

Checkout Conversion INDEX™

SNAPSHOT FOR Q2 2017

51.4

Average Checkout Conversion Index (CCI) score
on a scale of 0 (worst) to 100 (best) for Q2 2017



\$200 billion

in sales are forgone due to friction in the checkout process

81.1

Average Index Score of the top 30 merchants
– 37 percent higher than the average

38 AS

Thirty-eight eTailers scored a75 or higher in Q2 2017
– Top scorers excel at almost every tracked feature

2.65 mins

Average time to check out from online websites in Q2 2017
Online (2.26) • Mobile (2.43) • App (2.33)
– 8 seconds slower than Q1 2017

22

Average number of clicks to complete online and mobile purchases in Q2 2017
Online (22.2) • Mobile (22.8) • App (23.5)
– 1 more than Q1 2017

Why We Need A Checkout Conversion INDEX™



You've created the perfect product. You've placed it on the ideal sales platform. Website traffic is through the roof, just as you expected. All that's left to decide is how you'll spend all the money you're about to rake in. Yet the sales never come. Your (digital) shelves are fully-stocked, but *Field of Dreams*, this was not. What happened? Frustrated customers-to-be throw up their hands at the cumbersome sales process — that American flag-themed skiing onesie just isn't worth the trouble.

Worldwide retail eCommerce sales totaled nearly \$2 trillion in 2016 — an estimated 8.6 percent of all retail spending — and are projected to double in value by 2020.¹ Despite the strong growth, online merchants continue to leave money on the table, forcing their customers through one too many hoops before completing a purchase and missing out on the sale altogether. **In the U.S., where eCommerce sales total \$390 billion, we estimate that at least \$200 billion in sales are foregone due to frictions in the checkout process — a whopping 50 percent.**

During checkout, every click and second matters. A good shopping experience is one in which a customer zips through the checkout process as quickly as possible. As merchants add more online platforms like mobile apps and mobile sites, and customers continue to shift their purchasing patterns toward online, the online checkout experience becomes increasingly important.

The PYMNTS.com Checkout Conversion Index™ (CCI) measures user experience and grades merchants on how well they're able to capture sales. We quantify the friction consumers experience

¹ Worldwide retail eCommerce sales will reach \$1.915 trillion this year. eMarketer2017. <https://www.emarketer.com/Article/Worldwide-Retail-Ecommerce-Sales-Will-Reach-1915-Trillion-This-Year/1014369>. Accessed June 6, 2017.

when they shop online. We also identify the website and payment attributes most likely to discourage them from completing a purchase – thus losing sales for merchants.

The CCI is based on a team of “shoppers” shopping at 853 U.S. eCommerce sites across 14 merchant categories. These sites represent more than 46.2 percent of all U.S. eCommerce retail spending, and range from fewer than \$200,000 to \$90 billion in annual online sales.

It also grades merchants on a scale from zero to 100. **Higher scores indicate smoother checkout processes and less friction**, and correspond to higher conversion rates to actual sales. We’ve identified more than 74 attributes that correspond to checkout friction and used them to score merchants on ease of checkout.

We are interested in your feedback on this report. Please send us your thoughts, comments, suggestions or questions to ecommercefriction@pymnts.com.

What's New in the Checkout Conversion INDEX™

The eCommerce market has evolved significantly since the creation of the CCI, continually introducing new features to improve the checkout process. In addition to making the checkout process more seamless, merchants have introduced new sales channels specifically focusing on mobile.

The most recent edition of the CCI has incorporated two new purchasing channels: Mobile Sites and Mobile Apps. We strive to incorporate emerging checkout methods, especially as mobile continues to grow and represent a bigger slice of the expanding eCommerce sales pie. The CCI measures the frictions in the checkout process in these new channels and incorporates them into the aggregate score. While some features were already present, new features were added to reflect their relevancy in these new channels. Appendix A includes a detailed table illustrating how the CCI has changed with the

addition of these variables and new weights across the board.

This edition of the CCI more rigorously and thoroughly analyzes the entirety of a merchant’s sales process – especially as merchants evolve to meet changing consumer demands.



Where We Are in the Journey

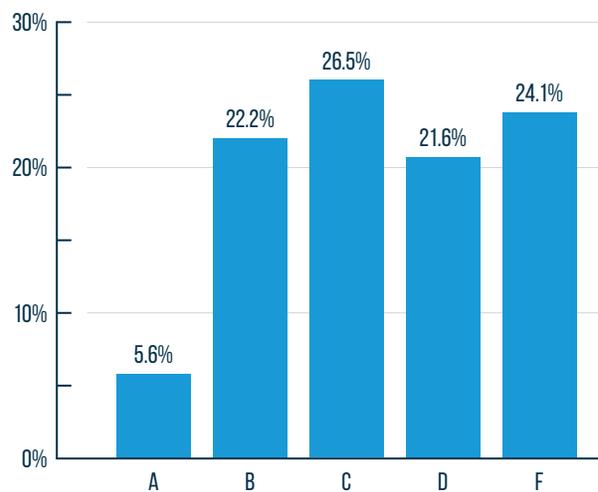


Every quarter, we evaluate our sample of merchants and their progress towards a perfect online shopping experience: a CCI score of 100.²

Who's Acing, Who's Flunking?

The average CCI grade is 51.4, a reflection of all the revenue we estimate merchants give up each year due to lost sales. Many merchants miss easy opportunities to improve conversion rates and revenues, though, as we'll show throughout the report. Before we dive into how merchants can optimize their sites – by increasing payment methods, reducing the number of clicks and offering live site help, for example – we'll give a lay of the land and show how much most merchants need

FIGURE 1. GRADE DISTRIBUTION



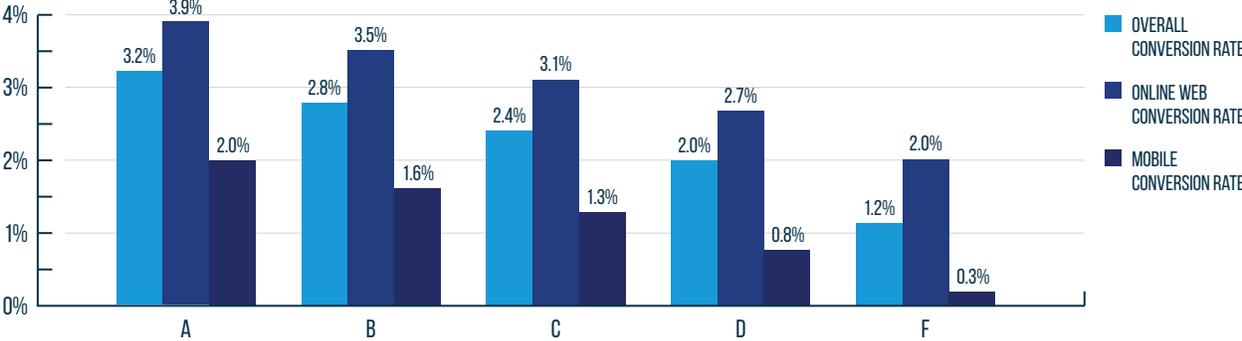
to improve their eCommerce offerings on both desktop and mobile. The chart above breaks down the distribution of sites earning each grade. Slackers beware: We're tough graders.

² Occasionally, merchants drop out of our sample, and we replace them with new merchants to maintain a sufficiently large sample. However, to make apples-to-apples comparisons, we restrict the sample to the merchants that we've tracked since the inception of the CCI when we analyze performance over time. This quarter, our analysis applies to 753 merchants.

An elite 6 percent of merchants earned an A, and these merchants stand out in essentially every feature in the Index. The remaining 94 percent of the sample is almost evenly divided across the remaining four grades, with a balanced distribution across merchants. While excelling is not easy, there is much room for improvement for most merchants – and plenty of low-hanging fruit to tackle to improve checkout systems.

Clearly, merchants that score higher on the CCI have reduced sales friction and more efficiently converted eyeballs to sales. In fact, the overall conversion rates for A-rated sites nearly triples that for F-rated sites, clearly demonstrating how much money is being left on the table and the value in improving checkout systems.

FIGURE 2. CONVERSION RATES BY GRADE



The Good, the Bad and the Ugly

To give a sense of how different sites handle friction – and, more importantly, to provide a sense of best practices to improve sales – we like to compare the top 30 and the bottom 30 merchants to the remaining lot. The top 30 websites averaged a CCI score of 81.1, ranging from 77 to 92. The bottom 30 websites averaged a CCI of 22.8, ranging from a low of 10.5 to a high of 27. The top 30 sites all earned As, and the bottom 30 only received Fs. It’s a huge gap: Elite retailers outperform the worst performers by a substantial margin. Looking on the bright side, there is much room for improvement.

The Makings of a Top Performer

To illustrate these differences, the following table summarizes key performance metrics for the most important checkout features broken down by overall grade. Per the new methodology, the table combines data for purchases on both desktop and mobile versions of merchant websites.

TABLE 1. MAIN FEATURES BY GRADE

INDUSTRY CATEGORIES	A (43)	B (185)	C (262)	D (125)	F (138)
TIME IN SECONDS	144	150	155	164	166
TIME IN SECONDS (ONLINE)	126.8	143.5	145.3	157.8	151.5
TIME IN SECONDS (MOBILE)	149.6	153.1	162.7	172.1	179.4
TIME IN SECONDS (APP)	125.2	149.5	165.0	148.3	157.3
TOTAL CLICKS	22	22	22	23	23
TOTAL CLICKS (ONLINE)	21.1	21.9	22.2	22.7	22.2
TOTAL CLICKS (MOBILE)	22.7	22.3	22.6	23.1	23.8
TOTAL CLICKS (APP)	24.7	25.9	20.9	23.9	22.6
PRODUCT REVIEWS AND RECOMMENDATIONS	92.1%	78.0%	61.5%	40.3%	16.3%
SHIPPING SAME AS BILLING	91.7%	91.9%	91.5%	85.1%	78.2%
FREE SHIPPING	97.3%	90.4%	82.9%	73.5%	54.9%
COUPONS	84.2%	79.3%	76.5%	77.1%	63.3%
SECURITY LOGOS	60.5%	72.0%	57.0%	55.9%	35.3%
SITE HELP – LIVE	100%	92.0%	92.2%	82.8%	59.2%
GUARANTEE OR REFUND	89.5%	82.0%	71.5%	52.1%	24.2%
REQUIRED PROFILE	10.5%	17.3%	22.5%	29.6%	47.7%
TOTAL PAYMENT METHODS	7.6	7.4	6.7	6.2	5.4

Merchants that earned an A excelled in nearly all features – and that is no easy task. Only 5.6 percent of all merchants studied received an A this quarter, but this elite set clearly makes its customers’ lives easier. Online shoppers were able to fly through the checkout process 15 percent faster on A-graded sites relative to F-rated sites (144 seconds versus 166 seconds, respectively). A-graded sites also offered more payment options than the rest. While F sites only provide five payment options on average (not even covering the full “Global 6,” which include Visa, Mastercard, American Express, Discover, Diners Club and PayPal), A-graded sites allow

approximately eight different payment options: They really want your money.

But that’s not all. Top scorers also offered live help to their customers in case they ran into any problems or had any questions. This prevents consumers from getting discouraged and reconsidering their purchases. While live help won’t force customers to buy, it can certainly lead these horses to water. F-rated sites only do this 59 percent of the time, clearly foregoing easy opportunities to increase revenue. It’s the same case for free shipping and guarantees/refunds – underperforming merchants provide less value for their potential customers. We can all relate to loading our carts with hundreds of dollars’ worth of purchases only to balk at the \$14.99 shipping and handling surcharge.

F-graded sites can also do a better job of removing frictions by including virtually free features, such as a “billing address same as shipping address”

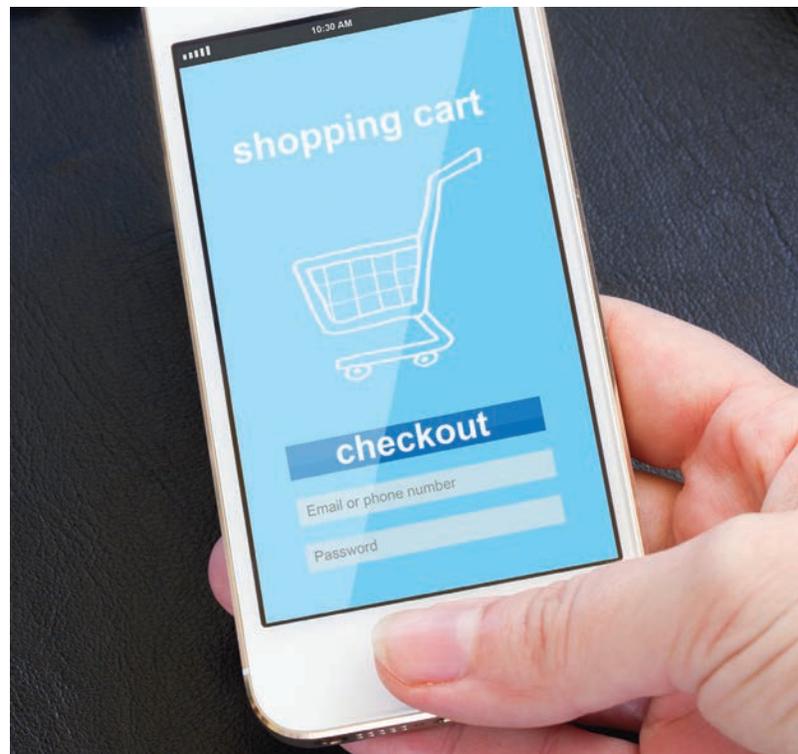


TABLE 2. TOP 30 MERCHANTS VS. AVERAGE

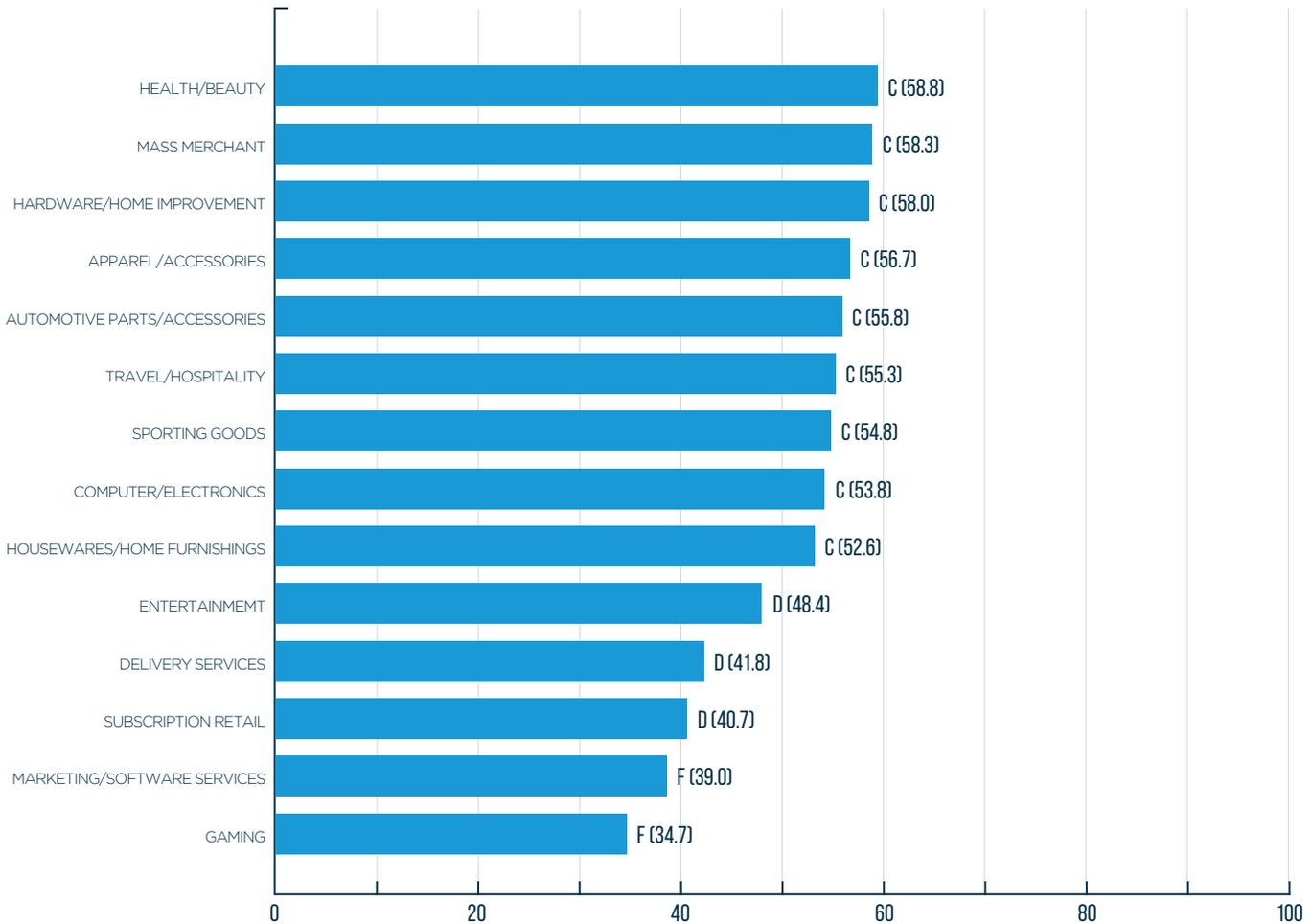
FEATURE	Top 30	Average
TIME IN SECONDS	141	157
TOTAL CLICKS	21.2	22
PRODUCT REVIEWS AND RECOMMENDATIONS	97%	52%
SHIPPING SAME AS BILLING	93%	88%
FREE SHIPPING	100%	77%
COUPONS	83%	77%
SECURITY LOGOS	66%	61%
SITE HELP – LIVE	100%	83%
GUARANTEE OR REFUND	93%	59%
REQUIRED PROFILE	7%	28%
TOTAL PAYMENT METHODS	7.4	6.5

checkbox option (something only 78 percent of F-rated sites do), or providing customer reviews and recommendations (only provided by 16 percent of F-rated sites). Separating the top 30 merchants from the rest, the differences are even more obvious.

Industries That Shine and Those That Don’t

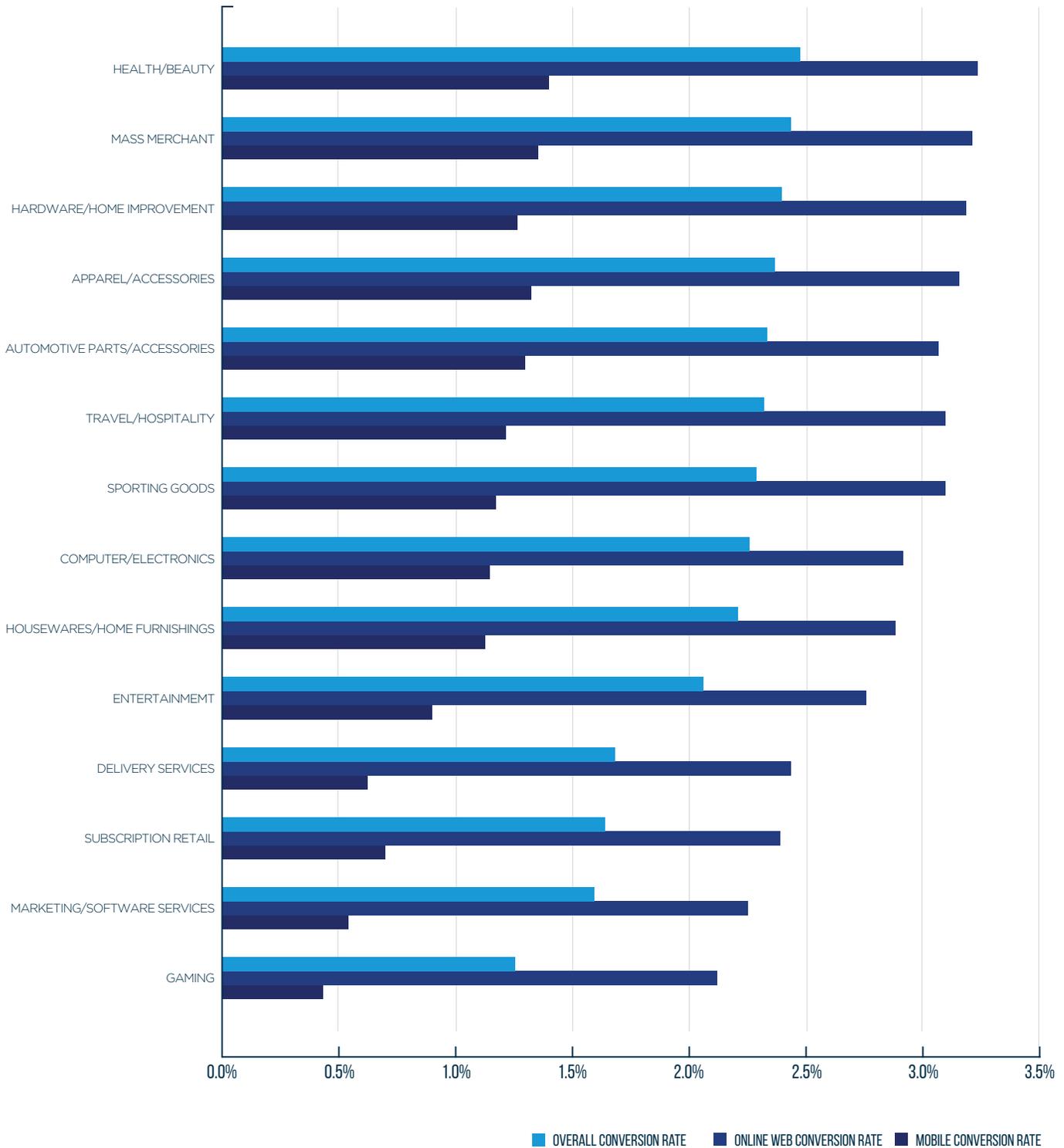
On the flip side, some merchants may be limited in how much they can improve. This is not because they are unable to figure out their websites, but more so because some products are more cumbersome to sell than others. A disaggregated analysis of average rating by industry drives this point home and is illustrated in the bar chart on the next page.

FIGURE 3. PERFORMANCE BY INDUSTRY



Breaking down CCI grades by industry, we see most industries earned a C, three received a D and two an F. Health and Beauty and Mass Merchants were the top performers – coming close to a B – while Delivery Services and Subscription Retail were on the cusp of receiving an F. Ds get degrees, after all. Speaking of Fs, Marketing and Other Software Services and Gaming were significantly worse than most. Gaming receives a grade of 33 percent below average. Not surprisingly, these grades correspond to conversion rates with Gaming only converting 1.25 percent of purchases, about half the rate of the top performer. Yikes.

FIGURE 4. CONVERSION RATES BY INDUSTRY

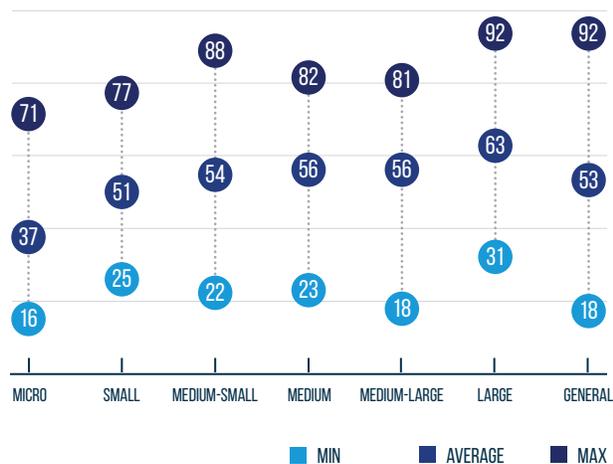


Size Matters

There's a reason we keep hearing that mantra, and it's because larger merchants may have more resources and more incentive to invest in better infrastructure and more premium features (like live help and free shipping). There may be a direct correlation between merchant size and CCI grades.

To test this, we ranked merchants based on annual sales, then divided these e-tailers into five categories. Each category accounted for 20 percent

FIGURE 5. INDEX SCORE AND RANGE BY SIZE



of merchants. However, because some merchants are particularly small (their annual sales are below \$1 million), we considered these “micromerchants” separately. The micromerchants category includes 75 merchants, about 10 percent of all merchants in our sample.

While there's no consistent pattern for the three medium categories, a reflection of the even distribution across B through F grades we showed earlier, we can see that larger websites generally outperform on average. These large sites have a higher average CCI grade, a smaller variation in CCI grades and a higher floor for CCI scores — clearly, size helps.

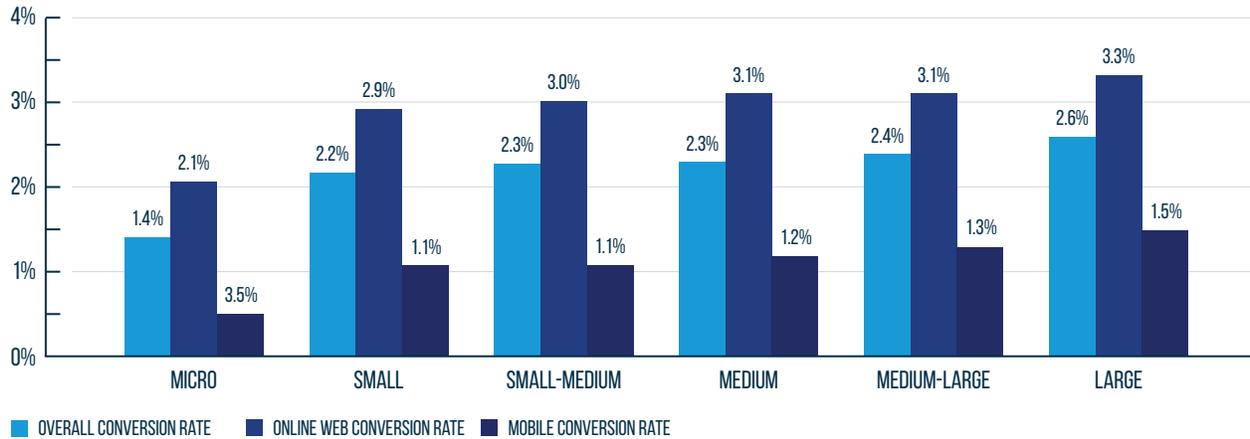
On the other end of the spectrum, micromerchants have a significantly lower score than average. Although there is less dispersion and differentiation among the middle 60 percent of merchants, the extremes show the pattern: Big firms can use their sizes to reduce frictions and improve their CCI scores, while startups and smaller firms struggle to create a seamless customer experience.

Unfortunately, smaller firms' inability to improve their sales process may prevent them from gaining the sufficient size that, in turn, would allow them to improve their sales process. Is that the chicken or the egg?

Conversion rates tell a similar story: While “the bigger, the better” does not necessarily hold for the medium-sized merchants, it does hold for the extremes, regardless of whether we measure desktop or mobile platforms.



FIGURE 6. CONVERSION RATES BY SIZE



While bigger merchants are most successful in converting sales, they are not the best in all categories. Let’s consider how annual sales impact the different features we’ve identified as most important for reducing checkout frictions.

For example, if we consider average checkout times for merchants of different sizes, we find that micromerchants are the top performers, getting customers from the moment they enter a merchant’s website through checkout in an average of 144 seconds. The middle 60 percent of merchants are the worst performers, clocking in at 163 seconds on average across the three grade groups. The largest merchants, at 154 seconds, show some improvement relative to the medium merchants.

If we consider the number of clicks needed to complete a purchase from the moment a customer enters the website, micromerchants also come out ahead. Customers can finish the shopping journey with only 17 clicks on average on micromerchant sites compared to 22 clicks on the rest of the sites. However, this ease of initial use may come at the detriment of other features — as we shall see later — as micromerchants offer fewer extra features other than the drop in friction due to faster checkout times.

One important category in which the largest merchants make the sales process more seamless, relative to their competitors, is in allowing more payment options. The largest merchants accept an average of 7.3 payment methods, one more than the average for all merchants combined and two more than micromerchants. The larger size allows these merchants to give their customers more payment options — no need to turn away good money, of course. This is consistent with our earlier conclusions that A-graded merchants had more options, and larger merchants tend to receive higher CCI grades.



FIGURE 7. TIME IN SECONDS BY SIZE

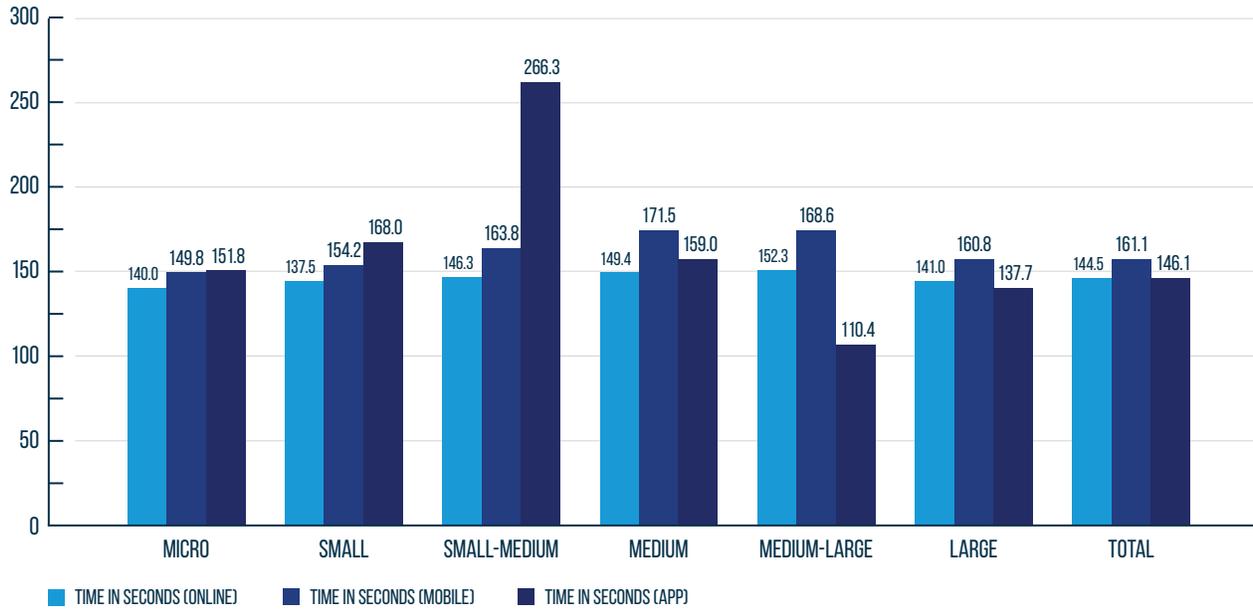


FIGURE 8. TOTAL CLICKS BY SIZE

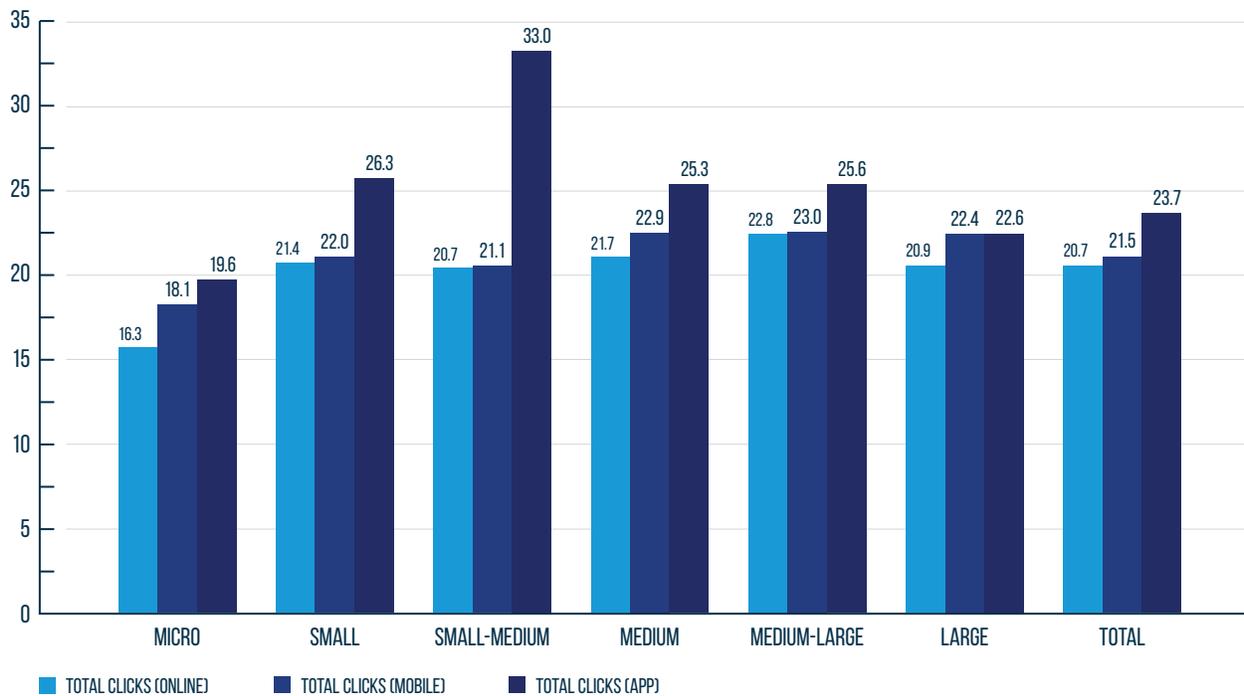
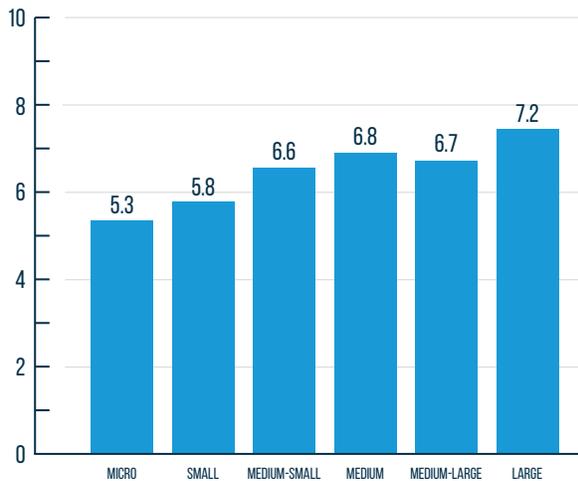
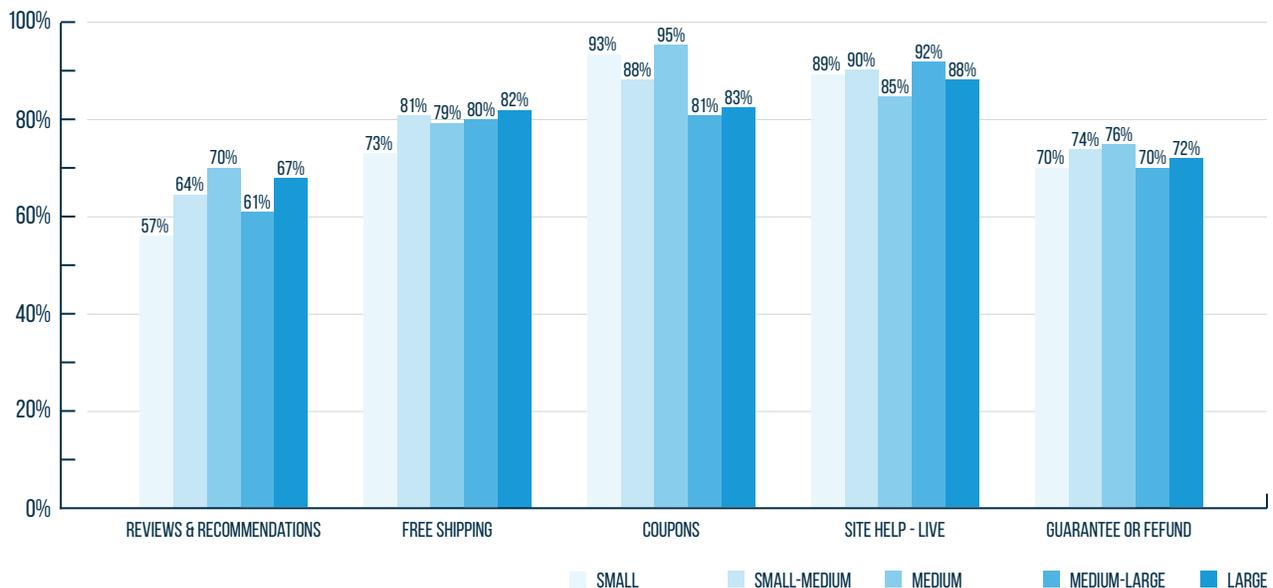


FIGURE 9. NUMBER OF PAYMENT METHODS BY SIZE



Finally, larger merchants tend to be more likely to include other features that improve conversion rates. For example, merchant size is correlated with free shipping as well as reviews and recommendations. It's possible that these merchants are able to focus on "Day 2" priorities, and are financially able to subsidize purchases. That being said, smaller merchants tend to more frequently offer coupons, perhaps as a quick way to subsidize more cost-conscious (and diligent) customers. Other features, like live site help, guarantees and refunds, appear to be unrelated to firm size. While including many of these features can improve the customer experience, it seems firms decide to implement them unsystematically.

FIGURE 10. MAIN FEATURES BY SIZE



As the data above shows, quicker checkout times aside, micromerchants lag behind their peers on average in all categories. This has a clear impact on their CCI grades: The average grade is a 37, although these grades ranged from a low of 16 to a high of 71. Consequently, most micromerchants received an F rating, and just two received Bs. It's clear that, at the extremes, size matters – and micromerchants do not have the scale to provide their customers with a seamless checkout experience.

The best performing micromerchants perform just slightly better than the large merchant sample as a whole. This is due to a feature set that compares well to those offered by the largest merchants, as illustrated in the figure below. Additionally, micromerchants require fewer clicks to check out, which contributes to their 53.6 average CCI score and 3.01 percent desktop conversion rate (compared to 51.4 and 2.88 percent, respectively, for larger merchants).

FIGURE 11. GRADE DISTRIBUTION — MICROMERCHANTS

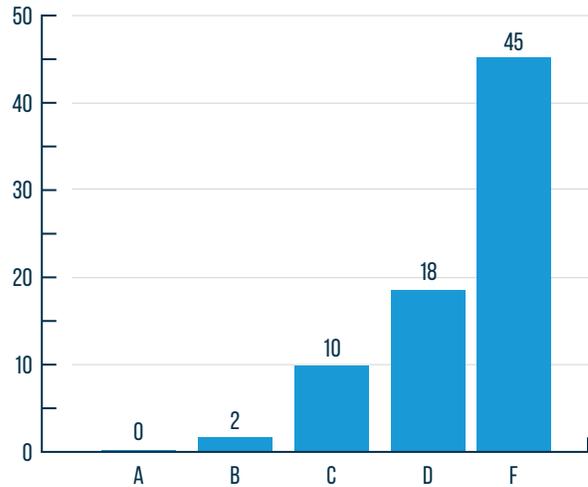
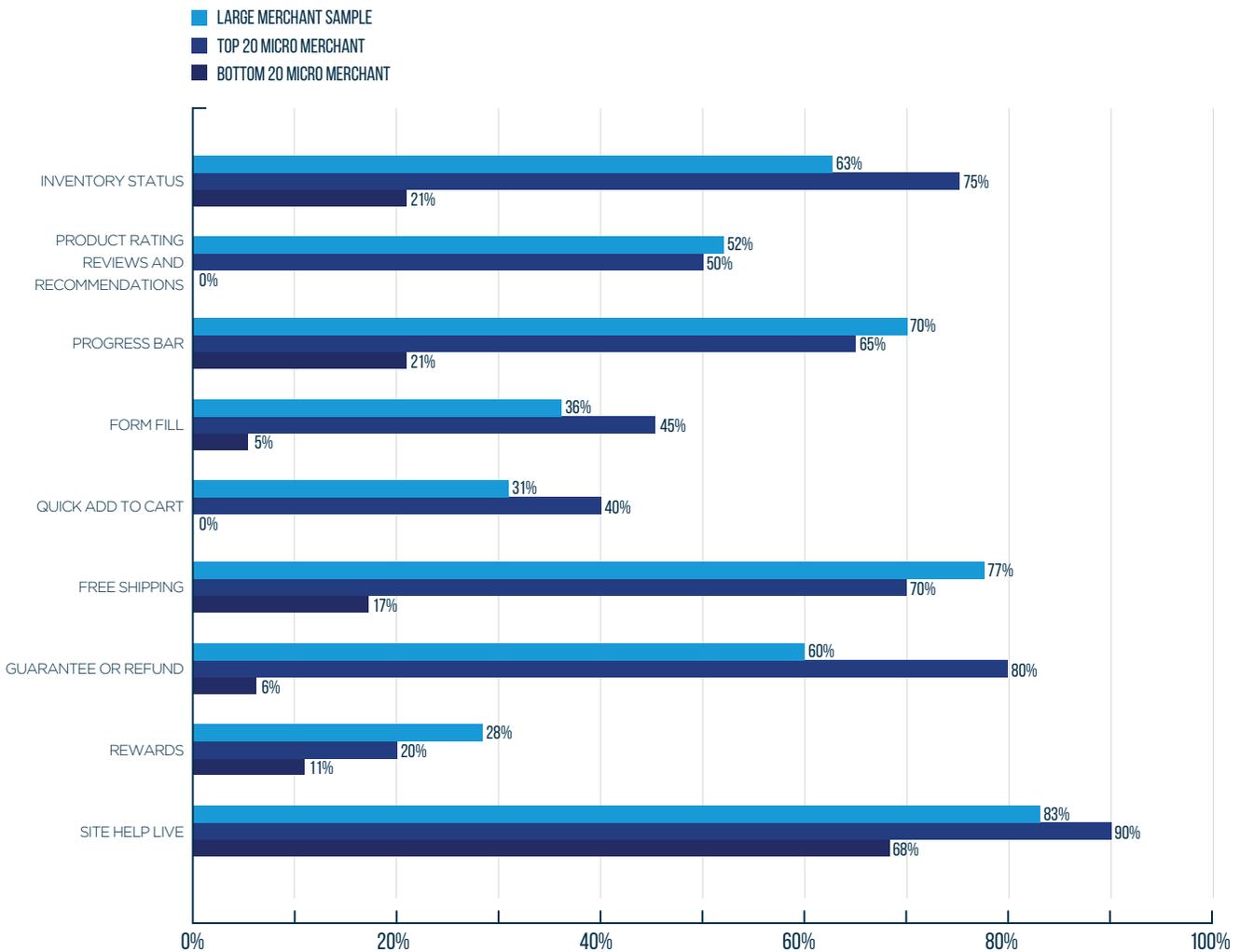


FIGURE 12. FEATURE COMPARISON FOR MICROMERCHANTS



The Old Index Score

For a more accurate measure of checkout conversion score in this edition of the CCI, we tracked consumers shopping activity on mobile devices.

While the Q2 Index Score is not directly comparable to the last version of this report, we evaluated the change in Index by applying our old methodology to our new data set.

It should be noted that typically, we remove a few merchants from our analysis to account for mergers and closures. In order to comprehensively compare the Q2 2017 Index Score with the Q1 2017 score, we limited our Q2 sample to include just the merchants that were also analyzed in the previous version.

Upon analysis of our limited sample, the Index score decreased slightly from 60.5 to 60.1.

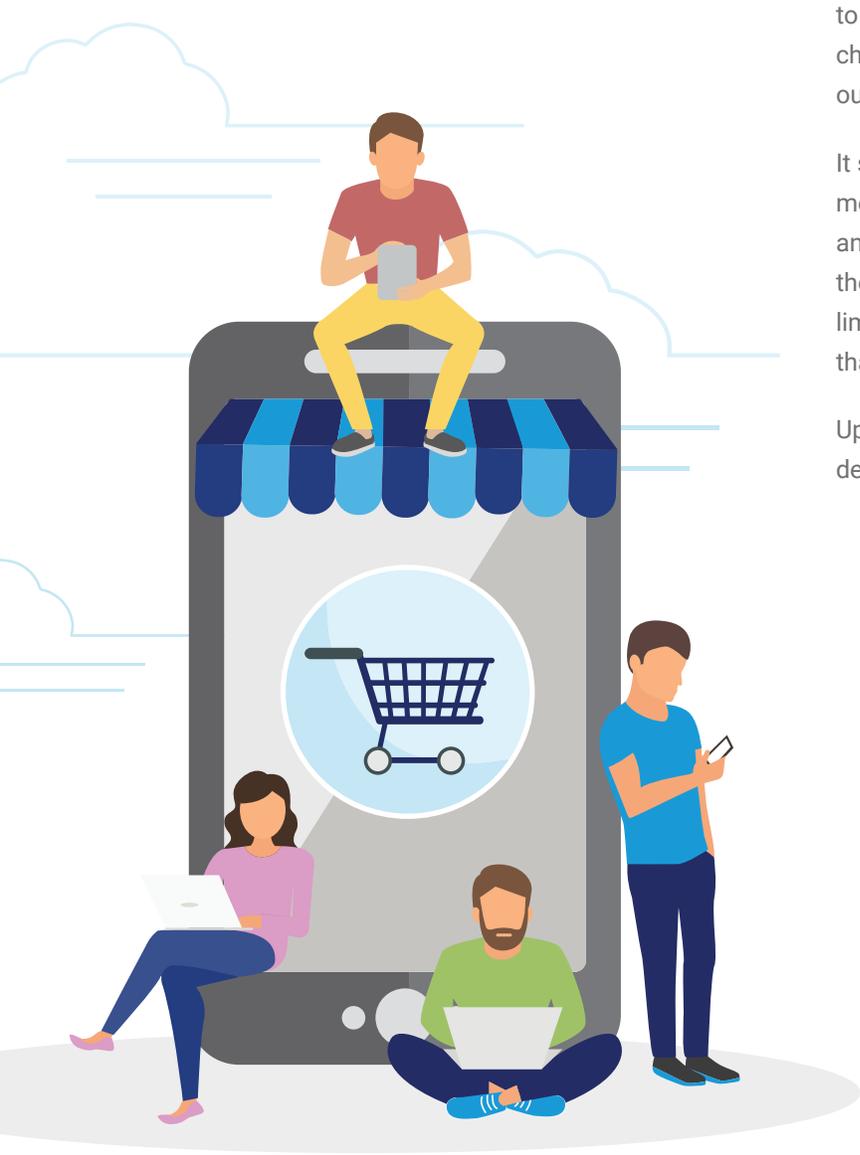
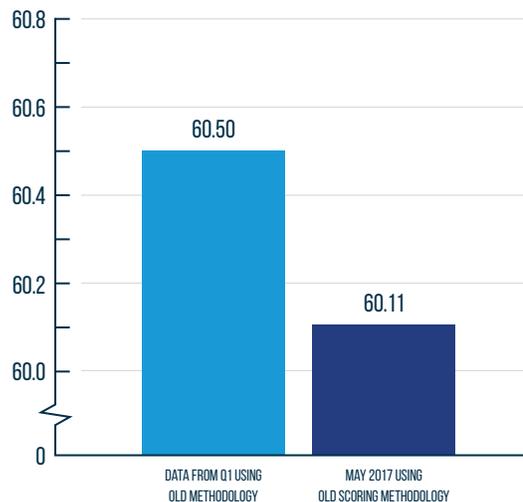


FIGURE 22. AVERAGE INDEX SCORE BY METHODOLOGY



Appendix

A. Methodology

To determine which elements hurt conversion rates and create friction in the shopping process, we first looked at existing research to see what consumers reported as important in driving their online shopping behavior. Desktop sites are no longer the only channel used to make a purchase. Mobile Websites and Mobile Apps are taking a prominent role in online retail, and at a pace that can't be ignored. We extended our original index and included the mobile channels in our analysis to achieve a more representative market index. We shopped at more than 853 eCommerce sites and tracked the presence or absence of key design features. As part of the process, analysts applied perspective on how easy — or difficult — it was to complete the shopping journey.

Additionally, we collected public data on decline rates in the purchasing process, and used additional information from third-party sources and a list of new merchants that were not taken into account before because of their size — a category known as “micromerchants.” Finally, we used statistical techniques to analyze which factors contributed most to friction and, ultimately, to cart abandonment.



Site Selection

We selected a variety of merchant categories, including both product and service industries, to observe a good mix of consumer eCommerce experiences.

A wide range of different sized merchants was chosen, from the biggest players in the market to micromerchants (small entrepreneurs and start-ups not normally captured due to their size), which see fewer than \$1 million in annual sales.

In our existing sample, merchants varied in size ranging from those with several billion dollars in annual sales to much smaller merchants accruing a few million each year. The smallest firm in our larger sample generated \$9 million in annual sales.

Research Approach

To evaluate and quantify the impact on conversion rate, we shopped each site — from landing page all the way through to submitting payment. We collected 79 variables from all the channels for 853 shopped and evaluated websites.

Factors present after the consumer decided to make a purchase were evaluated based on data that was then used to construct more than 55 categorical variables.

Scoring

The calculation of the final CCI is based upon the prevalence of friction-causing and friction-reducing factors, which exist during the checkout process, as well as decline rates. Each factor is part of a broader category (time, shopping, comfort and trust, etc.). We used statistical regression techniques to determine which factors are the largest drivers of conversion.

The final CCI score is the sum of all factors multiplied by their appropriate weight.



Categories and Factors That Drive Conversion

The final factors fall into the following categories:



Metrics

Measures the effort and time it takes to complete a shopping journey.



Shopping Convenience

Measures site features that support decision-making and simplify checkout, including reviews and recommendations, mobile access and shipping decisions.



Comfort and Trust

Measures assurances or ability to resolve issues, such as security or live help features.



Relationship

Measures attributes to build a relationship with the customer, including requesting a profile or the ability to send marketing information.



Payment Types

Measures ease of using a desired payment, such as payments accepted, transaction amount, currencies, payment methods and whether the transactions were one-time or recurring.

About

FEEDBACK

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