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CARDS WILL DISAPPEAR BEFORE CASH

CARLOS MOLINA | GLORY



Over the last few decades we have been relentlessly messaged by the card companies about a battle for transaction dominance between cards and cash. The idea that “cash will disappear” has become a meme, its inevitability seemingly assured in our new, high technology society.

New data shows the reality to be quite different:

Today, there is more cash in the global payments system than ever before.

Four Important Cash Facts:

- Physical euros (Source: European Central Bank) and dollars (Source: Federal Reserve) in circulation have grown every year during the last 15 years, the volume of dollars is growing at a CAGR of almost 5%, while the volume of euros has doubled since 2002 with a CAGR of more than 6%.

- The European Central Bank (ECB) forecasts the volume of notes in circulation will grow by 40% over the next 7 years.
- The Bank of England projects 20% growth in GBP notes over the next 7 years.

Cash is still the most popular face-to-face payment transaction method on the planet – despite numerous articles claiming a cashless society is imminent.

- The latest figures published in December 2017 by the ECB shows that in Europe 79% of all transactions at the point-of-sale were conducted with cash.
- According to the USA Federal Reserve, cash is still used for 32% of all transactions, regardless of who is paid (this includes mail and internet transactions which are rather difficult for physical cash).

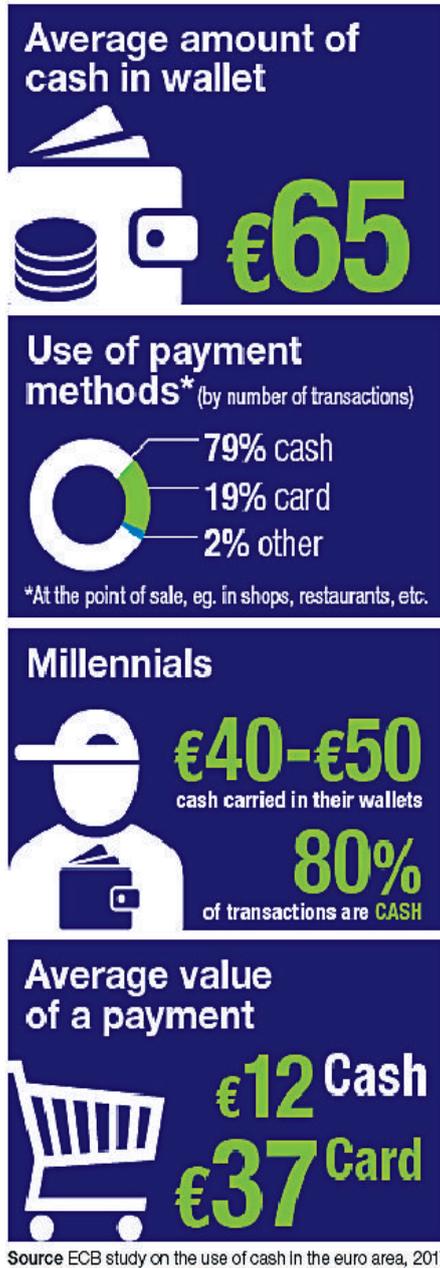
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This is hardly a comprehensive list, but is perhaps enough reason to revisit and challenge the meme. Today, instead, we will introduce a new meme.

How Europeans pay?



The Impact of eWallets

eWallets will have an impact on use of cheques (already in decline), use of cards (happening now), and, yes, use of cash as well. Most important, however, is that eWallets have the potential for radical disintermediation of the traditional card payment system.

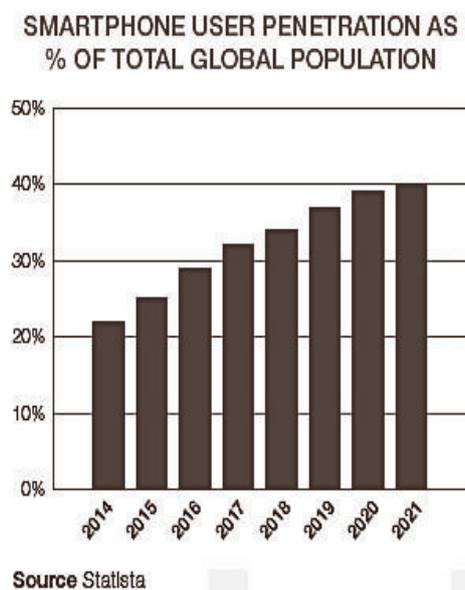
Contrast the debunked cash v card

myth with the card v eWallet reality. In the last 5 years, eWallets have demonstrated phenomenal growth – and attention – at the expense of card use. Many, and perhaps most, North American and European users of both cards and eWallets do not really understand the differences between the two, except that they use their phone instead of a card to make a digital payment. Their payment for both is still withdrawn from their bank account or paid by their credit card company.

In China and Africa the case is quite different – a separate account is maintained with your mobile phone company or in your Alipay (non-bank) account, and you first place money in that account before you make payments. This is the demonstrated potential for disintermediation.

More on this in a moment.

Continued Growth of Smartphones



Until now, eWallet and mobile wallet success has been driven by consumers' desire for efficient and convenient checkout experiences. The global adoption of smartphones, the device "always in our hand", is naturally a solution for new alternative payment methods.

Most forecasts suggest that three years from now, at least 40% of the

world's population, or put another way, more than 3 billion people will own a smartphone and will always be connected. This number will continue to grow rapidly, as smartphones become a basic requirement for interacting in society. This can be directly compared with distribution of debit and credit cards.

Most Americans and Europeans already have a smartphone, as well as a credit or debit card (or many of these); 56% of Chinese have a smartphone, but less than 40% have a debit or credit card; in India, 28.5% have smartphones, less than 25% of the population have credit or debit cards. Smartphone possession outpaces card ownership in most of Latin America. In Africa, a unique case exists (in many countries), where advanced digital phones (not full smartphones) capable of local digital transactions have far outpaced distribution of cards.

Still, smartphone use alone does not explain the phenomenon. Two other market changes are required.

Factors Affecting eWallet Adoption

First, consumer attitudes to making mobile payments need to change and data indicates this is happening, slowly.

In China, mobile payments have become core to life in tier 1 cities and forecasts shows that 79.3% of smartphone users will be happily tapping, scanning and swiping at the checkout by 2021. In comparison, the US will still have only 23% of smartphone users doing so, and in Germany it will be only 15% – despite higher smartphone penetration.

Second, merchants must accept payments. Since transactions require two parties, you also must gain acceptance of a payments system by merchants. Merchant acceptance depends on two things: cost and consumer demand.

Success in the payments world relies on acceptance scale. To achieve the required scale, you need not only users seeking to pay with your system, it must

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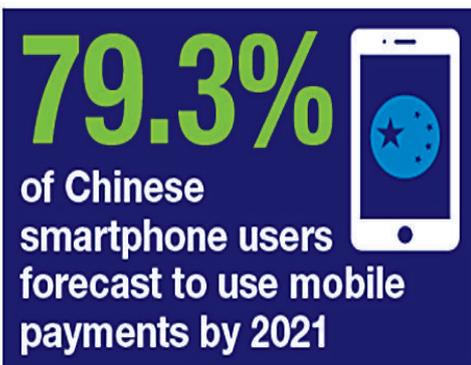
The growing use of mobile payments in China, viewed in the context of its massive population, has resulted in a large number of users over the last 4 years.

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bring value to merchants, as well. eWallets are so similar in convenience to cards, or cash, that there must be a strong incentive to the merchant to add another payment method.

The rapid expansion of mobile payments in China, truly a phenomenon of the last 4 years, was driven by Alipay and WeChat Pay who led the market. The key is that both companies are able to provide payments on the cheap, partly by allowing smaller vendors to make use of a simple printout of a QR code or their phone, instead of an expensive card reader. A back-end system that stores a record of user accounts, instead of having to communicate with a bank, also keeps costs down, radically reducing costs of participation by merchants.

Apple Pay, Google Pay, Alipay



Source eMarketer

Apple Pay and Google Pay, until now, have been the main drivers of the shift to mobile wallets in North America and Europe (although other notable companies such as PayPal and Stripe have also helped the

adoption of digital and mobile payments). They bring massive numbers of consumers with them through the iOS and Android operating systems residing on mobile devices. Consumers expect the wallets to work wherever they shop. So, there is demand – and demand should convert to merchant revenue, right?

Sort of. Merchants in higher income countries want to meet the demand, but already accept payments by cash and card. Many are pushing back on the expansion of payment options to include eWallets, because, perversely, they are forced to pay even more to the overall traditional payments cartel to accept these eWallets as tender.

This is a market entry opportunity for an all-new electronic payments system. eWallet leaders, in the near future, may see an opportunity to establish themselves not as facilitators of the current payment networks, but as replacements for these networks as popularity, convenience, multicurrency and globalisation become more prominent in consumer desires.

Apple and Google have said they have no such plans – at least not right now. Amazon has been a bit more vague about its intentions. All three have demonstrated they always, eventually, take over markets where they control the user experience. The two big Chinese players, Alipay and WeChat Pay – especially Alipay as part of Ant Financial – look like they are already behaving like banks, transacting and funding while earning on float between transaction and settlement, rather than earning only transaction fees.

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”



eWallet leaders like Apple could at some point take over as the new face of electronic payments.

“
FORECASTS PREDICT
BY 2021, 40% OF
THE WORLD WILL
OWN A SMARTPHONE
AND WILL ALWAYS BE
CONNECTED.
”

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Indeed, this new, cost-effective model makes Alipay a “most likely” disruptor if they learn to operate effectively outside of China.

There are two other players also worthy of watching: Facebook, with their WhatsApp peer-to-peer payment solution that is in beta release in India, brings a massive user base, similar in some ways to Alipay; and Amazon, whose Amazon Pay may win over consumers with loyalty or use incentives that may force other merchants to accept their solution. Both can be counted on to bypass the traditional 4-party payments system.

So, How Will eWallets Displace Cards?

1. Ecosystem Convenience

eWallets have already taken a significant portion of the online payment market. As online retail embraces globalisation, more and more consumers are cross-border shopping. In fact, the trend identified in the 2017 Global Ecommerce Study by Pitney Bowes, highlights the danger for online retailers accepting only credit cards as a method of payment. An estimated 70% of consumers are shopping outside their country of residence at least part of the time. Traditional credit cards may not readily work for these transactions, without secondary and inconvenient approvals. 41% of respondents to the Pitney Bowes study indicated they use eWallets as their preferred method of payment for these transactions, surpassing the use of credit and debit cards, and bank transfers. Essentially, eWallets can do all that cards offer, but

quicker, easier, and more securely.

2. Clear and Simple Buyer Protection

eWallets often offer increased buyer protection, such as PayPal, who will reimburse for missing and damaged items – something only required to be protected on card payments by the Consumer Credit Act on purchases over £100 (in the UK), and is only protected on credit card purchases, not debit. In turn eWallets, along with mobile payment methods, may further encourage the decline in use of cards across multiple channels.

3. Reduced Cost to Merchants

Today’s electronic payment systems are costly for merchants – existing bank and financial institutions have layered these systems on top of existing card processes as opposed to opting to establish their own separate identity. Watch for Alipay and WeChat who are challenging the current card network model in a disruptive and massively successful way by reducing fees for the merchants.

Why not cash, as well?

eWallets cannot replace everything that cash offers in terms of tangibility and near universal acceptability. People will still want a non-electronic payment method long after card usage declines, if for no other reason than a backup plan when networks are down – cash will remain a tangible and trusted payment method that always works. **Cash and digital will coexist.**

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eWallets often offer a superior level of customer protection compared to card payments - which spells bad news for the latter.

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”



More and more consumers are now shopping outside their country of residence - and they are increasingly turning to eWallets as a preferred method of payment.

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Conclusions

In summary, the traditional electronic payments marketplace has become costly for merchants and is ripe for disruption. As smartphones spread, and consumers can access one or more eWallet options, traditional cards and card networks will be supplanted by consumer-friendly eWallets that do not need these traditional networks to function. The traditional market players

will evolve or collapse, as will the use of cards. Overall market data supports that this transition of digital payments overtaking traditional networks will happen faster, and perhaps much faster, than cards will replace cash.

Cash on the other hand, will always have a unique selling point over digital payments: it is tangible, credible, 'hacker-resistant' and decentralised at the point-of-use. Perhaps that's why cash has survived the test of time for centuries. Innovation may always drive payments

change, but the overall popularity of cash is not really diminishing.

The talk of "the death of cash" has been a hot topic for over 60 years, all the while banknotes in circulation have continued to grow, year-on-year globally, and central banks around the world predict no change in this growth trajectory. In the meantime, smartphones are directly replacing cards as the digital transaction tool of choice. It seems perception and reality are different beasts. **It is time to replace the meme.**

SOFTWARE DRIVES PERFORMANCE: HOW TO FUTURE-PROOF YOUR CASH OPERATIONS

GEORG ALBACH | G+D CURRENCY TECHNOLOGY



The conversation has shifted; the pressing question is no longer whether digitalization will happen but, rather, how! Every member of the industry is examining potential avenues and the role software will play in helping to shape the new digital landscape. One thing is clear: cash demand is strong. The challenge is how to ensure it remains competitive and relevant in a digital future.

A shift in digital mindset

Most of the world's population live in countries in which more than 90% of transactions take place with cash. As the world's GDP increases, the volume of cash in circulation is also expanding to meet the demand. This reinforces the need to keep cash simple, available and competitive. The adoption of new supply

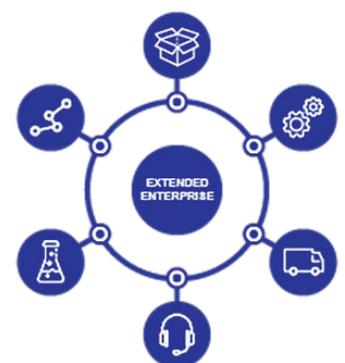
chain concepts and technological trends can help to realize this goal, while also drastically improving operational efficiency.

When looking at the trends shaping today's cash cycle, we see a desire for a connected, optimized and adaptive solutions. We need an integrated supply

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Supply-chain transformation

Traditional | Linear



Transformed | Connected

The right software solutions will be able to reshape the cash supply chain from the traditional linear model to an integrated, interconnected model.

“
**INTELLIGENT
 SYSTEMS, WHICH
 CALCULATE
 NUMEROUS
 VARIABLES TO OFFER
 BEST-CASE
 SCENARIOS, COULD
 ENABLE EFFICIENT
 MANAGEMENT OF
 STOCK AVAILABILITY
 ACROSS THE WHOLE
 SUPPLY CHAIN.**
 ”



Loomis uses the iBox to provide an additional level of security to its operations.

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chain management approach, which is capable of connecting the cash industry stakeholders in a way that addresses individual needs, while also unlocking hidden potential for multi-faceted optimization. Technology is an instrumental part of realizing a cash-friendly digital future as it drives transformation away from the management of individual functions and towards integrated solutions.

Embracing digitalization

In order to move forward, we must first replace the linear nature of today’s supply chain with a circular, interconnected and collaborative model. In doing so, we embrace an agile, IT-enabled approach that views the supply chain holistically and utilizes technology to exchange pertinent data, information and insights at multiple touchpoints.

As we enter the digital age, analytics based on this form of collaboration are no longer a nice-to-have – they are a must-have for driving efficiency and optimization at both the micro and macro-economic level. The benefits of such intelligent solutions range from the streamlining of internal processes and realization of faster reaction-times, to predictive forecasting. For example, intelligent systems, which calculate numerous variables to offer best-case scenarios, could enable efficient management of stock availability across the whole supply chain. Furthermore, insights gained from comprehensive multi-year forecasts across the cash supply chain, could inform and help to realize enhanced cash recycling and cost savings potential. In other words, a software-driven integrated supply chain approach has the ability to future-proof your cash operations.

MEMBERS' NEWSBOARD - LATEST STORIES FROM ACMA MEMBERS

LOOMIS IMPLEMENTS IBOX TECHNOLOGY TO DETER ARMORED CAR ROBBERIES - THE NEW ADDITION DEEPENS SECURITY FEATURES TO PROTECT GUARDS, CASH, AND IMPROVE TRACKING SPINNAKER

(HOUSTON, TX) —

Loomis is introducing iBox, a proprietary cash-in-transit (CIT) technology, into its armored car division, advancing how the cash management leader secures customer cash and protects transportation guards across the country. Developed by Spinnaker, a UK-based company, iBox includes intelligent cash protections like passive ink degradation, programmable operating and access control, and real-time asset and vehicle monitoring, among others.

Loomis will debut iBox in the Houston area before continuing its rollout nationally.

Each iBox feature is intended to make armored car operations safer and less attractive to potential threats — both from

outside thieves and internal theft — beginning with prominent messaging that states guards are unable to open iBox units.

In addition to preventing unauthorized access, each iBox can also detect, record, and respond to physical attacks by deploying security ink that eliminates cash value in seconds. And in the event a unit is stolen, installed GPS software enables Loomis to identify and track missing units immediately and activate alarm mode.

The protection of the company’s employees is a critical priority for Loomis, says Randy Sheltra, SVP of Risk Management.

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“We recognize the emerging risks associated with the cash-in-transit industry and, therefore, must react by implementing strategies that include

technology to counter the threats,” he says. “The iBox technology complements our current risk strategies. As the leader in the CIT industry,

Loomis consistently introduces

strategies to minimize risks to our people and our customers.”

To date, iBox and other Spinnaker technology is used in more than 30 countries around the world.

REDUCING VULNERABILITIES WITH ADVANCED ATM LOCK SECURITY BY SARGENT AND GREENLEAF (S&G)

SARGENT AND GREENLEAF (S&G)

Recent ATM attack trends, including jackpotting and advanced side channel attacks, show increasingly sophisticated exploitation of electronic ATM locks. As technology continues to improve and accelerate, ATM security must evolve to meet emerging

vulnerabilities.

S&G's electronic lock design includes modular construction and flexible features to deliver unmatched security with the speed and convenience of an electronic locking solution. Our locks not only withstand the latest high-tech

assaults, but also fit into modern business workflows.

To learn more about S&G's response to these threats please visit:

<https://www.sargentandgreenleaf.com/atm-security>

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Shangri-La Hotel, Colombo, Sri Lanka



ACMA Workshop at the Asia Cash Cycle Seminar 2019

Topic: Legislation/Regulation vs Self-Regulation and the Impact on the Security of Cash



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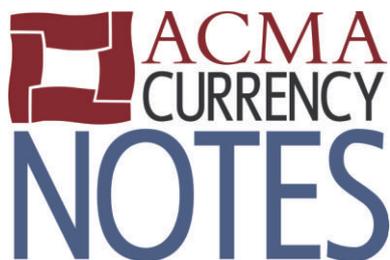
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To provide a platform for Cash Management Companies (CMCs) in Asia, Africa and Australia & Oceania to raise their professional reputation and standing in the Cash Handling and Cash Management Industry, and to act as a representative with the appropriate authorities on issues of common interest.

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