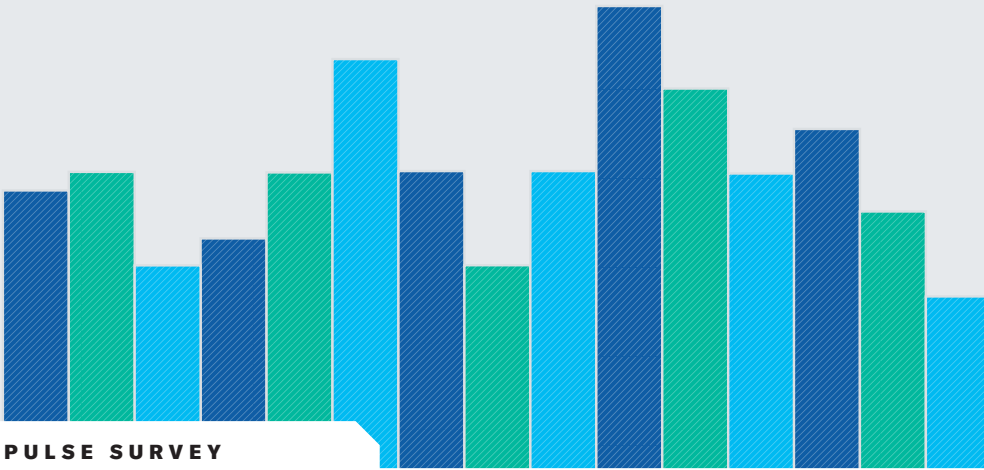




**Harvard  
Business  
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ANALYTIC SERVICES



**PULSE SURVEY**

# **BizOps: Connecting IT to Business Outcomes**



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Today's executives aren't just navigating uncharted terrain, they're contending with markets that have been beset by change that's happening at an unprecedented pace and scale. If speed and agility were ever optional for your organization, those days are clearly over.

Now, the need to scale and accelerate digital transformation isn't a lofty, long-term goal—it's a had-to-happen yesterday, all-hands-on-deck imperative.

In these dynamic environments, organizations can't contend with waste, inefficiency, or a lack of strategic coordination—but that's exactly what's been happening because of the persistent lack of alignment between IT and business teams. The presence of these organizational silos has long been a challenge, but the difficulties continue to be compounded as new technologies and services are introduced, more operational tools get added, and change continues to accelerate. This complexity is fueling a growing sense of chaos in many organizations today.

To accelerate delivery and innovation, enterprises have grown increasingly reliant upon agile and DevOps approaches. While DevOps has enabled teams to make strides toward continual improvement of software quality, this approach doesn't necessarily account for business outcomes.

This is where BizOps comes in. BizOps is a framework for data-driven decision making, one that connects IT efforts and investments with business outcomes. BizOps can help put business outcomes at the center of everything, from value management to development to IT operations.

We've sponsored research by Harvard Business Review Analytic Services to examine how enterprise executives are contending with this persistent disconnect between business and IT teams. Through this research, we wanted to explore how executives were contending with their current demands, and find out how many saw BizOps as beneficial to their organizations. (Spoiler alert: A lot—almost 90% of respondents.)

I encourage you to review this report and find out how your peers are navigating current market dynamics. This paper provides compelling insights into the trends in play, and it can help inform your business strategy as you look to capitalize on the opportunities BizOps can present.



**Serge Lucio**

**Vice President and General Manager,  
Enterprise Software Division  
Broadcom Inc.**

# BizOps: Connecting IT to Business Outcomes

Today's narrative for digital transformation has changed dramatically. Enterprises have long attempted to align IT departments and business units, and this goal has become only more pressing as time-to-market and competitive pressures increase.

An emerging approach to improve alignment between IT and business, called "BizOps," is beginning to attract interest, according to a survey of 216 executives by Harvard Business Review Analytic Services.

Eighty-six percent of respondents say BizOps would be beneficial, or in some cases already is beneficial, to their organization. Similarly, 89% of the executives say BizOps could significantly improve decision making by improving collaboration between IT and business teams.

BizOps is a data-driven framework for decision making that connects IT departments with business functions—such as marketing, finance, and HR—to align technology investments to business outcomes. The approach uses artificial intelligence (AI) to augment and automate some processes to provide continuous insight and collective intelligence. BizOps builds off the IT-centric approaches of agile methodologies and DevOps, which are aimed at improving the effectiveness and efficiency of technology departments.

"Many companies that have been successful with agile and DevOps are running into issues when they try to scale, or integrate development and operations, because they end up building applications and technology that don't fit together in an optimal way," says Mike Rosen, an analyst with IDC who focuses on strategic IT architecture and digital transformation. "A lot of these companies are now looking at BizOps as a way to extend the continuous cycle of DevOps to include the business considerations, so IT can build the right stuff faster."

The survey underscored the frustration that companies are experiencing with their current methods for developing, deploying, and using technology.

## HIGHLIGHTS



86% of survey respondents say **BizOps would be beneficial**, or in some cases already is beneficial, to their organization



87% agree that human workers **using artificial intelligence to support their business decisions** ultimately leads to improved decision making



74% of respondents say IT environments are **likely to become significantly more complex** at their organization within the next 18 months



“BizOps creates a shared understanding and vision across all teams that allow them to select project activities that have the highest priority,” Mike Rosen, an analyst with IDC.

Nearly half of survey respondents said the growing complexity of IT environments has created a sense of “chaos” in their organizations. In addition, IT teams tend to use metrics that don’t translate to business outcomes, and they don’t collaborate closely enough with business units in their organizations. This leads to mounting frustration, significant costs, and lost opportunities. Poor alignment between departments is also the top obstacle to digital transformation, according to the survey.

This report will define the emerging concept of BizOps and explore the consequences of the disconnects between IT and business units as they try to keep up with an ever-growing need for speed and agility, pivot to new business models, and adjust to the new normal of doing business. It will also examine the potential for BizOps to alleviate those issues and better tie IT projects to business outcomes so companies can consider how they might incorporate the approach into their operations.

## BizOps: Extending the Benefits of Agile Techniques and DevOps

To understand BizOps, it’s important to see how it contrasts and works with approaches that have been applied mostly to IT, such as agile techniques and DevOps. DevOps, shorthand for “development to operations,” coordinates the process from initiation to delivery, leaning heavily on automated processes. Agile software development is aimed at keeping business sponsors involved in IT projects, remaining flexible with requirements, and developing a minimum viable product (MVP). The MVP needs just enough features for customers to provide feedback so that better iterations can be developed quickly.

While both agile methodologies and DevOps have brought significant benefits to many organizations, they also have notable shortcomings. Agile methods, for example, rely on one- to-four-week iterations, or “sprints,” to create finite improvements in technology. These sprints, however, are done within a year-long project cycle. “That creates a disconnect, where you can’t make changes to the larger plan,” says IDC’s Rosen.

He further explains that BizOps can build on these approaches, adding strategic planning, continuous measurement, and enterprise context to DevOps. Consider a line-of-business (LoB) that wants to develop a new app. Typically, the LoB would have narrow criteria that wouldn’t

necessarily incorporate issues of enterprise concern, such as customer consistency, integration, or single sign-on. “BizOps creates a shared understanding and vision across all teams that allow them to select project activities that have the highest priority,” Rosen says.

BizOps is an emerging concept, and, at this point, most people are not even familiar with it, the survey showed. However, after learning about the approach, an overwhelming number of respondents immediately saw its value in addressing the disconnects between IT and business units.

Indeed, some 86% of respondents said it could be beneficial to their organization, including a smattering who have already implemented BizOps and are enjoying benefits from it. Only 13% thought BizOps would not provide any benefits to their organization.

## Confronting Frustration and “Chaos”

Executives are dissatisfied with the current ways in which IT and business units work together—or, more often, fail to work together. While this has generally been a long-standing concern, the consequences have mounted in the digital age as technology is increasingly interwoven with business goals.

“Large companies have experienced a lack of connection between IT and business for 30 years, but the disconnect didn’t matter that much because IT was considered a relatively back-office, transactional function,” says Tom Davenport, a professor at Babson College and analytics expert. “You were happy if IT produced payroll on time or was able to generate an order-receipt form. Now the ante has increased significantly because every company is, or will be, a technology and analytics company. If you create AI-based recommendations for e-commerce and screw it up, you can be put out of business pretty quickly.”

DevOps, agile methodologies, microservices, and containerized applications have dramatically increased the complexity of IT environments, according to the survey. In fact, 48% of respondents said the complexity of IT environments has created a sense of chaos in their organization. What’s more, 74% of respondents said IT environments are likely to become significantly more complex over the next 18 months. **FIGURE 1**

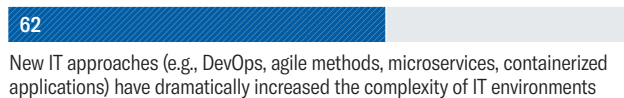
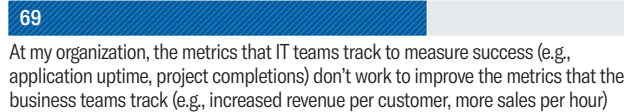
Some of this frustration stems from approaches that were developed to promote IT efficiency. Half of the respondents said DevOps has had a positive impact on developing reliable software faster, but it has also left gaps in ultimately

FIGURE 1

## Controlling Chaos

The complexity of IT presents huge challenges and can create a sense of chaos.

Rate the extent to which you agree or disagree with the following statements.  
[PERCENTAGE SELECTING SOMEWHAT OR STRONGLY AGREED]



Source: Harvard Business Review Analytic Services Survey, April 2020

connecting to business outcomes. Some 72% agreed that agile techniques and DevOps can provide project-level improvement, but the lack of enterprise alignment often cancels out those benefits.

“Agile has made some progress in producing systems more quickly and generating greater user involvement,” Davenport says. “However, the opportunities for using technology have become so great they’re outpacing the incremental improvements from tools like that. The goalposts are moving faster than the team is.”

Clearly, executives are looking for ways to get a handle on the chaos and complexities and extend the benefits of approaches like DevOps beyond IT to the entire organization. As companies and their customers adjust to new ways of interacting, the consequences of data silos are becoming even more pressing.

## Breaking Down Silos

There is a deep sense that IT is often cut off from the rest of the organization because of poor collaboration and data silos. More than half of respondents said at a high level, IT teams lack sufficient visibility into what other teams are working on because they operate autonomously.

In addition, some 69% of those surveyed said the metrics that IT teams track to measure success, including application

uptime or project completions, don’t work to improve the metrics that the business teams track, including, for instance, increased revenue per customer or more sales per hour.

However, the issues are even deeper than simply getting IT and business units on the same page. The goal is to get everyone thinking about how technology initiatives tie directly to the things that matter to the organization as a whole. Rosen notes that LoBs that sponsor an app or other technology projects often have narrow criteria, based on a specific goal, which itself may not align with enterprise business objectives.

“Today, people collect the information that supports the criteria by which they are being judged,” Rosen says. “In general, business groups are not thinking about how to actually measure business value. In other words, what data to collect, where to get it from, and how to display it to demonstrate that value.”

IT is not unmindful of this situation. Some 70% of respondents feel that IT teams want to improve collaboration with business units, but other priorities get in the way. Business units are clearly frustrated, as well. According to the survey, some business units say IT does not implement enough of their ideas for new technology solutions. **FIGURE 2**

Consequently, 63% of respondents said business units find it easier to build/buy their own applications than to explain their needs/ideas to IT.

These issues can significantly diminish the way IT is viewed by others in the organization: Over half of respondents feel business units regard IT as a cost center rather than a value center. This perception can have a drag on digital transformation efforts, since a cost-center orientation doesn’t foster the agility that digital initiatives demand.

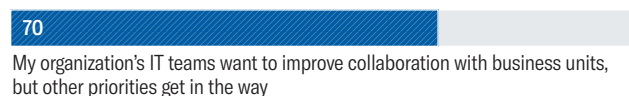
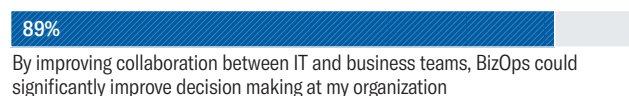
“Managing technology as a cost center—where the emphasis is on doing more with less, maximizing efficiencies of scale,

FIGURE 2


## Mutual IT-Business Frustration

Better collaboration leads to improved decision making and solutions.

Rate the extent to which you agree or disagree with the following statements.  
[PERCENTAGE SELECTING SOMEWHAT OR STRONGLY AGREED]



Source: Harvard Business Review Analytic Services Survey, April 2020



**“...the opportunities for using technology have become so great they’re outpacing the incremental improvements from tools like that. The goalposts are moving faster than the team is.”**

**Tom Davenport, professor, Babson College**

and then shrinking their budgets by 3% every year—shackles the organization,” explains Gene Kim, an award-winning chief technology officer, DevOps researcher, best-selling author, and founder of IT Revolution. “You see the problem when every time you tackle a business initiative, you have to gather a roomful of people who all bring Gantt charts and fully allocated budgets, all with excuses on why they can’t enable what the new business needs.”

The bottom-line consequences of treating IT as a cost center are troubling. About 77% of respondents said the disconnect between IT and business units now results in significant costs. According to the survey, this disconnect is also the number one challenge to digital transformation. **FIGURE 3**

“Companies are getting a dismal return on the \$1.3 trillion they put into digital transformation, because everyone understands the why, but no one understands the how,” Kim says. “I think they all need to create conditions that enable small teams to independently create value for their customers, which requires getting the teams the data they need. BizOps can provide the structure that enables small teams to achieve whatever mission they are given or choose to pursue.”

Based on studies he’s conducted, Kim says one of the top predictors of technology and business performance is the ability of teams to independently develop, test, and deploy technology to customers without coordinating and communicating with people outside their teams—often referred to as architecture. But that can only happen successfully when teams have visibility, and when the



## 77% of respondents said the disconnect between IT and business units now results in significant costs.

necessary data to determine their actions are tied to larger enterprise goals and aligned with other efforts in the organization.

Rosen additionally notes that BizOps is not simply a change in process, but a change in collaboration and culture. To implement BizOps, companies should eschew the common us-versus-them mindset, where internal teams work in competition with one another.

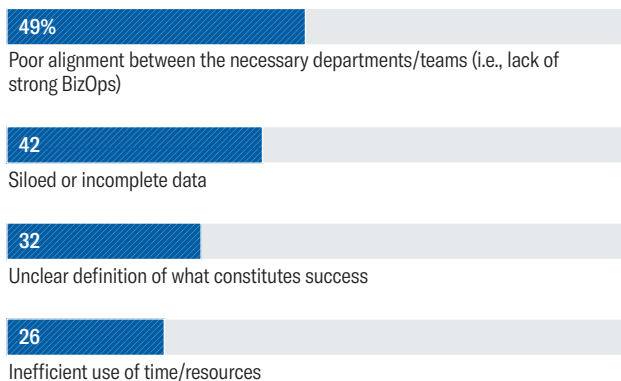
“BizOps requires clarity and competence, where leadership makes sure everyone understands the company’s goals, mission, values, and constraints, and leadership constantly reinforces this,” he says. Rosen points to Google as an example of a company that does this well. “Everyone at the company understands what the platform is, what the common services and rules for doing things are, and how that fits into security. If teams follow the rules and understand Google’s goals, mission, and vision, they are left with the autonomy to come up with great new ideas on their own.”

FIGURE 3

### Digital Detours

Poor alignment across lines of business and siloed data top the list of biggest obstacles.

What are the biggest barriers to successful digital transformation initiatives at your organization? [SELECT UP TO THREE]



Source: Harvard Business Review Analytic Services Survey, April 2020

### Defining Business Value

BizOps starts with the tricky task of defining business value. Any initiative will have to include identifying information that can be collected from a variety of sources, aggregated, and analyzed to validate value. In addition, “companies need to build instrumentation within the app to aid in the collecting of data that would have previously been an afterthought,” Rosen explains.

Complex IT environments, coupled with the increasing need for real-time information, spur the need to use automation and cognitive technology, like machine-learning algorithms and business intelligence-powered dashboards, to delineate value.

“By automating the production and collection of value data, companies can feed that information back into the loop to achieve continuous improvement and realize even more value,” Rosen says.

A handful of companies have successfully implemented a BizOps approach. For example, a movie theater chain captures point-of-sales terminal data from across more than 300 locations, which are fed into dashboards that give a real-time snapshot of the business. The chain’s goal is to use this data to regulate theater heating and cooling based on real-time





## Survey respondents anticipate several benefits from using BizOps, including improving business agility, executing strategic plans faster, and aligning digital transformation initiatives to business outcomes.

attendance data, manage replacement of seats based on actual use counts, and automate processes to streamline end-of-cycle financial closing efforts—all to better align IT outputs with business outcomes.

The idea of augmenting human decision making with automation, which is a fundamental component of BizOps, is appealing to survey respondents. Some 87% agreed that human workers who use AI to support their business decisions ultimately leads to improved decision making. Roughly the same number said that using AI more effectively would be a significant competitive advantage for their organization.

To date, respondents are not happy with the impact that AI and machine learning have had in their organization. This is another indication of the need to look for new ways of using technology to connect IT and business more effectively, as well as to give IT a clearer view of how their efforts tie into business strategy.

“BizOps has a lot of appealing components,” Davenport says. “The idea that we’re going to make a lot more automated decisions with this approach is a good thing. One of the big problems with business intelligence and analytics is that

they’ve depended on human beings looking at the output. In many cases, it’s better to take human beings out of the loop.”

Survey respondents anticipate several benefits from using BizOps, including improving business agility, executing strategic plans faster, and aligning digital transformation initiatives to business outcomes. **FIGURE 4**

Most executives also agree that by being able to better see the business outcomes of their work, IT can make better decisions, focus on more strategic efforts, and have higher levels of productivity.

“BizOps has an outcomes orientation,” Davenport says. “Data scientists have been fascinated with creating better models, but they have not been oriented into getting them into production deployment.”

Left unaddressed, IT’s current lack of visibility promises to become an even more pressing issue with the next generation of workers. Some 83% of respondents said people entering the workforce increasingly demand greater visibility into how their work is contributing to the organization’s overall success. BizOps can be a potential source of motivation for workers, and it can drive engagement by providing employees autonomy within a framework that centers around producing business outcomes.

FIGURE 4

### BizOps Benefits

Improved business agility to respond to customers tops the charts.

For your organization, what would be/are the biggest benefits from implementing BizOps? [SELECT UP TO THREE]



Source: Harvard Business Review Analytic Services Survey, April 2020

### Conclusion

The need for successful digital transformation and a desire to move faster are challenging companies to keep up the pace of IT development without losing sight of the outcomes they want to achieve. BizOps can provide a decision-making framework that helps companies adapt to the new reality in front of them and pivot their digital transformation initiatives in ways that will create new data streams in a time of unprecedented change.

Kim notes that many large organizations have focused on building innovation centers and studios, but these efforts often cannot scale effectively because they require cumbersome interactions with other teams that slow the entire process. “Scaling will be the difference between the winners and the losers in the marketplace for decades to come,” he says.

By providing heightened visibility, BizOps could make the workplace more appealing for the talent that companies want to attract while allowing companies to pursue technology initiatives that produce superior business outcomes.



**“Companies are getting a dismal return on the \$1.3 trillion they put into digital transformation, because everyone understands the why, but no one understands the how.”**

**Gene Kim, founder of IT Revolution  
and CTO**

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The approach is just emerging. Rosen says companies that are interested in this approach are now building out their agile methods and DevOps as they prepare to select a pilot initiative for BizOps with products and services that achieve outcomes. Given the pace of change, and the drive toward innovation, companies everywhere should consider how they can align their IT development, operations, and business units to react faster and satisfy customer demands.

“When business, development, and operations are not aligned, people understand that can cause waste and cost,” Rosen says. “But the real impact of that misalignment is the inability to grasp opportunities. They continue to fall further and further behind because of the inertia that misalignment causes. The whole business is hampered in its ability to keep pace.” BizOps is emerging as an opportunity to stay focused on those opportunities.

## METHODOLOGY AND PARTICIPANT PROFILE

A total of 216 respondents drawn from the HBR audience of readers (magazine/ newsletter readers, customers, HBR.org users) completed the survey.

Size of organization	Seniority	Key industries	Job function	Regions
<b>20%</b> 10,000 or more employees	<b>28%</b> Executive management/ board members	<b>12%</b> Manufacturing	<b>17%</b> General/executive management	<b>38%</b> North America
<b>31%</b> 1,000 – 9,999 employees	<b>43%</b> Senior management	<b>10%</b> Financial services	<b>10%</b> Sales/business development	<b>17%</b> Europe
<b>23%</b> 100 – 999 employees	<b>21%</b> Middle management	<b>9%</b> Business/professional services	<b>8%</b> Finance/risk	<b>29%</b> Asia/Pacific
<b>27%</b> Fewer than 100 employees	<b>8%</b> Other grades	<b>9%</b> Consulting services	<b>8%</b> Strategic planning	<b>7%</b> Middle East/Africa
		<b>8%</b> Health care	<b>8%</b> Consulting	<b>6%</b> Latin America
		All other sectors less than 8% each	<b>8%</b> HR/training	<b>2%</b> Other
			All other functions less than 8% each	

Figures may not add up to 100% due to rounding.



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