

The Intelligent Customer Experience

A new approach for banks

November 2015







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Executive summary

This paper is the product of EY's continuing partnership with Efma, which explores the value of using analytics to improve customer experience in European banking. It builds on our work in 2014, when we produced a paper examining the customer challenges facing European retail banks.¹

Throughout May and June 2015, EY and Efma conducted a series of think tanks focused on the challenge of improving customer experience by leveraging insights derived from data. These discussions gave Efma members an opportunity to debate a new customer experience measurement framework developed by EY – the Intelligent Customer Experience (ICE). The topic was brought to life by examining a recent pilot that allowed EY, in conjunction with their client Intesa Sanpaolo, to fine-tune this new approach.

The ICE methodology represents an innovative new approach to measuring and improving customer experience in retail banking. It has several unique features that combine traditional techniques with digital capabilities. These include digital analysis of internal data; validation of those internal findings with tailored customer surveys; and the development of detailed customer "personas." This combination allows banks to optimize the experience of individual customers, leading to direct enhancements in satisfaction, loyalty and revenues. The overall effect is to deliver higher-quality results than traditional methods, at a lower cost.

In our view, it has never been more important for European banks to be able to understand and improve the quality of customer experience – and its impact on subsequent behavior. Banks face an increasingly skeptical customer base; the growing challenge of delivering good customer service across complex multichannel platforms; and an increasing threat from FinTechs and other new entrants with competitive advantages in technological skills, branding and trust.

Instead of making accessibility their absolute priority, we believe that banks need to maximize their advantages as established, diversified players by focusing on factors such as customer knowledge, professional skills, financial expertise and data analytics. We believe that the ICE methodology can help banks across Europe to capitalize on their existing assets and capabilities, creating significant value for customers and shareholders alike.

We hope that readers will find this paper interesting and informative. We would, of course, be delighted to hear your views.

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Introduction – the customer agenda

Delivering better customer experience has become a key priority for most European retail banks in recent years. As we examined in last year's EY and Efma paper, there are direct links between customer experience and loyalty, advocacy and revenues.² It follows that it is vital for banks to be able to measure the quality of the customer experience they provide, accurately and reliably.

For established banks, the importance of customer experience measurement is only increasing with the entry of FinTechs and other newcomers to the banking market. These extremely dynamic players have strengths in technology, branding and emotional engagement that incumbent banks may struggle to compete with.

The development of multichannel capabilities is a common feature of many banks' responses to these strategic challenges. But this approach carries a risk of excessive cost buildup, given that many customers do not need their bank to provide every service through every channel. There is also a strategic risk that banks that put an excessive focus on accessibility are choosing to compete on FinTechs' own terms. Banks that are found wanting run the risk of finding themselves increasingly disintermediated from their customers, and reduced to the role of product suppliers.

In our view, banks need to play to their strengths by giving their customers tailored, professional financial guidance. That means improving customer experience by leveraging banks' core capabilities in areas such as product expertise, human capital and customer insight.

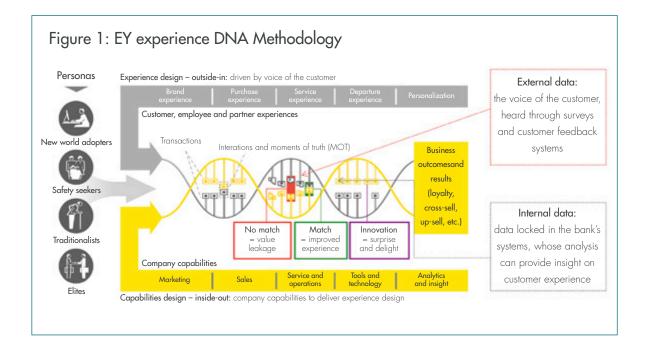
This brings us back to banks' need for dynamic, precise and cost-effective customer experience management. That is why EY has used its expertise to develop a new approach to customer experience management, specifically designed for today's world of digitization and "big data." Fine-tuned through collaboration with Intesa Sanpaolo of Italy, we call this new methodology the Intelligent Customer Experience (ICE).

In the rest of this paper we introduce the concepts behind the ICE; examine the methodology in three detailed sections; and conclude by considering the scalability of the approach across the whole banking industry.

² Looking at the bank from the customer's point of view, EY and Efma, October 2014

Our approach: the ICE

EY's ICE methodology is a completely new way for banks to measure and improve the quality of customer experience. It is based on EY's DNA model of customer experience management in banking (see figure 1), and was refined through a pilot program conducted in conjunction with Intesa Sanpaolo. Like many customer experience management techniques, the model is centered on the connection between customers' expectations and banks' capabilities. When the two sides meet, value is created. When they fail to connect, value is destroyed. The unique characteristic of the ICE is its highly detailed focus on every single interaction between banks and their customers.



As the name implies, the Intelligent Customer Experience aims to enable banks to deliver the most appropriate experience to every customer, every time. This means measuring the quality of individual interactions and optimizing customer journeys, leading to a better overall customer experience. The ICE can therefore be used to achieve strategic goals, such as improving loyalty, as well as tactical ones, such as improving performance metrics.

The new approach has several innovative features. Three of the most notable are:

- The use of analytics to unlock the hidden value of banks' own proprietary data
- The integration of traditional and digital techniques, by validating the findings of internal data analytics with focused customer surveys
- The use of sophisticated customer archetypes, or "personas" that enable banks to move beyond traditional segmentation and provide every customer with journeys best suited to their needs

In the following sections, we set out the principles of the ICE methodology in more detail, divided into three phases for ease of reference. We start with definition and design, followed by examining data gathering and analysis, and end by highlighting the insights and actions that banks can use to achieve tangible improvements in customer experience and revenues. We also help to bring this new approach to life through references to the pilot implementation of the ICE, conducted in conjunction with Intesa Sanpaolo, Italy's largest retail bank (see box).

The EY and Intesa Sanpaolo pilot

Intesa Sanpaolo (ISP) is the largest retail bank in Italy, with more than 11 million customers, 3,500 branches and 4 million clients actively using direct channels.

ISP has worked intensively to make most of its services available on an integrated multichannel platform. The decision to implement the ICE reflected the bank's ongoing agenda of retail transformation and a desire to strengthen its knowledge of data analytics. The strategic goals of this agenda include reshaping distribution around multichannel customer journeys and strengthening customer experience management.

The pilot was conducted by a small team from EY Italy, working in partnership with our financial services Analytics Hub. The methodology's focus on internal customer data meant that ISP's resource requirements were limited and that the pilot caused very little disruption to commercial activities.

1. Definition and design

Effective definition and design is crucial to implementing the ICE methodology successfully. We have broken this phase down into several areas, including product definition, the prioritization of customer journeys and events, and the definition of personas. Each step is vital if the data gathering and analysis phase is to deliver actionable insights and improvements.

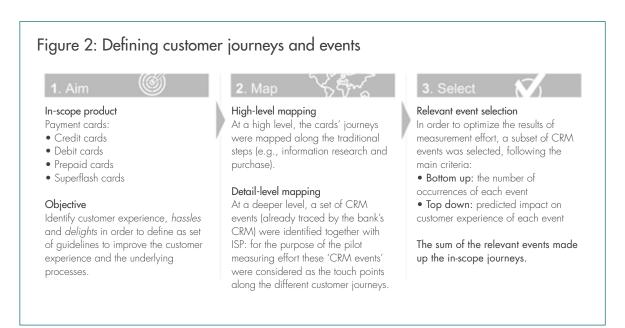
Defining the scope, objectives, customer journeys and events

As with any performance measurement methodology, banks need to focus on a specific area of the customer experience if they want to maximize the effectiveness of the ICE.

It follows that the first requirement is to identify a product area or business – such as mortgages, deposit accounts or personal loans – on which to focus. The second is to identify a clear tactical objective – such as improving usage or retention. Banks need to ensure that their choices are:

- Business relevant: measurement should focus on achieving improvements that will have a tangible impact on business performance.
- Efficient: the cost of measurement needs to be balanced against the potential benefits.
- Effective: the results of measurement need to be actionable.

In the **pilot program**, ISP opted to focus on their cards business. The scope included credit, debit and prepaid cards. The tactical goal was to increase usage rates, leading to stronger levels of commission income. These choices reflected a desire to identify the customer experience improvements most likely to increase card usage and portfolio profitability. The good availability of internal data on card transactions was also a supporting factor.



The initial scoping exercise needs to be followed by the definition of a specific set of customer journeys to examine in greater detail. Having identified a product area and a tactical objective (see "Aim" in figure 2), banks need to **map** the potential customer journeys that are most relevant to their overall aims. They then need to conduct a more detailed review of the customer events that make up the most important journeys and select the key events for further analysis. The number and frequency of the events, their importance to key customer journeys and the availability of relevant customer relationship management (CRM) data are all important considerations during the selection phase.

Defining the personas

As already mentioned, personas are one of the defining elements of the ICE and represent a significantly different approach from traditional segmentation techniques. The following questions and answers examine the concept of personas in greater detail.

What are personas? Personas are not categories into which customers must be placed, or between which they must be moved. They are customer archetypes. Crucially, they not only capture quantitative data but also customers' expectations and desires.

How are personas defined? Personas are defined with a mixture of quantitative and qualitative data from internal and external sources. They are constructed using analysis of internal quantitative data, before being enriched with external qualitative data via a survey. This means that personas incorporate factors as varied as:

- Customer characteristics: income, age, marital status, employment or education
- Customer emotions: life aspirations, fears, dreams, brand loyalties, advocacy and trust
- Banking behaviors: usage frequency, usage volume and preferred channels
- Financial factors: asset level, revenue level or profitability
- Digital factors: mobile usage or online shopping

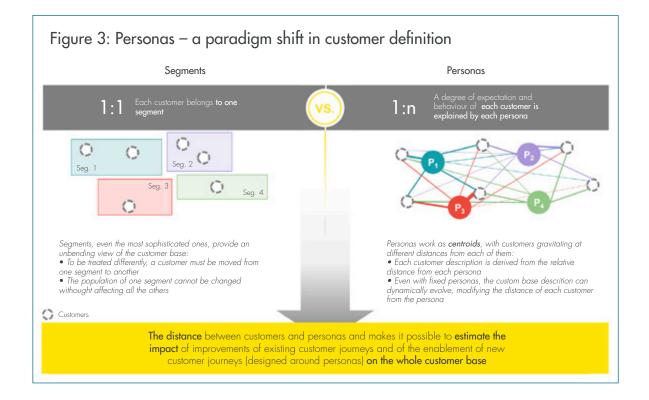
How are personas created? Sets of personas can be created in two ways. The field approach uses wide-sample surveys, augmented by focus groups and one-to-one interviews, to build a catalog of personas. This approach yields a universal set of personas that can be leveraged across more than one business unit. The analytical approach is based on analyzing customer behavior and using a small-sample survey to fine-tune the results. It is typically less intensive and costly, making it more suitable for a specific product area.

The **pilot** used an adapted version of the analytical approach. Its starting point was the eight customer segments identified by EY's most recent Global Consumer Banking Survey.³ These were adapted with data taken from ISP's customer relationship management systems. The resulting set of personas was then finalized through a targeted customer survey.

Why are personas central to the ICE approach? They allow banks to map and understand the financial behavior and desires of individual customers. That means that personas can be used to optimize journeys for individual customers. Once created, personas can also be modified or amended with only limited need for further customer polling.

³ Visit www.ey.com/gcbs to download a copy.

How are personas used? They give banks a set of reference points or "centroids," against which the expectations and desires of individual customers can be mapped. Customer expectations are defined by the position of each individual relative to every persona (see figure 3). As we shall see, this approach can be coupled with data analytics to generate significant new insights into customer behavior.



Defining the metrics

Defining KPIs is a vital element of any customer experience measurement program. The ICE methodology focuses on understanding the impact of key interactions on customer experience at a persona and product-specific level. Defining the KPIs that the process aims to measure is critical to obtaining an output of actionable insights.

KPIs provide the benchmarking milestones that allow banks to craft optimal customer journeys for each persona. As well as helping banks to develop tailored customer journeys that maximize satisfaction, this allows them to identify the interactions that have the greatest positive – and negative – impact on customer experience. These are called "delights" and "hassles," and identifying them allows banks to focus their investment on the improvements that have the greatest relevance to client satisfaction and behavior.

The **pilot** allowed us to develop a client experience measurement dashboard. This acted as the key output mechanism for insight from our ICE model. The dashboard not only identified delights and hassles, but by linking them with the chosen business objectives, it also pinpointed which improvements to specific hassles or "pain points" would have the greatest impact on subsequent transaction levels.

2. Data gathering and analysis

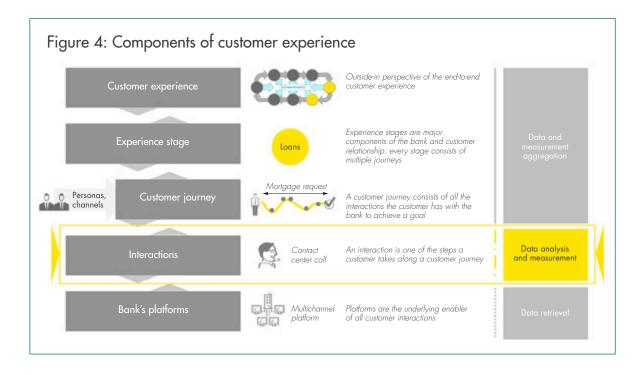
After definition and design comes the heart of the ICE process: data gathering and analysis. Rigorous analysis of internal data and the integration of internal analysis with external customer views are two of the cornerstones of the ICE methodology. These unique features enable banks to maximize the value of existing data and reduce the need for expensive customer surveys.

Identifying internal data

Deciding which internal data to analyze is a vital step toward successfully implementing an ICE program. This is not just about unlocking the value of banks' proprietary data. Internal data tends to be more consistent, comparable and reliable. It can also allow for a very large sample size, leading to a higher level of statistical accuracy and effectiveness.

Banks need to strike a balance between two factors when identifying which data to use. One is the availability of data on banks' platforms – or more precisely, its quantity, quality and accessibility. The other is its alignment with the business goals identified during the definition and design phase.

Measurement needs to take place at the interaction level. This bottom-up approach allows the resulting analysis to be used to redefine the customer journeys that make up the overall customer experience (see figure 4).



As discussed, ISP wanted the pilot to investigate which customer experience improvements would be most likely to drive increased card usage and profitability. The internal data pools chosen for further analysis were:

- Card transaction data over a one-year period
- CRM systems data on events such as card blocks, spending limit changes and PIN reissues

Analysis of these data pools identified 16 key customer events for more detailed investigation, which together represented more than 90% of all card holder interactions with the bank.

Conducting the internal analysis

The first step of internal data analysis is to decide how the data is to be interrogated. In other words, which are the right questions to ask? Identifying a clear, specific set of questions is crucial to establishing a successful analytical model. The questions should be precise enough to create tangible value, but also broad enough to allow the algorithms to deliver fresh insight. The questions need:

- To be aligned with the desired business goals
- To establish whether the chosen customer events have a meaningful impact on customer experience and behavior
- To identify whether different events have different effects on different personas (and therefore, on different individuals)
- To identify whether different events have different effects on different products
- To assess whether any customer-specific characteristics affect responses to different interactions

The internal data analysis itself is then used to estimate, on a persona-by-persona basis, the connection between individual customer events and the subsequent impact on customer views and, therefore, customer behavior.

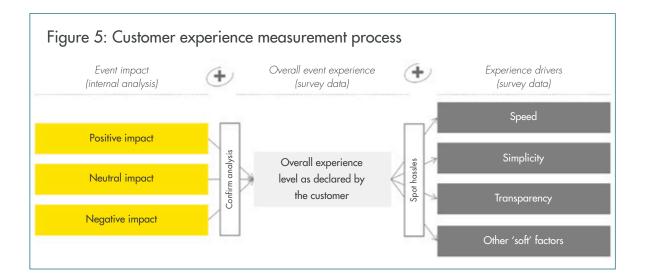
In our **pilot** with ISP, EY's financial services Analytics Hub analyzed variations in card transactions for each customer before, and after, instances of the 16 selected customer events, to establish any correlations. The analysis reviewed 3 million recorded customer events and 300 million recorded transactions to generate an estimation of the impact of each of the 16 chosen types of event on customer experience.

Integrating internal analysis with the voice of the customer

The next phase of data gathering and analysis is to integrate the internal data analysis with the "voice of the customer" – one of the defining features of the ICE methodology. This involves identifying customers who have experienced one of the specified customer events, and then polling them using ad hoc surveys under a carefully constructed framework. Developing and using customer surveys in this way brings a number of challenges. One is to make the surveys concise but meaningful. The longer the survey, the lower response rates will be, so questions need to be carefully defined and prioritized. Another challenge is making sample sizes as large as possible, to ensure statistical reliability while keeping costs at an affordable level. Online or email surveys help to control costs but will only work with a large customer population. Questionnaire design is also important. Set values are required for rigorous statistical analysis, with even ranges preferred to prevent respondents from opting for central, neutral values.

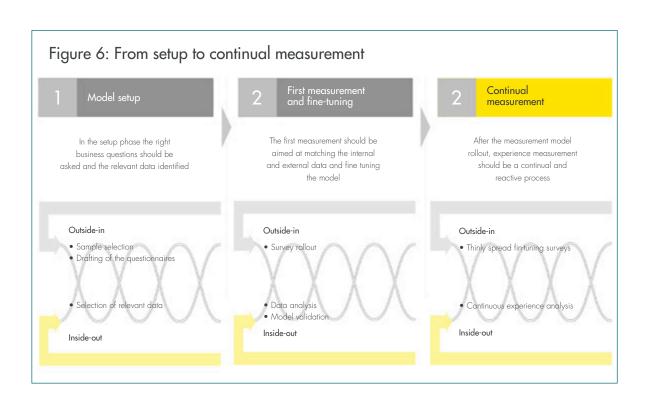
During the **pilot**, customer surveys were not only used to validate the results of the internal customer experience analysis, but ISP also took the opportunity to ask some broader questions about customer expectations. A sample of 120,000 customers was polled and around 6,000 responses received. Each customer polled had experienced one of the 16 customer events under scrutiny, with questions tailored dynamically to their circumstances. Questions requiring scores offered a scale of 0-10, while questions regarding actual experiences ranged from "extremely below expectations" to "beyond expectations."

Once the survey has been completed, the results of the internal analysis can be calibrated against actual customer experience (see figure 5). For example, an internal prediction of customer responses to a particular interaction – whether positive, negative or neutral – can be compared against customers' actual views of exactly the same event.



In our **pilot**, the predictions derived from internal analysis – whether positive, neutral or negative – were compared with actual declared experience, measured across a set of card experience drivers via our customer survey. Where different products or services are being studied, a different set of drivers could be required.

This integration of internal and external data does not just have "one-off" value. By validating the predictive potential of internal data-driven analysis, banks are able to place more reliance on internal data in future. That means that customer experience measurement can be continuously revised, with only a very limited need for further surveys (see figure 6). Periodical small-sample fine-tuning surveys are sufficient to maintain the accuracy of the methodology, helping to control ongoing costs and minimize reliance on customer goodwill.



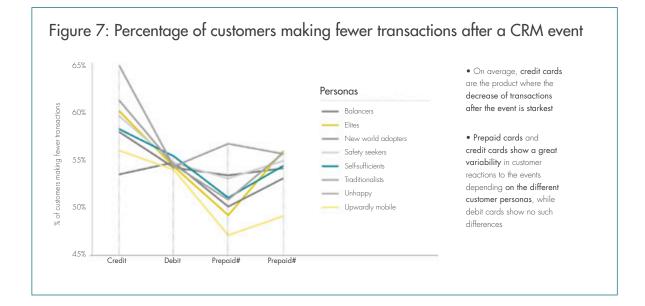
3. Insights and actions

The final phase of the ICE methodology involves harnessing the findings and insights that flow from data gathering and analysis. In this section of the paper, we use a number of examples from the ISP pilot to illustrate the kind of actionable insight generated by this approach.

The ICE methodology delivers a range of actionable insights designed to improve customer experience and maximize the resulting impact on loyalty and revenues.

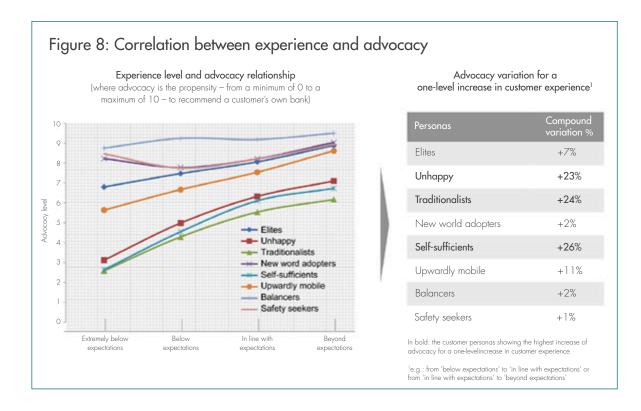
"Inside-out" insights are derived from analysis of internal data. They can often be used to enhance customer experience at critical interactions. One example could be enabling a bank to react quickly and optimally after customers experience a "hassle," improving the chances of delighting a customer and turning a potentially negative experience into a positive one.

One of the inside-out findings of the **pilot** was that different personas reacted to customer events in very different ways, depending on the type of card used. For example, one particular event led to similar reductions in debit card usage by all personas, but a wide variation in the usage of other card types (see figure 7).



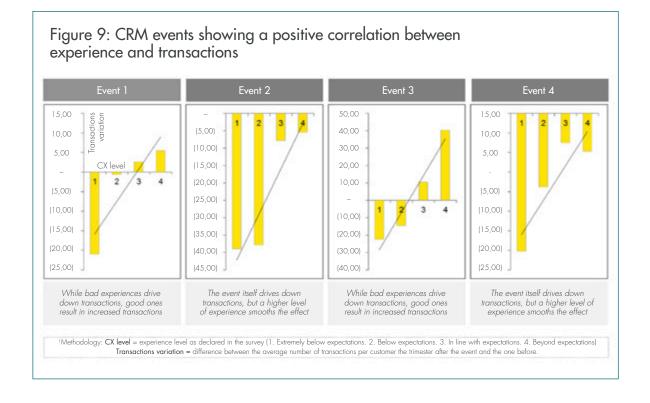
"Outside-in" insights flow from analysis of external customer views. They typically help to shape experience design, whether by tweaking existing customer journeys or designing new ones.

One outside-in **pilot** finding was that, while all personas displayed a positive correlation between levels of experience and levels of advocacy, they also showed significant differences in sensitivity (see figure 8).



Mixed insights that combine inside-out and outside-in perspectives are particularly valuable in terms of prioritizing investment on events identified as hassles or pain points. These are the insights that enable banks to understand how different personas respond to particular customer events, and which specific improvements will deliver the greatest uplift in satisfaction and revenues. These are the type of actionable, business-focused insights that can help to make an approach, such as the ICE, self-sustaining and even self-financing.

In our pilot, mixed analysis revealed that some specific customer events led to a particularly strong subsequent increase or decrease in card usage, depending on the perceived level of customer experience (see figure 9).



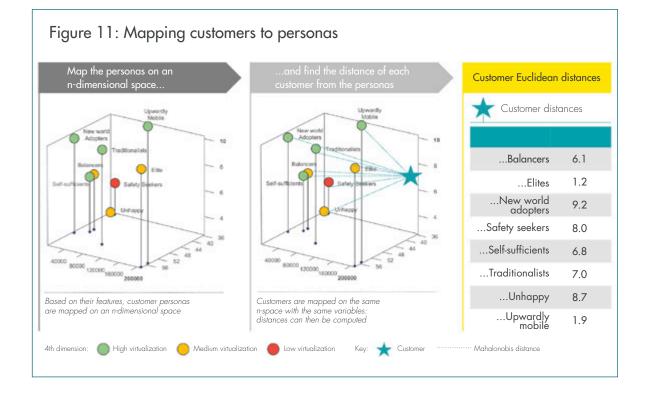
Priorities can be further fine-tuned through correlation analysis. This takes additional factors into account, such as relevance to a bank's business objectives or the sensitivity of particular personas. That enables banks to pinpoint which aspect of the event – such as speed, simplicity or transparency – is the most important driver of customer experience for each persona.

Analysis conducted as part of our pilot showed that different personas can view the same events in very different ways. While some events provoke near-identical responses from all personas, others can be viewed as a hassle by some, but as a delight by others (see figure 10).



Finally, the ICE methodology can also generate **self-refining insights**. This ability to deliver continual self-improvement is another of the unique features of the ICE methodology. In particular, combined analysis of internal and external customer data can be used to add detail and refinement to the definition of personas. The features of personas that are based on banks' internal data can then be used to map every customer's position relative to each persona in a geometric way, generating further insight (see figure 11).

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In our **pilot**, analysis showed that length of card ownership was a key driver of customer responses to a wide range of interactions, suggesting that customers become less tolerant of hassles over time. This insight suggested that the length of product ownership – not just the length of the bank relationship – should be included when defining personas.

Conclusion: looking beyond the pilot

Despite heavy investment in digitization and data analytics, many European banks are struggling to harness the power of customer and transaction data. The development of multichannel capabilities is increasing the complexity of the challenge. And the ability of FinTechs, online retailers and technology firms to build emotional engagement with their customers is adding to the need for customer experience management tools that can optimize individuals' customer experience – and convert those improvements into stronger revenues.

At EY, we believe that our new approach meets that need. It uses innovative new techniques to provide a remarkable degree of insight, while remaining pragmatic, affordable and effective. In summary, we believe the key strengths of the ICE methodology are that:

- It focuses on clearly identified business goals.
- It makes optimal use of the data that banks already hold.
- It incorporates customer views while reducing the need for expensive surveys.
- It uses objective, quantitative analytics.
- It delivers prioritized, actionable insights that maximize the value of investment.

Banks implementing the ICE also benefit from more than a one-off improvement in their customer experience management capabilities. The experience of ISP shows that banks can apply the insight and understanding they have gained in other areas, including those with more complex customer interactions.

Of course, EY and our clients are still learning our way around the new methodology. Our experience so far has shown us that a range of factors is important to successful implementation. These include:

- Designing the project around clear business-oriented goals
- Overcoming silo mentality and synchronizing the input of CRM, data management and other teams
- Ensuring a thorough evaluation of data quality, to avoid placing too much reliance on flawed data
- Maintaining clear central oversight, such as ensuring that interviews are conducted consistently
- Committing to targeted investment to capitalize on the value of the insights generated

Where these conditions are met, we see scope for the ICE to create significant value in every major area of retail banking activity. The importance of data analytics to the approach means that businesses with large customer bases are likely to experience the greatest benefits. The ICE can be applied to complex and simple products alike, subject to the availability of sufficient data. Furthermore, once a universal set of personas has been defined, it can be leveraged across any retail business, with adjustments for specific product areas as required.

EY recognizes that no management tool can act as a "silver bullet." Like any customer experience management technique, the ICE needs to be implemented within a framework that provides the required vision, support and governance. Nor is it a substitute for a well-founded retail strategy. But, we believe that our approach will help many banks to capitalize on their data, skills and knowledge to offer their customers more tailored and professional guidance. That, in turn, will help them to increase loyalty, revenues and profitability. Early adopters have a particular opportunity to open up a competitive advantage over existing rivals and new entrants alike.

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