WHITE PAPER

Just For You: The Route to Hyper-personalization in Banking

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As digital reshapes financial services, banks are unlocking new ways to get closer to their customers. Decision-makers see that the ability to personalize communications is a sure-fire way to foster engagement and deepen loyalty. Still, despite this clarity, many institutions are struggling to move from basic personalization to the more sophisticated approach, or hyper-personalization, that would create real value. Reasons include the constraining effects of legacy technology, failures to integrate advanced analytics, and neglect of necessary changes in ways of working.

As digitalization continues to play out, most customer relationship management (CRM) teams are on a personalization journey. The majority have moved beyond the established approach of devising an offer and identifying potential targets—often based on little more than instinct. (See Exhibit 1). They now take a more sophisticated route based on sound data management and predictive algorithms. These advancements have been positive, but have also exhausted current capabilities.

To turn personalization into hyper-personalization, meaning ultra-precise messaging in close to real time, banks need to get a firmer grip on advanced technologies and the operating models that support them. In most cases, this will require a profound transformation. First, banks must be willing to abandon the manual paradigms of the past and put artificial intelligence and machine learning (AI/ML) at the centre of the proposition. In addition, they must adopt agile approaches to marketing, enabling faster development cycles and greater flexibility. This, in turn, will enable them to build much more refined and extensive message libraries.

Based on our experience working with numerous banks pursuing personalization agendas, there are five building blocks that reliably are the foundations of a hyper-personalized offering. The first is that the change needs to be pan-organizational, taking in both the bank's overall strategy and its operating model. The second is a new paradigm for communications, based on a constantly refined catalogue of actions, deep analysis of customer activities, and AI-driven orchestration. Third is a modern tech stack, which should be backed by the fourth element which is seamless data streaming, Finally, scaling is critical, which will mean leveraging the cloud to support AI and machine learning. For optimal results, all of these building blocks need to work in harmony.

As banks consider the way forward, we here analyze the challenges ahead. These include diagnosing, designing, implementing and scaling personalization solutions—not just in one place, but across dimensions including operating models, business logic, data science, and IT platforms. We identify some of the most stubborn impediments to change and point to approaches that have been effective, including prioritising levers such as scale, velocity, and precision. Forward-looking banks have shown that these, together with the five building blocks, are a reliable route to a truly customer-centric offering that both boosts competitiveness and balances short-term revenues with long-term gains.

Exhibit 1: Legacy solutions amended, but many areas neglected for hyper-personalization

	Baseline Legacy campaign CRM	Typical progress	Typically neglected	Further changes required
Operating model	• CRM as support • Monthly campaign cycles	• --	• A/ B testing • Eliminating repetitive tasks	• CRM as business • Crossfunctional cooperation
Business logic	• Prioritization of products	• --	• Non-sales communication • Customer preferences	• Balancing customers' & banks priorities
Content	• One-size-fits-all	• Personas created	• Tailoring content to personas	• Massproduction of content
Channels	• Branch, CC • E-mail, SMS	• Online/ mobile banners • Mobile push	• Only single banners • Inefficient interfaces	• Ensuring variety of online/ mobile banners
Tech stack	• Legacy/ campaign-oriented • Simple real-time module	• --	• --	• Real-time decisions driven by AI / ML
Analytics	• Per-product propensities • Monthly scoring	• Opensource/ Python researched	• Productive use of opensource	• AI/ ML decisions per communication variant
Events	• <10 hardcoded in core systems	• Streaming & event detection tech	• Events bypass models	• AI/ ML for events • Click- and tap-stream events
Data	• Operational – d-1/ d-3 • Analytical – monthly	• --	• Refreshing data for scoring weekly / daily	• One data store • Real-time streaming

Personalization in stages

Personalization of customer communications was delivered in its early period through campaign management systems designed to serve outbound assisted channels (branches, call-centers) with sales leads. The approach primarily consisted of prioritizing products and selecting the most promising audiences. Campaign systems were usually operated in monthly cycles.

In the recent past, digital channels have been incorporated into the process. Emails, texts, mobile push messages, and online and mobile banners, have become the most efficient and least intrusive ways to interact—certainly less expensive and intrusive than calls from agents. These have allowed banks to communicate as much as 100 times more frequently than in the past. Moreover, they often parameterize digital communication: Customers are addressed by name and offered specific product values depending on their financial situations. In addition, almost all banks have tinkered with event-based communications, meaning reacting in minutes to customers that, for example, discontinue digital sales processes or hit the bottom of their accounts at ATMs.

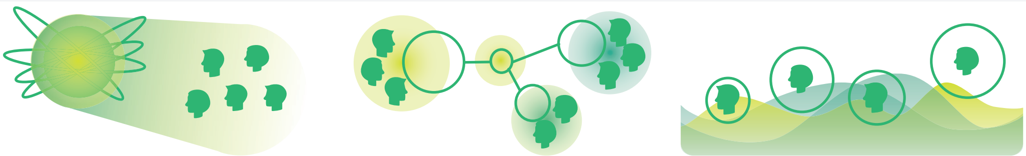
What does hyper-personalization mean?

Direct access to customers in their daily lives has huge potential. However, it requires razor-sharp communications that are relevant to each customer's situation. This individual matching of best offer and best communication, harvested from thousands of options and presented at the right moment and through the right channel, is hyper-personalization in action.

Unlike human-assisted channels, in which sales agents are informed by the CRM and must use their skills to communicate, digital channels require a CRM system to describe the offer to each customer, tailored to his/her individual situation, context, and profile. Most banks have adopted a basic form of this paradigm, in which flavors of messages are fitted to a collection of pre-determined personas—usually comprising 8-10 personality types.

Looking to the future, there is an opportunity to take the next step. This will be personalization that is AI/ML-driven and will enable marketing teams to match the best-offer and best-communication variant to each customer, based on analysis of data streams from banking and digital activity. Communication will be multi-purposed, taking in both sales opportunities and as much as 60 percent of relationship-building, for example through financial wellness recommendations. To get there, banks will need to build libraries of hundreds of propositions and juggle thousands of communication variants, which they must continuously refine based on insights from AI/ML. (See Exhibit 2).

Exhibit 2: What hyper-personalization means



	"Classic" CRM campaigns	Personalization	Hyper-personalization
Scope of communication	• Sales	+ Onboarding/ activation	+ Relational/ engagement/ financial wellness
Product/ offer selection	• Products prioritized for entire customer base	• Propensities per product (20-50) checked per customer	• Uplifts compared per offer / action (10-20 per each product)
Content differentiation	• Content not differentiated • Incidental A/ B-testing	• Content differentiated by macro-segment (8-12) • Parametrized content • Systematic A/ B testing	• Multiple (>20 per offer) communication variants • AI/ ML for per customer (1:1) selection of communication variant
Customer events	• Single(<10) events handled unconditionally / with basic rules	• Multiple (>20) events handled based on business rules	• ML processes recent customer activity / events / real-time signals
Timeliness	• Monthly & events	• Monthly & events	• Real-time

Where are most banks on the journey?

Change rarely happens all at once, and banks report varying degrees of progress on their journeys toward more personalized customer communications. The majority have created communication placeholders in logged-in online services and mobile apps. They have twinned their CRMs with these channels, and routinely execute communications such as advertising banners in online services and on mobile apps. Some banks have started to respond to real-life situations, leveraging transactional (and sometimes click-stream) triggers.

Still, there is a way to go. Very few banks perform systematic, or even basic, A/B testing of communication variants, probe alternative offers, experiment with phrasing, or tweak visuals. While close to 90% have developed personas/behavioral segmentation, less than 30% systematically use communication variants targeted to different personas.

When it comes to predictive algorithms, most bank CRMs still rely on monthly scored, per-product propensity models, meaning that the predictive indications both miss the most recent information (monthly scoring), and are generic in their outputs (which product, but not what communication). Almost all CRM data science teams have started to experiment with opensource technologies (Python/Spark), enabling them to build more powerful algorithms and process larger volumes of data per customer. However, only a few are using the new technologies at scale, and virtually none has used them to process a comprehensive set of customer characteristics - ideally, more than 10,000 – for more precise predictions.

Another challenge for banks is moving away from manual campaign management, in which non-value-adding and repetitive tasks dominate. These require excessive amounts of time to (semi-) manually generate target groups, optimize running leads, and distribute leads to channels. At the root of these shortfalls are usually legacy workflows, technology limitations, and, importantly, a mindset predicated on manual targeting. These challenges are connected. Only about two in five banks, for example, have minimized manual re-work in the campaign cycle while still relying on legacy tech.

Creating impact through new paradigms, technologies, and ways of working

To become truly customer-centric, banks need to make adjustments outside the ambit of CRM. In many cases, this will mean balancing a short-term desire to ramp up communications with a long-term focus on building strong relationships and increasing lifetime value. Almost a third of CRM teams face challenges in this regard, and many struggle to align with business units. As a result, they are unable to convince the broader organization to embrace a holistic approach to CRM, or to balance the need to generate short-term revenues with the benefits of deepening customer relationships and higher lifetime value.

To successfully implement hyper-personalized messaging, banks need artificial intelligence and machines learning (AI/ML). Advanced algorithms and powerful data capabilities will enable them to optimally match offers and communication variants to individuals, with manual interventions limited to indicating targets for product mix and short- versus long-term gains. Only through deeply interrogating data can they effectively interpret signals and events, including from online click- and mobile tap-streams, as well as produce optimal responses in real time or close to real time (milliseconds or seconds). These abilities are predicated on installation of next generation technology platforms.

Other additions to the CRM tool kit that are quickly becoming indispensable are the ability to target customers browsing on non-logged pages and third party/paid media, including Facebook and Google walled gardens.

A complementary deep change is required in ways of working. Agile methodologies are required to supercharge creativity, delivering up to 10 times more propositions per cycle. Marketing and compliance teams, instead of being bottlenecks in the creative process, need to be closely involved in the agile production of messaging content. Data science teams, meanwhile, should be much closer to the action, controlling targeting machinery and ensuring that creative teams are directed by data and AI/ML insights.

Banks on the move

Leading banks have seen the technology writing on the wall. This group, comprising about one in three institutions, has taken steps to lay the foundations for hyper-personalization. Around 10 percent have selected and started to integrate new tech platforms, while about 80 percent have initiated the selection process, or are planning to issue RfPs in the coming months.

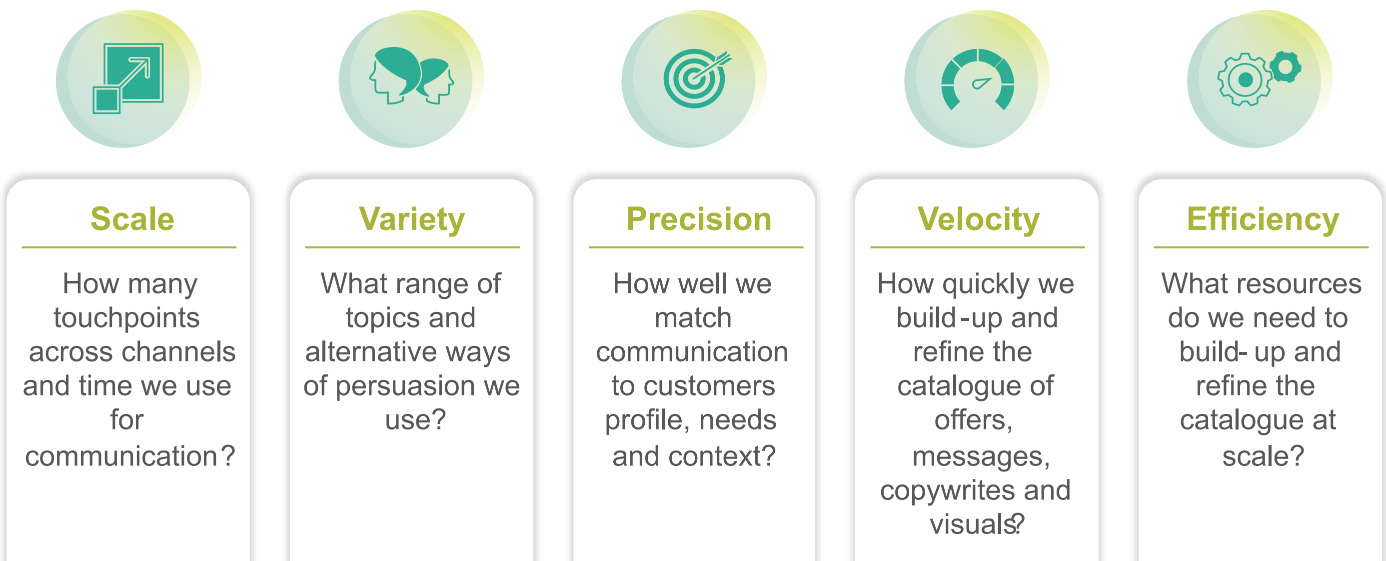
Still, many banks are taking a sub-optimal approach, or are falling short on design imperatives. When selecting a new tech stack, the vast majority of CRM teams focus mostly on a long list of desired functionalities. These would include the ability to conveniently create cutting-edge digital content, detect click-stream events, react in real time, effectively manage digital communication placements, and enable easy A/B testing. In addition, they often expect the tech platform to come with a clear recipe for hyper-personalization. This false assumption results in under-utilization, with rich functionalities only translated into gut-instinct manual targeting. The culprits are legacy campaigning approaches and attempts to use black-box off-the-shelf AI/ML components, which are often designed with other industries in mind. Underlying these challenges are often structural issues. Many CRM analytics/data science teams have managed implementation of state-of-the-art opensource solutions, but are still often excluded from tech procurement decisions or from deciding on how new platforms should be applied.

Meanwhile, about 86% of banks are considering cloud solutions (SaaS and PaaS) as their next-gen CRM platform. Indeed, about 28% have already obtained cloud tenancies and are conducting proofs of concept for CRM analytics. At the leading edge, about one in seven banks is in the process of finalizing migration of CRM analytics to MLaaS (machine learning as a service).

Success factors for implementation

Successful implementation of hyper-personalization is about more than shiny new technology or an off-the-shelf approach. Leading banks have shown that the transformation needs to be founded on a strategic vision and willingness to make changes both to mindset and operations. These banks view their personalization ambitions through the lenses of their plans for the wider business. They also favor highly structured implementation based on five key levers that create business impact in personalization; scale, variety, precision, velocity, and efficiency. (See Exhibit 3).

Exhibit 3: Personalization impact from compounding 5 levers



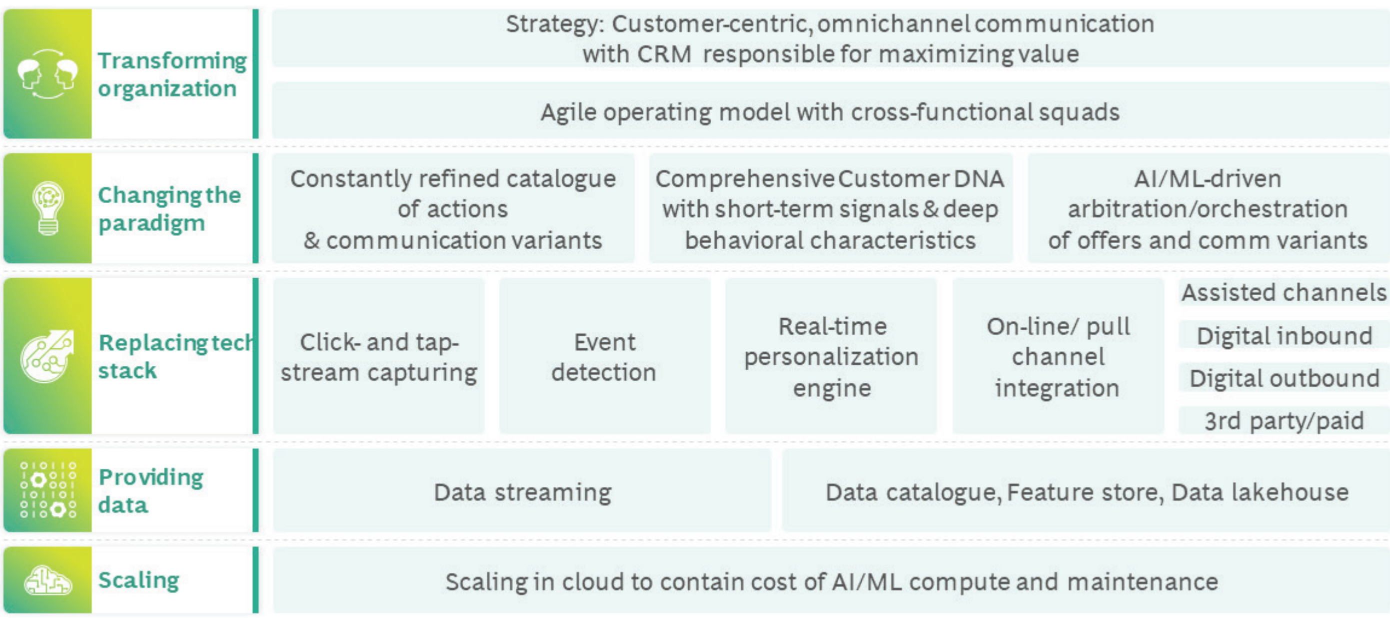
The cornerstone of any implementation should be a vision of how hyper-personalization will function, and a deep understanding of how the tech and operating model will operate. The most advanced banks often build their offerings on five key building blocks. (See Exhibit 4). The first of these is based on the principle that there can be no effective change without organizational conviction. This means that banks need to cast off established orthodoxies, take a strategic approach to transformation, and be forensic on the drivers of change. The CRM needs to be placed at the center of the value creation process, and banks need agile, cross-functional teams to support the transition.

The second building block is about communication and action variants, deep behavioral analysis, and advanced orchestration, Data science teams need to both change the way predictive models are implemented and applied and take more responsibility for managing communications and their impacts. They need to step away from their screens and become storytellers around the benefits of change. Creative teams, meanwhile, need to mass-produce and constantly refine content, while embedding AI/ML recommendations into the creative process and overcoming the urge to manually target the communicating—a tough ask for cohorts that are accustomed to being in control. However, only by putting AI/ML at the centre of communication targeting can they produce the acuity and responsiveness that will catalyze results. As a precondition of efficiency in the mass production of content, marketing and compliance functions need to be closely involved.

Pivotal to positive business outcomes is to start with the logic that needs to be embedded in the tech platform. Essential elements of this third building block include click and tap stream capturing, event detection, and real-time decisions for both online and offline channels. In the background, building blocks four and five are advanced data streaming capabilities and the ability to scale use cases in the cloud are essential.

Only once these five building blocks are in place or are at least thoroughly understood and designed, do leading banks go out into the market and start selecting the best fitting tech platform.

Exhibit 4: New building blocks needed in all layers



Personalization is an alluring concept that creates high expectations of banks. Unfortunately, despite some effort, most banks have failed to live up to those expectations. They personalize but do not hyper-personalize, and therefore fail to reap benefits in terms of customer loyalty or bottom-line performance. Still, banks that have successfully made the transition have shown there is a path to hyper-personalization that can be implemented at a reasonable cost and on a reasonable time scale. These institutions have understood that strategic, rather than tactical, change is required, and a willingness to embrace not just new technologies, but new mindsets and ways of working.

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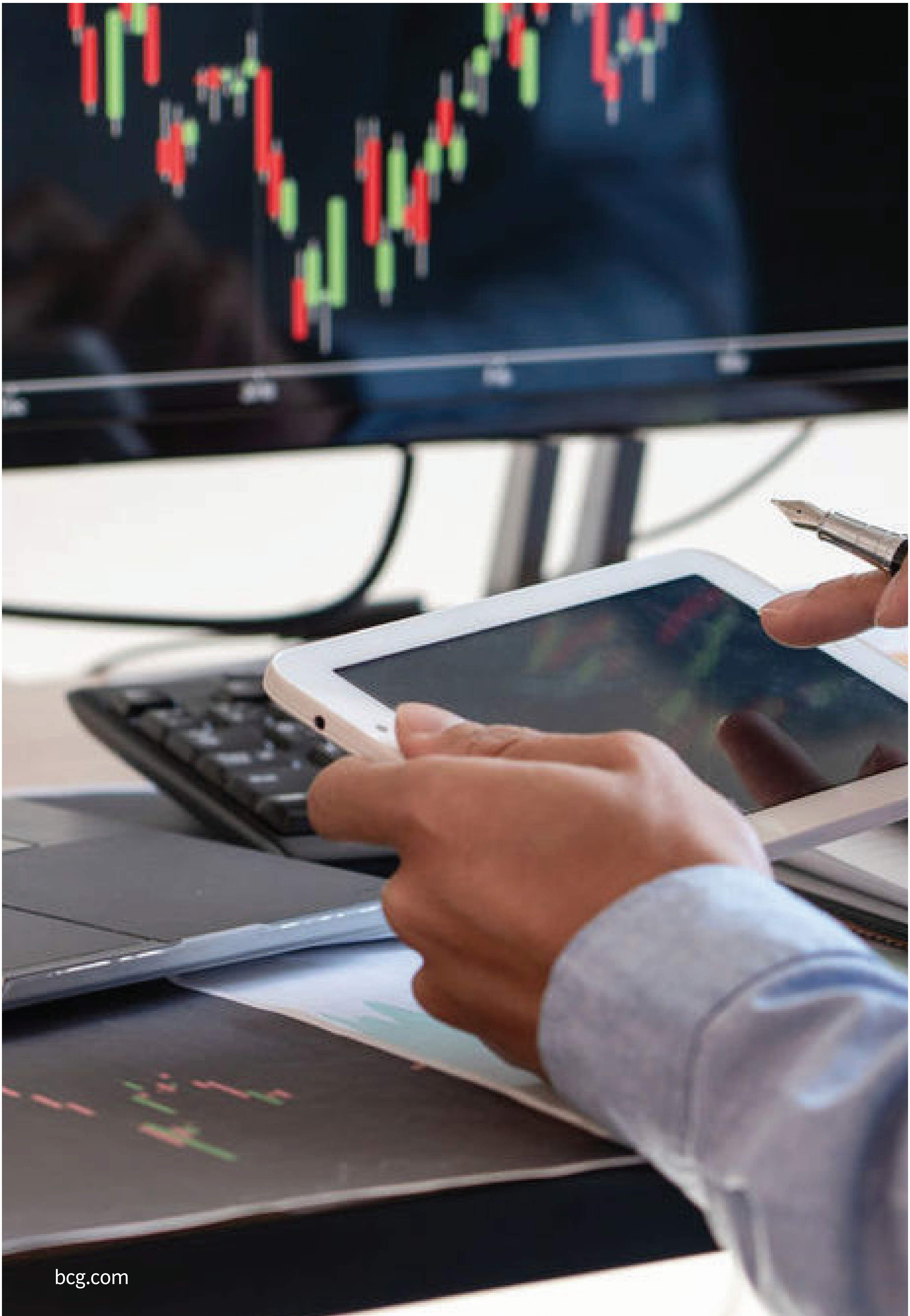
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