelligence platform for data visualization and collaboration. Today, Smartwall is used as a metaphor in Draftfcb that signals intelligent analytical data visualization using software like Adobe’s Flash program to animate results. Gliwa comments, “It’s not just about the data, but about telling the story and making it visually appealing. Using Smartwall, the entire ‘wheel’ team can run ‘what if’ scenarios or examine brand voice visualizations, exploring hypotheses and developing strategies together in one room.”

was involved), analysts needed to work closely with front-line management:

It was a real behavior change exercise on their part of the tellers and call center reps. We had to work shoulder to shoulder with branch managers, field managers, and supervisors. Getting the usage of the new system and process up to 50% almost killed us.
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Chevron
Chevron has a group of decision analyst/coaches who perform a variety of roles that aid decision-makers, many of which are educational:

- Lead or facilitate decision-framing workshops;
- Coordinate data gathering for analysis and conduct interviews with experts;
- Build and refine economic and analytical models;
- Help project managers and decision-makers interpret analyses;
- Recommend when additional information and analysis would improve a decision;
- Conduct an assessment of decision quality;
- Coach decision-makers and improve their decision-making abilities.

Chevron’s Decision Analysis group has trained more than 2500 decision-makers in two-day workshops, and has certified 10,000 decision-makers through an online training module. All senior executives have been certified, including the company’s CEO. All major capital projects—common at large oil companies like Chevron—have the benefit of a systematic decision analysis.

- A quantitative risk management consultant worked with clients to develop pictures of the key risk factors in their businesses, e.g., a supply chain flow with risks attached to each step;

- An oil company’s analyst group head taught analysts to bypass detailed analytics and “tell the story of value.”

Educational initiatives were typically aimed more at the “end users” of new decision tools and approaches. 41% of the surveyed organizations had some form of educational intervention. In most cases, this took the form of workshops, such as those used at Chevron to teach decision analysis techniques (see case). Some other educational attempts were more informal, as in the use of Lexis Nexis Insurance to educate insurance company sponsors to be advocates of new, analytics-based claims decision approaches (see case under “Beneficiaries of Decisions”). Two transportation firms also had education approaches; one educated drivers on a new route algorithm (because the drivers have a stake in the outcome, and the driver union wanted them to be involved in the process). The other created an interactive educational game to teach dispatchers some of the principles behind managing a transportation network. One goal of the game was to persuade participants that the decisions are too complex to be done in one’s head; instead, they need to use all of the available decision tools at their disposal.
Summary and Conclusions

Several facts are apparent from this analysis. First, it’s clear that organizations are finding it important to improve their decisions. Although this was not a random sample, individuals in almost every organization contacted said that they could identify some attempt to make better decisions with better processes. While many respondents did not report measurable results, those that did achieved impressive successes—suggesting that the redesign of decision processes will increase over time.

Second, organizations employ a variety of intervention types when attempting to improve decisions. The most common types in this survey were analytics, culture and leadership changes, and data, but there were several others that were also frequently employed.

Third, given all these diverse forms of interventions, it is easy to see why analysts—previously responsible for data gathering and analysis—are morphing into consultants whose responsibilities are much broader. The effective decision analyst in the surveyed organizations may be responsible for assistance with framing the decision, process redesign, orchestration of communication and education programs, and change management—all in addition to the traditional analysis functions.

An implication of these findings is that organizations wishing to institutionalize decision improvements will need to ensure their familiarity with these common intervention types, and create ongoing capabilities to deliver them. External consultants may also need to invest in these types of client offerings.

Every organization makes decisions, and making them better could help every organization’s performance. Therefore, decision improvement is simply something that every organization should undertake.

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1 This research was underwritten by SAS Institute, Inc. Some SAS personnel suggested customers who would be willing to be interviewed for the study.


5 Pascal Dennis, Getting the Right Things Done: A Leader’s Guide to Planning and Execution, Lean Enterprise Institute, 2007.

Concerning Sponsorship: Note that this report is intended as an objective assessment. Sponsorship was neither sought nor offered until after the research had been completed and the contents authored. The existence of the sponsorship has, in no way, impacted the conclusions.


