

# The impact of technology on business process operations

*Research results across industries and functions*



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# About the **research**

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In 2014, Genpact commissioned a research project conducted by an independent research firm. The goal was to assess the potential to address strategic enterprise challenges through advanced operating models across a defined spectrum of industry sectors (banking and financial services, manufacturing, high tech, healthcare, life sciences and consumer goods). The findings presented are based on the response of executives selected, based on their ability to materially influence functional decisions, of which over 150 were from finance, about 130 from marketing, about 120 from procurement, about 140 from risk and over 350 from operations. Respondents were asked if operating model initiatives such as radically improved use of technology can materially impact an enterprise function.

We analyzed the data to identify patterns of applicability and financial impact of technology. To do so, we first determined which enterprise challenges were most pressing for the surveyed organizations, by industry and business functions. We then analyzed which enterprise functions helped the most in addressing those challenges. For those functions' operations, respondents rated the ability of technology to materially impact them. We finally analyzed the estimates respondents made of the financial impact generated by technology in impacting those functions. The results provide an unprecedented view of technology's ability to impact new operating models and, as a result, help core enterprise functions to address the big challenges their companies face. The ability to compare results across multiple industries and enterprise functions is also new and intriguing.

# Abstract

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We are entering a time in which new yet robust technologies – such as cloud, analytics, collaboration, mobile – will catalyze the evolution of process operations, and multiply operations' impact in addressing the numerous challenges that large enterprises face. However, the applicability and impact of these technologies is not uniformly high, according to almost 1,000 business executives surveyed by an independent research firm in a project commissioned by Genpact. The research also shows that many executives associate technology with significant positive monetary impact, and that technology is proportionally more applicable to business functions that address multiple challenges across the enterprise.

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## **Research confirms the important role of technology in delivering a powerful impact—but application requires selectivity**

Executives in some functions estimated a high impact from radically improved technology—higher than the impact of other levers, such as outsourcing, shared services, and business process reengineering. The estimated impact from improved use of technology - when applicable - for finance and accounting processes was the highest across all functions and significantly higher than other levers.

Looking across some of the industries, executives expected significant impact from operations with radically improved use of technology. Insurance and life sciences R&D executives estimated a significantly higher impact from improved use of technology compared to outsourcing, shared services, and business process reengineering levers, while the impact was comparable for banking (both retail and commercial) and life sciences commercial operations.

Yet many didn't see technology as a material lever to impact operations. The number who did was significantly lower, in fact, than for the combination of shared services and outsourcing (See Figure 1 on following page).

**Figure 1: Estimated annual impact (USD million) of three operating model levers and applicability of each (represented by width of column) across functions and industries**

**Average \$ impact**, bar width proportional to percent of respondents stating that the initiative will have a material impact



Annual \$ impact is the impact of operating model initiatives in \$ per annum including reduction of cost, capital required, improvement of cash and revenue growth

\* Some data not reported due to sample size limitations

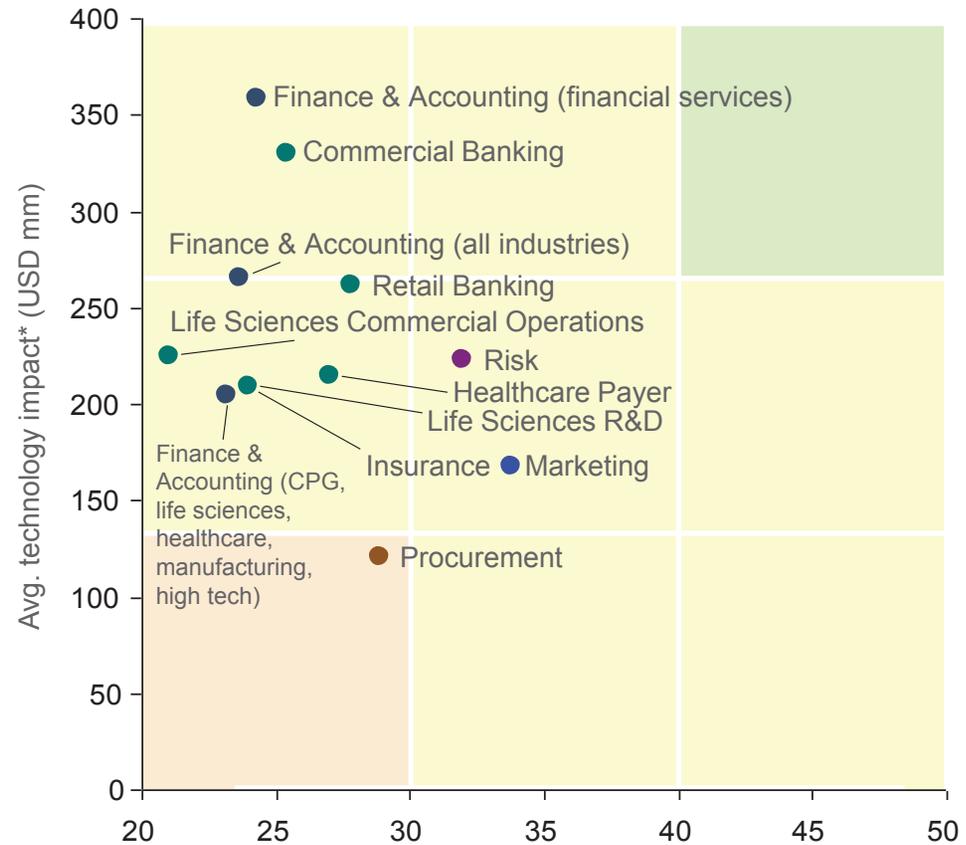
<sup>1</sup> BPO - Business Process Outsourcing, SSC - Shared Services, BPR - Business Process Reengineering, Tech - radically improved use of technology

**Figure 1**

**Technology impact seen as high when applicable, but many don't see it of use. Results vary across functions and industries**

Figure 2 compares more closely the opinions of executives in various functions and industries. Banking (both retail and commercial), capital markets and insurance consider radically improved use of technology as impactful slightly less often than their counterparts - however when applicable it is estimated to generate significant positive financial impact.

**Figure 2: Financial impact of technology and applicability of technology lever**



% of responses stating radically improved use of technology among those operating model initiatives that can materially impact operations

\* Estimated annual impact of technology initiatives in USD including reduction of cost, capital required, improvement of cash and revenue growth

**Figure 2**

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The reason may be that many financial institutions have done more work on their IT systems than their counterparts in other industries, and therefore the percentage of institutions that can still derive value from this may be lower. The result may also be due to the sheer size of banking operations, which makes the task of “materially impacting them” more daunting than in other industries. Note that for BFS, finance functions such as Master Data Management were seen to have the highest impact on multiple enterprise challenges among all functions, which seems to imply that specific technology work is of great value to those institutions.

Some functions or industries estimated a lower estimated financial impact from improved use of technology, yet in those cases, the proportion of executives who saw technology as impactful was slightly higher. Marketing technology, for instance, was frequently seen as applicable, though lower in financial impact. Procurement technology had the lowest estimated impact of all categories, while the percentage of respondents from life sciences’ commercial operations who saw technology as impactful was the lowest of any group in the sample.

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## *Technology generally considered more impactful for functions that impact multiple strategic challenges*

### **Technology's impact seems more widespread for functions that impact multiple company challenges**

Interestingly, when comparing enterprise functions' overall impact<sup>1</sup> with the percentage of the respondents from those functions who believe that technology can have a significant impact, some patterns emerge [Figure 3].

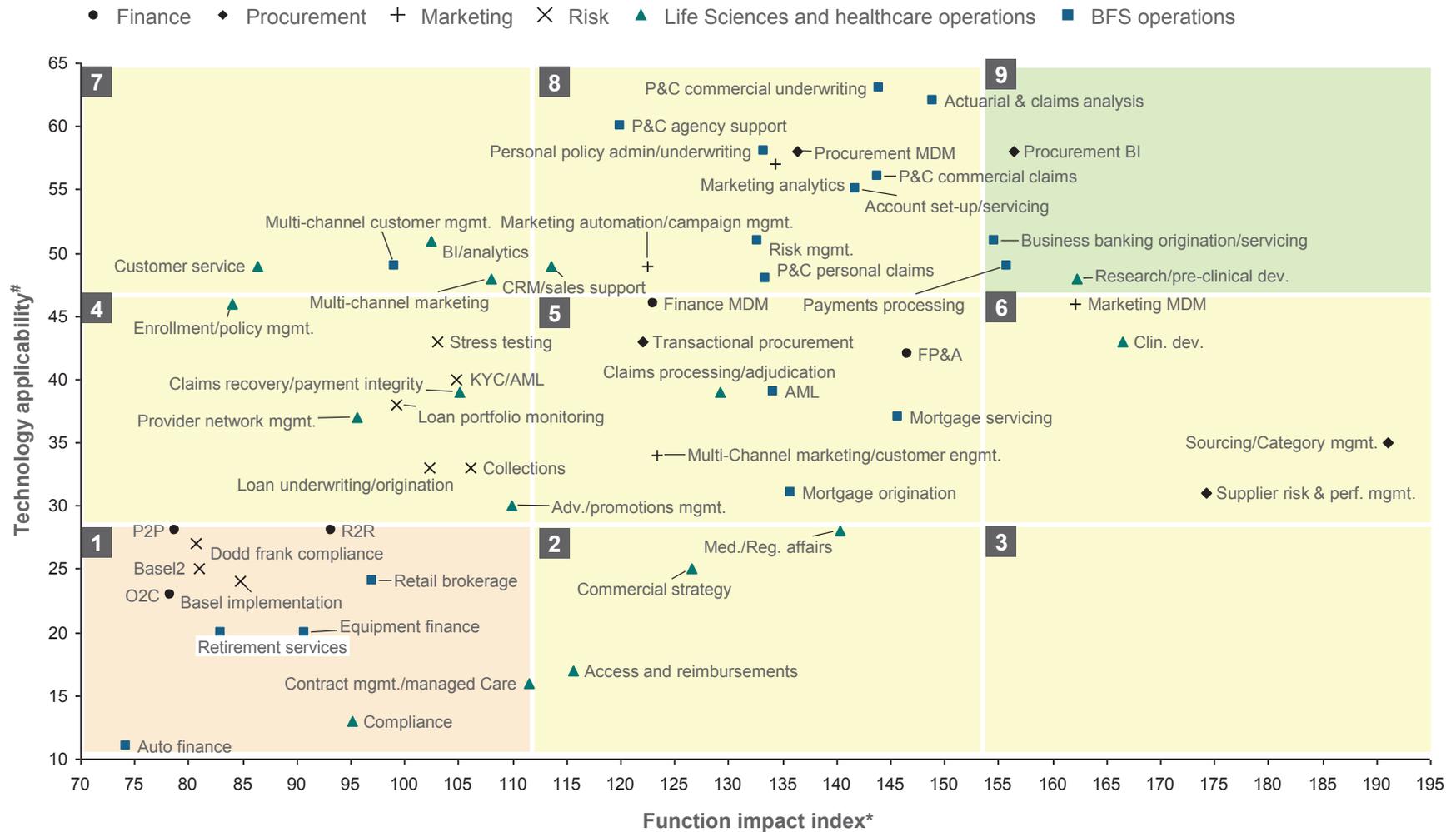
Notably, more respondents rated technology as a material impact lever for functions that bear on multiple strategic enterprise challenges. Two such groups emerged:

- **Wide function impact, high technology applicability.** Quadrant 9 (top right of the 9-block chart) represents functions for which technology is often seen as a material lever for impact, and those functions are often seen as materially impacting multiple important enterprise challenges. This quadrant includes life sciences' research/pre-clinical development, business banking origination, payment processing and procurement business intelligence.
- **More limited function impact, low technology applicability.** Quadrant 1 (bottom left of the chart) marks the opposite side of the spectrum. This quadrant only has some commercial banking operations' functions like auto and equipment finance, retirement services from insurance and life sciences' compliance function.

Two sets of outliers could be singled out:

- **Wide function impact, low technology applicability.** Quadrant 3 (bottom right of the chart) comprises of functions that impact multiple strategic challenges, but for which comparatively few executives see technology applicability. This quadrant is virtually empty and functions in its vicinity include procurement supplier risk management and sourcing category management or life sciences regulatory affairs. These functions have strong impact on important enterprise challenges but fewer respondents saw technology as having a material impact for them, possibly due to reliance on subject matter experts' discretionary judgment.
- **More limited function impact, high technology applicability.** Quadrant 7 (top left of the chart), shows functions where technology's applicability is substantial, but that either impact fewer enterprise challenges or address only the ones that are considered comparatively less critical in those enterprises. This quadrant is also very sparsely populated and includes healthcare and life sciences operations' functions like customer service, business intelligence and multi-channel customer.

**Figure 3: Technology applicability correlates with functions' impact**



[1] Calculated as "impact index" that weighed the impact of each function according to the importance of the business challenges the function addresses

\*Function impact index: Higher index values mean that the function impacts many of the enterprise's most important challenges.

#Technology applicability: Percentage of the function's executives who stated that radically improved use of technology could have an impact on the function  
n = 912 executives from a survey conducted by LinkedIn, commissioned by Genpact

**Figure 3**

# In conclusion

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Business process operations have entered a new phase of accelerated transformation, thanks to now-mature, powerful technologies. Cloud-based and mobile applications, advanced analytics and powerful collaboration tools multiply the effect of well understood operating model levers such as shared services, outsourcing, global delivery and process reengineering. However, the applicability and impact of these technologies is not uniformly high, according to almost 1,000 business executives polled by an independent research firm in a survey commissioned by Genpact.

The key, in our experience, is to understand which technology interventions – coupled with process engineering and organizational redesign such as shared services and outsourcing often integrated in Global Business Services – are most impactful. Doing so enables large enterprises to focus scarce resources to what’s really materially impacting the most significant business outcomes. It also helps reducing the complexity of projects invariably involving cross-disciplinary teams that often struggle finding common language, ground and “true north”. The ability to identify the levers to pull, however, is not widespread and relies on experience accumulated by designing, transforming and running operations. For many companies the best approach may be to identify partners who possess that ability, in order to avoid expensive and time consuming experimentation and, ultimately, risking losing momentum and precious time in an unforgiving competitive environment.



## Genpact Research Institute

The Genpact Research Institute is a specialized think tank harnessing the collective intelligence of Genpact – as the leading business process service provider worldwide - its ecosystem of clients and partners, and thousands of process operations experts. Its mission is to advance the “art of the possible” in our clients’ journey of business transformation and adoption of advanced operating models.

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### About Genpact

Genpact (NYSE: G) stands for “generating business impact.” We design, transform, and run intelligent business operations including those that are complex and specific to a set of chosen industries. The result is advanced operating models that foster growth and manage cost, risk, and compliance across a range of functions. We have hundreds of long-term clients including more than one-fourth of the Fortune Global 500 and currently employ over 66,000 employees in 25 countries, with key management and corporate offices in New York City. Behind our passion for process and operational excellence is the Lean and Six Sigma heritage of a former General Electric division that has served GE businesses for more than 16 years.

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