

## Amazon Go とキャッシュレス社会への移行

By: Rapid Access International, Inc.

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支払い技術の開発は、Apple や Google のような大手技術系企業にとって注目の分野となっている。しかし、2018 年 1 月後期には Amazon が一歩先行することとなった。同社は完全にキャッシュレスでレジも不要の店舗を開店したのだ。

### Amazon Go

店舗名は「Amazon Go」だ。Amazon Go は、買い物客が買い物袋に入れた商品を追跡できるカメラやセンサーを整備したという史上初のコンビニエンスストアである。買い物客はスマートフォンに入れた Amazon Go アプリを簡単にスキャンして入店し、商品を選び取り、帰るだけだ。店舗を去ると各々の Amazon アカウントには手に取った商品の額が課金される。Uber の乗客が下車するときに課金されるのと同様である。

床面積 1,800 平方フィート（約 167 平米）の店舗が 1 月 22 日、シアトルに開店した。日用品、調理済み食品、飲料、食材セット等を購入できる<sup>1</sup>。

### Amazon Go の課題と可能性

開店当日、大手メディア記者が自ら店舗で買い物をしてきた体験を伝えている。記者が店舗を去る際、アカウントに課金されているかを確認してみたところ、持ち出した商品のうちヨーグルト 1 点が請求されていなかった<sup>2</sup>。従業員にそれを知らせたところ、ヨーグルトはそのまま持ち帰ってよいと言われた。

些細なことに思えるかもしれないが、この考え方が Amazon の小売店全店に適用されれば、同類の問題が収入を脅かす可能性がある。また、Amazon は 2016 年から、自社従業員が店舗での購入を行って技術試験を行ってきた、ということも特筆すべきであろう。

Amazon は、食料品スーパーの Whole Foods を 2017 年 6 月に 137 億ドルで買収した<sup>3</sup>。前述の技術を Whole Foods にも導入させるのは自然の流れではないかと思えるが、Amazon の広報担当者は、メディアの取材に対し、そのような計画はないと述べている。Amazon は全米で書店を 13 店舗展開しており、今後はさらに 3 店舗開店に向けて準備を進めている<sup>4</sup>。Amazon の書店は既に現金払い不可となっており、購入者はクレジットカードまたはスマートフォンの Amazon アプリを使って支払わなければならない<sup>5</sup>。

### 影響の可能性

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<sup>1</sup> Wattles, Jackie. *Amazon to (finally) open checkout-free store in Seattle*. CNN. January 22, 2018. Available at: <http://money.cnn.com/2018/01/21/technology/business/amazon-go-seattle-store/index.html> Accessed on February 1, 2018.

<sup>2</sup> Bosa, Deirdre. *We accidentally took a yogurt from Amazon's new grocery store without paying, but Amazon told us to keep it*. CNBC. January 22, 2018. Available at: <https://www.cnbc.com/2018/01/22/amazon-go-grocery-store-opened-and-we-accidentally-stole-a-yogurt.html> Accessed on February 1, 2018.

<sup>3</sup> Wattles, *op. cit.*

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*

Forbes 誌では、賃金モデルデータを使って、小売・サービス企業大手 140 社が、Amazon Go のように完全に自動化されたらどうなるのかを検討した。その結果、米国の民間部門の労働力の 1.8% 近く、つまりウォルマート、ターゲット等の量販店や衣料品小売のギャップのような店舗で働く 230 万人が、影響を受けることとなることが示された。これは全米でレジ係として働く 340 万人の約三分の二に相当する。<sup>6</sup>

この推計は単なる仮説ではあるが、当該産業の規模および範囲を表すのに役立つ。このような技術は、明らかにこの種の雇用にとっての脅威となる。

Amazon Go は雇用を脅かすだけではない。このようなモデルが貧困層にとってはどのような脅威となるのかという問題もある。現金の有用性が低下すれば、銀行口座を持たないコミュニティに偏って影響を与え得る。米国人の 29 パーセントはクレジットカードを保有しておらず、米国国内の世帯の 7.5 パーセントは銀行口座さえも持たない<sup>7</sup>。全世界でいえば、銀行を利用できない人口はさらに多い。多くの人にとって、現金が経済参加の唯一の方法なのだ。

米国内外で、プリペイドカードや携帯電話を使った支払い、という代替的方法がある。しかし、それに係るコストはいくらか高くなる。特にプリペイドカードはそうだ。そのために、Amazon は、Amazon Cash というプログラムを立ち上げた。ユーザーは、プログラムに参加する販売者のアカウントで支払いができる、というものだ。また、Amazon ギフトカードを使って支払うという選択肢もある。

Amazon は今後、Amazon Go に関して著しい障害があれば解決していくと思われる。それよりも大きな問題は、キャッシュレス社会が進むと小売業やサービスセクターにどのように影響を与えるのか、取り残されてしまう人が決して出ないようにするにはどのような措置をとれるのか、ということかもしれない。

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<sup>6</sup> Stevenson, Andrew. *Amazon Go And The 2.3 Million Cashiers It Could Leave Behind*. Forbes. February 1, 2018. Available at: <https://www.forbes.com/sites/justcapital/2018/02/01/amazon-go-and-the-2-3-million-cashiers-it-could-leave-behind/#2f408e187bcc> Accessed on February 1, 2018.

<sup>7</sup> Tarantola, Andrew. *Can Amazon Go help the unbanked go digital?*. Engadget. January 31, 2018. Available at: <https://www.engadget.com/2018/01/31/can-amazon-go-help-unbanked-go-digital/> Accessed on February 1, 2018.

## **Amazon Go and the Move Toward a Cashless Society**

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The development of technology for payments has been a key area of focus for large tech companies such as Apple and Google. But, late this past month, Amazon went a step further. The company opened a completely cashless store without the need even for cashiers.

### **Amazon Go**

The name of this store is Amazon Go. The first of its kind, Amazon Go is a convenience store equipped with an extensive setup of cameras and sensors that track what customers place in their shopping bags. With a simple scan of the Amazon Go App on their phones, customers enter the store, select their items, and then leave. Their Amazon accounts are charged for the items selected once they leave; in much the same way as an Uber passenger is charged for their ride when they exit the vehicle.

The 1800 square foot Seattle store opened on January 22<sup>nd</sup>. Customers can purchase groceries, ready-to-eat meals, cold drinks and meal prep kits.<sup>8</sup>

### **The Challenges and Potential for Amazon Go**

On opening day, CNBC's Deirdre Bosa reported on her experience shopping at the store. Upon leaving the store, she checked the charges made to her account. One of the items she collected, a tub of yogurt, was not listed on the bill.<sup>9</sup> After noting this to an employee, she was told that she could just keep the yogurt.

That may seem like a small thing, but if this concept is to be rolled out to all of Amazon's Whole Foods stores, these sorts of issues could pose a threat to revenues. And, it's worth noting that Amazon has been testing the store's technology with its own employees who have been able to shop there since 2016.

Deployment of the technology to Whole Foods would seem to be the natural progression; however, an Amazon spokesperson told CNBC that they do not have any such plans. Amazon purchased the Whole Foods grocery chain in June for \$13.7 billion.<sup>10</sup> The company also operates 13 bookstores across the U.S., and it is working to open three more locations.<sup>11</sup> Amazon's bookstores already do not accept cash; requiring customers to pay with a card or through the Amazon app on their smartphones.<sup>12</sup>

### **Potential Impact**

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<sup>8</sup> Wattles, Jackie. *Amazon to (finally) open checkout-free store in Seattle*. CNN. January 22, 2018. Available at: <http://money.cnn.com/2018/01/21/technology/business/amazon-go-seattle-store/index.html> Accessed on February 1, 2018.

<sup>9</sup> Bosa, Deirdre. *We accidentally took a yogurt from Amazon's new grocery store without paying, but Amazon told us to keep it*. CNBC. January 22, 2018. Available at: <https://www.cnbc.com/2018/01/22/amazon-go-grocery-store-opened-and-we-accidentally-stole-a-yogurt.html> Accessed on February 1, 2018.

<sup>10</sup> Wattles, *op. cit.*

<sup>11</sup> *Ibid.*

<sup>12</sup> *Ibid.*

Using wage model data from JUST Capital, Forbes magazine looked at what would happen if cashier duties at the 140 largest retail and service sector companies were to become completely automated, as they are at Amazon Go. “[They] found that nearly 1.8% of the U.S. private sector workforce – that’s 2.3 million Americans working for companies like Walmart, Target and The Gap – could be affected, representing roughly two-thirds of the 3.4 million cashiers throughout the U.S.”<sup>13</sup>

This estimation is merely hypothetical, but it does help illustrate the size and scope of the industry. This sort of technology clearly represents a threat to these jobs.

Amazon Go is not just a threat to jobs. There are also some questions about how such a model threatens the poor. A reduction in the utility of cash could disproportionately impact the unbanked community. Twenty nine percent of Americans do not have a credit card, and 7.5 percent of American households do not even have bank accounts.<sup>14</sup> Globally, the numbers of those without access to the banking system is much more significant. For many, use of cash is the only way to participate in the economy.

In the U.S. and abroad, the use of prepaid cards and mobile payments represent alternatives; however, the associated costs can be somewhat higher. Particularly for prepaid cards. For its part, Amazon has created a program called Amazon Cash that enables users to pay their accounts at participating vendors. And, there is always the option of purchasing an Amazon gift card.

It seems likely that the company will work out any significant glitches with Amazon Go. The bigger questions may be how a move to an ever more cashless society will impact the retail and service sectors, and what measures can be taken along the way to ensure that no one is left behind.

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<sup>13</sup> Stevenson, Andrew. *Amazon Go And The 2.3 Million Cashiers It Could Leave Behind*. Forbes. February 1, 2018. Available at: <https://www.forbes.com/sites/justcapital/2018/02/01/amazon-go-and-the-2-3-million-cashiers-it-could-leave-behind/#2f408e187bcc> Accessed on February 1, 2018.

<sup>14</sup> Tarantola, Andrew. *Can Amazon Go help the unbanked go digital?*. Entgadget. January 31, 2018. Available at: <https://www.engadget.com/2018/01/31/can-amazon-go-help-unbanked-go-digital/> Accessed on February 1, 2018.