FACILITIES TECHNOLOGY TRENDS & BUYING BEST PRACTICES

2018 INDUSTRY RESEARCH
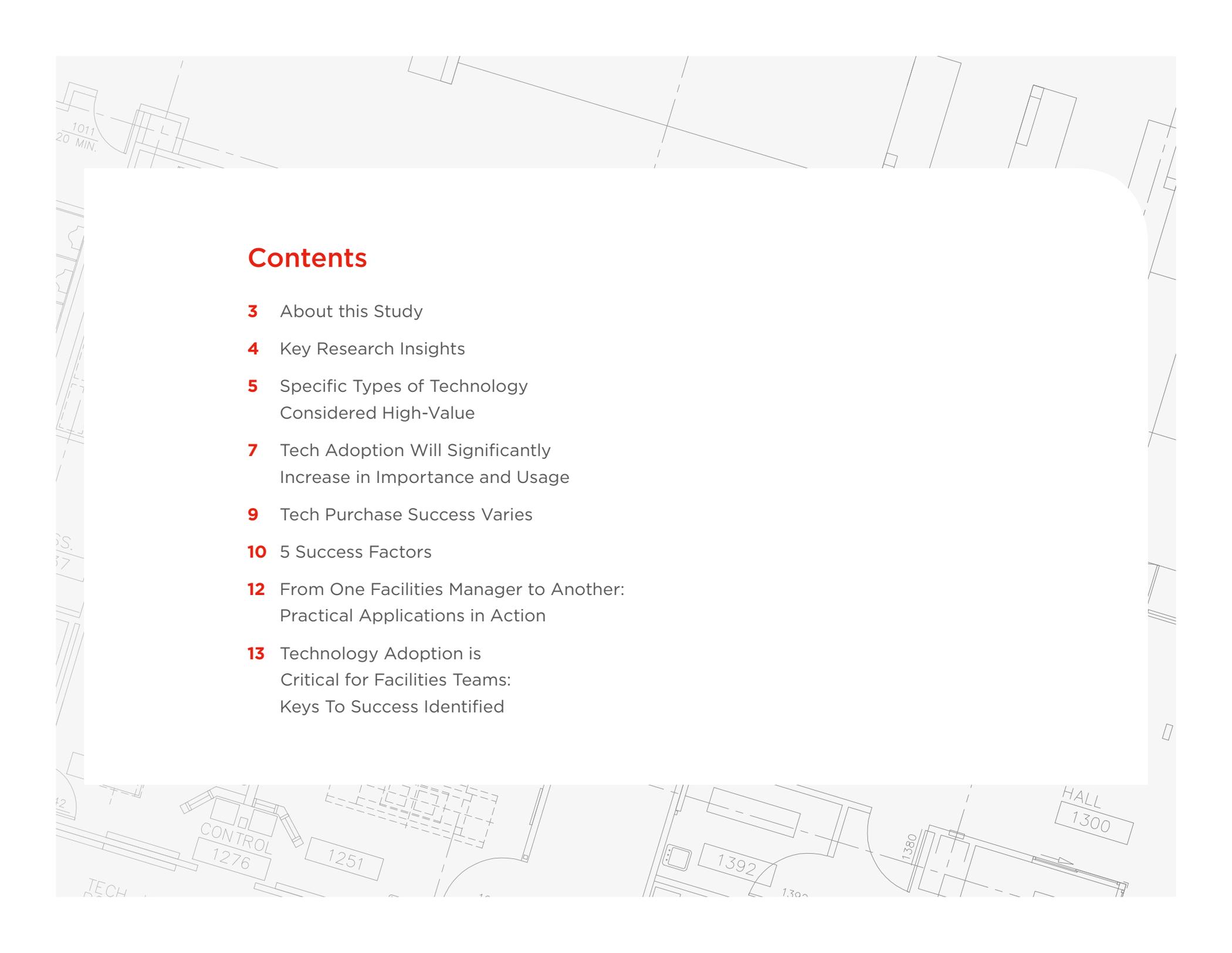
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About This Study

Facilities teams have a tremendous opportunity to modernize and streamline how their facilities and operations work gets done by integrating the use of technology tools and solutions into their workflows. To date, some facilities teams are succeeding with the purchase and use of technology far more than others. This raises a key question.

Why do some facilities teams succeed in leveraging technology while others don't?

Finding answers to this question was the primary focus of our most recent survey as this builds off the insightful research and survey from 2017.

In August 2017, ARC partnered with AIIM, a non-profit association, to study the challenges facilities teams face due to catastrophes and outdated information management technology.

The findings indicated—among other things—that catastrophes are far more costly and frequent than previously understood (2017 research), and that facilities teams could be better prepared by leveraging mobile technology. Additionally, the 2017 survey revealed an opportunity for facilities teams to use technology to eliminate the impact of low-value tasks on their overall productivity.

It was clear from the 2017 study that facilities teams need to leverage technology. But some teams were succeeding in acquiring technology while others weren't. This is what prompted our research in 2018.

Previous ARC research found that facilities, engineering, and maintenance teams have had a wide variety of experience and success with purchasing technology. While some teams were successfully purchasing tech to increase their productivity, many had tried and failed.

By investigating this range of experiences, in this study, we sought to answer the following questions:

- Why are some facilities teams more successful in purchasing technology?

- What can we learn from successful facilities technology buyers?

- What are facilities teams using technology for today?

- What will they use it for in the future?

- How important will technology be to the facilities team of tomorrow?

To find the answers to these questions, ARC conducted a survey of facilities, maintenance, and operation teams in September of 2018.

## Survey Respondents and Related Staff Counts

The data referenced in this study was compiled from the responses collected from 229 survey respondents who have recently been involved in the purchase of new technology.

Facilities-related Staff Count by Respondent

1-9 people
28%
(64 respondents)

25+ people
53%
(119 respondents)

10–25 people
19%
(43 respondents)
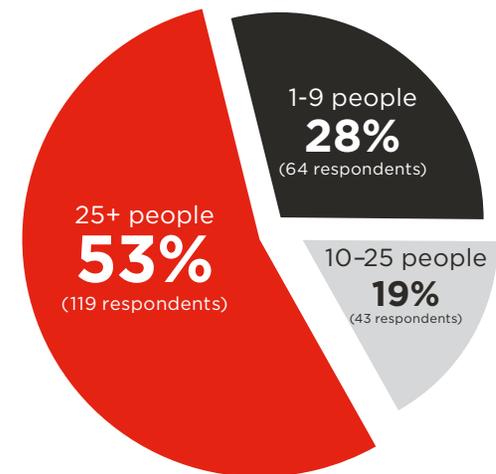
Key Research Insights

Despite operating facilities of various sizes in different industries and locations, answers from survey respondents indicated a clear consensus in several areas. Ranging from why and how facilities teams buy technology to what makes a successful purchase and where tech fits into the future of the industry, key takeaways include:
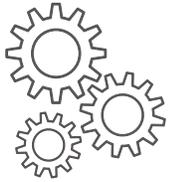
99% of facilities leaders agree that **technology will become more important** to their team's success in the near future.

The vast majority of facilities teams **purchase technology to improve productivity and customer service.**

Facilities teams could **complete up to 30% more work orders** if document search was improved with mobile technology.
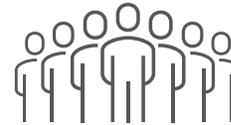
Larger facilities teams **purchase twice as much technology** as smaller teams even though both face virtually the same budgetary challenges.

5 success factors lead to far **better success buying technology.**

Specific Types of Technology Considered High-Value

When asked to rank the value of eight types of technology tools, four of the technologies rose to the top as the most highly favored by respondents: Emergency & Life Safety, Communications or Collaboration, Mobile Productivity and Work Order or Ticketing tools.

As shown in the chart to the right, when asked what technology is most valuable for their team nearly 70% of facilities teams place a high value on tools that facilitate Emergency & Life Safety. Compared to the four tools above, survey respondents gave lower ratings for technology tools related to Energy Management, Asset Tracking, Lighting Management, and Smart Buildings.

Four most valuable technology tools:

(Sum of top 2 responses: Very or Extremely Valuable)

Emergency & Life Safety
69%

Communications or Collaborations
63%

Work Order or Ticketing
60%

Mobile Productivity Apps
59%

Benefits Drive Prioritization

The next area of focus was finding out which benefits were most important for getting a technology purchase approved. As the chart on the right shows, there are three benefits—improved customer service, productivity, and cost reduction—that were the clear priorities.
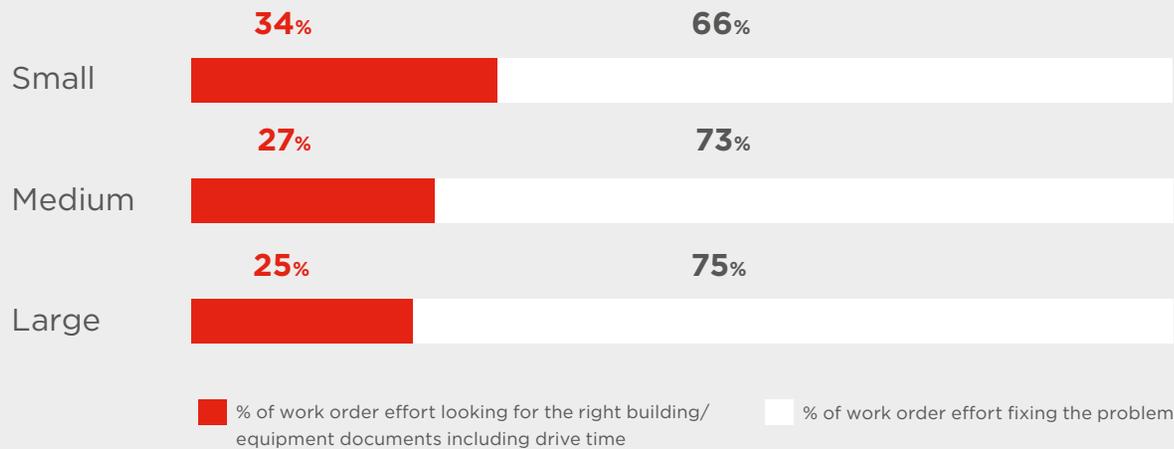
Facilities teams are in the customer service business so increasing productivity goes hand in hand when it comes to prioritizing tech purchases. 82% of large teams and 78% of small teams agree that improving productivity is the top priority when selecting facilities technology.

As productivity increases, customer service levels simultaneously go up. Customer service is nearly unanimously ranked as second priority for purchasing technology by large and small teams alike at 66% and 64% respectively.

#1 Product improves our team productivity
82% Large teams
78% Small teams

#2 Product improves customer service
66% Large teams
64% Small teams

#3 Product reduces our costs
55% Large teams
59% Small teams

#4 Product improves our emergency preparedness
47% Large teams
45% Small teams

#5 Product reduces our legal/financial risk
38% Large teams
42% Small teams

Despite the growing acceptance of technology, the facilities industry still faces productivity challenges, as shown below. Facilities teams are spending, on average, 30% more time on work orders than would be necessary if document search was improved through a mobile technology solution.

Work Order Time spent on Document Search vs Productive Work

Small	**34**%	**66**%
Medium	**27**%	**73**%
Large	**25**%	**75**%

■ % of work order effort looking for the right building/equipment documents including drive time

□ % of work order effort fixing the problem

30% more work orders could be completed if document search was improved through a mobile technology solution.

Given that this year's respondents said they spend from one third to half their day on work orders, we can conclude that technology has much to offer facilities teams. For example, if document search was improved, 30% more work orders could be completed.

Completing substantially more work orders helps facilities teams accomplish their top priorities of improving productivity and customer service while lowering costs.

Then, consider that 2017 survey respondents reported having failed to complete four to nine preventive maintenance tasks each month.

Falling behind on preventive maintenance is both commonplace and ends up creating more corrective or reactive work orders. This is another example of productivity-related challenges that also translates into lower levels of customer service provided to building occupants.

The more time these teams spend on reactive work orders, the less time they have for proactive work orders. As a result, facilities teams end up playing a never-ending game of catch up. This explains why 2017 respondents also reported that they work an average of 50 hours of overtime per month.

The key takeaway here is when technicians spend less time on low-value tasks such as searching for documents, the team gains time to spend on preventive maintenance. As a result, fewer reactive work orders come in, customer service levels soar, team productivity improves, and overtime costs are reduced.

Technology can be a facilitator for tapping into these performance improvement opportunities; but as was indicated by survey respondents, FMs need to be better equipped and informed about how to influence tech buying decisions.

Tech Adoption Will Significantly Increase in Importance and Usage

Virtually everyone who responded to the survey agrees on the merits of technology. Last year, 82% of facilities teams said they planned on digitizing documents and storing them in the cloud. And as this year's survey shows—regardless of their end goal—nearly every facilities team believes that technology of some kind will become more important over the next five years than it is today.

Do you think technology will be more important to your team's success in the next 5 years compared to today?

100%
Medium teams

99%
Large teams

98%
Small teams

While the responders are nearly unanimous in their belief about the importance of technology in facilities management and operations, as the next chart shows, large facility teams that have successfully purchased at least 10 tech products in the past three years are the strongest believers in technology.

How much more important will tech be to your team in 5 years?
(Sum of top 2 responses: Very or Extremely Valuable)

Large teams (10+ products purchased)

97%

Large teams (1–3 products purchased)

87%

Small teams

83%

Clearly, technology is working for facilities teams. We see in the chart above that those teams who have bought and are using the most technology are also the most optimistic that technology will become even more important in the future. In short, their technology purchases have been a success in increasing productivity and providing higher levels of customer service.

How many more technology products are purchased by large facilities teams? Twice as many for twice the success as shown below.

Number of technology solutions purchased per year

2.2
Large Team

1.3
Medium Team

1.1
Small Team

Why do larger teams buy more technology?

When we looked closer at why larger teams buy more technology, surprisingly, we discovered it is NOT because large organizations have more budget. In fact, they face exactly the same budget challenges as smaller organizations as shown below.

For the tech products that were not purchased in the past 3 years, why do you think they were not purchased?

	Large Team	Medium Team	Small Team
Too expensive	58%	57%	57%
No budget	28%	28%	28%
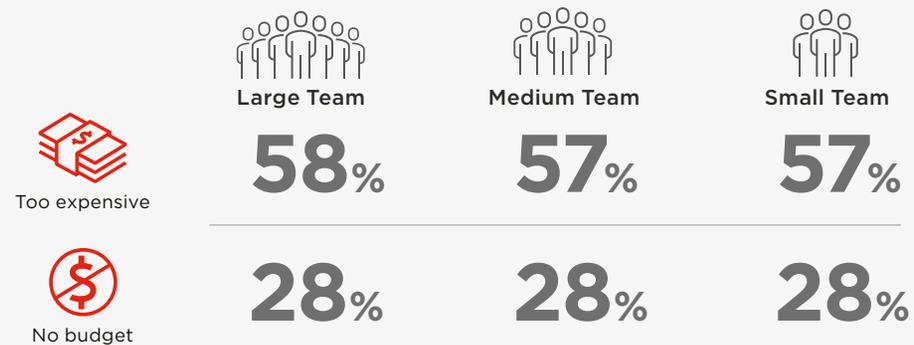
As a result of this clear agreement among large and small teams, our central question remains:

Why are some facility teams better at purchasing technology than others?

Tech Purchase Success Varies

There are gaps in tech usage that are linked to the quantity of technology purchases reported.

Why is there such a big difference among facilities teams in the number of technology products purchased? Where some teams are purchasing and integrating facilities technology into their workflow three times per year, others struggle to purchase more than one product per year.

While nearly every facilities leader sees the value of technology only some are succeeding in acquiring it. Why? Seeing this gap, our research focused on finding out why some buyers succeeded more often than others.

How many technology products has your facilities team purchased?

% of Respondents	Purchase Frequency	
20%	**3+** every yr	★ ★ ★ +
19%	**2-3** every yr	★ ★ ★
9%	**1-2** every yr	★ ★
52%	**1** or less every yr	★

5 Success Factors

Analysis of the survey responses identifies the 5 Success Factors for buying technology. These 5 Success Factors show the areas of focus by the most successful facilities teams that are typically not followed as rigorously by those teams who are currently falling behind in their adoption of technology.

For tech products that were successfully purchased in the past three years, what were the primary reasons the purchase was approved?

	Large Teams buying 3+ products/yr	Large Teams buying <1 products/yr	Small Teams
1. The product was easy to use	63%	48%	39%
2. We did a pilot of the product first	63%	46%	30%
3. IT was involved in evaluating and approving decision	59%	54%	56%
4. Product included a mobile app	53%	41%	27%
5. Budget approver was involved in technology evaluation	44%	41%	33%

This research shows that facilities teams of all sizes that adopt these 5 Success Factors will enjoy far more success purchasing technology.

For the tech products that were not purchased in the past 3 years, why do you think they were not purchased?

Facilities teams of all sizes should adapt their approach to avoid the most common reasons for purchase failure which are presented here.

#1	#2	#3	#4	#5
Product too hard to use **31%**	Budget approver didn't see value **17%**	Rejected by IT **16%**	Not able to pilot it **15%**	Lacked a mobile app **12%**

The Do's and Don'ts of Buying Technology

Based on the data provided above, there are several things you can do to give your team the highest chance of getting a tech purchase approved.

☑ **DO**

Show that the product provides one or more of the following benefits:

- Improves team productivity and customer service
- Reduces costs
- Improves emergency preparedness and compliance audit readiness
- Reduces legal and/or financial risk

☑ **DO**

- Make sure the product is easy to use
- Make sure there is a strong mobile app
- Do a pilot first
- Involve the budget approver in the evaluation
- Involve IT in the evaluation
- Get references from other companies using the solution

☒ **DON'T**

Choose a product that:

- Is hard to use
- Lacks an excellent mobile app
- Doesn't offer a pilot or integrate with other systems
- Lacks customer service or support

From One Facilities Manager to Another: Practical Applications in Action

This report's findings provide several actionable conclusions about how and why facilities teams buy technology. But, just as critical as a successful tech purchase is how the product is integrated into the facilities department workflow.

So, to learn more about what happens after a successful tech purchase, we conducted in-depth interviews and on-site visits with facilities teams in a variety of industries including government, healthcare, and education. Here's what we found.

Florida Hospital Wesley Chapel (FHWC)
Elevating How Service, Safety, and Security Are Delivered

Director of Facilities, John Crouch and his team run a tech-savvy, customer-centric operation. Like most new hospitals, their building documents are stored digitally. But even though they'd moved beyond paper, technicians still had to rely on memory to quickly identify the digital folder with the information they needed. Either that or the technician would be forced to spend time searching for the information.

At best, this was an inefficient use of time that extended wait times for customers. At worst, it was a safety hazard that slowed emergency response times.

When Crouch and the CFO of FHWC watched a demo of the Mobile Facility Dashboard they began to envision how the technology could help their facilities team keep the hospital in peak physical condition.

Crouch and his team concluded that by organizing their building information on ARC Facilities Platform and Mobile App, they would:

- Increase the number of work orders they completed each day.
- Be better able to stay on top of preventive maintenance.
- Improve response times and emergency preparation.
- Lower the costs of employee onboarding.

Orange County Government
Taking the Next Step in the Digital Journey

When the **Facilities Manager** at Orange County, **Rich Steiger**, was hired, he was given a clear mandate: drive the integration and use of technology to optimize the facility team's efficiency. He wasted no time transitioning the team to mobile devices. They also started submitting timesheets electronically, managing inventory with scanners and tablets, and moving from paper to digital.

Even so, Rich Steiger knew there was room for improvement. When he saw the ARC Facilities Platform and Mobile App at a conference, he knew he'd found what he needed.

Once ARC understood how Steiger's team accessed and used information, they structured the data so technicians could find any document with just a few clicks. Given that Steiger's team is responsible for over 400 buildings spread across five maintenance districts and 1,000 square miles, having quick and easy mobile access to the information had an exponentially positive effect on productivity.

With this innovative solution in place, Steiger's team:

- Had all the building information they needed at all times on mobile devices.
- Reduced employee onboarding times.
- Improved customer service.

Technology Adoption is Critical for Facilities Teams: Keys To Success Identified

With constant pressure on facilities leaders to improve productivity and customer service while maintaining or cutting costs, embracing technology has overwhelming support within the facilities community. But, some facilities leaders are proving to be far more successful at buying technology than others. This study sought to gain insights into the reason, and uncovered some surprising results.

Importantly, lack of budget does NOT explain why some teams are more successful procuring technology than others.

The study identified 5 Success Factors leading to success. If facilities leaders apply these success factors, they will have more success procuring the technology products they need to improve their team's performance:

These responses tell us that the most successful buyers make a point to:

1. Prioritize ease of use
2. Do a pilot before committing to a major purchase
3. Involve IT in product evaluation and approval
4. Prioritize mobile technology
5. Involve the budget approver in the product evaluation

20% of facilities teams have emerged as leaders given their success incorporating tech into their teams' capabilities.

They're showing that a tight budget is no longer a valid excuse. They're showing that the technology, and the industry, is ready to elevate service levels to unprecedented heights.

A path to success has been proven. It's now time for all facilities leaders to apply the 5 Success Factors and bring their teams into the modern era. With the insight into daily operations necessary to understand how facilities technology can transform an organization, facility leaders can leverage technology to manage the buildings of the future.

Learn more about the ARC Mobile Facilities Platform at **go-e-arc.com/paper/facilities_tech_trends**