

The New Business Imperative

Adopting cross-functional, cost-out and revenue-in capabilities.



ORGANIZATIONS HAVE TO MOVE QUICKLY TO ADAPT TO HEIGHTENED CUSTOMER DEMANDS AND CHANGING CUSTOMER INTERACTIONS IN A DIGITAL FIRST WORLD.

SHAPE IS THE ONLY SECURITY PLATFORM THAT SUBSTANTIALLY DELIVERS CROSS-FUNCTIONAL INVESTMENT VALUE AND SIMULTANEOUSLY INCREASES TOP-LINE REVENUE GROWTH ACROSS WEB AND MOBILE.

With the digital footprint expanding consumers are demanding personalized and curated experiences. Companies will have to find ways of sustaining investment value across domains that simultaneously drive down costs and improve top-line revenue.

The authors contend that two opposing forces are at play in the online world: downward pressure on cost centers is mirrored by a rising need to outperform top-line growth. To succeed, companies need to find solutions that can both reduce the cost of digital expansion through process efficacy, while at the same time ensuring online consumers convert at a higher rate, responding to curated user experiences. The focus needs to shift from functions that have traditionally been budgeted for separately and delivered in isolation, to investments that persist value across functions and domains. Organizations must go beyond leveraging investments made in downstream systems, also ensuring that those systems deliver benefits outside of their traditional domains.

That will require C-suite members across the spectrum to ask questions beyond the obvious, leaving behind traditional approaches that the post COVID-19 world will render ineffective. Cross-functional capabilities that reduce costs through unrivaled efficacy, while also helping grow top-line revenue, will become critical to solution portfolios. As such, process owners of all levels need to rethink solving in isolation and take a cross-functional approach, based on cost-out and revenue-in orientations.

Security professionals need to think beyond their organizational bounds: for example they should ask if effective bot mitigation solutions are also able to contribute to improved fraud prevention or marketing-led user acquisition strategies. As a cost center, they must consider whether it is possible to show direct attribution to top-line revenue growth. They must also probe leadership on why they would not mandate that every investment made not only services adjacent domains but proves an ROI through revenue growth. And keep seeking capabilities that reduce the cost equation and (not or) boost the profit equation.

This shift in approach has become especially important in light of factors that will be explored in this paper, from the growing C-suite focus on revenue preservation, to digital disruption across sectors including retail and banking, changing consumer behavior in a digital world, and the growing threat of fraud loss as digital attack surfaces grow.

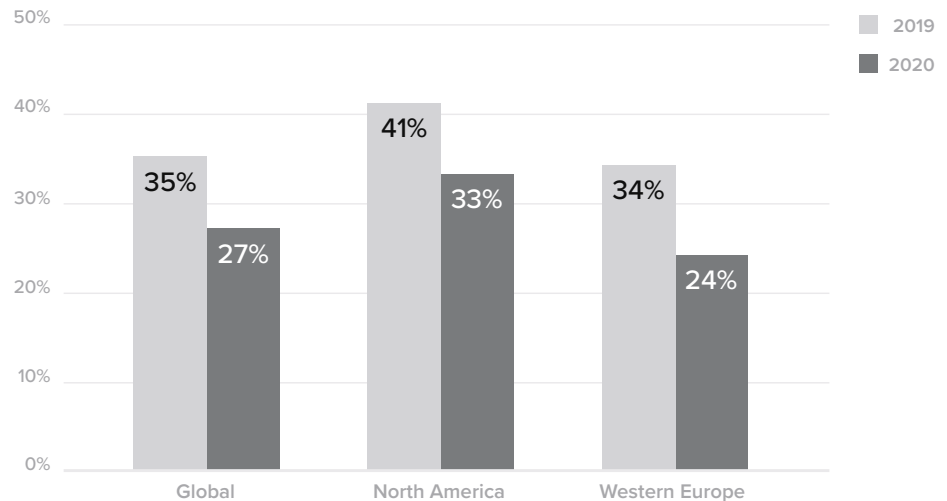
REVENUE CONCERNS ARE COMPOUNDED BY DISRUPTIVE, COMPETITIVE BUSINESS MODELS THAT LEVERAGE DATA, AI, AND CLOUD CAPABILITIES TO SCALE, EXPAND AND ADAPT.

Revenue Is a Top Concern for CEOs Amidst the Digital Revolution Disrupting Business Models

Businesses that are championing data, AI and superior digital experience are thriving

A pre-COVID-19 survey of Global CEOs from PwC found that revenue growth is a top concern. Only 25% of CEOs were confident of growth in revenue, down 12% from the 2019 survey, and the lowest since PwC conducted this survey since 2009. Companies leading the digital transformation are expanding while those that have resisted technology spend and digital transformation efforts have seen a reduction in revenue. Add to this the impact of COVID-19 and the shift is now towards revenue preservation rather than revenue growth.

Figure 1: PwC CEO Survey—% of CEOs with high confidence in revenue growth.



Retail Apocalypse: Between 2012 to 2019 over 12,000 retail stores have closed due to over expansion, rising rents, operating cost and the shift in consumer shopping patterns to e-commerce. The rising “digital first experience” has left several retailers filing for bankruptcies; Sears Holding, Toys R US, Forever 21, Barneys New York and most recently, the famed Neiman Marcus. During the same period Amazon was generating greater than 50% of retail sales. Customers are influenced by Amazon’s digital shopping experience and they expect similar experiences from their retailers, banks, airlines and every other daily online interaction. Amazon, Google, Facebook have permeated customers' daily lives and have constantly raised the bar on customer expectations. Customer shopping pattern data is an asset to organizations to understand trends and provide the next best personalized offer and shopping experience. Despite massive investments in analytical tools and technologies, organizations struggle to leverage vital insights. More importantly, siloed organizational

culture compounded by not being customer centric has led to decisions that negatively impact their ability to be relevant to customers and thereby positively impact customer retention and growth.

Banking Disruption: A September 2019 Report from Experian credit bureau revealed that the market share of Fintech in the personal lending space has increased to 49.4% (from 24.5%). Fintech has attracted massive venture capitalist investment due to the digital first approach with easy customer reach, new markets, and increasing competition. Nontraditional finance providers like Apple have launched credit card offerings that reduce late payment fees and provided a good customer experience. Banks are faced with increased pressure from Fintech and Big Tech, made more urgent by a low interest rate environment. Pressure to reduce the costs of investments has caused a correlative pressure to increased revenue and margin. Already reeling from the online onslaught, banks are closing branches to save money and more recently, COVID-19 has led to bank closures and reduced hours. There are similar trends in every industry, as challengers emerge that primarily engage consumers via mobile apps, online, or via IoT solutions.

Consumer Shift to Digital

Businesses that remove last mile digital customer friction will see customer and revenue growth

The explosion of smartphones and rising global digitization has changed customer behavior. A report from eMarketer suggested that, on average, a person in the US spends more time on their mobile than in front of a television. This has not only negatively impacted television advertising revenue, but seen digital marketing spend take precedence.

Figure 2: TV and Mobile Devices.
Average time spent in the US, 2014-2021. Hrs:Min per day among population.

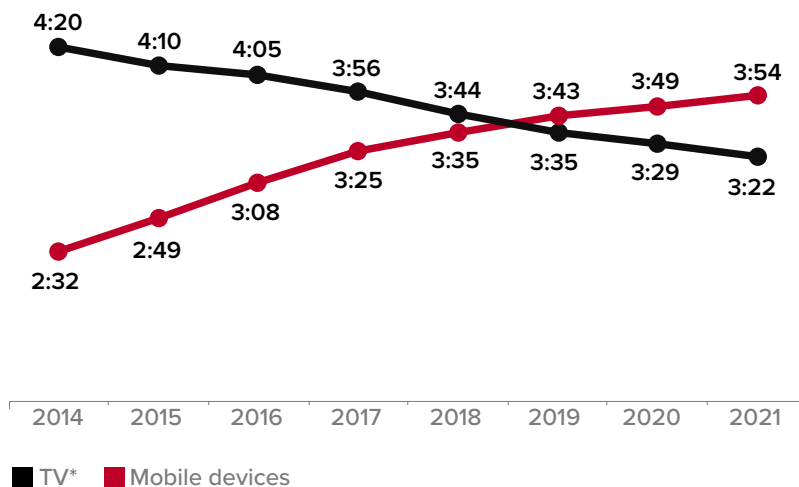
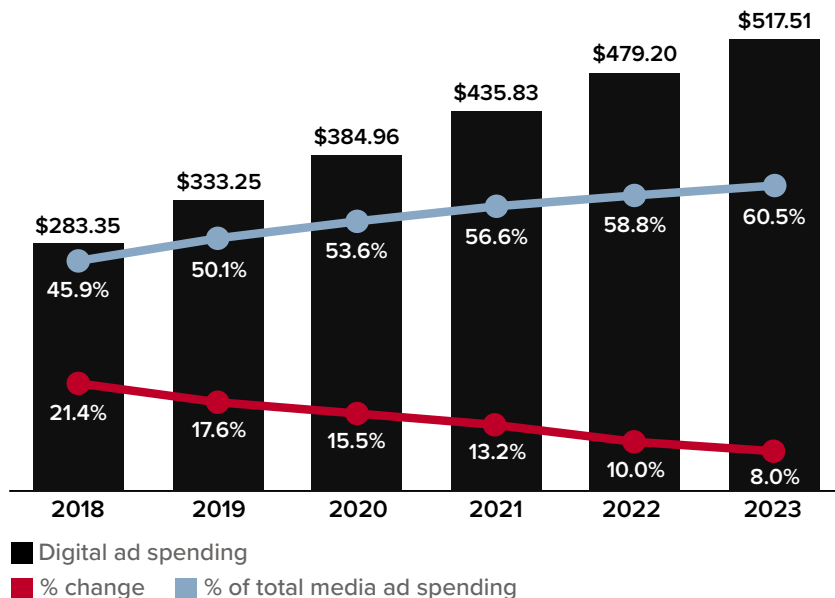


Figure 3: Digital Ad Spending Worldwide, 2018-2023. Billions, % change and % of total media ad spending.



ANNUAL DIGITAL MARKETING SPEND IS \$385B EXPECTED TO GROW TO \$517B. IS THIS WELL SPENT IF ORGANIZATIONS DON'T ACTIVELY SEEK NEW WAYS OF INCREASING CONVERSION AND REMOVING LOGIN FRICTION?

It is expected that by 2023 digital marketing spend will be 60.5% of total media spending at \$517.51B worldwide. The main goal of digital ad spend is to drive traffic to their web and mobile channels to provide a personalized consumer experience leading to sales conversion and increased revenue. Organizations are also working to derive maximum benefit from consumer data, leveraging machine learning and artificial intelligence to provide the next best offer and provide a one-click checkout experience.

In every industry there is a surge in pressure to increase revenue and reduce operating costs and losses. Digital transformation has become imperative. Signaling renewed urgency to increase revenue across the board, IDC estimates organizations will spend \$7.4 trillion dollars on digital transformation efforts between 2020 to 2023.

Shape increases conversion rates

Shape is able to help overcome revenue and digital shift challenges by increasing customer conversion rates by up to 30%. This can improve revenue by 1% to 2% amounting to millions of dollars. Across all industries we have noticed for example that 10-15% of online consumers hard fail at log-in. Our unique approach to user legitimization allows us to recapture 50% or more of those—meaning 5-7% of “lost users” are returned. This is important because existing customers spend at a greater rate than those using guest checkout. During a ten-day online sales motion at one large retail customer Shape was able to return 15k users that amounted to 1,800 orders for \$360k in revenue daily. Curating experiences for existing online consumers is more lucrative than acquiring new online consumers in the post COVID-19 world.

ARE ORGANIZATIONS PREPARED FOR INCREASED FRAUD ATTACKS AS THEIR DIGITAL FOOTPRINT EXPANDS? ARE YOUR SECURITY AND FRAUD SOLUTION-SETS READY FOR NEW DIGITAL ATTACKS ACROSS WEB AND MOBILE?

The Move Towards a Bigger Digital Footprint Exposes a Bigger Attack Surface

Businesses need to prepare for a larger and more dynamic attack surface

The threat to a secure online presence remains one of the top ten concerns for growth in the PwC CEO survey. Globally fraud loss is increasing in double digits. The rate of digitization suggests that as growth and attack surfaces increase, more and more consumers are forced to seek services online.

Fraud losses spike amid a bigger and more porous attack surface

Credit card fraud losses alone amounted to \$28B worldwide and \$12B in the US during 2019. It's estimated 10%-20% of credit loss is first-party fraud loss, estimated to be \$10-\$20B in additional losses.

Fraud loss is further compounded by rising data breach incidents. Most prominently, 150 million US consumer credit files containing PII information were exposed from the Equifax data breach in 2017. Combined with this, consumers are lured into SMSing phishing, malware and several other fraud schemes. In this environment, fraud loss can be expected to increase across all industries.

Fraudsters are also eyeing COVID-19 stimulus packages, robbing consumers and the economy of the benefits of these initiatives. 10% of government program funding is expected to be lost to fraud. If we factor fraud loss from other financial products and industries such as retail, airlines, healthcare, telecommunications, entertainment and other industries, the fraud loss amounts to hundreds of billions of dollars and the estimated total cost of fraud and financial crime in trillions of dollars. The indirect cost of fraud includes investigation and operations, system unavailability, foregone revenue, regulatory fines, and remediation costs such as technology and process improvements mandated by regulatory agencies.

Figure 4: 2019 Nilson Report—US Credit Card Fraud Loss (\$Billions).

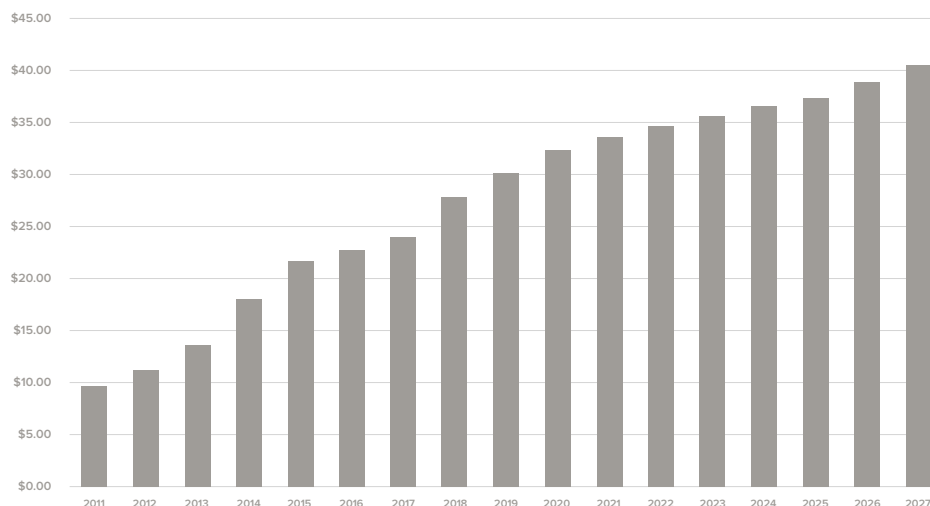
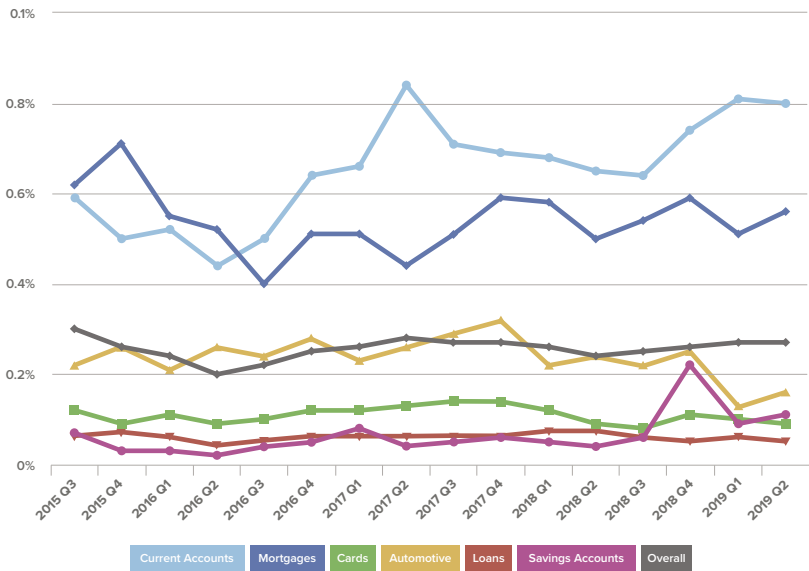


Figure 5: Experian UK fraud loss trends.



Experian’s Global Identity and Fraud report highlights mobile account takeover doubling in the last 4 years. A 180% increase in retirement account fraud, with baby boomers being the target of fraudsters as they retire with wealth created during their lifetime. On the one hand we see a rise in organizations concerned about revenue, increasing digital spend, and providing a more personalized consumer experience to increase consumer loyalty. On the other hand, organizations strive to reduce losses, and fraud loss being one of them.

Shape reduces unwanted traffic

Shape consistently reduces unwanted synthetic traffic by between 70-90% depending on vertical. Add to that the over 400M credit card and bank accounts as well as 350M loyalty accounts that Shape protects and it becomes clear that our network substantially enhances our clients’ fraud detection capabilities. Having effectively removed unwanted synthetic traffic and human fraud, we stand behind the claim of having the cleanest human transaction data for use in our closed loop AI system. By operating in a cross-functional fashion, Shape boasts a higher detection rate, lower false positive rate, saves \$MM in fraud loss and an even higher reduction in total cost of fraud. Customers deploying our anti-fraud capability regularly enjoy returns in excess of 5 times their investment before calculating in reduced operational costs and higher system uptime.

The Move Towards Cross-functional Runtime Capabilities

Businesses embracing cross-functional capabilities that curb costs and grow revenue will surface as winners

In a business environment where customer behavior is changing, digital transformation is accelerating, the threat of fraud is proliferating and challengers are gaining ground, organizations must change their approach to succeed. A fundamental priority is to find capabilities that offer the opportunity to both reduce bottom-line cost and, by doing so, increase top-line revenue. In other words, companies should inspect their portfolios and divest in capabilities that provide only cost-out or revenue-in outcomes in favor of those that do both. To find these capabilities, C-suite members must be bold enough to ask internal processes owners to think beyond their domains and relentlessly look to solve through cross-functional cost-out and revenue-in capabilities.

Shape helps grow top-line revenue

Shape, as a cross-functional cost-out and revenue-in platform equips customers with the ability to reduce pressure on the bottom-line and simultaneously grow top-line revenue. Evolving beyond the synthetic traffic detection and mitigation capability, Shape has developed the ability to reduce human related fraud activity in an unrivaled way, ensuring that only legitimized users enter your systems and benefit from your investments.

To learn more, contact your Shape Security or F5 representative, or visit shapesecurity.com or f5.com.

- ¹ PwC 23rd annual global CEO survey:
<https://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2020.html#cs23DataExplorer>
- ² Retail Apocalypse:
https://en.wikipedia.org/wiki/Retail_apocalypse
- ³ IDC Worldwide digital transformation prediction:
<https://www.idc.com/getdoc.jsp?containerId=prUS45617519>
- ⁴ E-Marketer Digital Ad Spend:
<https://www.emarketer.com/content/global-digital-ad-spending-2019>
- ⁵ Fortune 500 Firm 1955 vs 2017:
<https://www.aei.org/carpe-diem/fortune-500-firms-1955-v-2017-only-12-remain-thanks-to-the-creative-destruction-that-fuels-economic-prosperity/>
- ⁶ Nilson 2019 Credit card fraud loss report:
<https://nilsonreport.com/mention/407/1link/>
- ⁷ Telcos face \$300b global loss from uncollected revenue:
<https://www.iot-now.com/2016/01/11/40836-telcos-face-us300bn-global-loss-from-uncollected-revenues-and-fraud-in-2016/>
- ⁸ McKinsey Global Payments report:
<https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/tracking%20the%20sources%20of%20robust%20payments%20growth%20mckinsey%20global%20payments%20map/global-payments-report-2019-amid-sustained-growth-vf.ashx>
- ⁹ Experian Report: The latest trends in personal loans:
<https://www.experian.com/blogs/insights/2019/09/fintech-vs-traditional-fis-latest-trends-personal-loans/>
- ¹⁰ The Connected Defense against Fraud and Financial Crime:
<https://www2.deloitte.com/us/en/insights/topics/risk-management/fighting-economic-crime-connected-technology.html>

