



Cisco Innovation 2005 Study

Summary of Findings



August 2005

Objectives & Methodology

Data Collection Timeframe:	July 8-18, 2005
Respondent Profile:	635 total respondents 542 business decision makers 93 IT decision makers
Company Profile:	190 small companies (10 to 99 employees worldwide) 222 medium companies (100 to 999 employees worldwide) 223 enterprises (1,000+ employees worldwide)
Key Geographies:	U.S.

Overview of Findings

Driving Organizational Competitiveness

Innovation was the overwhelming choice for driving organizational competitiveness according to a poll of 635 U.S. business and IT decision-makers. When asked to choose between increased innovation, better education, reduced wages or reduced corporate taxes, more than half (53%) of the executives interviewed selected increased innovation as the key to increased competitiveness. Just over a quarter (26%) of executives believe increased employee education/skill levels is the key to increasing their organizational competitiveness.

Who is driving the need to innovate? Customers (32%) and senior management (27%) were cited as the two top drivers of innovation, followed by competitors (17%) and employees (11%). Partners/suppliers and government organizations were only selected by 7% and 6% of executives, respectively.

Organizational Differentiation

Almost half (47%) of the executives surveyed ranked having the highest quality product or service as the top factor for differentiating their organization. Having the best relationships with their customers ranked second (31%) and providing the most innovative product or service as the third most important factor for differentiation. Providing the lowest cost product or service was ranked last. Linking these two findings, it is evident that innovation doesn't apply just to products and services. Organizational approaches to quality assurance and customer relationships can benefit from innovation, as can many other facets of how an organization operates in a very competitive global economy.

Barriers to Innovation

Many factors can be barriers to innovation from regulatory issues to market risk. When asked which they believed was the biggest barrier to innovation, a third (33%) of executives chose organizational issues, just under a third (29%) chose investment costs, and 17% said that regulatory issues were the biggest barrier to innovation. Market risk and a lack of skilled labor were selected by approximately one in 10 executives (11% and 10% respectively) as the biggest barriers to innovation.

Focus for Innovation

Organizations can focus their investments and energy across many areas within an organization. On average, organizations have prioritized two key areas for innovation over the next 12 months. Relationships (customer, supplier, employee) was the top area of focus for innovation (40%) followed by product/service quality (36%), operations (36%) and product/service development (32%). These results again underline the notion that innovation can come in many forms, not just at the product and service level.

When asked with which one group an organization would most like to improve relationships, the overwhelming choice was customers (50%) followed by employees (24%), and partners/suppliers (15%).

Improved Communication and Integration

The pace at which our global economy operates has changed the way we communicate and interact at both an organizational and personal level. Improving communication and integration between key constituencies, whether within an organizational ecosystem or within the healthcare system, could have a significant impact on global innovation and competitiveness.

Most executives indicated that improved communication and integration between customers, product/service development and customer service and support would significantly impact the rate at which their organization innovates, increase their competitiveness and increase customer satisfaction. Partners/suppliers, sales, marketing and other organization groups were also considered but not as frequently.

Technology Focus for Innovation

Several emerging technology areas are having a big impact on organizational productivity and success. Communication technologies are now enabling conversations anytime, anywhere within an organization's ecosystem. Location technologies are benefiting businesses, customers, employees and suppliers/partners by communicating the location of people, products and tangible assets. Data storage technology is benefiting businesses and individuals by allowing storage and access to vast amounts of customized and personalized information. Increased access to greater Internet and network bandwidth is enabling faster and more sophisticated web-based technologies and applications.

When asked which of these four technology areas would have the most significant organizational impact if incorporated into a product or service at a low marginal cost, communication technology was the top choice (32%) followed by location technology (24%), greater Internet and network bandwidth (22%) and data storage technology (22%).

Industries In Need of Innovation

Almost all U.S. industries have adopted computer and Internet technology albeit at different paces and levels of investment. Executives were asked to choose which among several industries would benefit most from embracing technical innovation. While healthcare was chosen most frequently (53%) federal (50%), state (48%) and local (46%) government were also top choices for embracing technical innovation.

The education sector has been a focus of many conversations within the US as a top driver for improving our global competitiveness, but surprisingly educational institutions were not at the top of the list for needing to embrace technical innovation with only 39% of executives selecting K-12 education and 38% selecting higher education.

Innovation in Education

Putting educational innovation into the context of an organization's needs helps understand executive perspective on the overall education system. When asked where innovation in the educational system would benefit their organizations the most, executives overwhelmingly wanted employees with greater creative thinking and problem solving skills.

Executives believe that innovation efforts are most needed at the high school level and believe that having stricter requirements for students to meet specific academic standards (34%) would have the most positive benefit for the education system and their organizations. Other beneficial areas include improved communications (21%) broader access to global subject matter (21%), stricter requirements for teacher qualifications (13%) and a greater choice of schools (10%).

When it comes to improving communications and integration between constituencies in the education system, it is no surprise that teachers, parents and students are at the center of that integration. Improving communications between school administrators, industry or government was a lower priority.

Healthcare Innovation

The U.S. healthcare system has been the central focus for presidential platforms for the last 15 years. In that space of time, the debate has continued and from the perspective of many users of the healthcare system, not enough has been done to improve it. HIPPA and other regulatory issues have made the introduction of technical innovation a challenge for the entire system. With all the different ways to improve the health of U.S. citizens, it is not surprising that executives disagree on how to improve the system.

When asked where improvements in employee healthcare will benefit their organization the most, more than two-thirds of executives indicated that innovations must come in the public/private healthcare system (reduced costs, better record keeping, better insurance coverage) while the other third believes that innovations in healthcare (better doctor training, better medications, more health education, healthier employees) will benefit their organization the most.

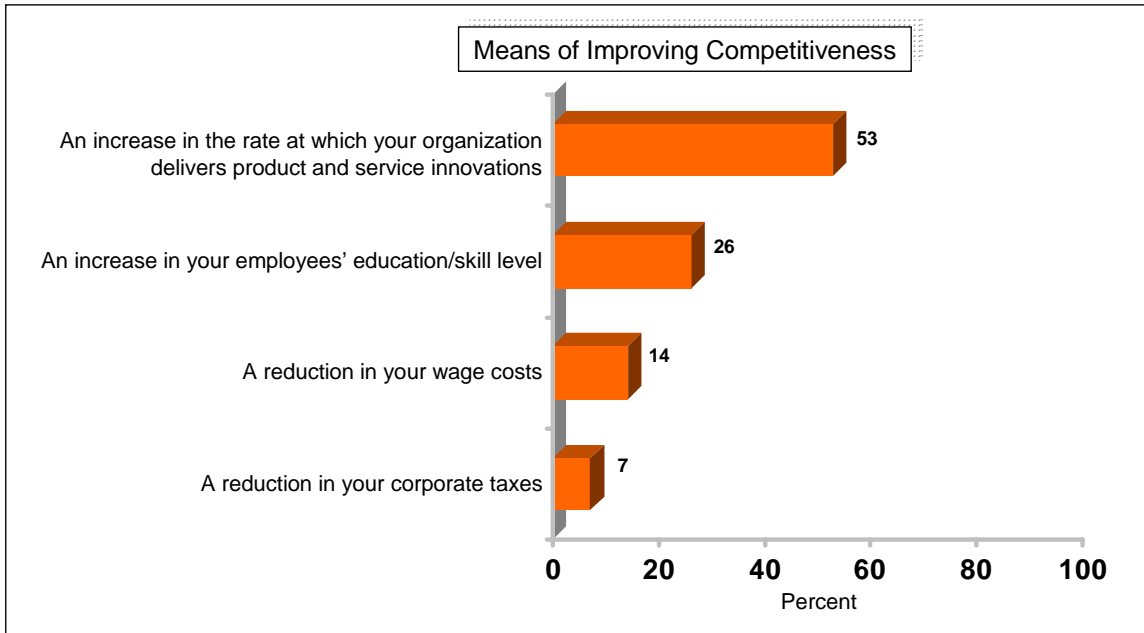
Improvements in the healthcare system using technical innovation can occur at the point of patient/doctor interaction such as family care, long-term care or emergency care. Other improvements can come from technical innovations in specific aspects of the healthcare system such as improved communications, broader choice in healthcare services or more effective and safe medications.

Almost half (49%) of executives chose improvements in family medicine followed by improvements in medical specialist/ specialty care (21%), long-term care (21%) and emergency care (9%). Executives were somewhat split when it came to improvements in specific aspects of the healthcare system. Improved communications and preventative care/ patient education were both top choices for innovation (27%) followed by an easier, more simplified process of utilizing healthcare insurance (20%), broader choice in healthcare service (17%) and more effective and safe medications (8%).

Improved communication and integration between primary care doctors (75%), insurance companies (68%) and patients (62%) would drive the most significant improvement in the effectiveness of the healthcare system according to the executives surveyed. Medical specialists (34%), government regulators (25%), pharmaceutical companies (22%) and pharmacists (14%) were also considered, but not as frequently.

Innovation

Areas with Largest Impact on Improving Competitiveness



- The two largest improvements in organizational competitiveness will come from innovation and education according to respondents polled for this study.
 - Respondents consider increases in the rate of innovation (53%) and education (26%) to have the biggest impact on their organization's competitiveness.
 - Innovation is considered more critical in the manufacturing sector where 76% of respondents indicate that increases in the rate of innovation will have the biggest impact on their organization's competitiveness (this is significantly higher than in the construction, education and government sectors).

- The more innovative the respondent considers their firm to be, the more they want to increase the rate of innovation or increase employee education.
 - Respondents at firms who tend to wait until technology is proven before adopting it, find reduced wages or reduced taxes more appealing than do respondents at more innovative firms.

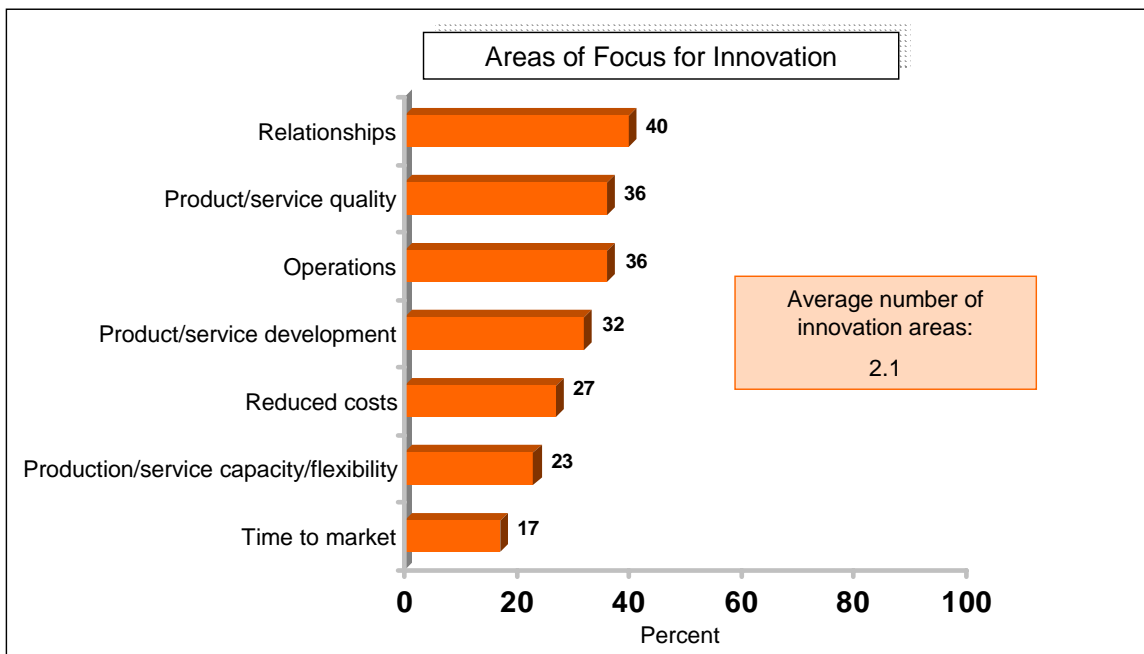
- When senior business and IT decision-makers are asked which single business outcome their organization could achieve through increased innovation...:
 - 26% of respondents indicate they would use innovation to drive increased revenues.
 - 18% indicate they would use innovation to drive an increase in market share.
 - 18% would use innovation to drive improved customer relationships.
 - Only 16% indicate that they would use innovation to lower production costs.
- Innovation-driven business outcomes also vary by industry.

	Construction	Finance	Manufacturing	Professional Scientific & Services	Wholesale/Retail Trade
Most Desired Outcome	Reduce Production Costs/ Interactions (26% each)	Interactions (27%)	Increase Market Share (27%)	Increase Revenue (42%)	Increase Revenue (32%)
2nd Desired Outcome		Increase Revenue/Market Share (24% each)	Increase Revenue/Reduce Production Costs (26% each)	Interactions (33%)	Reduce Production Costs (31%)

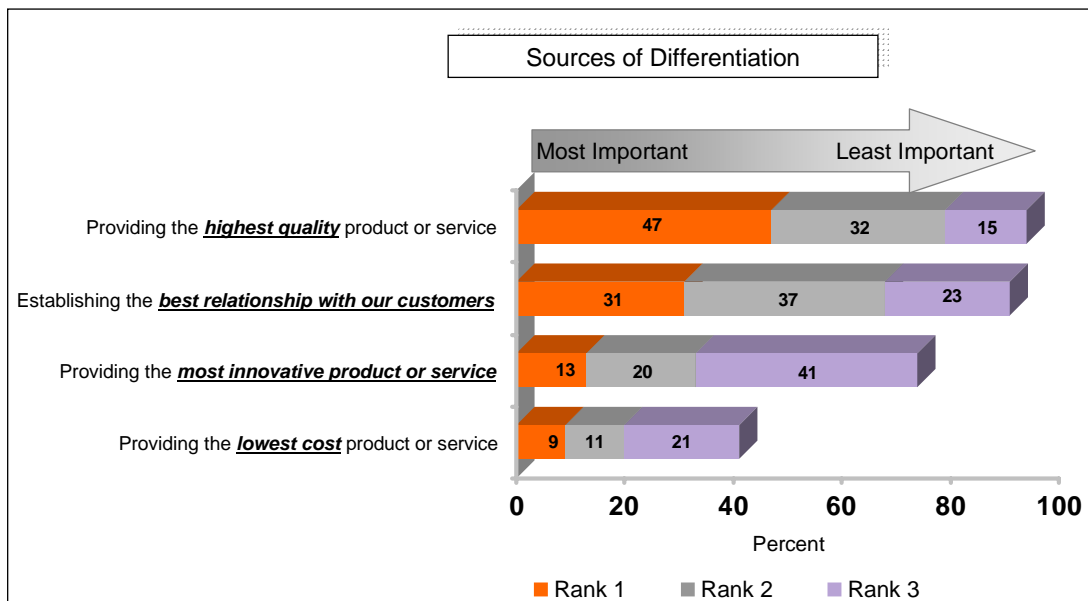
	Education	Government/ Social Services	Healthcare/ Pharmaceuticals
Most Desired Outcome	Interactions (44%)	Interactions (45%)	Interactions (30%)
2nd Desired Outcome	Increase Market Share (21%)	Reduce Production Costs (34%)	Increase Revenue (26%)

* "Interactions" include improving customer relationships an internal knowledge sharing.

- Most executives polled for this study believe their organization will focus innovation on an average of 2 areas within the next 12 months. Relationships with customers, suppliers, partners, and employees is the most frequently chosen area for innovation.



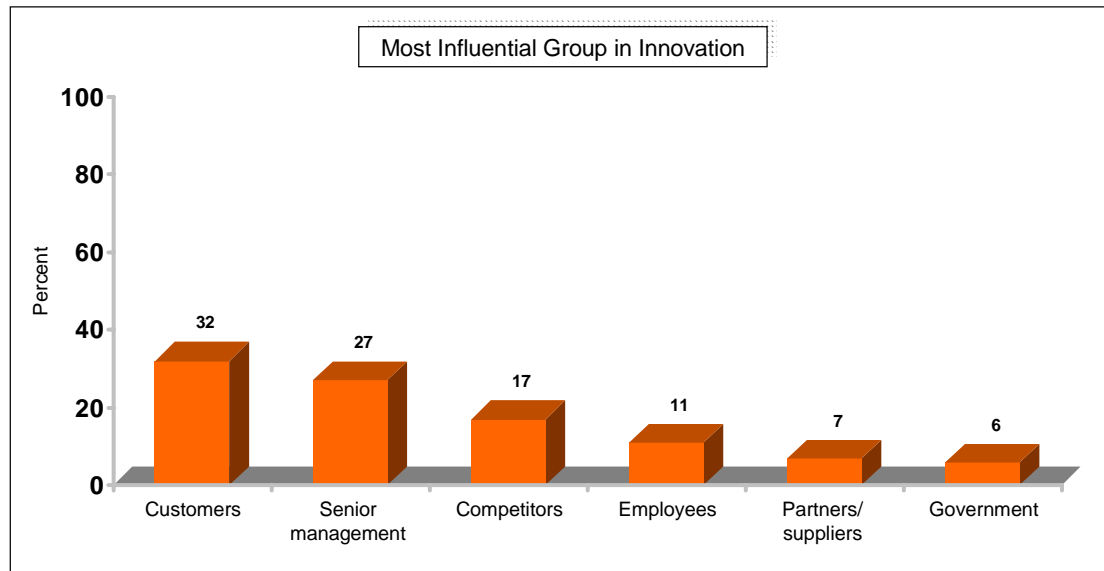
- Having the highest quality product/service and establishing the best customer relationships are considered to be the most important factors for differentiating organizations (mentioned by 47% and 31% of respondents, respectively).



Influence & Barriers

Influence

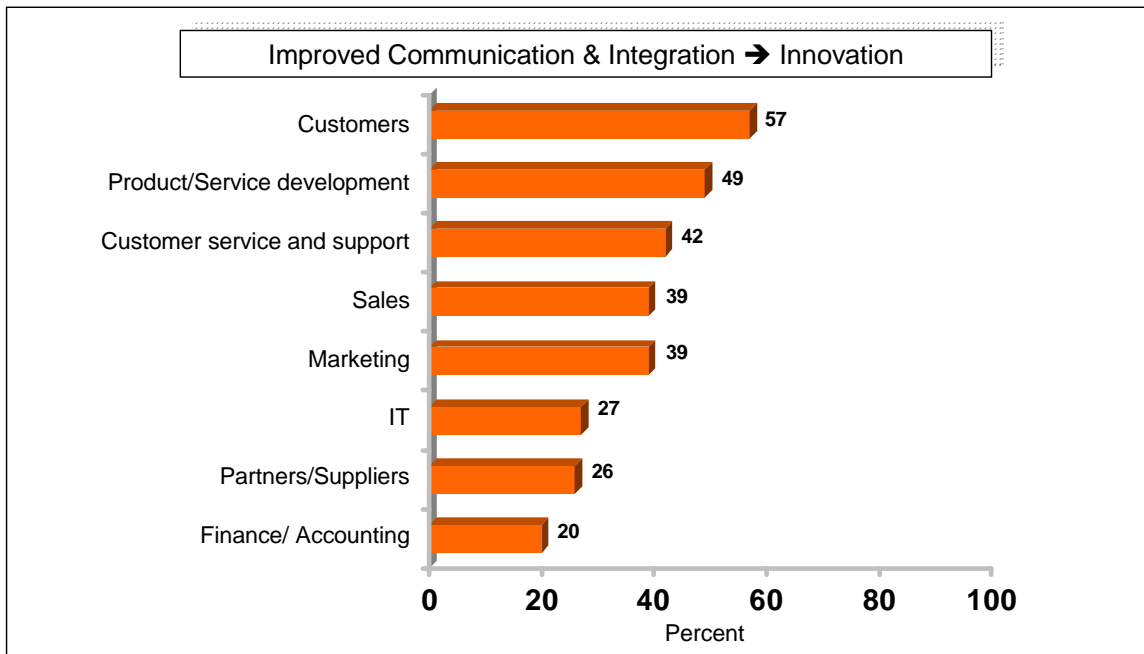
- Executives indicated that innovation is influenced primarily by customers, senior management or competitors.
 - Overall, very few respondents consider government an influencer of innovation; however, respondents working in this sector are significantly more likely to consider the government a driver of innovation (cited by 38% of government respondents).
 - Interestingly, customers have much less influence on innovation at organizations with a low-cost strategy. At these organizations, senior management has the most influence, followed by competitors and customers drop to third.

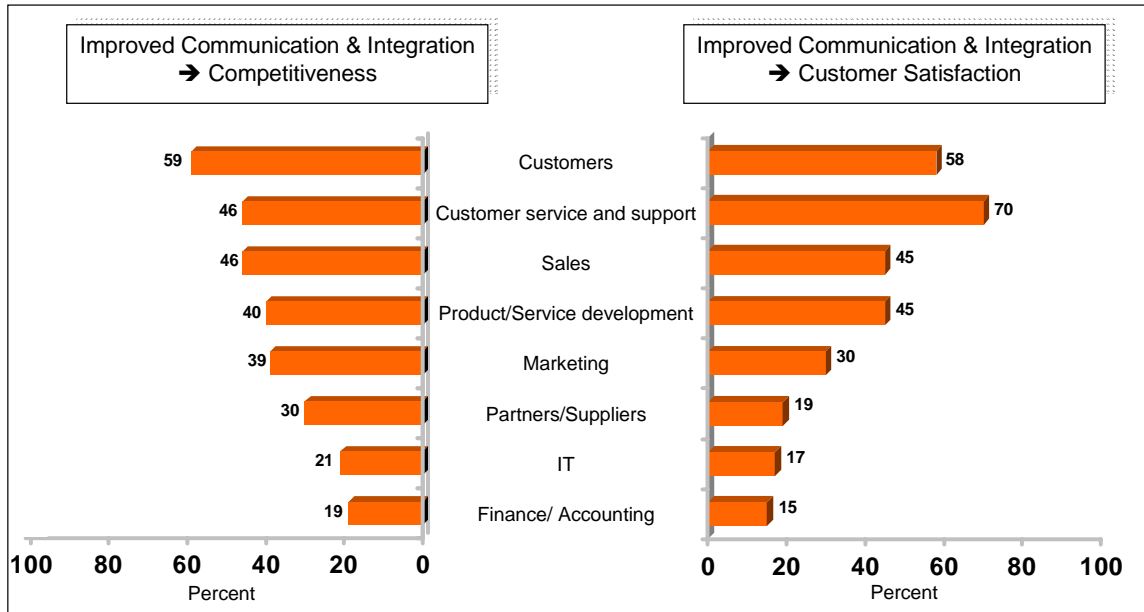


Interactions

- Interactions between multiple groups are an important part of innovation and competitiveness.
 - As firms strive for competitive advantage from these interactions, they appear to be looking at unique combinations. When asked about improving communications between three groups for greater innovation or competitiveness, no single grouping was selected by more than 7% of respondents.
 - Regardless of whether or not there is a clear consensus about which areas to connect, integrating various groups will have implications for networking, communications and security technology.
 - The technology used to improve communications and integration will impact innovation, competitiveness and customer satisfaction.

- To improve innovation, the three most commonly mentioned areas to connect include customers, product/service development, and customer service.
 - While customers are considered drivers of innovation, 29% of respondents believe innovation can be driven by improving communication/integration entirely between internal groups.
 - Improving communication/integration between sales and various other groups is considered important for innovation by more respondents in the manufacturing (52%) and wholesale/retail (56%) industries than other industries.
 - Communication/integration preferences are also influenced by what the organization is trying to achieve through innovation.

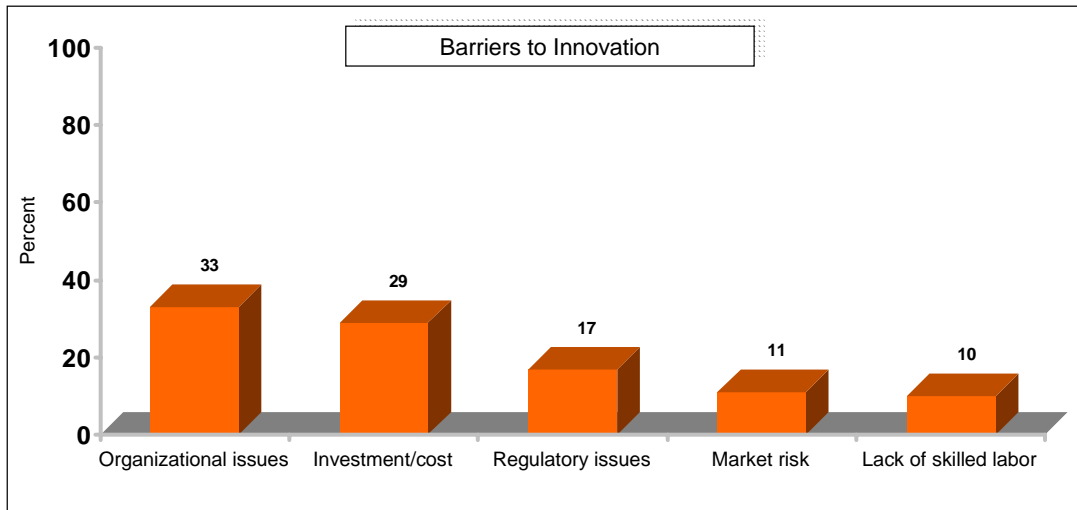




- To improve competitiveness, the three most commonly mentioned areas for communication/integration improvements are customers, customer service, and sales.
 - While customers are important, 27% of respondents believe that competitiveness can be improved through enhanced communication/integration entirely between internal groups.
 - Improving communication/integration between sales and various other groups is considered important for competitiveness by more respondents in the wholesale/retail industry than some other industries.

- For improved customer satisfaction, the three most commonly mentioned areas for communication/integration improvements are customer service, customers, and sales.
 - While connecting customers with support is critical to satisfaction, 30% of respondents believe that competitiveness can improved through enhanced communication/integration entirely between internal groups.
 - Connecting sales is seen as beneficial primarily among companies outside of the government, healthcare, education and service-focused sectors.

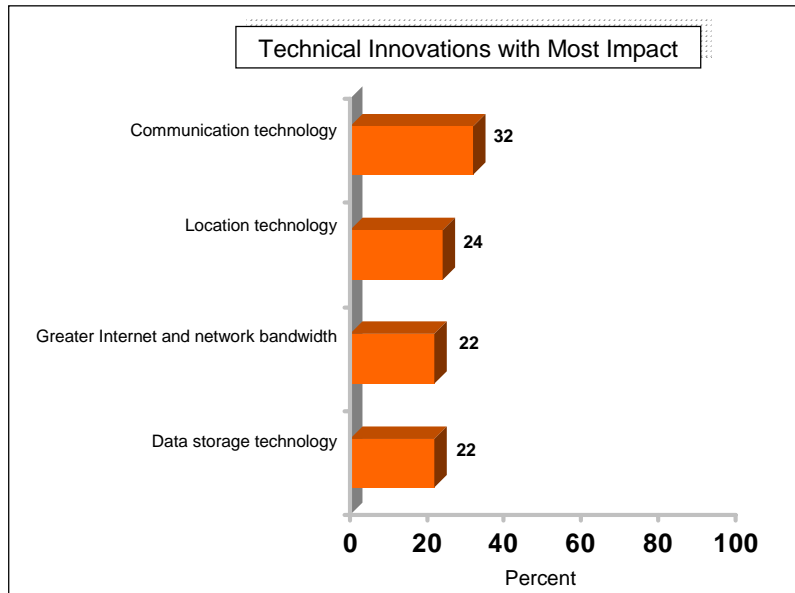
Barriers



- Internal issues are a barrier to innovation.
 - 33% of respondents rate organizational issues as the biggest barrier to innovation.
 - 42% of respondents at enterprise companies indicate that organizational issues are a barrier; this is significantly higher than those at medium (31%) and small (25%) organizations.
 - Respondents facing organizational issues as barriers to innovation tend to be more likely to want to focus on improving communication/integration entirely between internal groups.
- Investment cost is a stronger barrier for small firms, ranking second overall at 29%.
 - Significantly fewer respondents in IT roles cite cost as a barrier (18%) than respondents in a business role (31%).
- Regulatory issues are the third most commonly cited barrier at 17%, primarily driven by respondents in the healthcare/pharmaceutical industry.

Innovation & Technology

- Communication technology is expected to have the greatest impact on organizations, followed by location technology (24%), increased bandwidth (22%) and data storage (22%).
 - Location technology is more valued in the wholesale/retail industry than other industries, where 41% of wholesale/retail respondents indicate that this technology would have the biggest impact on their organization.

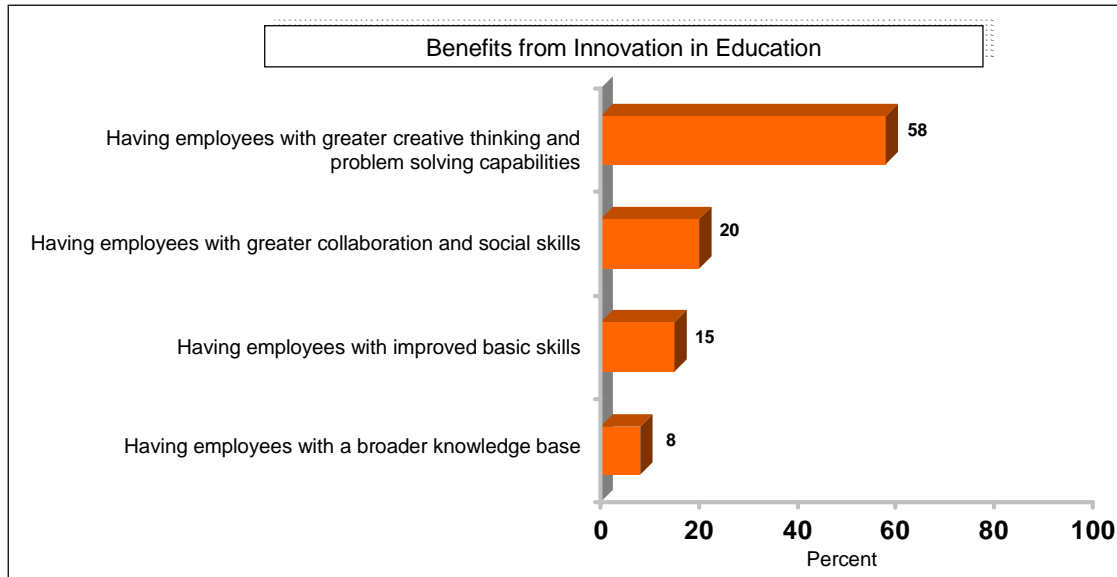


- Communication technology is also the single most frequently mentioned technology as an effective means of achieving goals for innovation, regardless of whether efforts are focused on production cost reduction, increased revenue, increased market share or improved interactions.
 - Among respondents focused on transaction cost reduction, 32% indicate that data storage technology will be the most effective to meet their goals, with communications technology following in second (27%).
 - Increased bandwidth is more beneficial to small companies than to larger companies. In fact, 26% of respondents at small companies indicate that increased bandwidth technology is most likely to help them achieve their goals for innovation (vs. 15% at enterprise organizations).

Education

Expected Benefit from Innovation

- When respondents were asked where innovations in the education system benefit will benefit their organization, 58% cite greater creative thinking and problem solving skills, followed by collaboration and social skills (20%).



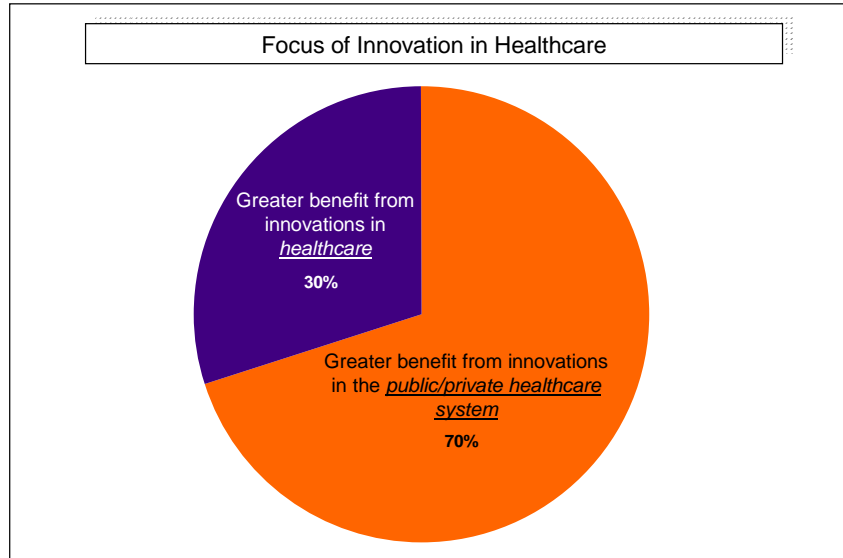
Focus for Innovation

- 40% of respondents would most like to see high-schools improved using technical innovation, followed by college/university (29%), continuing education and skills training (17%) and elementary/middle school (14%).
 - Respondents with an advanced degree are more likely than those who are less educated to indicate that improvements should be focused on colleges/universities.
- 34% of respondents indicate that stricter academic requirements for students would provide the largest benefit to the educational system.
 - Respondents with higher education levels are less likely to think stricter student requirements is the solution; instead, they shift towards stricter requirements for teacher qualification and broader access to global subject matter.
 - Other areas that would benefit the educational system include broader access to global subject matter and improved communications (both selected by 21% of respondents), stricter teacher requirements (selected by 13%) and a greater choice of schools (selected by 10% of respondents).
- Improving communication/integration between parents, students and teachers will have a significant impact on improving the effectiveness of education.
- Notably, respondents in the education sector do not differ substantially from other respondents in terms of their perceptions of where to focus innovation within the educational system.

Healthcare

Expected Benefit from Innovation

- 53% of respondents identify healthcare as the economic sector most in need of innovation.
 - The need for innovation in healthcare is even more pronounced among those employed in this industry. In fact, 84% of respondents who work in the healthcare industry select healthcare as an area for innovation, this is significantly higher than all other industries.



Focus for Innovation

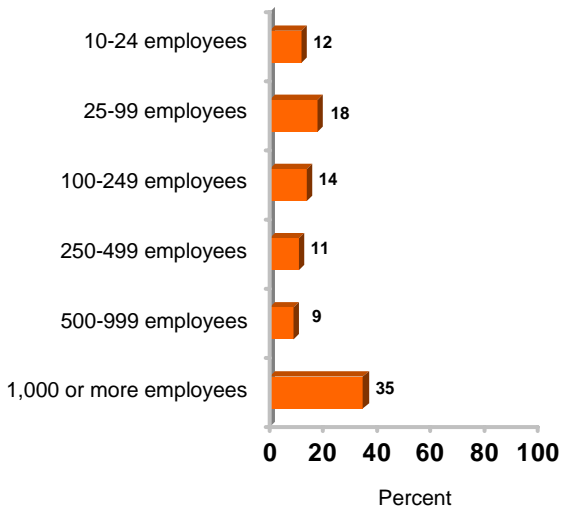
- 70% of respondents indicate that innovation should be directed to improve the system, rather than the medicines and doctors.
- Improvements through technical innovation are seen as most beneficial when they are focused on family medicine (49%), followed by specialists (21%), long-term care (21%) and emergency care (9%).
- Improving communication/integration between doctors, patients, insurance companies and specialists will have the most significant impact on improving the effectiveness of healthcare.
 - Within the healthcare industry, respondents agree that there is a need to connect doctors, patients and insurance companies, but they are more likely to indicate a need to improve communication with government regulators than are respondents in other industries.
- 27% of respondents would most like to see health education and preventative care improved using innovation, followed by 20% who would like to see innovation make insurance interactions easier/simpler.
 - Only 8% of respondents would like see improvements through innovation produce more medications.

Demographics and Firmographics

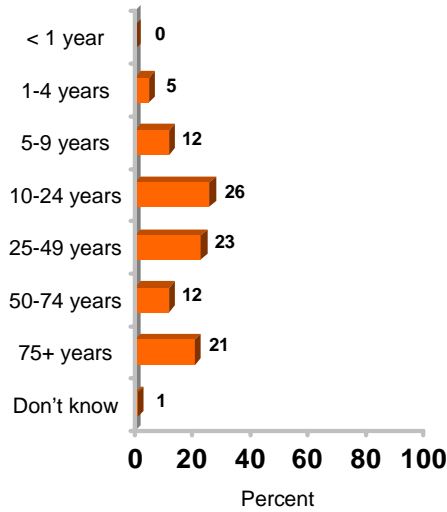
Industry	Total
Finance, Insurance, Real Estate	14%
Manufacturing	13%
Professional, Scientific and Technical Services	13%
Healthcare	10%
Wholesale or Retail Trade	9%
Other For-Profit	7%
Education	6%
Accommodations/Food Services	4%
Construction	4%

Industry (continued)	Total
Agriculture, Forestry, Fishing	3%
Government and Public Administration	3%
Transportation and Storage Services	3%
Other Non-Profit	3%
Pharmaceuticals	2%
Utilities	2%
Repair and Maintenance	1%
Social Services	1%
Mining	0%
Don't know/Prefer not to say	2%

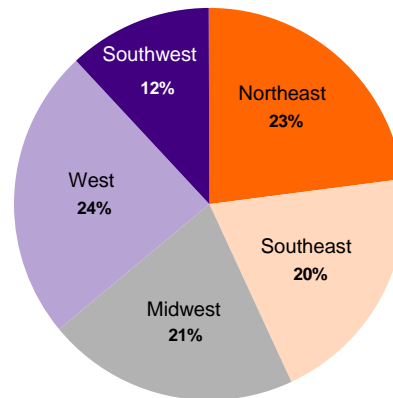
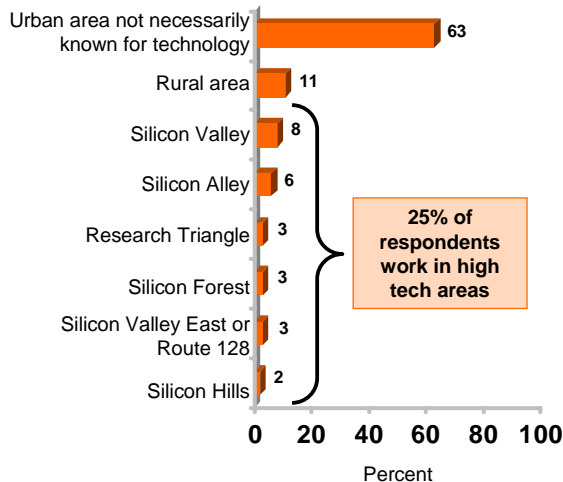
Organization Size



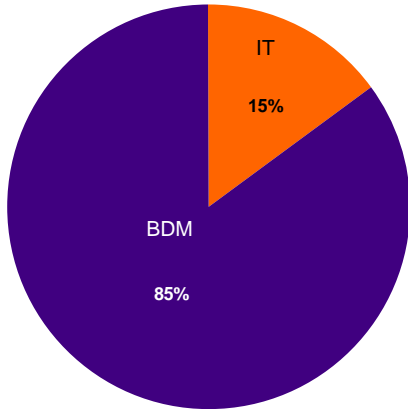
Years in Business



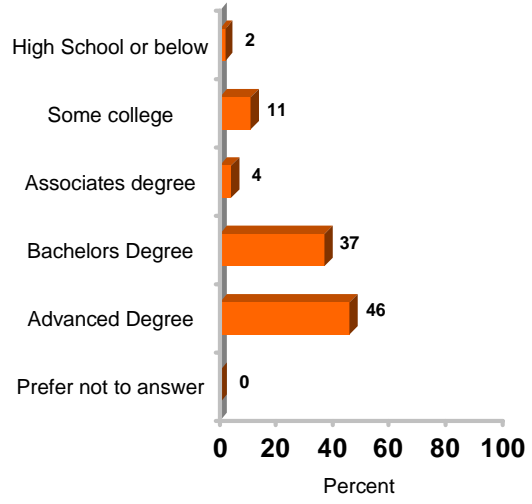
Organization Location



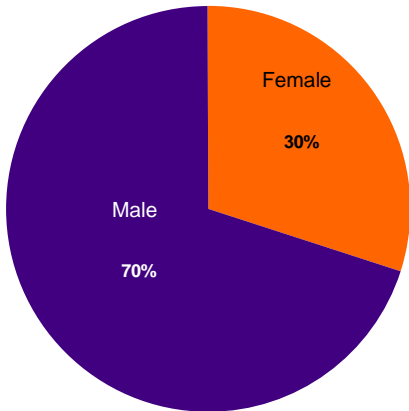
Job Responsibilities



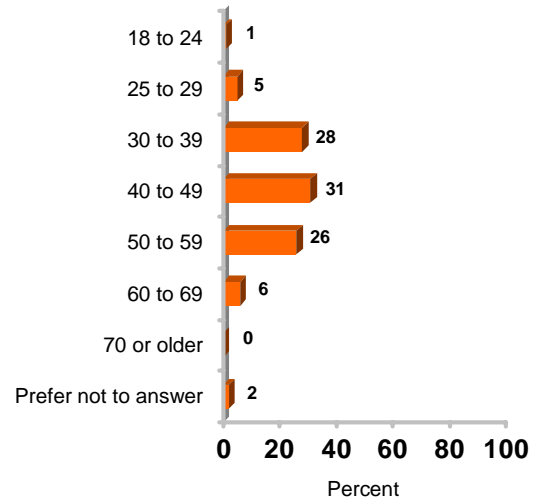
Level of Education



Gender



Age



About Momentum Research Group

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Since its inception, MRG has had the pleasure of conducting such innovative research for a number of clients including AMD, Autodesk, Cadence, Cisco Systems, Hewlett-Packard, PeopleSoft, Siebel Systems, Sun Microsystems and Sybase.

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