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Special Issue Editorial: Shared Responsibility and Blurring Boundaries: Strategic Implications of the Sharing Economy

New global giants like Airbnb, Didi Chuxing, WeWork and Upwork have created digitally-enabled ways of organizing economic activity that shift much of what was traditionally accomplished by employees within an organization to a crowd of individual entrepreneurs and on-demand workers. The term “sharing economy” has grown to encompass these and hundreds of other new “platform” businesses whose scale is expanding rapidly. By many measures, Airbnb is now the world’s largest provider of short-term accommodations: its 4 million listings dwarf Marriott-Starwood’s inventory of 1.1 million rooms. Upwork generates income for over 12 million micro-entrepreneurs. Didi Chuxing boasts over 15 million drivers and 300 million users. WeWork has a presence in 16 countries and over 3 million square feet of office space in New York City alone.

This special issue on the sharing economy illustrates the impact of these new business models on the competitive landscape of an array of industries and companies, including those firms that embrace the new models and those that ignore change. The articles in this issue offer strategic and transformational insights for incumbents considering entering the sharing economy. The issue features three in-depth case studies: Udemy, an online learning platform, brings together online course creators and those interested in learning. GoGet CarShare, an Australian grassroots startup with environmental goals, aims to resolve environmental congestion issues associated with car ownership by making cars available on-demand. Audi, an established player in the automotive market, deals with the threat of the sharing economy by shifting its core strategy and experimenting with a number of sharing economy initiatives.

The articles here paint a diverse yet cohesive picture of sharing economy businesses, covering both their successes and their failures. For example, our lead article by Constantiou, Marton and Tuunainen categorizes sharing economy businesses into four models (franchisers, principals, chaperones and gardeners) based on levels of platform rivalry among participants and control exerted by the platform owner. Using prototypical examples – Uber, Handy, Airbnb and Couchsurfing – the authors demonstrate how the success of each of these companies arises from leveraging one of these four models. In contrast, the article by Täuscher and Kietzmann examines the risks of competing in the sharing economy, identifying factors that could lead to failure in the sharing economy. These factors include, among other things, the lower control over service quality a platform has relative to a traditional company, the high level of competition for idle resources, the resource-intensiveness of growing a two-sided market, and unexpected changes in the regulatory and legal environment.

While the scale and importance of the sharing economy seems apparent today, our special issue also highlights the variety in what comes to mind when people use the term “sharing economy.” Some see the sharing economy as being purpose-driven, aimed at more sustainable models of business that lead to more responsible stewardship of the planet while lowering the economic inequality inherent in traditional capitalist business models. Others view it as perhaps the most lucrative profit opportunity to emerge from Silicon Valley in decades, pointing to the tens of billions of dollars in venture capital that have flowed into platforms like Airbnb, Lyft, Uber, Didi Chuxing and WeWork in the last three years.

Indeed, while compiling the papers for the special issue, we uncovered differing sources of a familiar tension between these purpose-driven and profit-motivated objectives. Some firms like GoGet Car Share might initially propagate their

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2 Tan, Felix Ter Chian, Michael Cahalane, Barney Tan, and Jonathan Englert. “Facilitating Collaborative Consumption: The Evolving
business model as being purpose-driven, but these goals might get diluted over time by the growth of the business. Others, as pointed out by Constantiou et al., may simply camouflage a founding goal of profit or cost reduction in the rhetoric of purpose or social impact.

**Defining the Sharing Economy**

Towards grounding future thinking and strategy more firmly in a shared definition, it helps to step back and examine some roots of this tension between purpose and profit, between the social and market-oriented views. In early conceptions of the sharing economy from Yochai Benkler, Michel Bauwens and Lawrence Lessig, a well-defined contrast was drawn between traditional market-based or hierarchical capitalist models of organizing economic activity, and different socially mediated forms of exchange that were thought of as “sharing.” Bauwens’ central notion is of commons-based peer production, decentralized production based on social relations rather than through markets or hierarchies. Lessig draws the same contrast for exchange, between market economies regulated by price and sharing economies governed by a complex set of social relations. Bauwens has a more radical view of sharing that focuses on an extreme, Bitcoin-like form of economic decentralization that places purpose over profit.8

Strikingly, each of these early notions contrasts with what we see labeled the “sharing economy” today. The current signature of sharing is a melding of market-based and social mechanisms of exchange, as illustrated by some more recent definitions. In their 2010 book *What’s Mine Is Yours*, Rachel Botsman and Roo Rogers describe the shift away from ownership-based or “hyper consumption” towards what they labeled “collaborative consumption.” They highlight how collaborative consumption embeds a social aspect into market-oriented transactions. Collaborative consumption is defined by principles that include critical mass, idling capacity (the untapped value of unused or underused assets), belief in the commons, and trust in strangers. Analogously, in her celebrated 2010 book *The Mesh*, Lisa Gansky defines “the mesh” underlying new models of shared exchange as having features that include shareability (products or services can be easily shared within a community and that community can take any form), immediacy, the replacement of advertising by promotions driven by social media platforms, and the ascendance of digital forms of trust. The definition from JustPark founder Alex Stephany in his more recent book *The Business of Sharing* has elements that include value from underutilized assets (akin to Botsman and Roger’s idling capacity), community (the facilitation of more fluid exchange through community trust, social interaction, or shared value), and reduced need for ownership.

The most recent (and broadest) definition of the sharing economy comes from Sundararajan (2016), who favors the term “crowd-based capitalism” over “sharing economy,” and defines an array of new digitally-enabled sharing business models as being characterized by five features. First, exchange is largely market-based. Second, capital becomes more high-impact (paralleling Botsman and Rogers’ idling capacity, and Stephany’s value from underutilized assets). Sundararajan then highlights three additional distinctive features:

- Crowd-based “networks” rather than centralized institutions or “hierarchies”: the supply of capital and labor comes from decentralized crowds of individuals rather than corporate or state aggregates.

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- Blurring lines between the personal and the professional: the supply of labor and services often commercializes and scales peer-to-peer activities which used to be considered “personal.”
- Blurring lines between fully employed and casual labor, between independent and dependent employment, between work and leisure: many traditionally full-time jobs are supplanted by contract work that features a continuum of levels of time commitment, granularity, economic dependence, and entrepreneurship.

This definition encompasses not just the more recent models of Airbnb and Lyft, but earlier digital innovations like those pioneered by YouTube, and suggests a broader pattern of platform-driven disruption of the economy that is now gaining attention as the “sharing economy.” For example, the YouTube platform, owned by a traditional hierarchical organization Google, centralizes the aggregation of demand, facilitates search and discovery, and performs some content filtering and trust provision. Content production, by contrast, is done by a distributed and varied “crowd” that blurs lines between professional and casual creators, full-time content producers and hobbyists, and between a pure content marketplace and more traditional content creation and distribution hierarchies.

The blurring of boundaries highlighted above is a significant theme of the articles we received, and of those published here. A critical strategic consideration for any organization that is assessing its sharing economy prospects or potential disruption is a plan for dealing with these blurring lines. The papers in this special issue illustrate how one might tackle many of these melding boundaries: between markets and hierarchies, a continuation of a trend identified by Koch and Schultze (2011), as well as between products and services, producers and consumers, employment-based expertise and informal personal labor, and pro-social vs. pro-business goals.

Furthermore, the sharing economy businesses discussed in these papers use information technology (hereinafter IT) to evangelize (i.e., educate stakeholders about their sharing vision), and to optimize resources or harmonize (i.e., blend seemingly conflicting goals such as growth and social aims). Put differently, as the sharing economy businesses evolved, IT co-evolved, and in many cases, more flexible technology facilitated the blurring of boundaries. Given the integral role of IT in the product-service offerings of sharing economy businesses, cases like that of Audi also show how the boundaries between IT roles such as Chief Information Officers and non-IT executive roles will continue to blur.

The Shifting Landscape of Commercial Trust and Societal Institutions

If one abstracts out the ideas of the articles in the special issue, while also examining the more recent sharing economy business models, this new division of responsibility between the platform and the crowd is another recurring theme, and one that connects thinking about the sharing economy to other key topics of recent interest in digital strategy, such as crowdsourcing, crowdfunding and open innovation. In particular, we posit that what unifies the “sharing economy” is as much about new models of shared consumption as it is about a blurring of boundaries between institutions that provide commercial trust and institutions that are the repositories of an economy’s structural capital. This portends a fundamental digitally-induced redefinition of many familiar 20th century institutions and a radical reallocation of broader corporate and commercial responsibility.

The production model familiar to us during the second half of the 20th century is of large organizations that employ individuals full-time, paying salaries in exchange for labor and talent. In such a production model, the commercial trust required for transactions between large trading partners is provided by contracts enforceable in a court of law. The relatively high transaction costs associated with writing and enforcing these contracts can be absorbed by exchange of sufficiently high value. The kind of trust needed for smaller consumer transactions is established in part by government standards (through varied regulatory bodies for consumer safety) and in part through the profit motive of corporate brands (if the quality of service is consistently low, the consumer takes his or her business

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elsewhere). These three forms of trust provision—government regulation, economic institutions and corporate brand—contrast quite starkly with the social trust that enabled most of the world’s commercial activity until a few hundred years ago.

The emergence of entirely new, although nascent digitally-enabled infrastructures for commercial trust that explicitly involves a reintegration of social ties into commercial exchange is noteworthy because trust systems play a defining role in shaping the organization of the world’s economic activity. The social source of trust that is central to most definitions of the sharing economy is perhaps also the source of confusion between commercial and personal, but in parallel, the source of greatest promise. As discussed in Sundararajan (2016), the information needed to verify identity, intentions, and capabilities in digitally-mediated exchange stems from varied cues including learning from one’s own prior interaction; learning through familiarity that comes from the nature of exchange (being part of the “cultural dialogue”); learning from the explicit experiences of others (such as what is learned by reading reviews written by prior customers); learning by relying on digitized social capital (such as what one might infer by viewing someone’s Facebook or LinkedIn network); and the reliance on digitized forms of real-world identity. In a non-face-to-face setting, these cues can establish authenticity; they can assist in assessing goals; and they can help assess expertise or quality.

Every sharing economy platform has some combination of these cues available digitally. Platforms like YouTube and eBay scaled earlier in the evolution of the Internet because the stakes are lower when buying a product from a stranger, or viewing a video from an unknown source, than when getting into a stranger’s car and saying “drive me to another city.” Now, with reliable verification of real-world identity and access to digitized social capital, higher stakes exchange becomes possible, which is why we have seen the acceleration of the sharing economy in industries like transportation and accommodation.

The new trust systems facilitate exchange: additionally, much of what these new platforms and their crowds of providers hold includes the core production or value generating capabilities of the economy, the “knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice.” These capabilities comprises knowledge that an economist would call human capital, “the knowledge, information, ideas, skills, and health of individuals,” as well as what management experts would label structural capital, the infrastructure and processes traditionally held by a firm that allow human capital to function.

Strikingly, the papers in this special issue reveal that four forms of knowledge that comprise an organization’s intellectual capital—individual explicit, individual tacit, social explicit and social tacit—may be both made available by a platform for use by providers, as well as developed and retained by the providers themselves. Consider, for example, a prosumer who drives periodically for Lyft. As a driver, he or she draws on the codified knowledge contained in the “heat maps” that the platform delivers to its drivers to aid their finding areas of high demand. The platform also provides procedural knowledge about optimal routes via a custom GPS navigator that is optimized using data about millions of prior rides, and codified knowledge about what is an acceptable interior for their vehicle. But in parallel, the prosumer is learning by doing, acquiring and retaining tacit knowledge about what mode of customer interaction is more likely to generate a tip, or what specific pockets of demand for higher fare rides might exist in different locations at different points in time. Similarly, an Airbnb host draws on pricing and merchandizing expertise embedded in the platform’s algorithms and its community, but is, in parallel, creating and retaining his/her own structural capital, in the form of knowledge about how best to promote his/her listing, when to lower prices, how to deliver effective customer


service, what customers like and don’t like as add-on services specific to the host’s neighborhood; a summary of the host’s associated “brand” is contained in the host’s reputation score on Airbnb.

This, of course, highlights a critical challenge that larger sharing economy businesses face: drawing the right boundaries between what is held by the provider, and what is retained by the platform. This special issue sheds light on this key strategic choice. For example, as discussed by Täuscher and Kietzmann, Udemy gradually saw the need to shift the role of customer support from its providers to dedicated customer service representatives. This lower control associated with customer support by the providers over service quality, or more generally, over consistency in experience, is a central challenge in the sharing economy model. Many peer-to-peer car rental platforms like Turo and Getaround have evolved from allowing providers to set varied prices towards a more centralized and uniform pricing system. Carefully managing this transition and the associated changes in provider roles, while retaining the trust and engagement of the crowd of providers central to delivering one’s branded service, is a delicate balancing act. Moreover, shifting pricing and customer service expertise is far simpler than the challenge faced by a company considering how to divide up the brand capital created by a sharing economy provider operating through their platform. For example, while the reputation of a host may be codified in the proprietary Airbnb review system and not legally owned by the host, it is inextricably associated with that specific host and cannot be appropriated by Airbnb.

Three Strategic Insights

As the sharing economy fundamentally alters the scale, mix and roles of the institutions that have historically provided commercial trust and held structural intellectual capital in economic activity, we offer three strategic insights for managers.

1. Hybrid business models are necessary for success.

The development of hybrid business models was a central tenet of success for the sharing economy companies examined in this special issue. A hybrid business model features market and hierarchical elements. Market coordination systems assume goods and services are commodities and match producers and consumers in networks fostering transparency, market competition and rational decision making. In hierarchical coordination systems, producers and consumers create value-added goods and services by building integrative, long-term and mutually beneficial relationships in a contractual model that streamlines coordination and information sharing.

On the surface, the sharing economy appears to foster market coordination. However, the companies studied in this special issue incorporated elements of both markets and hierarchies. These hybrid business models were necessary to work towards financial stability and achieve the critical mass necessary for their sharing economy ventures to survive. The online learning platform, Udemy, incorporated a contractual business-to-business model with corporations for online training. For Udemy, this strategy provides stable revenue in the form of a monthly subscription fees and increased customer retention since Udemy has locked the business customers in by integrating Udemy into their existing online learning platform.

The auto supply industry offers several examples of hybrid business models. To achieve network effects in supplying autos, GoGet CarShare developed hierarchical relationships with both sides of the network. Key to this was GoGet CarShare’s partnering with companies that had large fleets of vehicles. It was the success of companies like GoGet CarShare, that encouraged Audi, a car manufacturer, to enter the sharing economy. Following lessons from the innovator’s dilemma, Audi felt it had to cultivate its mobility initiative even though this was a direct assault on its traditional car manufacturing business. Audi’s mobility services, which facilitated car sharing among groups, such as neighbors, forced Audi to deal with ongoing contractual relationships with customers instead of transactional relationships it was accustomed to as part of its traditional car manufacturing business.

2. Product-service systems in the sharing economy help customers collaboratively consume the products or services embedded in the product-service systems.

Product-service systems represent a business model that integrates the delivery of products and services cohesively. While traditional product-service systems may include after-sale services (such as maintenance or repair) that facilitate the consumption of the focal products, product-service systems in the sharing economy help customers to collaboratively consume the products or services embedded in the product-service systems. The Audi case, for example, illustrates how a company integrated services into its products to meet customers’ transportation needs. Likewise, and responding to the constraints of Australia’s transportation infrastructure, GoGet CarShare provided customers with a variety of options to share access to its fleet of over 2,000 vehicles across the country. Udemy’s product-service systems enabled the collaborative consumption of courses available on its online learning platform. All three case studies epitomize the strategy to “servitize” products, according to Constantiou et al., that used to be consumed exclusively, blurring the boundary of products and services.

To pursue cohesion of product and services that constitute a product-service system, as revealed in this special issue, each provider made integration efforts through significant transformation. GoGet’s shifted from the ideal “eco-friendly” product-service system to a diverse fleet that its customers in the mass market wanted; Audi transformed its organization to integrate its premium mobility services; and Udemy initially focused on attracting instructors, after which it moved on to attract learners and to lock them in with effective course engagement features. As a result, all three companies achieved certain levels of cohesion in their respective product-service systems.

3. Co-innovation is at the heart of new business models, but not at the heart of sharing.

All business models presented in the special issue heavily rely on co-innovation, which involves multiple stakeholders. For example, Udemy made use of instructors, as well as outside learning platforms that linked to existing courses; Audi worked together with customers during both product creation and operation; and GoGet Car relied on the value chains of others, particularly that of its business partners, to develop its services.

Co-innovation illustrates that the dichotomy between producers and consumers is blurring. Both producers and consumers (hence the portmanteau “prosumers”) are stakeholders in the business model and actively participate in the innovation process. These prosumers take on the role of a “sensor” (in the case of GoGet Car for example) as well as that of a beneficiary. Throughout this special issue, the articles illustrate how sharing economy companies motivate every stakeholder in the business model puzzle to innovate. However, as their growth reshapes their priorities, many sharing economy businesses must engage in much soul-searching to reconcile the competing profit and purpose objectives we discussed at the beginning of this editorial. As of 2017, we see even market leaders like Uber, Lyft and Airbnb grappling with this strategic challenge, as backlash against the sharing economy seems to be mounting.

Overall, we find that the sharing economy is partly about the “sharing” of idling capacity, responsibility and intellectual capital, and partly about the “economy,” i.e., businesses set out to make a profit. Indeed, even the editorial team had diverse opinions about the implications of an excessive focus on the “economy” rather than the “sharing,” with some asserting that it was critical for the sharing economy to be, ideologically, the “economy of sharing” and others encouraging a greater focus on the underlying business changes while positing that labels and their meaning evolve to fit what happens in practice. We agreed, however, that without the “economy,” the “sharing” would be difficult or impossible to continue at scale; without the “sharing,” the “economy” would be misrepresentative at best.

Concluding Points

The articles in this special issue show that an entirely new generation of digital institutions may be emerging. What will their eventual scope and structure be? How will this reshape the economy and society? How should firms deal with blurring
boundaries and create the right ones? We believe this pattern encapsulates perhaps the most promising sharing economy-related opportunity for research, as well as the most critical general strategic challenges that organizations must develop answers to as they navigate a world in which the pace of business model transformation continues to accelerate.

Answering these questions requires the type of contributions that made this special issue possible. We appreciated everyone involved. This includes all individuals who participated in our sharing economy workshops held at ICIS in 2016 and at HICSS in 2017, along with all of the authors who submitted their papers to the special issue. We particularly thank the following reviewers for supporting us with this special issue: Niels Bjørn Andersen, Erran Carmel, Joseph Davis, Cathal Doyle, Blake Ives, Ling Jiang, Michelle Kaarst-Brown, E.H. Klijn, Mary Lacity, Allen Lee, Florian Matthes, Eph McLean, Rony Medaglia, Min-Seok Pang, Gabriele Piccoli, Jeannie Ross, Judy Scott, Kristian J. Sund, Chris Wagner and Bob Zmud.

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From the Editor-in-Chief:

Each December, *MIS Quarterly Executive* publishes a special themed issue. The theme for this December’s issue is the strategic implications of the sharing economy. The guest editors are Iris Junglas, Hope Koch, Arun Sundararajan and Ping Wang. Prior to the special issue submissions, the guest editors organized workshops on the sharing economy at *ICIS* 2016 and *HICSS* 2017. Be sure to read Iris, Hope, Arun, and Ping’s highly insightful guest editorial that provides an excellent definition and overview of the sharing economy.

As this issue is going to production, we are looking forward to this year’s SIM/MISQE Pre-*ICIS* workshop on the topic of Optimizing the Digital Workforce. Organized by Michelle Kaarst-Brown, Jeria Quesenberry, Tim Weitzel, and Fred Niederman, the workshop will take place on Sunday December 10 from 10:00 to 3:00 in room 318C of the Coex building in Seoul. Please feel free to come and go even if you are not presenting. The workshop will feature presentations under three themes: managing the new digital workforce, recruiting and training the digital workforce, and unleashing the potential of the digital workforce.

Each year, MISQE publishes the results of the annual SIM IT Trends study. This has been a popular study for several decades. In this issue, authors Leon Kappelman, Ephraim McLean, Vess Johnson, Russell Torres, Nguyen, Chris Maurer, and Alsius David provide a guest editorial that previews the SIM IT Trends study results. The March issue will contain the complete results and analysis.

Dorothy E. Leidner
Editor-in-Chief
Guest Editorial: A Preview of the 2017 SIM IT Trends Study

Since 1980, the Society for Information Management (SIM), a co-founder of MIS Quarterly and MIS Quarterly Executive, in collaboration with a team of academics, has conducted an annual survey of its members to identify and study the most important IT management issues. Over the decades, the SIM IT Trends Study has been updated and expanded into an insightful and comprehensive investigation of IT issues, management practices, and leadership. The study provides a valuable trends analysis as well as a snapshot of the state of IT for both practitioners and academicians. This preview highlights a few topics from the 2017 study. The complete report will appear in the March 2018 issue of MIS Quarterly Executive.

Data collection was conducted over the course of nine weeks, from April to June 2017. During this period, the IT Trends Study team contacted 4,213 SIM members via personal e-mail and SIM’s two e-newsletters and social media presence on LinkedIn and Twitter. A chapter competition was also conducted to improve response rates. A total of 1,178 completed responses were received (28.6% response rate), representing 769 unique organizations and including 469 CIOs. The findings in this preview are based on the responses from both datasets. SIM member organizations come in all sizes and from more than 30 different industry sectors.

Most Important and Most Worrisome IT Management Issues

Since its inception, the SIM IT Trends Study has examined and reported on the IT management issues that are considered the most important to organizations and, more recently, the most worrisome to senior IT leaders. Participants were asked to choose up to five IT management issues or concerns from a list of 41 options. While some issues like “Security/Cybersecurity/Privacy” have been highly rated consistently in both lists, there is some diversity between IT leader’s top concerns and those of organizations. For example, while “Cost Reduction/Cost Control (IT)” is fifth-ranked on the organizations’ top concerns list, it is only 20th on IT leaders’ list. Figure 1 depicts the difference in ranks of the top-five IT management issues and concerns of both lists.

The Largest IT Investments of Organizations

Participants were asked to select up to five IT areas/technologies from a list of 37 options in each of three categories: (1) their organization’s largest near-term IT investments; (2) areas that should get more investment; and (3) areas of greatest concern to them personally. Investments in Analytics, Business Intelligence, and related technologies (such as Data Mining and Big Data) continue to occupy the number one position for the ninth consecutive year. Figure 2 depicts the relative frequency of responses for “IT Investments that should receive more investment.” Interestingly, only two technologies (Analytics and Security) appear in the top five of all three lists.

Measuring IT Performance

Organizations use different metrics to measure IT performance. The questionnaire asked participants to select up to five of the most important performance measures (from a list of 34) used to evaluate their own performance as well as the performance of their organization’s Internal IT and Outsourced IT. The top performance measures reported by CIOs for evaluating Internal IT show some interesting and significant changes between 2016 and 2017. Although “Availability and Uptime” remained number one ranked this year for internal IT, 2016’s second-ranked—“Cost Control/Reduction (Business)”—and third-ranked—“Return on Equity”—experienced very large drops in their level of importance. Figure 3 portrays this change in importance ranking among the Top-3 Performance Measures of Internal IT, as reported by CIOs, between this year and last. Find out which other performance metrics were among the most frequently chosen in this year’s full report which will appear in the next issue of MISQE.

All This and More in the Next Issue of MISQE

The findings presented in this article reveal only a glimpse at a few of the findings in the full report. If you are interested in knowing the technical and soft skills organizations find most
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important and hardest to find, with whom CIOs spend their time and what they spend it doing, and the spending, workforce, and cybersecurity practices of organizations, then do not miss out on your opportunity to read the 38th anniversary SIM IT Trends Study report coming out in the March 2018 issue of the *MIS Quarterly Executive*. The full report will present findings on these and many more topics and practices as well as identify key trends and unexpected results, and provide insights into the IT world today and how it is evolving.

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Figure 1: Top-Five Most Important and Worrisome IT Management Issues

![Figure 1: Top-Five Most Important and Worrisome IT Management Issues](image)

N = most senior IT leader in 769 unique organizations

Figure 2: IT Investments that Should Receive More Investment

![Figure 2: IT Investments that Should Receive More Investment](image)

N = most senior IT leader in 769 unique organizations
Figure 3: Rank Change in 2017 of 2016’s Top-3 Performance Measures for Internal IT

- Availability/Up Time
  - No change (0)

- Cost Control/Reduction (Business)
  - Down by 13

- Return on Equity
  - Down 24

N = 444 CIOs