Digital Transformation
Achieve Agility And Innovation
Through Collaboration Technology
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Contributing Research: Forrester’s Infrastructure And Operations Research Group
Executive Summary

Across industries, workers are more mobile than ever, as they now have tools that allow them to get their work done on the go. Business leaders are investing in tools that increase mobility and reduce barriers to collaboration, as they recognize that this leads to higher business agility and ultimately higher customer satisfaction. As much as employees expect and enjoy mobility, however, they still find that in-person meetings are the best way to work with others — and they need tools in their functional meeting spaces in order to work effectively with their colleagues both in person and around the world. The office is still the hub of productivity and cannot be left out of investment plans if companies truly want to optimize collaboration.

In June 2016, Microsoft commissioned Forrester Consulting to evaluate the ways in which collaboration is changing among enterprises. To explore this trend, Forrester led with a hypothesis that many enterprises struggle with gaps in their workplace collaboration technology, environments that are not built for collaboration, and cultures that do not fully support teams to achieve better outcomes. The result is teams that are not as effective as they could be.

In conducting in-depth surveys with 741 business and facilities decision-makers and 1,032 information workers from across the US, the UK, and Germany, Forrester found that there is a significant latent demand among enterprises for technology solutions and optimized spaces that enable collaboration and improve productivity in meetings.

KEY FINDINGS

Forrester’s study yielded four key findings:

- **Collaboration is critical to business, and technology is critical to collaboration.** Mobile device usage has changed the way that people work. Employees are spending more time away from their desks and using mobile devices, yet they still largely feel the most productive when working from an office location. Each of these trends is connected to the fact that employees are collaborating at high rates. Business and facilities decision-makers must therefore provide the culture, technology, and physical spaces that support mobile employees while fostering and optimizing collaboration.

- **When leaders get it right, optimized meeting spaces, technology, and culture lead to business benefits.** Leading-edge companies have experienced a wide range of significant benefits as a result of improvements to their culture, technology, and office environments, including increased agility, higher employee satisfaction, and even higher customer satisfaction.

- **Executives (sometimes falsely) believe that their office environments support collaboration.** Executives often spend a lot of money on mobile technologies for their employees but fail to pay the same attention to the physical spaces in which their employees work. These leaders admit that a majority of meeting spaces lack tools that are purpose-built for collaboration, yet 70% think that they’re still meeting employees’ needs. The net result is that employees avoid 29% of meeting spaces due to insufficient tools or design when collaborating as a group.

- **Decision-makers must rethink productivity solutions.** Business leaders who wish to attract and retain the best employees and reap the benefits of a highly collaborative workforce must exemplify great collaboration themselves, and they must build office environments that meet a number of criteria for connectivity, privacy, and flow. Employees desire solutions that allow them to collaborate in person (or feel like they are in person when collaborating remotely), easily share and store ideas, and integrate into their other business apps.

**KEY FINDINGS**

- **76%** Working from the office is better for getting work done with others.
- **75%** Working from the office is better for feeling like part of a team.
- Collaboration tools drive time savings, agility, and customer satisfaction.
- Videoconferencing capabilities are the most desired improvement.
Collaboration Is Critical To Business, And Technology Is Critical To Collaboration

Charles Darwin once wrote, “It is the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.” Effective collaboration is more important than ever as enterprises across industries strive to innovate and to deliver seamless cross-channel customer experiences. In a world where customers expect to be able to access the information they need whenever, wherever, and on whatever device they choose, companies that are not able to break down functional silos will find it increasingly difficult to win, serve, and retain these customers.

As a result, the way that employees work is changing. Workers are spending less time sitting at their desks and more time working cross-functionally with colleagues, partners, and customers. Our study found that:

- **Mobile device usage has already changed the way people work.** The mobile revolution that is reshaping consumer behaviors is also making its way into the workforce. Employees have become accustomed to doing their work using mobile devices — our study found that 61% use laptops, 55% use smartphones, and 25% use tablets at least weekly for work — and the usage rates for each of these devices among those that have them are increasing dramatically (see Figure 1). Forrester’s Employee Mind Shift Index (eMMSI) shows that employees’ expectations to be able to complete work while on the go exceed even what their companies expect of them.

- **In just two years, work away from the desk has skyrocketed.** Some 41% of employees reported that they now spend more time away from their desk than they did two years ago, many significantly so. In addition to being driven by advancements in mobile technologies, employees are spending more time away from their desks because of a number of workplace-specific trends. One of the top drivers is the need to move around and collaborate with colleagues, clients, or partners, both in and out of the office (see Figure 2). This collaboration is encouraged by leadership: 77% of decision-makers agreed or strongly agreed that their companies encourage collaborative outcomes and reward team efforts, and 78% of decision-makers acknowledged a business need to collaborate and share files internally.

- **The office remains a central focus for successful work.** When we think of “collaboration technology,” we’ve over-rotated our thinking, focusing on remote participants and mobile workers. Those two factors remain critical to successful collaboration, but what about what happens in the office itself? Our study found that — surprise! — workers find the office (not their home office) most productive across a variety of measures pertaining to collaboration (see Figure 3).

Our study found that — surprise! — workers find the office (not their home office) most productive for collaborative outcomes.
What Workers Want In Collaboration

In the age of bring-your-own (BYO) technologies, workers have been pushing the envelope on workplace technology, forcing decision-makers at their companies to innovate. Collaboration is no different. Today’s workers conceive of collaboration in ways that require a great deal of technology support (see Figure 4):

First and foremost, they want to collaborate with others in person. While investments in mobile devices have helped workers collaborate more effectively (both in person and remotely), it’s important to note the top desire of workers is to have the ability to experience feeling like they are working together side by side (79%). Investments in technologies to make that easier will appeal to a large swath of the workforce.

The top desire of workers is to work together side by side in person.
Workers want to store, share, and engage in real-time work sessions. Collaborating — say, in an important meeting — often fails to yield assets that can be disseminated after the fact. But workers want to easily store and share documents or meeting notes after the session (67%) to gain momentum from their investment of time. They also want to bring remote parties into the room with effective real-time collaboration (63%).

They want collaboration technology suited to business processes and how they work. Workers also highlighted the importance of having collaboration solutions that integrate with the applications they use for work (62%) and the ability to use tools specifically dedicated to work (60%). In other words, they want all the business-critical processes — now managed via software — to be integrated into their meeting experiences.

They want to have fun. Psychology shows that happy workers will lead to happy customers. And workers know this, too — 56% of them said they want to have fun while using the tool. One route to that experience is to use large-screen computing devices and visual aids, which appeals to 55% of workers.

**Optimized Environments, Technology, And Culture Lead To Business Benefits**

Where we work — our work environment, including its proximity to colleagues and partners and the tools we have in place — affects how we work. Academic researchers studying this issue started out by studying themselves. They found that working in the same building or even on the same floor had only a marginal effect on their likelihood of co-publishing an article with a colleague. But working in the same corridor had a huge effect — two researchers on the same corridor were two-thirds more likely to collaborate than if their offices were merely on the same floor.

Leading-edge enterprises are beginning to recognize that employees now work differently than they used to. Forward-thinking business leaders have made it a key imperative to provide the culture, tools, and environments that facilitate collaboration and productivity among both in-person and remote employees. When these leaders get it right, they realize a number of key benefits:

Effective collaboration leads to productivity, agility, and customer satisfaction. Companies are seeing returns on their investments in collaboration and productivity. We asked decision-makers what the benefits are of technology, culture, and physical spaces that are optimized for collaboration. Not surprisingly, high productivity and better collaboration rose to the top. There are other related benefits that are critical to the business, including higher levels of employee creativity, better quality products, more business agility, and increased customer satisfaction. Some 82% of business leaders told us that their use of collaboration tools and technologies has improved time savings since deployment, and 81% reported an increase in customer satisfaction (see Figure 5).
Some 82% of business leaders told us that their use of collaboration tools and technologies has improved time savings since deployment.

**FIGURE 5**
Collaboration Tools Drive Business Benefits

“To what extent has your organization’s use of collaboration tools and technologies affected the following employee productivity metrics since deployment?”

<table>
<thead>
<tr>
<th>Metric</th>
<th>Somewhat improved</th>
<th>Significantly improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time savings</td>
<td>47%</td>
<td>35%</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>47%</td>
<td>34%</td>
</tr>
<tr>
<td>Cost savings</td>
<td>49%</td>
<td>30%</td>
</tr>
<tr>
<td>Fast resolutions</td>
<td>46%</td>
<td>33%</td>
</tr>
<tr>
<td>Additional tasks</td>
<td>48%</td>
<td>28%</td>
</tr>
<tr>
<td>Increased production</td>
<td>42%</td>
<td>34%</td>
</tr>
<tr>
<td>Lead generation</td>
<td>42%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Base: 741 business and facilities decision-makers at enterprises in the US, the UK, and Germany
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2016

> **Refreshed physical environments are linked to employee wellness.** Companies that are about to invest in updated meeting spaces expect to realize the same benefits that are reported by respondents that have recently completed such renovations — improved team culture, higher employee satisfaction, and higher customer satisfaction. More so than technology and culture, physical spaces are linked to employee wellness and morale (see Figure 6). Fifty-one percent of decision-makers who have recently updated their office environment believe that physical spaces optimized for collaboration lead to higher employee satisfaction.

**FIGURE 6**
Updated Meeting Spaces Improve Employee Wellness

“You stated that your company has recently invested in a refresh of the collaborative spaces in your office environment. What benefits have you realized?”

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher employee satisfaction</td>
<td>51%</td>
</tr>
<tr>
<td>Improved team culture</td>
<td>49%</td>
</tr>
<tr>
<td>Higher customer satisfaction</td>
<td>43%</td>
</tr>
<tr>
<td>Better use of collaborative technologies</td>
<td>40%</td>
</tr>
<tr>
<td>More successful innovation</td>
<td>40%</td>
</tr>
<tr>
<td>Reduced operational expenses such as travel</td>
<td>37%</td>
</tr>
<tr>
<td>Faster time-to-market for new products/services</td>
<td>37%</td>
</tr>
<tr>
<td>Better differentiation against competition</td>
<td>36%</td>
</tr>
<tr>
<td>More effective hiring and retention</td>
<td>36%</td>
</tr>
</tbody>
</table>

Base: 210 business and facilities decision-makers at enterprises in the US, the UK, and Germany
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2016

Additionally, 49% believe that it makes for a better team culture. As a result, 36% experience higher employee retention rates. Forrester has found that companies with forward-thinking innovation workspaces promote higher attendance in the office, better teamwork, and faster projects, in addition to attracting new talent.

**Many Office Spaces Lag Behind**

When decision-makers are investing in collaboration and productivity tools, the top priority is often applications and mobile devices that allow for employees to work effectively offsite. These types of solutions are numerous and critical to modern businesses. When organizations consider these investments, however, meeting spaces within the office — meant to be the hub of productivity — cannot be left behind. As important as it is to facilitate remote work, it is equally as important to ensure that in-person collaboration is also
optimized, and that employees within the office are able to work effectively with their mobile counterparts. Most companies that we surveyed feel that they are excelling in this area, but their employees tell a different story:

**Decision-makers think that they have optimized their office environments, but meeting rooms lack tools.** Decision-makers are optimistic that they have optimized their businesses for collaboration and productivity. Eighty-two percent believe that they provide physical spaces that meet their employees’ needs; 81% believe that they have workplace technology that supports collaborative behaviors, inspires ideas, and accelerates progress; and 80% feel that they have a culture that provides a psychologically safe environment for everyone to contribute. However, when we asked these decision-makers what percentage of meeting spaces have technology that is purpose-built for collaboration, the results were relatively dismal. Only 34% of large meeting rooms are equipped with collaboration tools such as whiteboards and conferencing technology. Other types of meeting spaces are even worse, with only 33% of medium-sized rooms and 26% of small rooms properly equipped. While our study found that small and medium rooms are the most highly used collaborative spaces, these traditional meeting spaces aren’t the only ones that need updating. Some teams function better in nontraditional spaces such as cafes and break rooms, and many important decisions are made in executive offices. These types of spaces are even less likely to have the collaborative technologies that employees need (see Figure 7).

**Employees have remote collaboration tools but not meeting spaces optimized for collaboration.** While employees frequently work remotely, they still prefer working in the office for a number of reasons. Chief among these is that 76% of workforce respondents believe that in-person meetings are the best way to collaborate. Unfortunately, not all meeting spaces facilitate effective collaboration: On average, employees avoid 29% of meeting spaces due to insufficient tools or design when collaborating as a group. With the rising cost per square foot of office space, these unused meeting spaces have a significant impact on operating expenses, leasing costs, and capital costs for equipment and furniture.

**Large-scale videoconferencing makes global collaboration a practical reality.** To recreate the “in-person meeting” experience for employees who are both in and out of the office, leading decision-makers are turning to high-definition videoconferencing tools that allow users to co-create, share files, and move around the room as they work. Leveraging realistic video to bring together team-based collaboration sessions can lower the barriers to collaboration among on-premises and remote employees, partners, and customers. 

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**Figure 7**
Most Meeting Spaces Lack Sufficient Tools

<table>
<thead>
<tr>
<th>Meeting Space</th>
<th>Equipped</th>
<th>Not Equipped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large meeting rooms (21-40 people)</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Medium-sized meeting rooms (9-20 people)</td>
<td>33%</td>
<td>68%</td>
</tr>
<tr>
<td>Theater-style rooms (40+ people)</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>Small meeting rooms (4-8 people)</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>Executive offices</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Small/ad hoc “huddle spaces” (2-3 people)</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>Nontraditional spaces (cafes, break rooms, etc.)</td>
<td>16%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Base: 741 business and facilities decision-makers at enterprises in the US, the UK, and Germany
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2016
On average, employees avoid 29% of meeting spaces due to insufficient tools or design when collaborating as a group.

Decision-Makers Must Rethink Productivity Solutions

Seventy-eight percent of decision-makers acknowledge a business need to collaborate and share files internally, yet employees are avoiding 29% of meeting spaces. It is clear that the physical spaces in which people collaborate — and the tools within those spaces — have a strong impact on employee productivity. So what specifically do employees need in their office environments to make them the most useful, and how do decision-makers move forward? Leaders should consider that:

› **Buy-in must come from the top.** While facilities and IT personnel may be responsible for implementing and maintaining digital collaboration tools, the budgets for these are largely controlled by senior executives, namely the CEO, CIO, and CFO. To support their collaboration, customer satisfaction, and business agility imperatives, they must be willing to invest the appropriate resources into building the culture, tools, and spaces that their employees need to drive results.

› **Functional team spaces must meet a number of criteria for connectivity, privacy, and flow.** The exact design of collaborative workspaces may change depending on who is planning to use them. For example, there is research that higher ceilings promote higher performance in conceptual thinking, while lower ceilings are better for mathematical thinking. Our study found some common trends in what facilities decision-makers feel is important. At the top is connectivity to computers, conferencing technology, and other devices, which enables both in-person and remote meeting participation (see Figure 8). Employees also require spaces that are readily accessible in their moments of need and allow them privacy when discussing sensitive topics.

![Figure 8](image)

**“What are the top improvements that you would desire in order to increase the value of collaboration spaces in your organization?”**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Desired Improvement %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videoconferencing capabilities with camera, audio, and screen combined</td>
<td>68%</td>
</tr>
<tr>
<td>Digital whiteboards</td>
<td>64%</td>
</tr>
<tr>
<td>Wireless device connection</td>
<td>60%</td>
</tr>
<tr>
<td>Digital touchscreen(s) larger than 55”</td>
<td>53%</td>
</tr>
<tr>
<td>Audioconferencing only (polycom, phone)</td>
<td>47%</td>
</tr>
<tr>
<td>Digital display-only screen(s) larger than 55”</td>
<td>43%</td>
</tr>
<tr>
<td>Digital touchscreen(s) smaller than 55”</td>
<td>41%</td>
</tr>
<tr>
<td>More power outlets</td>
<td>41%</td>
</tr>
<tr>
<td>Digital display-only screen(s) smaller than 55”</td>
<td>29%</td>
</tr>
<tr>
<td>Standard whiteboards</td>
<td>28%</td>
</tr>
</tbody>
</table>

Base: 741 business and facilities decision-makers at enterprises in the US, the UK, and Germany
Source: A commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2016

› **Executives must provide vision, training, and goals.** Improving collaboration at a company often requires a variety of inputs. Business decision-makers identified a wide range of inputs that are important to driving effective collaboration, including technology training, clear alignment and goals, and a culture that has managers modeling teamwork and rewarding employees who do the same. Forrester has found that modeling a culture of information sharing and problem solving is a key role that management can play in driving enterprise collaboration success.
Key Recommendations

Rapid changes in worker behavior — over a period of merely two years — point to a need to invest in new types of collaboration solutions. To determine what kind of solution is right for your organization, you should employ six best practices:

› **Have an open dialogue with information workers about their work environment.** There is a concerning disconnect between executives and employees in terms of executives’ beliefs that they have an environment that is optimized for collaboration. Seek employee feedback on what meeting space tools and attributes help them do their jobs better, and find ways to incorporate these throughout the office.

› **Create a cross-functional group to explore collaborative computing solutions.** Typically, IT professionals, facilities and operations leaders, and business professionals all play a role in determining the best collaborative computing solutions to deploy. A cross-functional work group will help you understand the needs of each constituency. Most importantly, don’t forget to include workers themselves. Draw from a variety of roles: What works for sales professionals might be the same as what works for product designers, but you won’t know unless both groups come to the table during the discovery phase.

› **Explore new types of collaboration spaces.** Leading-edge organizations are employing a variety of new, technology-enabled spaces for employees to engage in more impromptu collaboration. Huddle spaces — which are less formal than meeting rooms, sometimes without doors — allow for spontaneous work sessions. Design spaces collocated next to production areas are becoming more common in manufacturing and aerospace. Hot desks — which are spaces mobile workers can claim upon visiting offices — require the addition of rooms where meetings and collaboration can take place.

› **Unify in-room and remote collaboration experiences.** While mobility has been a point of great emphasis in recent years, the office matters, too — but don’t over-rotate on one or the other. Seek a solution that allows people in the room to do their best collaborative work and that brings remote participants (traveling colleagues, partners, or customers) into the experience seamlessly. Workers desire large-scale videoconferencing tools that allow them to easily share and store files and that are integrated with their other business applications.

› **Engage in proof-of-concept pilots.** With collaborative computing, the proof lies in the pudding: The solution must work for your employees and in your company, with all its specific needs. Pilots play a crucial role and will be key to success. Start with five collaborative spaces, including a few meetings rooms and a huddle space, and put into place review mechanisms such as focus groups and surveys of employees who use these spaces.

› **Roll out an integrated solution to the wider organization.** Once you’ve proven the case, a big-bang rollout will ensure that all employees gain the benefits from the collaborative solution you’ve chosen.
Appendix A: Methodology

In this study, Forrester conducted an online survey of 1,873 respondents in the US, the UK, and Germany, from organizations with at least 1,000 employees in the US and at least 500 employees in other countries. Survey participants included 741 business and facilities decision-makers with responsibility for office collaboration technologies, in addition to 1,032 information workers. Questions provided to the participants asked about perceptions, plans, preferences, and challenges in regards to collaboration. Respondents were offered a small incentive as a thank you for time spent on the survey. The study was conducted in full in June 2016.

Appendix B: Supplemental Material

RELATED FORRESTER RESEARCH


Appendix C: Endnotes


