

Big Data, Big Business and the Greater Good

A new IDG Research Services study finds organizations are striving to synthesize data from multiple sources for societal and monetary gains

In the past few years, organizations have embarked on a widespread effort to break down their data silos, with the goal of allowing departments to share their data. But eliminating data silos has brought more advantages and new challenges than most enterprises ever imagined. By undertaking this admittedly difficult task, enterprises have created a world where any department at any time can share data, with just about anyone.

It's not just departments within a single company that are sharing data. Indeed, data is being shared to and from: external supplier databases, third-party sources in the cloud and SaaS applications; social media; and more increasingly, sensors that are part of the Internet of Things.

Perhaps unwittingly, organizations have created a world with more data to analyze, but also better data to analyze; a world in which they can use the resulting information and knowledge to make their organization smarter. But not just better at doing business – they now have the ability to extend their reach and improve society, too.

If that sounds mutually exclusive, it's not. According to a recent IDG Research Services survey, the idea of "Social Innovation" — using technology to improve not only revenues but also society — is gaining significant traction across multiple industries, from health care and financial services to telecommunications, high tech, and the public sector. A strong majority of respondents (80%) agree that doing more for society is ultimately good for business, and 60% report that their organizations' business decisions align with this belief.

Why are enterprises exhibiting this high level of interest

for something that isn't entirely financially motivated? The answer is simple: it's because the world is more interconnected and interdependent than ever before, which means that both organizations and individuals can make an impact. Organizations are starting to see more value in reaching outside their immediate environment for data, either for a broader perspective or for more granular insight. Tearing down silos results in more sources of information, more ways to analyze that information, and more ways to aggregate data. The result: sharper, better perspectives than ever before.

At the same time, societal trends now have a greater influence on businesses and organizations, both in terms of business pressures and business opportunities. As the Harvard Business Review noted in a 2011 article, "seeking legitimacy or public approval by aligning corporate objectives with social values has become a business imperative."

Corporate Thinking on Social Innovation

Another element in this shift in corporate thinking: some highly visible CEOs are focusing on giving back to society. Salesforce CEO, Marc Benioff, whose foundation has contributed \$60 million and who has personally given \$100 million to a hospital, says "The business of business isn't just about creating profits for shareholders, it's also about improving the state of the world and driving stakeholder value." Apple CEO Tim Cook also notes that Apple does "a lot of things for reasons besides profit motive. We want to leave the world better than we found it."

Most of the survey respondents agree with these executives. When asked if doing more for society is ultimately good for business, 36% strongly agreed and 44% somewhat agreed. When asked if there is a conflict between doing good business and making socially conscious decisions, 52% somewhat or strongly disagreed.



Total Level of Agreement

Doing more for society is ultimately good for business.

More than
80%
Strongly Agree

More than
10%
Strongly Disagree

There is a conflict between doing good business and making socially conscious business decisions.

More than
50%
Strongly Agree

More than
30%
Strongly Disagree

Nor are these just personal opinions. Some 60% of respondents report their organizations' business decisions align with the belief that "doing more for society is ultimately good for business," and these results are consistent across multiple industries: banking (52%), healthcare (64%), telecom (48%), and government (76%).

Interestingly, when the survey linked technological capabilities to Social Innovation, the results were equally emphatic. Given the definition of Social Innovation as "the integration of machine data (i.e., Internet of Things), analytics, IT infrastructure solutions and industry expertise to create products, solutions and services that enable organizations and agencies to address larger societal issues and trends (e.g., urbanization, safety, new health models, increased mobility and data traffic, etc.) that also result in new opportunities," organizations reported a high level of activity and interest.

For instance, 55% said that they already have "some experience with Social Innovation projects," with those projects either in progress or already completed. Only 13% admitted that the idea of Social Innovation is new to them, but they are nonetheless still planning projects in that realm, based on the definition provided. The remainder expressed interest in the idea, and more than half of the remainder said

they are already in the information-gathering stage.

Finally, only a small number of respondents (13%), said they are uninterested, citing a variety of obstacles. Some said their organizations had other priorities, or budgetary constraints. Others cite internal politics or a lack of vision. Some admitted their companies tend to be more reactive than proactive when it comes to dealing with such issues, and others were straightforward in saying that their organizations found Social Innovation irrelevant.

From Altruism to Capitalism

But many organizations have already found that Social Innovation need not be exclusive of revenues. In many cases organizations interest in Social Innovation isn't purely altruistic, but believe it's the path to greater returns. In such cases — and rightfully for stakeholders — business goals are driving interest in Social Innovation. Evidence exists in all of the aforementioned industries. Not surprisingly, there's a high level of interest and opportunity in both healthcare and the public sector.

In the healthcare industry, organizations want to use Social Innovation to improve the level of personalized care (cited by 74% of respondents); reduce healthcare costs (70%); and improve patient satisfaction (68%). The methods for making this a reality already exist. Wearable or remote devices transmitting patient information means fewer trips to hospitals and clinics, and thus, lower costs; yet the information the devices provide delivers greater insight into medication efficacy and patient use.

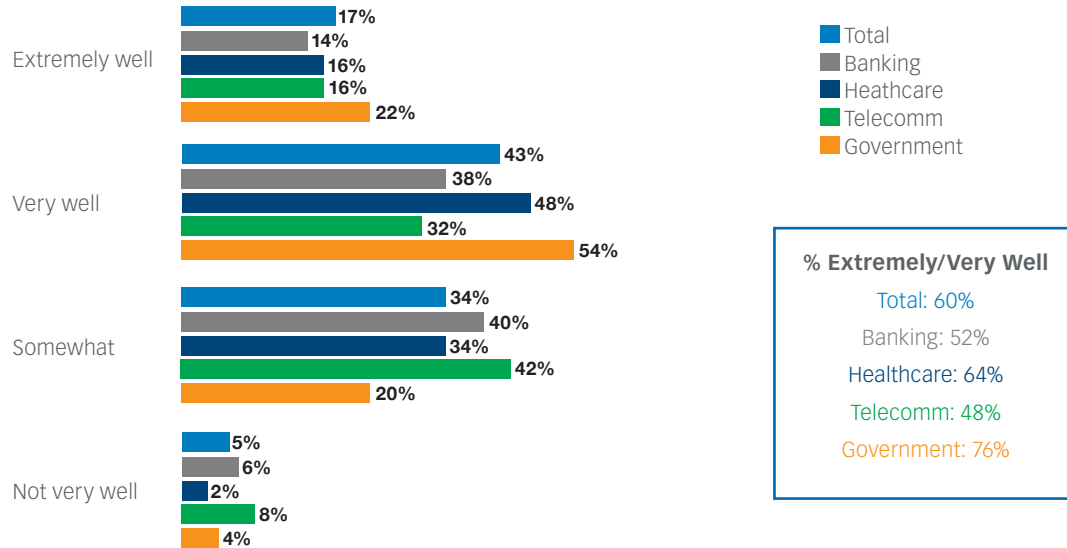
Individual information can also be extrapolated to improve treatment of similar demographics. On a global scale, increased analytics of patient data can help in a variety of areas, from genome typing and viral outbreaks to tracking of life-threatening conditions such as obesity and diabetes.

The public sector industry's interest in Social Innovation is equally tangible. Organizations in this industry are interested in increasing collaboration among departments (cited by 62% of respondents); improving public safety and security (52%); and building a more efficient community infrastructure (52%).

But the ramifications of the Internet of Things and improved analytics also boost improvements to society through crime solution and deterrence. Public safety



Business Decisions/Practices Align with Belief, “Doing More for Society is Ultimately Good for Business”



SOURCE: IDG Research Services, June 2015

organizations can’t afford to install security cameras everywhere, but with the ability to collaboratively tie into private organizations’ security cameras, especially in conjunction with applications such as gunshot detection, license plate recognition and social media, first responders can react more quickly with better information to identify victims or apprehend criminals.

In another use case, a transportation company upgraded the wireless networking capabilities on its ferries. While the system immediately benefitted commuters, it also improved safety because the system could track feeds from ferries more efficiently, including — in the future — monitoring ferry equipment for preventive maintenance requirements, and fuel gauges to ensure timely refueling.

Even in what might be considered unexpected industries, the interest is there. Take banking; a majority of respondents in that industry said they were developing either new or more cost-effective products and services with Social Innovation in mind. Their goal: to create competitive advantage and increase innovation.

Consider the possibilities of using both accountholder and third-party data to create a more-accurate view of changing neighborhood demographics. Banks could use such

data to recognize a lower level of risk of investing in such neighborhoods, and thereby opening up lending opportunities to potential customers who may have been in previously limited socioeconomic ranks.

Similar out-of-the-box analysis may also be valuable to the telecom industry. According to the survey, the telecom industry’s interest in Social Innovation is driven by an economic desire to boost communications capabilities and competitiveness, cited by 56% of respondents (the same percentage also want to lower customer churn). But half of respondents want to quickly develop new products and services to increase revenues, and it’s in this area that Social Innovation becomes more relevant.

Consider, not unlike the banking scenario, the ability to develop more granular insights into providing better wireless service to rural areas, using better information-gathering and data-analysis techniques to recalculate the ROI of such investment. With increased interest in the Internet of Things, there may be more sensors in rural areas than humans — but nevertheless, a higher level of wireless access.

Note that the telecom industry can also use the tools of Social Innovation for other service improvements. Consider unplanned social events where thousands of people

converge unexpectedly. Telecoms could take the information generated by the smart phone usage of those people — calling friends, uploading photos — and use the information to beef up network bandwidth in those areas. The economic benefit: their users don't encounter outages that may have resulted in the loss of customers. The social benefit: public safety officials maintain 911 uptime.

Getting Started With Social Innovation

A strong majority of most organizations (66%), no matter what their industry, view Social Innovation as an ongoing part of business that touches most projects and plans. For instance, 64% of respondents find data-driven decision-making a critical or high priority. Even more encouraging, most companies report progress regarding their Social Innovation efforts. While half say they are on track in these efforts, they admit to “progressing slowly”; another quarter feel they are making progress.

Results that reflect slow progress are not surprising. Bringing a lot of data together for analysis isn't easy. Data management, data analysis, and systems integration are all challenging. Organizations also cited their data analytics maturity, with more than 50% saying that while analytics skills within IT are moderately advanced, the maturity of analytics technology lags behind. But with experience, organizations will get more confidence.

How can organizations move forward? First, they need to understand the obstacles that will most likely impede their progress. According to respondents, these include gathering the resources to plan and implement new analytics solutions (cited by 33%); the cost of new services and expertise (31%); data integration (30%); and identifying the best opportunities for innovation (29%).

When facing multiple obstacles such as complex data sources and analytic processes, it's hard to know where to start. Organizations are looking for partners with experience in critical areas, citing expertise in analytics and systems integration as most important. Both analytics and system integration were cited by 73% of respondents, although the latter is the area that respondents say they would benefit most from vendor assistance. Other criteria cited as important are data management expertise (68%) and industry and operational expertise (67%).

But the most important characteristic, and one that seems to be in abundance, is the desire to intertwine efforts to boost revenues and increase Social Innovation efforts. And as long as organizations understand that they can do both without adversely affecting one or the other, their efforts will be rewarded.

How Hitachi Data Systems Can Help

Hitachi Data Systems (HDS) can help companies move forward with their Social Innovation efforts in a variety of ways: through its solutions in public safety, healthcare, telecom, machine-to-machine analytics, automotive, and energy; through its internal consulting expertise; and through its partnerships with deep industry experience.

Hitachi Live Insight Center of Excellence was created to specifically address Social Innovation projects end to end. It leverages extensive background in the capabilities respondents cite as most important, including analytics expertise, systems integration, and industry expertise.

For instance, HDS, as part of Hitachi, Ltd., has access to more than 5,000 industry consultants and hundreds of data scientists. Its own innovation engine creates more than 17,000 patents each year, and Thomson Reuters has recognized it repeatedly for its innovation efforts.

Hitachi also has unique, comprehensive expertise and perspective on the Internet of Things because it builds many of the devices, such as sensors, that generate big data. It also builds and integrates IT solutions and manages data for 83% of the Global Fortune 100. All of this expertise underscores its deep experience in core business processes, analytics innovation, and operational technology. ■

For more information about how HDS can help you implement Social Innovation at your organization, visit :

www.hds.com/solutions/social-innovation



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