



A note from Carol Leaman

Chief Executive Officer at Axonify

Microlearning is an emerging trend that shows no signs of going away. Business leaders and learning professionals alike are trying to determine how microlearning can help them improve employee performance in ways that traditional training and employee development tactics can't. In fact, according to the Association for Talent Development's 2017 report, Microlearning: Delivering Bite-Sized Knowledge, 81% of surveyed organizations are currently using, or planning to begin using, microlearning to support their employees.

Despite growing enthusiasm, there are still many questions surrounding this revolutionary approach to training. What types of companies and industries are successfully using microlearning? Are there certain applications where microlearning works better? And when microlearning is used for training, do we still utilize test scores and completion rates to measure success?

These questions could only be answered in theory even a few short years ago. But the rapid growth and pervasive adoption of microlearning as the gold standard for training in organizations across virtually every industry means we can move beyond applying general theory. We can now answer key questions around the efficacy of microlearning using empirical data from real-world applications.

I'm excited to introduce the 2018 Microlearning Global Benchmark Report. This report is designed to cut through the noise with actual substance—the evidence you need to thoughtfully apply microlearning principles in your own organization.

- It's the first and only comprehensive analysis of what microlearning looks like in terms of general trends, adoption, demographics and industry applications.
- It provides learning measurement key performance indicators (KPIs) and benchmarks you can trust as best practices to guide your own microlearning programs.
- The insights presented were generated by anonymously analyzing a sample of 78 organizations across a variety of industries and ranging from mid-sized to large Fortune 100 companies—that are capturing millions of learning data points as employees engage in their daily training using the Axonify Microlearning Platform.
- · You can look forward to this report being released annually, with future editions expanding our data set based on continued adoption of microlearning around the globe and evolving based on your feedback.

Regardless of the current degree and scale of microlearning at your organization, I'm confident that this report will arm you with the insights to see where it makes sense to get started—and the endless possibilities of where you can take it.



Casol Leaman

Contents

A note from Carol Leaman, Chief Executive Officer at Axonify	2
Executive summary	4
Anatomy of a microlearning session	5
General microlearning trends	7
Industry usage	8
Geographic reach	8
Mobile usage	9
Gender distribution	9
Gamification and microlearning	10
The motivational wrapper of microlearning	10
The download on gameplay and game mechanics	11
Digging into the numbers	12
Microlearning measurements, applications, industries and benchmarks	15
The powerful new measurements of microlearning	16
More data means more effective measurement	16
How did microlearning perform?	17
Microlearning top applications	19
Industry deep dive: Retail	21
Industry deep dive: Finance & Insurance	24
Industry deep dive: Manufacturing & Logistics	27
Where do you go from here?	30
Bringing it all together	31
About Axonify	32
Glossary: the new measurements of microlearning expanded	33
Study methodology	35



Executive summary

Microlearning isn't some far-off vision. It's real. It's impactful. And it's a concept that organizations can easily adopt right now. Here are 3 key takeaways we learned from analyzing data from an anonymous sampling of 78 companies that use the Axonify Microlearning Platform to train their people.

Microlearning has universal appeal with industries who have "deskless" workers

SEE PAGE 7

Microlearning is used across dozens of industries to support a multitude of training applications. We see large pockets of adoption in retail (27%), manufacturing & logistics (25%) and finance & insurance (22%), as well as telecommunications, healthcare, call centers, pharmaceuticals and a handful of others. So, why does microlearning thrive in these industries? It's due to the disproportionately large concentration of "deskless" workers—those frontline employees who are out on the road, on the store floor, or in the manufacturing plant with limited access to a dedicated computer or even a company email address. Microlearning resonates with deskless workers because it's a habit-forming style of learning that fits seamlessly into their workflow the first thing they do at the start of a shift or something easily picked up when they have downtime.

Microlearning drives high levels of employee engagement

SEE PAGE 13

Traditionally, getting employees to engage in training has been the toughest hurdle. That's simply not the case with microlearning, for key reasons. Microlearning automatically adapts learning so each session is based on what an employee knows or doesn't know—it's fluff-free and personalized to the individual. Game mechanics can also be embedded into the experience make learning irresistible. In fact, we found that three quarters (74%) of employees voluntarily engage in 106 microlearning training sessions per year. And employees exposed to game play and game mechanics participate at a rate of 52% more, experiencing average knowledge increases of 27%.

Microlearning impacts business results by improving employee knowledge, confidence and performance

SEE PAGE 17

Unlike traditional training approaches, microlearning lets you continuously measure what an employee knows or doesn't know, and whether they're demonstrating the right on-the-job behaviors. Our results paint an incredible picture of the power of microlearning, as employees who use it know 85% of the information they are required to know on the job. That's significant, when compared to the average 73% baseline knowledge when an employee gets started with daily training. The average Confidence score of 8.2 out of 10 across our sample signals that employees are not only building knowledge, but feeling confident enough to apply it on the job.

Anatomy of a microlearning session

Before we dig into the data, it's important to provide context into what a microlearning session involves. Our customers often liken the microlearning experience to a habit, like brushing your teeth in the morning, which means it fits right into the daily workflow. But what exactly does a typical microlearning session look like? How long is it? Where does gamification fit into the experience? And when does knowledge transfer occur? We analyzed millions of daily microlearning training sessions to create a detailed view.



PARTICIPATION

Three quarters of employees participate in training every month.

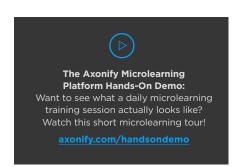


FREQUENCY

Those participating in training every month, train at a frequency of almost 9 sessions every 30 days, keeping in mind there are typically only 20 working days in the average month. This translates to about 2-3 times per week, or 106 times per year.

WHAT IS MICROLEARNING?

Microlearning is an approach to training that delivers content in short, focused bites. To be effective, microlearning must fit naturally into the daily workflow, engage employees in voluntary participation, be based in brain science (how people actually learn), adapt continually to ingrain the knowledge employees need to be successful, and ultimately drive behaviors that impact specific business results.

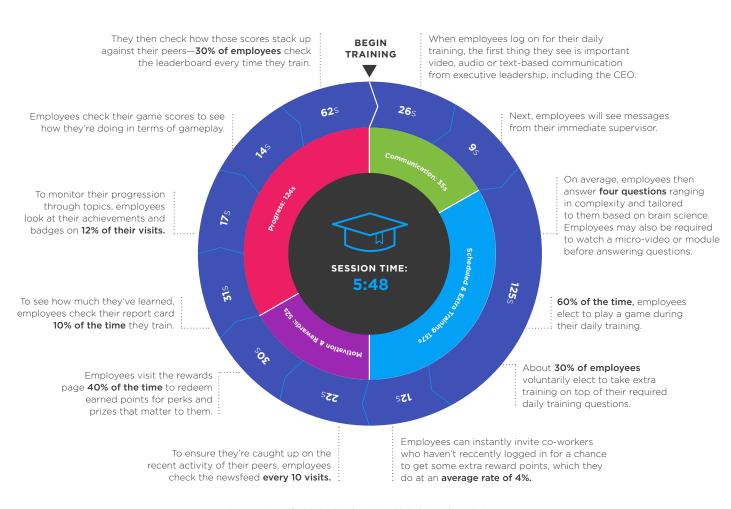




What does a typical microlearning session look like?

The average Axonify microlearning session lasts just under 6 minutes per day. It typically starts with critical messages from senior management, followed by personalized training, casual gameplay, rewards and an overall progress check.

fig. 1



Source: Axonify 2018 Microlearning Global Benchmark Report



We don't want people to be "addicted" to the learning platform, we want them to learn something, apply it, and then go back to work.

JOSH BERSIN, PRINCIPAL AND FOUNDER, BERSIN BY DELOITTE



General microlearning trends

The data revealed key trends around what type of employee characteristics microlearning is best for, which industries are using microlearning and the most popular subjects people are training on.

Microlearning flourishes across industries with "deskless" workers

Whether it's being used for onboarding, compliance, or growing and sustaining critical knowledge to drive on-the-job performance, the data tells us that microlearning has universal appeal across virtually every industry. The largest concentration of adoption, however, exists in

three key segments: retail, finance & insurance (F&I), and manufacturing & logistics (M&L). What's the common thread between these three industries? Deskless workers. The modern worker needs training that fits seamlessly into their busy workflow, whether they're on the floor dealing with customers, working remotely to sell complex financial products, out in the field, or on the road transporting products to the end consumer.

What's a deskless worker?

Limited connectivity. Limited time. Limited control. This describes the deskless workforce. This group includes employees on the floor or in the field who can be difficult to access with consistent messages and training. They can be sales professionals who are often traveling or working remotely, retail associates and plant workers who work shifts, or transport drivers who infrequently visit an office. They're difficult to reach but have massive impact on top- and bottom-line results.

Deskless workers are grossly underserved when it comes to training through systems like an LMS. Microlearning better addresses the needs of all employees, including both head-office (desked) employees and frontline employees.

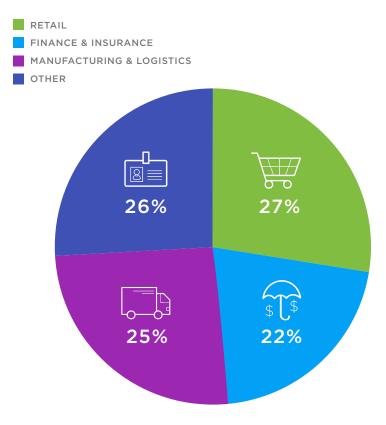


Learn more about how to meet the training needs of the Deskless Worker in the webinar No One Left Behind—Driving Performance within a Deskless Workforce. axonify.com/desklessworkerwebinar



Microlearning knows no borders

fig. 2 Which industries use microlearning the most?



Microlearning is spread across virtually every industry, with large concentrations in retail, finance & insurance and manufacturing & logistics. The "Other" category contains 19 additional industries, including call center, consulting, hospitality, pharmaceutical sales, food services, healthcare, broadcast media, energy, education, software, telecommunications and more.

Source: Axonify 2018 Microlearning Global Benchmark Report

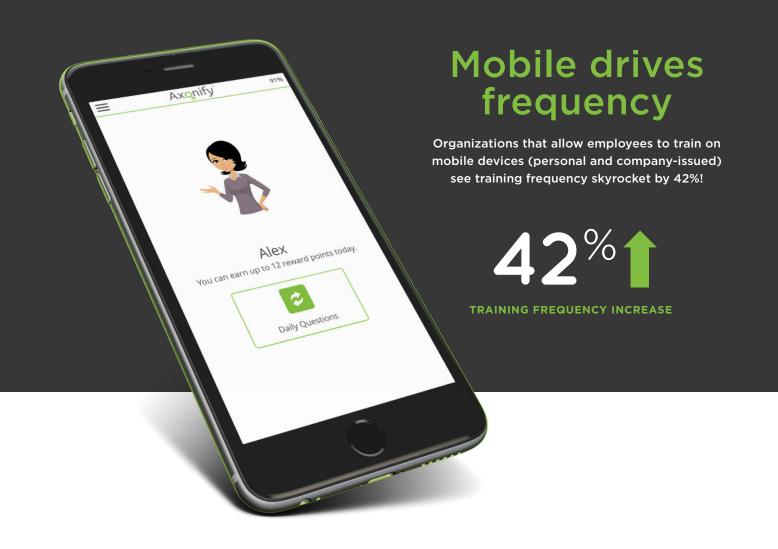
fig. 3 Global microlearning adoption

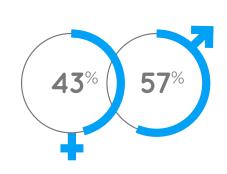


Microlearning adoption is growing at a staggering rate. It's being actively used to deliver training in over 176 countries and over 40 languages! Across continents, borders and languages, microlearning has become the new gold standard for corporate learning.

Source: Axonify 2018 Microlearning Global Benchmark Report







Gender neutral training

Microlearning doesn't discriminate. The gender distribution is nearly even at 57% male and 43% female. which closely aligns to the workforce demographics in our sample.



DIG DEEPER

Whether you're an experienced learning practitioner looking to up your game, or a business professional trying to solve a critical operational problem, leverage the most comprehensive microlearning guide on the planet Everything you need to know about microlearning. It's like having your very own microlearning expert at your side.

axonify.com/microlearning

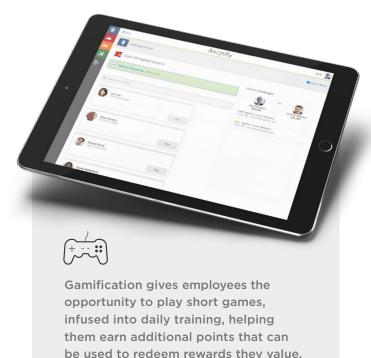


Gamification and microlearning

While some may consider gamification a trend, we have irrefutable proof of the significant role it plays in driving learner engagement. Gamification has become an overused word when it comes to corporate training, and that can cause confusion around its efficacy. When you strip away the rhetoric, does it actually work? And just how does it fit with microlearning? This section examines gamification's impact on employee engagement and reveals how organizations are pairing it with microlearning to drive impressive performance.

The motivational wrapper of microlearning

If knowledge is a rich cappuccino at your favorite café, then gamification is the stamp on the loyalty card that keeps you coming back for more. Gamification is a critical element of the microlearning formula and, when done right, it's one of the major drivers of the high engagement numbers presented in the Anatomy of a Microlearning Session on p.5 of this report (Participation of 74% at a Frequency of 2-3 times per week). Gamification is about creating as many opportunities as possible to grow knowledge by finding the right balance between business value and experience for the employee. Infusing microlearning with gamification and game mechanics accomplishes something that may sound impossible: making learning irresistible. And it provides the right environment for the brain to ingrain knowledge deep enough to change employee behavior.



DID YOU KNOW?

Gamification fits perfectly with the way employees want to learn. In fact, 90% of employees place emphasis on training that is fun and engaging.

Ipsos, Axonify's State of Workplace Training Study



Still on the fence about gamification? Let's take a look at how gamification is driving engagement and employee knowledge.

Gamification is much more than games

Casual gaming combined with game mechanics ignites competitive spirit, makes learning fun and keeps people coming back to learn every day. Here are the key elements driving these behaviors:



Knowledge Acquisition

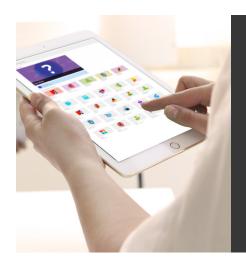
Casual gaming integrated into daily learning

Embedding short, fun, app-like games into the learning experience effectively stimulates neural pathways in the brain, helping it focus on learning in a way that optimizes knowledge acquisition.



Badges, rewards and challenges

Using points motivates employees to answer questions, play games and win individual or team challenges. Not only do they compete for a chance to dominate the leaderboard, they can redeem points for tangible prizes through marketplaces, auctions and other options.



The download on gameplay

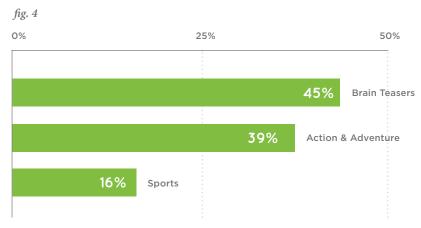
No two people are the same, and that's why game variety is a critical, but often overlooked, consideration when it comes to microlearning. After all, if someone isn't a sports fanatic then you're out of luck if the only games available to employees are football or golf. It's also important to ensure games appeal to every gender and age demographic. (And, yes, it's a myth that millennials are the only age demographic that enjoys games.) The reality is gameplay, when done right, has universal appeal across gender, age, tenure and role.

Digging into the numbers

The analysis of millions of game interactions gives us a direct window into how game variety appeals to the genders. Data was gathered across 21 games split into three categories: Action & Adventure, Brain Teasers and Sports.

Brain teasers take all

Overall, the gameplay popularity breakdown showed that Brain Teasers were played most often (45%), followed by Action & Adventure (39%) and Sports (16%).



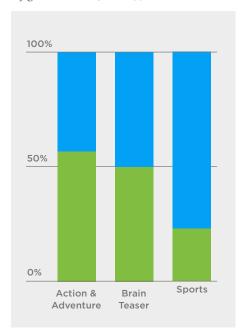
Source: Axonify 2018 Microlearning Global Benchmark Report

Games have universal appeal Gameplay, like microlearning, shows no discrimination when it comes to gender. Of employees who play games, 50.4% are male and 49.6% are female.

Adventure for women, sports for men

We know that men and women both play the same amount of games, but does each gender play the same type of games? Let's look at the breakdown.

fig. 5 Gender/game type breakdown



Source: Axonify 2018 Microlearning Global Benchmark Report

FEMALE MALE

Females dominate Action & Adventure games, playing them 58.2% of the time, while males gravitate towards Sports games much more than their female counterparts, choosing them 71% of the time.



The impact of casual gameplay and gamification

The data clearly demonstrates that people love playing games. But how does that translate into engagement and ultimately building more capable employees? After all, that's the end goal, right? Let's take a look at how gamification paired with microlearning drives engagement and builds more knowledgeable employees.



DID YOU KNOW?

Embedding casual gameplay into learning puts the brain in a state of flow, releasing dopamine that stimulates memory paths and promotes greater knowledge retention.

Source: Axonify 2018 Microlearning Global Benchmark Report



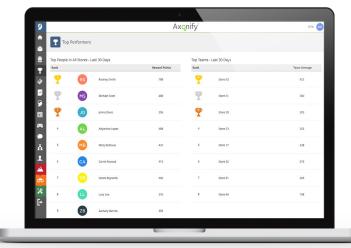
If designed properly, a game or gamified approach will encourage employees to practice desired skills and focus on obtaining desired learning outcomes which translates into on-the-job performance.

KARL KAPP, GAMIFICATION EXPERT AND AUTHOR OF PLAY TO LEARN: EVERYTHING YOU NEED TO KNOW ABOUT DESIGNING EFFECTIVE LEARNING GAMES



DID YOU KNOW?

Competition and progress alongside their peers matters to many employees. In fact, it's significant enough that 40% of employees check their leaderboard daily to see how they stack up. And that type of engagement pays huge dividends when it comes to training frequency. Those who visit their leaderboard more frequently (three quarters of the time) train 39% more than those who rarely visit (less than a quarter of the time).





The impact of rewards

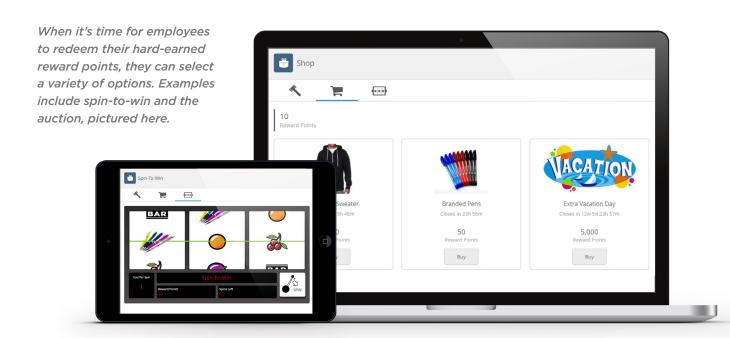
A significant component of gamification that drives engagement is the use of tangible rewards. By answering questions, playing games, winning challenges and inviting friends to train, employees earn points to redeem for prizes. Here's what the data revealed around the degree to which rewards encourage learning.



Employees exhibit 2x higher voluntary participation when rewards are provided, compared to when they are not.



Employees who regularly visit the rewards page exhibit a higher training frequency than employees who don't.





Microlearning measurements, applications, industries and benchmarks

Next, we'll take a deeper dive into microlearning applications in the real world. We'll also analyze the results it's delivering across the industries using it the most—retail, finance & insurance and manufacturing & logistics—to provide practical benchmarks you can measure against in the future.

But before we dig into the numbers, we need to first understand the modern learning metrics that are possible with microlearning.



The powerful new measurements of microlearning

A test score from 6 months ago, or a completion rate, won't tell you whether an employee is capable of performing on the job today. So, why do organizations continue to use these old-school measures? The answer is simple: traditional approaches to learning can't capture the data resolution needed to surface insights that actually help the business.

Imagine what you could do if managers and coaches had a real-time view into each individual employee's

knowledge, level of confidence in that knowledge and improvement over time?

What if you could see specific gaps and weaknesses that expose the business?

Or if you could finally see how learning is impacting on-the-job behaviors and tie it back to business results?

These are the new measurements of corporate learning, all made possible by microlearning.

More data means more effective measurement

Simply put, continuous microlearning approaches generate infinitely more data on each individual employee than traditional systems. This enables us to reveal powerful new measures for learning leaders and frontline managers to see how knowledge and performance is growing in real time.

• Instead of a single-assessment data point (for example, a score on a test), microlearning leverages proven brain science to continuously measure

question responses at multiple time intervals and across varying degrees of difficulty, all while tracking an employee's confidence in their response to each question.

- The vast amount of learning data is then translated into a new set of powerful metrics for learning practitioners, administrators, business leaders and frontline managers.
- Microlearning gives the business a high-fidelity, continuous, real-time view of what employees know and, more importantly, what they don't know.

Let's now take a look at a few of these new powerful metrics and how Knowledge and Engagement measures across our sample grew over the past 12 months.



Adaptive microlearning serves employees tailored daily questions based on business priority, an employee's demonstrated levels of knowledge and weaknesses, as well as their level of confidence in that knowledge...



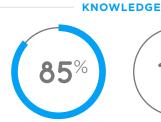
DIG DEEPER: Want to know more about the brain science behind microlearning? Dr. Alice Kim, Cognitive Psychologist, explains in this short video.



How did microlearning perform?

The following provides a snapshot of the Knowledge and Engagement data averaged across a sample of 78 organizations using the Axonify Microlearning Platform. These are the modern learning metrics organizations are adopting to improve the impact of their learning strategies.











BASELINE KNOWLEDGE

How much of what companies need their people to know did they actually know at the beginning?

CURRENT KNOWLEDGE

How much of what companies need their people to know do they actually know today and will continue to know in the future?

KNOWLEDGE LIFT

How much has knowledge improved over time?

CONFIDENCE

How confident are people in the things companies need them to know, on a 10-point scale?

PARTICIPATION

What percentage of people have engaged in a training session at least once in a 30-day period?

FREQUENCY

How frequently are people training in a 30-day period?



DID YOU KNOW? Continuous daily microlearning captures the big learning data needed to generate these evolved measurements on what an employee knows or doesn't know, in real time.

Digging into the numbers

Knowledge: Across the sample, employee knowledge grew by 12% (Knowledge Lift). Employees using microlearning achieved an aggregate Current Sustained Knowledge level of 85% on the topics that their respective organizations needed them to know. This knowledge will be sustained over time through microlearning reinforcement.

Confidence: An 8.2 out of 10 confidence score demonstrates that employees not only know their stuff, they feel confident and comfortable in what they know. High confidence is a leading indicator of on-the-job application and behavior change.

Participation: Three quarters (74%) of employees actively participated in daily training at least once during any given 30-day period.

Frequency: Employees participating in daily training sessions engaged in **8.7 training sessions in a 30-day period** on average, which translates to close to three training sessions per week, or 106 sessions per year!

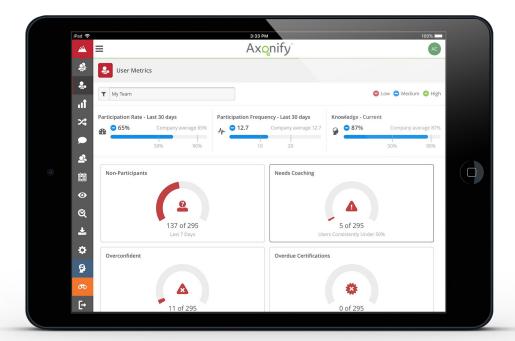


The outcome of learning is not learning; it's performance

DAVID WENTWORTH **BRANDON HALL GROUP**



Powerful microlearning dashboards











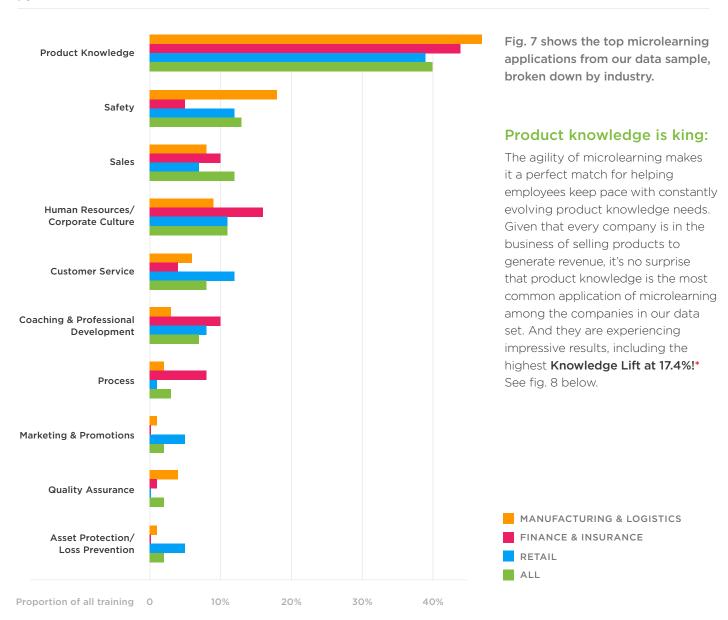
DIG DEEPER: Want to know more about the New Measurements of Microlearning? Check out the glossary at the end of the report for more comprehensive definitions.

Microlearning top applications

Microlearning is on its way to being used ubiquitously across the globe to build employee performance and deliver business results. Next, we'll take a look at the most common applications and subjects companies are training their people on. Then, we'll further break down the numbers within specific industries to serve as benchmarks for what your peers are doing and to help you set your priorities for the future.

Digging into the numbers

fig. 7 Top microlearning applications



Source: Axonify 2018 Microlearning Global Benchmark Report









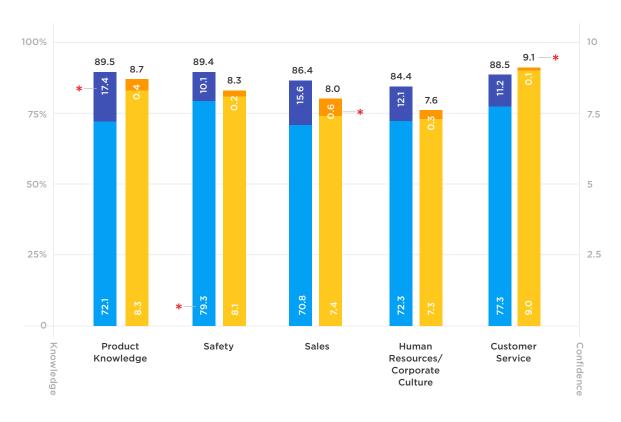


Fig. 8
breaks down
the baselines
and lifts for
Knowledge and
Confidence
across the
top five
cross-industry
applications.

Source: Axonify 2018 Microlearning Global Benchmark Report

Confidence in sales skills:

Whether you're a frontline retail associate or selling pharmaceuticals, presenting in high-pressure sales situations is often intimidating. The more practice people have with the sales process and selling techniques, the more comfortable they become, and that means their confidence skyrockets. And that's exactly what it takes to go deep into a conversation with today's increasingly knowledgeable consumers. So, it's no shock that when we compare sales skills to all other applications, we see the highest rate of **Confidence Lift at 0.6 of a point, or 6% improvement***. Imagine the impact on revenue or transaction size if your frontline employees were that much more confident in a topic like upselling techniques?

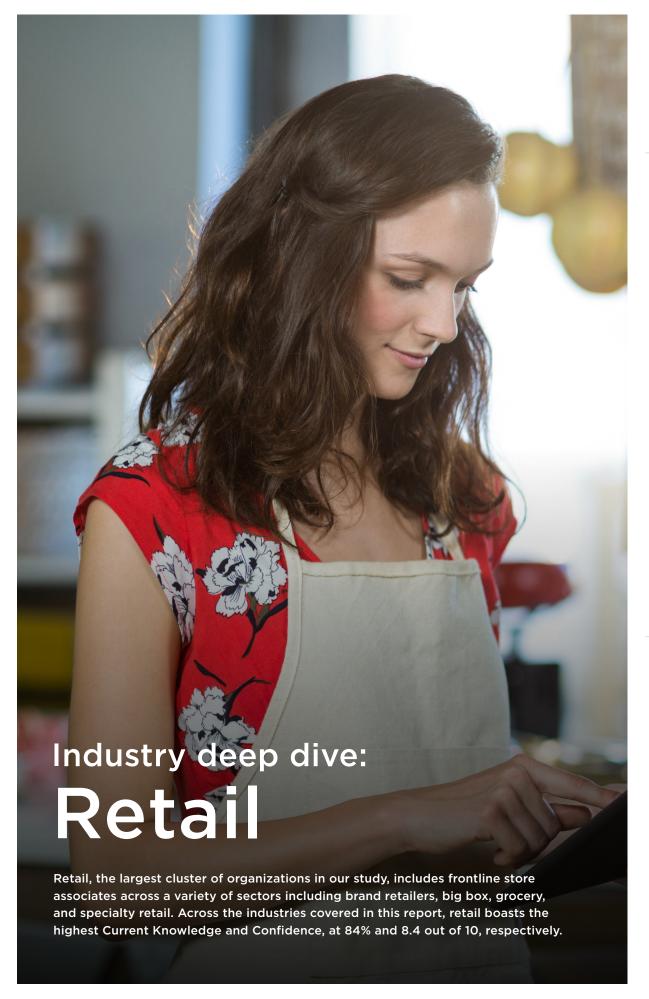
Service with a smile:

Employees are most confident when it comes to the subject of customer service, as demonstrated by a **Confidence rating of 9.1 out of 10***. That's great news for any business, but particularly in brick and mortar retail where service has become a core differentiator as digital disruption continues to shake up the industry.

Safer than you think:

Safety, the second most popular application in microlearning, boasts an initial **Knowledge Baseline** of 79%*, the highest of any subject. In other words, employees come into organizations much more equipped with general knowledge about how to work safely and abide by OSHA (Occupational Safety and Health Administration) regulations, versus other subjects that are unique to each organization, such as "Marketing and Promotions."





Key performance indicator benchmarks

Knowledge:



CURRENT KNOWLEDGE



KNOWLEDGE LIFT



CONFIDENCE

Engagement:



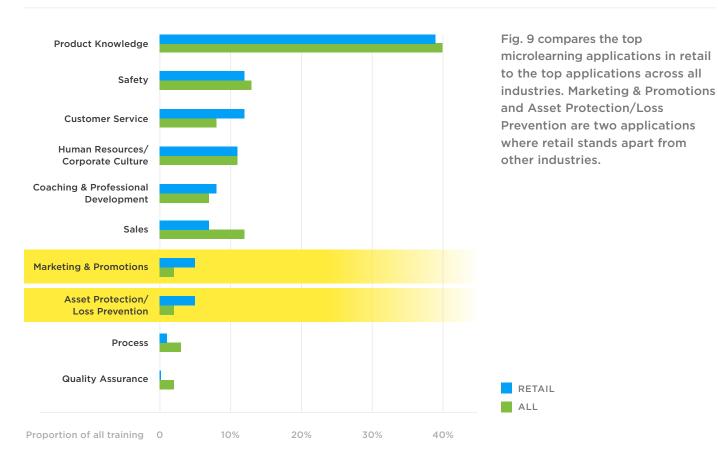
PARTICIPATION



FREQUENCY

How the numbers add up

fig. 9 Top retail applications



Source: Axonify 2018 Microlearning Global Benchmark Report

Marketing and Promotions bring customers back:

Brick and mortar retail isn't for the faint of heart. Weekly promotions not only keep pace with online pure play competitors, but also serve as the most impactful way to bring shoppers back to the store on a regular basis. And microlearning is the way best-in-class retailers are keeping store associates up to speed on the latest promotions. In fact, retailers are using microlearning to train employees on promotions at a rate more than 2x the industry average.

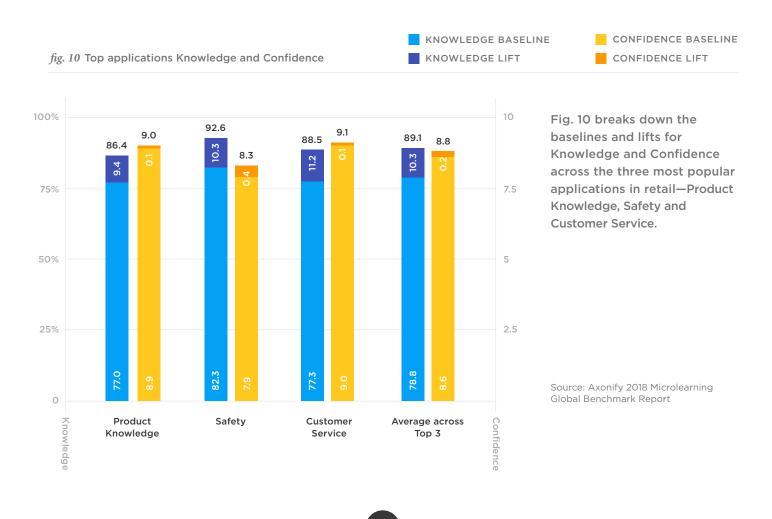
Motivated to protect:

Asset Protection and Loss Prevention is a popular application in retail, with **usage that's more than 2x the cross-industry average**. Shrink rates increased to a rate of 1.44% of company sales in 2017 (NRF, "National Retail Security Survey 2017), leading to organizations losing millions to internal and external shrink every year. This is why progressive retailers embrace daily microlearning reinforcement as a critical preventative measure to keep shrink rates in check!



Store associates know their stuff:

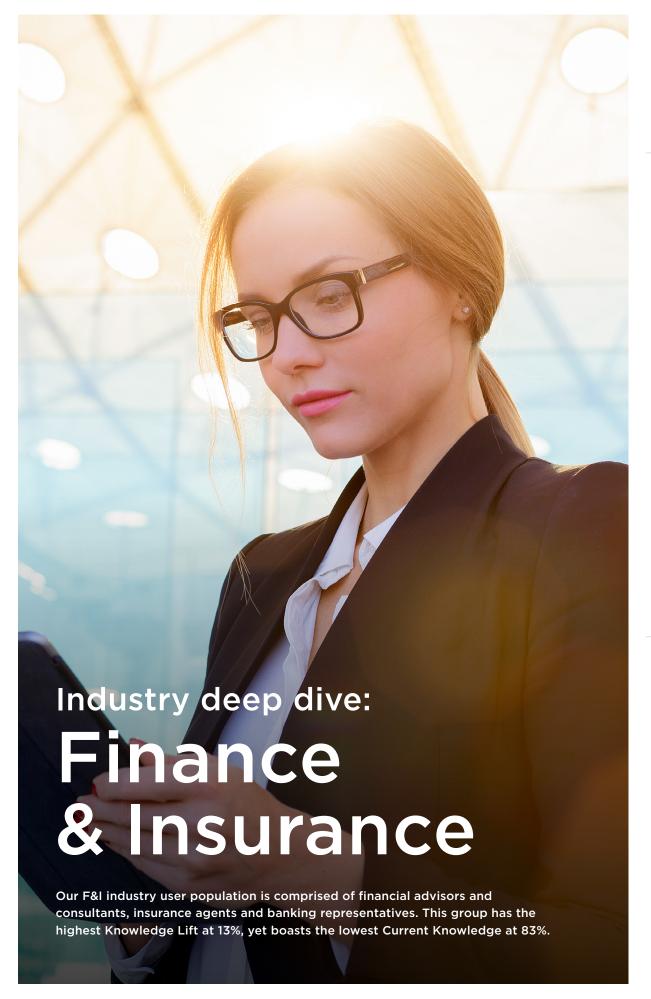
It's not all that surprising that baseline Knowledge and Confidence are so high in retail, when you consider the new retail environment that has turned brick and mortar retailers to focus on their frontline staff as the core differentiator to compete with online giants like Amazon. Employees typically come into the retail environment with knowledge and experience that they've picked up at a previous company, which is reflective of an industry with a turnover rate that's generally higher than other sectors.



In my 40 years of experience, this is probably the most innovative program I've put in place in any of the positions that I've been in for retail safety and loss prevention.

CHAD MCINTOSH, VP OF ASSET PROTECTION AND RISK MANAGEMENT, BLOOMINGDALE'S





Key performance indicator benchmarks

Knowledge:



CURRENT KNOWLEDGE



KNOWLEDGE LIFT



CONFIDENCE

Engagement:



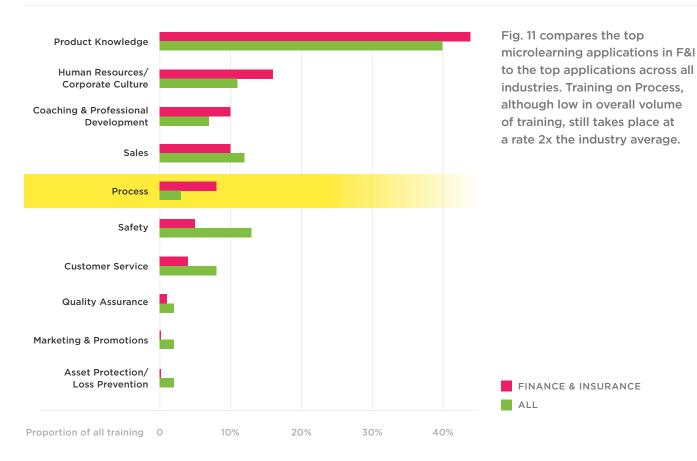
PARTICIPATION



FREQUENCY

Taking stock of the numbers

fig. 11 Top finance & insurance applications



Source: Axonify 2018 Microlearning Global Benchmark Report

Highly regulated, heavy process:

Process-related training is in the bottom half of popularity across all industries, but that's simply not the case for F&I. **Training on processes in this industry takes place at a rate 2x greater** when compared to all other industries. Here's why: finance & insurance is one of the most highly regulated industries. Consider governing bodies, like the Securities Exchange Commission (SEC),

that exist to ensure investors have ample information regarding their investments. If the proper process isn't followed, employees can put themselves and their organizations at severe risk. Banks and other financial institutions recognize the power of microlearning when it comes to making sure their names only appear in good news headlines.



A lot to know (but they're fast learners):

We saw the highest jump in Knowledge Lift in F&I versus all other industries at 13%. Why does knowledge grow at a faster rate in F&I than the other industries? The whole world of finance moves fast and competition is fierce. As a financial advisor, if you tune out for a moment, a regulation has changed or the stock market has shifted. If you're not on top of your game, the advisor down the road steps in to close the deal. So, why the lowest knowledge levels then? Simply put, finance isn't easy. The topics are extremely complicated (think: "How to Properly Calculate Return on an Annuity" or "Asking the Right Questions to Assess a Customer's Financial

Risk Profile"). When dealing with personal wealth, life insurance or money in general, the stakes are high. Prospective clients want to know they are trusting someone who is knowledgeable and confident when it comes to decisions about their personal finances. This complexity, coupled with constant change, means building knowledge can never stop.

They love to train:

KNOWLEDGE BASELINE

KNOWLEDGE LIFT

The huge Knowledge Lift in F&I is directly attributed to the employee practice of high-frequency training. At a frequency of 10 (about 3X per week on average, or about 120 sessions per year), it's the highest across all industries!



DID YOU KNOW?

Financial regulation is a tricky subject, with rules and laws being updated frequently. With microlearning, changes can be made to training content and immediately pushed out to employees, ensuring they stay up to date on the newest regulations.





Fig. 12 shows the baselines and lifts for Knowledge and Confidence across the three most popular applications in F&I—Product Knowledge, HR/Corporate Culture, and Coaching and Professional

Development

CONFIDENCE BASELINE

CONFIDENCE LIFT

Source: Axonify 2018 Microlearning Global Benchmark Report

"

Axonify helps us more effectively control our risk and protects our brand from adverse news.

CHARLES RIZZO, CFO & SVP, JOHN HANCOCK GROUP OF FUNDS





Key performance indicator benchmarks

Knowledge:



CURRENT KNOWLEDGE



KNOWLEDGE LIFT



CONFIDENCE

Engagement:



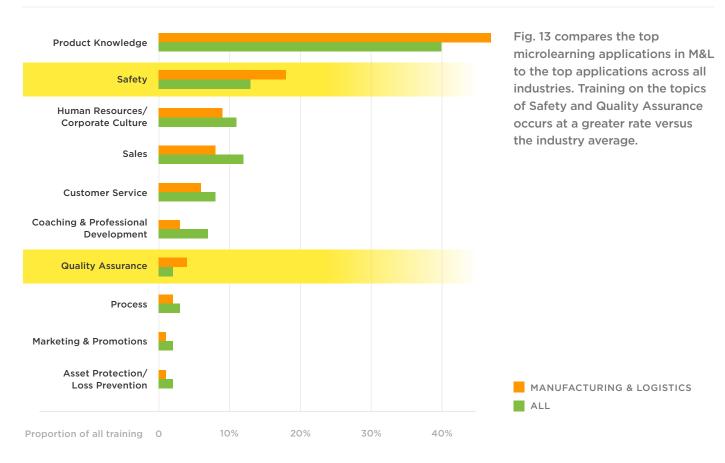
PARTICIPATION



FREQUENCY

Building on the numbers

fig. 13 Top manufacturing & logistics applications



Source: Axonify 2018 Microlearning Global Benchmark Report

Safety first:

Manufacturing is no stranger to the topic of safety. The frequent use of dangerous equipment or hazardous materials leads to higher risk of injury or even death, not to mention the big fines and potential criminal penalties associated with violating federal and state safety Acts. Organizations are increasingly turning to microlearning as a better way to mitigate these high safety stakes. In fact, safety training is the most popular application in M&L next to product knowledge. Best-in-class manufacturers embed safety directly into the corporate culture to keep people and property safe. Safety training in M&L occurs at a rate of 3X more than F&I and almost 2X more than retail.

Crazy about quality assurance:

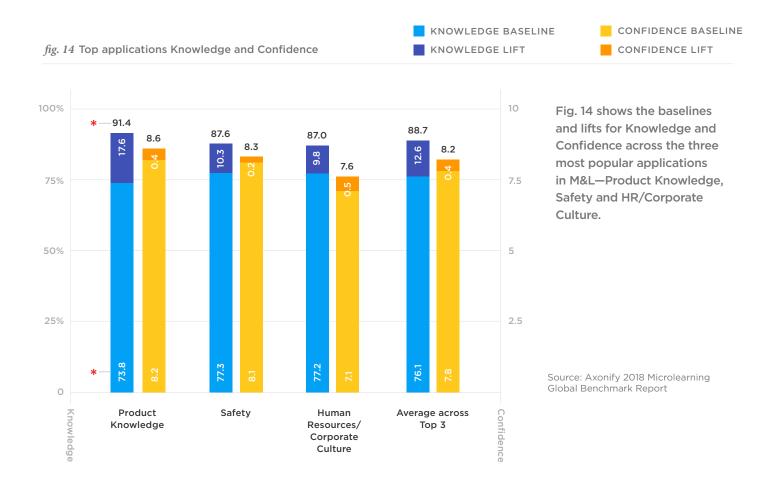
Manufacturers everywhere are dealing with a complex quality assurance puzzle with pieces that shift depending on the type of product they manufacture or ship.

They must meet stringent quality standards for ISO certification and face steep potential fines if they don't meet government regulations, such as those set out by the FDA (Food and Drug Administration). And should a defective product somehow get through their safety nets and into the hands of the end consumer, it costs the manufacturer big bucks. Microlearning helps companies tame this quality assurance complexity.



They know their products:

Despite a low Knowledge Baseline when it comes to **product knowledge (73.8%)***, microlearning helps **lift M&L employees' knowledge up to an incredible 91.4%***, the highest mark in the most widely used application. This increase makes a lot of sense, when you think about it. Employees in M&L are either building products or out selling them to distributors, and strong product knowledge is crucial for success in either scenario.



We have seen significant value with the Axonify platform.

There's been a lot of energy around it with people logging on more than once a week and challenging each other.

BARBARA GROFIC, PROGRAM MANAGER OF SAFE BY CHOICE $^{\text{TM}}$, MERCK



Where do you go from here?

Now that you've reviewed the data and seen the evidence around how global organizations are experiencing the tangible benefits of microlearning, you're hopefully feeling inspired. And you may even be feeling a little overwhelmed—that's okay, we've got your back!

The good news is that you don't have to rip and replace your existing learning program to take advantage of microlearning. Here are some tips for how you can take it at your own pace:

Start with the end in mind

The bottom line with all learning is that you should always be assessing the desired business results you want to achieve. Only then can you provide a learning experience that will best support knowledge growth, behavior change and ultimately better business performance.

✓ Determine where you can generate the most business impact

Adopting a microlearning approach means you'll have to take a look at your existing content, but it doesn't mean that you'll have to start from scratch. Start by focusing on an area of the business where training can make the biggest impact and begin applying microlearning principles there. As you audit your content, you will find you can keep some of what you have in place, perhaps choosing to augment it by applying some fundamental principles behind microlearning—like adding reinforcement questions. In other cases, you may use your existing materials as the foundation for creating new, more focused assets. And often it will just make sense to replace an existing course entirely with a microlearning approach.

✓ Focus on specific, measurable results

When you are pitching key decision makers on the change, don't talk about microlearning, or even learning. Instead, focus the discussion around solving business problems. Telling C-level stakeholders you have a proven way to solve a safety issue and reduce claims by 50%, with the power to measure and prove results, will get their attention much quicker than talking about a new approach to learning.

Make sure you have the right delivery technology

Microlearning delivery technology is often overlooked by organizations. In order for microlearning to work, it must be delivered in a way that is tailored to each individual employee's knowledge strengths and weaknesses, in a continuous manner to bridge the gaps based on what matters to the business. Adaptive microlearning technology that incorporates proven brain science techniques, such as spaced repetition, retrieval practice and confidence-based assessment, is critical to bridge this gap.

✓ Fuse casual gameplay and game mechanics thoughtfully

Think about your end goal and make sure you have your bases covered when it comes to games. If you're looking to stimulate memory paths, you'll need casual game play that appeals to each individual learner. And if you're trying to get people jazzed about learning, then the right mix of gamification techniques will get you participation levels that are off the charts. Your microlearning solution should include casual gameplay options that appeal to your entire employee base, along with the right mix of game mechanics to generate maximum business impact.

✓ Do your homework

You need to implement microlearning correctly to get the results that solve your biggest business challenges. With new concepts to grasp, it makes sense to learn as much as you can about this revolutionary approach to measurable learning. The Ultimate Guide to Microlearning goes in-depth on the subject, helping you truly understand the concept of microlearning and how your organization can take advantage of it to get real results.



Bringing it all together

Every year there are new buzzwords and exciting tools proclaiming to be the Next Big Thing in learning. Some will succeed and some will, ironically, be forgotten. The bottom line is that learning will only be successful if it is designed for people, taking into consideration how they work, how they learn, what engages them and, most importantly, how it ties back to moving the bottom line.

Microlearning will withstand the test of time

Microlearning isn't about generating buzz or providing an excuse for providers to charge customers more money. Microlearning's success is directly attributable to how human it is—it's designed around how people learn, what they like and how they apply their learning in real-life scenarios. It treats learners like unique individuals, rather than a faceless, homogeneous group.

By collecting hundreds of millions of data points around how employees actually learn, microlearning is now proving its power and promise to take corporate learning to new heights. In fact, microlearning is finally giving the entire learning industry the powerful big data that has been missing until now. And this, for the first time, is enabling learning and business leaders to measure the impact of training on the business in dollars earned or saved.

It's solving real business problems across industries and around the globe

As this report demonstrates, microlearning is applicable in every industry, for virtually any application—from product knowledge and safety, to process, quality assurance, brand and culture, and beyond. It drives engagement more than any other training, as employees get tailored learning in a format that they enjoy. Finally, it delivers on the promise it was created around: building a level of employee knowledge, confidence and performance that ultimately drives measurable business results.

Microlearning has seen huge advancements over the past few years. We're excited to be at the forefront of empowering frontline workers with actionable knowledge like never before. And we look forward to sharing how microlearning is continuing to evolve and equip employees around the world to positively affect business goals in our second edition of this report in 2019. Until then, we hope you'll keep seeking opportunities to **fuel your people and power your organization**.



DIG DEEPER: Check out our collection of real-world stories across a variety of industries that show the business impact of microlearning.

axonify.com/customer-stories



About Axonify

Axonify is the only microlearning platform trusted by global business leaders to drive performance and deliver bottom-line business results. By providing a continuous and personalized learning experience that fits naturally into employee's workflow, Axonify ingrains knowledge deep enough to change behavior on the job. Axonify uses fundamentals of brain science, adaptive microlearning and gamification to make the experience fun, fast and effective while measuring the impact on bottom-line results. With more than 150 customers in 95 countries around the world, including Walmart, Bloomingdale's, Toyota, and John Hancock, Axonify makes learning personal to the individual and impactful for the business. Founded in 2011, Axonify is headquartered in Waterloo, ON Canada.

Axonify. Driving Knowledge. Improving Performance. Call us today at 1-855-AXONIFY or visit www.axonify.com

"

We chose Axonify because it's based on brain science and has the ability to adapt the learning to the individual. The learning is wrapped up in gameplay and pushed out through microlearning, based on what the advisor knows or doesn't know, in short bursts of just a few minutes a day."

JASHA FLETCHER, HEAD OF LEARNING SOLUTIONS ARCHITECTURE, BT CONSUMER, CUSTOMER CARE

Glossary: the new measurements of microlearning expanded

Gone are the days where module completion was the only relevant measure in assessing training's impact. Due to advancements in microlearning and data collection, analyzing learning goes far deeper than simply measuring if employees were taught, which is all completion rates attest to. The new measurements of microlearning determine what employees actually know in real time, and whether that's translating to the on-the-job behaviors employees need to exhibit to achieve business goals.

Below we define the metrics that provide the most discerning and comprehensive measurements that are referenced throughout this report.

1. Knowledge Level: Measures what employees know

Knowledge level is an assessment that measures an employee's level of proficiency on a specific topic, displayed as a percentage (0-100). It is continuously measured in real time based upon the data collected from an employee's daily training sessions and the questions they've answered at various complexity levels configured using Bloom's taxonomy.

- a. **Baseline Knowledge** considers the question scores the first time an employee sees a question at each specific question level difficulty.
- b. Current Sustained Knowledge is calculated with the two most current scores of all questions an employee has answered at all question difficulty levels in a particular topic.
- c. Knowledge Lift shows how much an employee's knowledge has grown over time, with growth measured by the difference between Baseline Knowledge and Current Knowledge, expressed as a percentage.

2. Confidence: How confident employees are in what they know

Confidence is measured by asking employees to rate their confidence during question response. Displayed on a 10-point scale (0 being low and 10 being high), the Confidence measure is a leading indicator of whether we can expect to see Knowledge translate into on-the-job behavior change.

3. Participation: How many employees engage in training

Participation is expressed as a percent of employees who log into training over a 30-day period, divided by all employees with access. For example, a participation rate of 80% means that 80% of employees have logged onto Axonify within the past 30 days. With a higher participation rate, employees are exposed to the content more often and have been proven to have higher knowledge and confidence scores than employees with lower participation.

4. Frequency: How often employees engage in training

Frequency is the number of times, on average, employees log into Axonify over a 30-day period. Employees that frequent the training more often have increased exposure to the content, leading to higher knowledge and confidence in the training and eventually better job performance. An employee's frequency is expressed as a digit representing each day logged on during a 30-day period. For example, a frequency of 15 means that an employee logged on 15 times in the past 30 days, or every other day. Another way of looking at this number is that a frequency of 15 translates into about 180 training sessions per year.



Study methodology

The bulk of this report was generated via analysis of anonymous data points from over 360,000 employees across 78 North American organizations, and nearly 4 million microlearning sessions that occurred between January 1, 2017 and December 31, 2017. All activity and knowledge data was anonymized and averaged into industry groupings to ensure that no individual or organization could be identified within the data. All data presented in this report is an average of multiple organizations and tens of thousands of employees for each industry. It is important to note that within each industry there are organizations that achieve both knowledge lift and engagement with microlearning that is above and below the presented averages. This analysis was conducted with the support of Dr. Deltcho Valtchanov, PhD, Axonify's Senior Research and Data Scientist.

