



# IoT commerce: an early read on Amazon's Dash buttons

by Ken Cassar and Leslie Warshaw

# content

## 03 IoT enables frictionless commerce: Amazon Dash Buttons

03 internet of things

04 convenience commerce

04 what are Amazon Dash Buttons?

## 05 the Slice Intelligence view

05 which items are people buying with Dash Buttons?

06 Dash Button usage

07 building brand loyalty through repeat purchasing

08 what do Dash Button buyers look like?

## 09 what does all of this mean?

10 author bios

11 about Slice Intelligence

12 methodology

# IoT enables Convenience commerce: Amazon Dash Buttons

Technology trade publications have espoused the importance of the Internet of Things (or IoT) for years, and manifestations of it have hit the mainstream consumer landscape recently in the form of Fitbit fitness trackers and Nest thermostats. Until recently, though, IoT hadn't affected the consumer packaged goods industry. Amazon, in partnership with major CPG manufacturers has changed that with the introduction of Dash Buttons.

Amazon Dash Buttons are Wi-Fi enabled buttons sold by Amazon and branded by CPG brands. About the size of a pack of gum, these gadgets allow shoppers to simply press a button when they've nearly run out of a household item in order to have a replacement shipped in two days via Amazon Prime.



## internet of things

The Internet of Things (IoT) describes Internet-connected devices that are embedded with sensors and software which allows them to connect with other devices and of course, people. Fitbit fitness trackers, Nest thermostats, and Apple Watches are all examples of IoT.

This new technology is of critical importance in e-commerce today. Clearly, many IoT devices are sold online, which presents opportunities for electronics retailers and manufacturers. More important for CPG brands, though, is the role of IoT in making it more convenient for consumers to order products at regular intervals or on-demand.

For example, General Electric recently announced a partnership with Amazon to allow a new generation of smart appliances to automatically order replenishment items when they run low. Hewlett Packard already offers a service called InstantInk whereby Wi-Fi enabled printers can automatically re-order ink when they run low.

## convenience commerce

The process of moving from wanting something to having something is sometimes filled with obstacles. If we'd like a pair of jeans we typically drive to a store, find the style, color, and size that we like, and then we take it home with us – this assumes that we were lucky with the first store we went to. If not, the process repeats itself. Even for a product as simple as a toothbrush, where we may be loyal to the same brand, the process is filled with friction – from remembering to put it on a list for your next trip to the grocery store, to finding it in the store and then bringing it home.

One of the initial selling points of e-commerce was that we could buy products from the comfort of our homes, but there were still plenty of obstacles – going to a website, finding the product, inputting a credit card number, and waiting for it to be shipped. Over the past 20 years this has gotten dramatically less painful online. Retailer selection has grown, making it more likely that one shop will have what you are looking for. Shipping is increasingly likely to be free, and quick. And websites are building more streamlined experiences.

Recently, subscription-based retail models have multiplied, ensuring that you've got a new batch of razors before the old ones become dull. Retailers in categories as diverse as apparel (Trunk Club), oral care (Goodmouth), shaving (Dollar Shave Club), and meal preparation (Blue Apron) have developed innovative approaches to ensure that the divide between 'I want it' and 'I'm using it' is as effortless as possible. This driving principle is Convenience Commerce.

## what are Amazon Dash Buttons?

Amazon, in partnership with brand manufacturers including Procter and Gamble and Kimberly Clark, began offering Dash Buttons in March of 2015. Dash Buttons are each branded for a particular product and are available for sale to Prime members on Amazon for \$4.99, which is refunded when a first purchase is made with the button.

When the button is received at home, the consumer sets it up using the Amazon smartphone app. This process enables connection to the home Wi-Fi network, and allows the consumer to choose which particular brand/product they'd like (Tide Spring Meadow scented 81-count laundry pods, for example). After this initial set-up, the consumer simply presses the button and the product arrives on their doorstep in two days, free of shipping and handling charges.

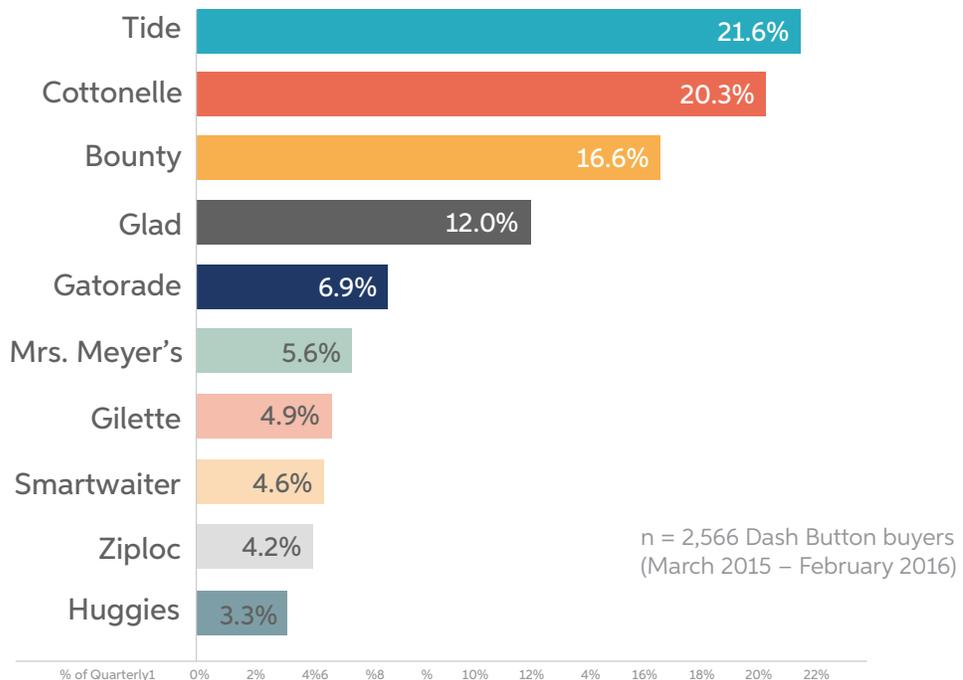
## the Slice Intelligence view

Dash buttons are a new phenomenon, only available to all shoppers since March 2015 and not yet been heavily promoted by Amazon. As such, the number of people using the Dash Button is low (less than .1 percent of Slice's panel bought a Dash button). Here is what we found.

### which items are people buying with Dash Buttons?

The figure below shows buyers for each Dash Button. Tide, Cottonelle, and Bounty are the leading brands today, but they are also the brands that Amazon launched with in March. Just over 100 Dash Buttons are available, ranging from Orbit gum to Hefty bags.

#### Dash Buttons sold by brand



## Dash Button usage

Among those that have purchased a Dash button, fewer than fifty percent actually used them to make a purchase. Of course, this number will increase as consumers run out of the product in question. But it does pose the question of whether some consumers might have been confused with the set-up process or disappointed in the limited selection of products.

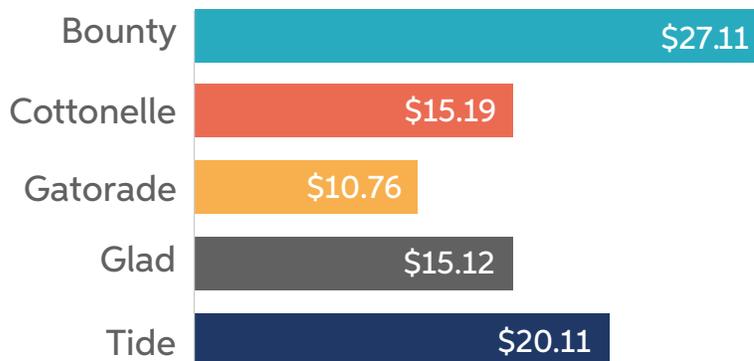
Among those that made a purchase of the brand for which they had bought a button, the average spend per order per brand varied between \$10.76 (Gatorade) and \$27.11 (Bounty)-- significant order sizes reminiscent of Club channel purchases. Order frequency works out to roughly once every other month.

### average orders per month\*



\*only includes months after the panelist first used the Dash Button

### spend per Dash order

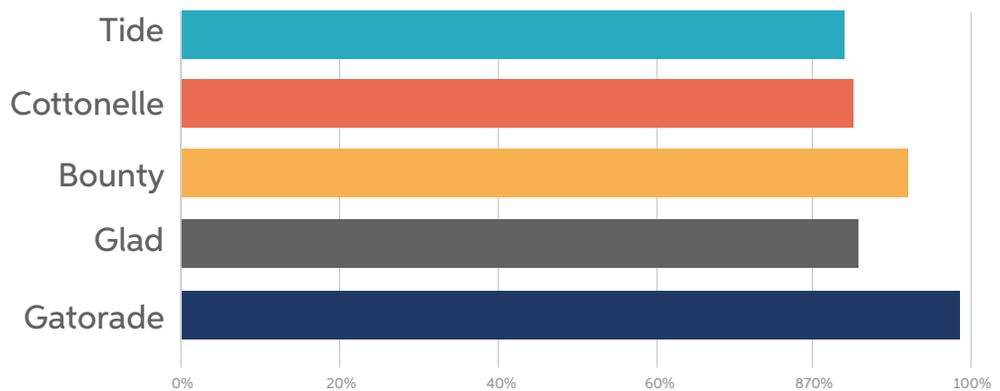


n=1,468 Dash Button buyers, \*\*assumes that all purchases made after the purchase of a brand within that category were made with the Dash Button

## building brand loyalty through repeat purchasing

The early evidence suggests that among those that activate their Dash Buttons, the Dash Buttons allow consumers to fulfill a significant share of their category requirements. In the figure below, we look at the brand's share of the online category (across all online merchants). The wallet share figures range between 84 percent (Tide) and 99 percent (Gatorade).

### brand share of online category spend after Dash Button purchase



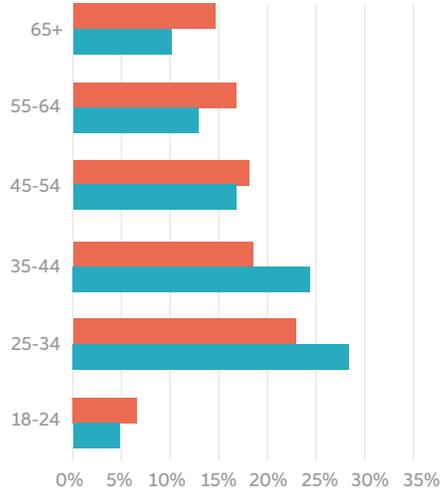
n = 1,468 Dash Button buyers

The top selling Tide SKU available to Dash buyers is an 81-count package of Tide laundry pods, priced at \$19.97, or \$.25/pod. If we apply that price to the Tide average order size of \$20.11 we can estimate that this accounts for approximately 70 loads of laundry over 2 months – very close to the average of 25 to 32 loads.

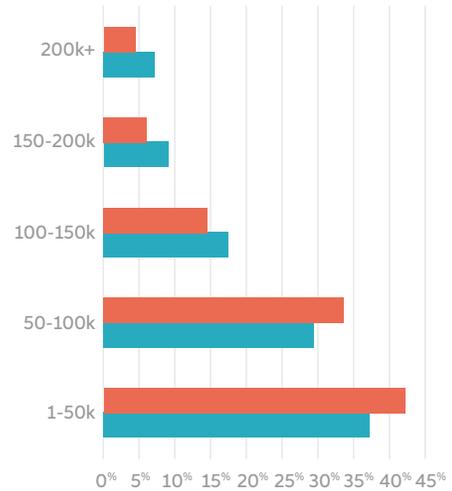
# what do Dash Button buyers look like?

Dash Button buyers look like classic early technology adopters – male and affluent. Not a surprise, given that this is a brand-new technology product, albeit a simple one. Embraced by early adopters does not necessarily predict success amongst the broader market.

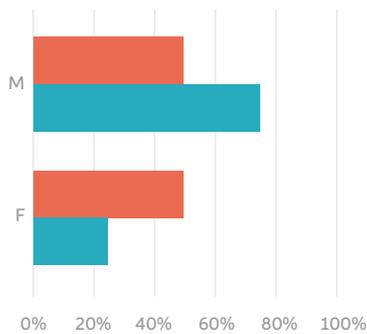
## Age



## Household Income



## Gender



■ Dash Button Buyers  
■ Overall Online Shoppers

n = 2,546 Dash Button buyers

# what does all of this mean?

This is a very early look at the performance of the Dash Button. Time will tell whether Dash Button buyers will grow beyond early adopters; whether more button buyers will activate their buttons; and whether those that use them will continue to do so.

However, we believe that this is a strong affirmation of innovative moves made by retailers and manufacturers over the past two years to make it easy for consumers to replenish their stocks of consumer goods – through subscriptions, same-day delivery, meal solutions, and now buttons.

CPG retailers and manufacturers should think about IoT and Frictionless Commerce in a broader context as they look to change the way they go to market. Some of these things include:

- Focus on the opportunity to build a closer relationship with the shopper
- Think beyond a just a website or digital promotion
- Monitor changes in IoT, including tech, devices, and shopping patterns
- Study and test for continual improvement along the way

Retailers of CPG items need to challenge themselves to set their own innovation agenda in order to maintain relevancy. Brands that aren't a part of such innovation agendas will pay a heavy price if they have to play catch-up to faster moving competitors that embrace innovation and accept the risks that come with it.



[ken@slice.com](mailto:ken@slice.com)  
[follow@sliceintel](https://twitter.com/follow@sliceintel)

## ken cassar

principal analyst, vice president

Ken Cassar is vice president, principal analyst at Slice Intelligence, where he looks at trends in the e-commerce industry armed with Slice's robust set of online sales data.

Ken brings a rich online retail background to Slice Intelligence. Most recently, Ken was SVP, Media Analytic Solutions at Nielsen, where he developed several innovative digital commerce measurement and advertising effectiveness solutions. Prior to Nielsen, Ken was an analyst at Jupiter Research, where he was an early thought leader, trusted adviser, and media source on e-commerce. His prescient outlook on fledgling e-commerce industry was a key contributor to Jupiter's dominance as a digital media zeitgeist at the dawn of the Internet.

Ken has an MBA and Bachelors Degree in Political Science from the University of Connecticut. Ken aspires to stay technologically ahead of his teenage children, as evidenced by his 'Gadget Geek' Slice profile. He also has the appropriate jacket for every occasion.



[leslie@slice.com](mailto:leslie@slice.com)  
[follow@sliceintel](https://twitter.com/follow@sliceintel)

## leslie warshaw

vice president, analyst solutions

Leslie Warshaw is currently works with Slice Intelligence as the vice president of analytic solutions, and is responsible for working with consumer package goods clients.

Before joining Slice Intelligence, Warshaw was global senior vice president of product development for Lightspeed Research and TNS, responsible for product development, marketing, and sales of panels and custom online marketing research communities. She is also a veteran of the Nielsen Company, where she was vice president of product development and sales. At Nielsen, Warshaw played an instrumental role in the development of ground breaking products that linked online behavior with purchasing as a way to measure the sales ROI of targeted online advertising.

In the start-up world, she assisted with the early stage development of both Usamp (Instant.ly) and InfoScout as those businesses entered the market research space; bringing new technology and new data collection methodologies.

# about slice intelligence

With a panel of over 4 million online shoppers, Slice Intelligence directly measures all digital commerce activity from the consumer. By collecting and cataloging actual shopping behaviors from online shoppers in the wild, Slice Intelligence precisely measures what others have only been able to approximate, revealing new insights about online shoppers and their behaviors.

Slice Intelligence's retailer-independent methodology captures commerce as it happens at the item level, across all merchants. While most companies rely upon panels of online users or of people who scan or take pictures of their receipts, Slice measures all online shopping activity directly gathered from consumers' purchases. This allows Slice Intelligence to collect more data, at a higher level of quality than other methods. This intelligence gives clients unparalleled insights about everything their customers buy, even when shopping elsewhere, eliminating the need to use less reliable and less actionable research products.

Because we extract information from email receipts, we are able to capture all purchases on any and all devices. This "hands-off", device-agnostic approach to measurement solves many of the challenges that have plagued online and household scanning panels, without the gaps that inherently occur due to inconvenience, multiple device usage and panel recruitment challenges.

Only Slice Intelligence measures all online purchases, using the same methodology, tied to the same consumer, including that consumer's historical purchase patterns to reveal loyalty and switching behavior, and brand affinities.

Slice Intelligence comes from a methodology developed at Stanford that extracts online purchase data from e-receipts in consumers' inboxes. This refined data collection method enables impeccable, near real-time data from a global panel of 4 million people, the largest panel of online shoppers anywhere.

Slice Intelligence is led by a team of measurement industry executives who have brought some of the most innovative and successful digital measurement products to market.

# methodology

Slice Intelligence uses a proprietary technology that was developed by machine-learning scientists from Stanford University. Slice Intelligence's technology identifies e-receipts within inboxes, extracts every available data point about every purchase at the item level, normalizes measurements across retailers and structures the data into an industry-wide taxonomy and catalog. All this happens at high speed and accuracy, and is reported daily.

With 4 million panelists, Slice Intelligence has the largest, most representative panel of online shoppers. Recruited through sources including: partners who leverage the Slice API to create new compelling online experiences; the popular Slice shopping utility which enables shoppers to organize, track, and manage their online purchases; and the Unroll.Me service which reduces inbox clutter.

Our methodology provides near real-time data that is representative of the U.S. online population and correlates closely to the U.S. Department of Commerce and public disclosures by online retailers.