



# Executive Summary

The market dynamics in the credit space are undergoing a dramatic transformation, with increased competition from financial institutions, new technologies, alternative issuers, and evolving customer expectations in the new digital world. Card issuers know they need to create and deliver new roadmaps with better products and features that drive revenue and win new customers, but the goal of quickly and cost-effectively bringing truly differentiated payment solutions that meet the expectations of today's consumers is often out of their reach.

There is a palpable sense of apprehension. According to a 2015 study by Celent, half (53%) of all financial institutions (Fls) surveyed say they feel a "loss of control" with regards to the market's digital transformation. Clearly, Fls feel they have a lack of options in addressing dynamic market change. What's causing this concern?

The main problem is that the legacy transaction processing technology used by so many financial institutions was

never designed to address today's dynamic market needs. As a result, card issuers have to design products that conform to the limitations of outdated processing technology, which makes it hard to deliver their desired product roadmap. Some are forced to lower their requirements while others build their own bolt-on solutions. Either way, processing technology has become an obstacle—not an enabler—leaving many issuers stuck with "me too" offerings.



This white paper introduces a new model for payment processing platforms—one defined by Agile Processing technology—that gives issuers the control and flexibility to create, test, and rapidly deploy feature-rich payment programs at low cost. This paper will help you understand:

- How today's market dynamics are challenging credit card issuers and the technology they rely on
- The obstacles financial institutions face in executing a successful credit program roadmap
- The Agile Processing model, its key attributes, and how it gives control back to issuers



# **Credit Market Overview**

Even with advances in technology and new players with different business models like crowdfunding and alternative lending edging into the market, credit cards are not disappearing any time soon. In fact, the global cards market continues to expand and is expected to flourish for years to come. The compounded annual growth rate (CAGR) for North America and Europe is 7.3%, and for developing markets is a robust 13.2%, and these rates are projected to maintain that steady trajectory for the foreseeable future (Celent Payments Model, May 2016).

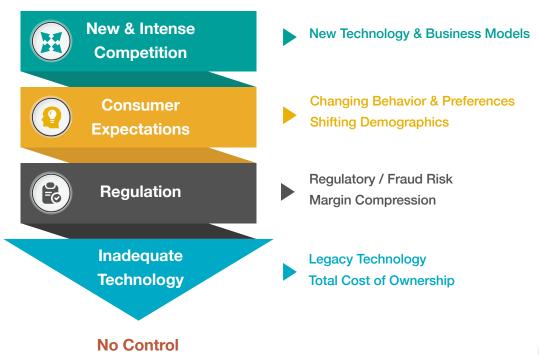
As such, credit products remain a lucrative, high-margin business for Fls. While it seems like an easy win, financial institutions have to deliver better, appealing solutions and avoid "me-too" credit offerings. According to a 2015 study from the US Federal Reserve, consumers want access to credit—but only if the

product is differentiated and provides value beyond existing alternatives. This is no small task given the demands of a dynamic and rapidly changing market landscape.

# MARKET TRANSFORMATION IS PLACING PRESSURE ON ISSUERS

The cards and retail payments landscape has changed dramatically over the last several years, putting pressure on card issuers and the processing technology they rely on. Today's payments market—described by the advisory firm Celent as the "new normal"—is characterized by new, more intense competition from other banks, financial technology (FinTech) companies and alternative issuers, evolving consumer expectations in the new digital world, and margin compression resulting from mounting costs associated with regulatory and compliance obligations and fraud and risk management.

### **Challenges Credit Issuers Face**



### New, More Intense Competition

Perhaps the most visible change in the payments market over recent years is the proliferation of new products and services driven by new technologies like P2P payments and digital wallets and new players with different business and credit lending models.

These technological advancements provide opportunities for new challengers to disrupt traditional business models and penetrate financial services markets, including:

- FinTech companies that are unbundling traditional bank products, offering lower costs for traditional services, such as e-payments and online trading.
- New competitors offering discrete financial services without becoming full-fledged banks, such as Square, PayPal, and Apple.
- Social media companies with huge user bases moving into the financial sector, such as Facebook, Twitter, and Google.
- All-digital "Neo Banks" that have no physical branch presence, targeted at discrete segments like Millennials.

Moreover, issuers face stiffer competition from other Fls, ranging from smaller, more aggressive banks fighting for the same wallet share to large banks with big marketing budgets and the deep financial resources for technology initiatives.

# **Evolving Consumer Expectations**

Consumer behavior has rapidly evolved. Today's consumers are digital, social, interconnected and increasingly mobile, and they expect purchasing and

### MILLENNIALS — THE DIGITAL GENERATION

**14.5** hours

Number of hours each week spent on smartphone

41%

Percentage of total time spent on smartphones by Millennials

Source: Experian, 2014

commerce experiences that are timely and relevant to their unique situation. This is especially true for Millennials, a target demographic for Fls who are racing to fill the gap created by Baby Boomers who are aging out of the market. Millennials prefer to use mobile and social media platforms to interact with their financial providers. They expect to transact in real-time using a broad range of payment instruments and want contextual, relevant payment experiences.

### Regulation

Complex regulatory and compliance rules continue to require operational adjustment and high financial and human commitment. Combined with rising costs associated with risk management and fraud, issuers are experiencing margin compression.

The end result of this competitive, fast-changing, and customer-focused environment is that issuers are being squeezed and their payment processing technology is under pressure.

Consequently, their products are becoming less and less relevant in the market. To stay top of wallet and win new customers, card issuers have to respond quickly and create compelling new products and programs that increase customer engagement and revenue—and do so at the lowest possible cost.

But therein lies the problem: The legacy processing technology they have in place is inadequate to support current market realities. Rather than the enabler it was designed to be, processing technology has become an obstacle.

# LEGACY PROCESSING TECHNOLOGY IS AN **OBSTACLE, NOT AN ENABLER**

The legacy transaction processing systems relied on by so many FIs globally were created decades ago and are no longer suited for today's dynamic market needs. Intense competition, digital, mobile and social enablement, a push for more and differentiated products, multiple transaction types, and constantly-changing consumer expectations have collectively put significant strains on technology stacks designed for environments 25 or more years ago.

These systems were designed for high-volume debit and credit transactions as the center of the commerce equation. That formula and the architecture that supports it no longer works. People and their purchasing experience are at the center. A modern payments processing platform must support this reality; it needs to be architected so that people and their commerce experience are the focus—not just the transaction.

#### WHAT DOES THIS MEAN FOR ISSUERS?



### Cannot Deliver on Product Roadmap

Inflexible technology significantly constrains issuers from creating and delivering the roadmap they want to remain competitive.



# **Unresponsive to Cardholder Needs**

Issuers can't make changes they need to in any timely way as current solutions are uncompetitive to market needs and speed.



# (S) Cost Misaligned to Effort and Time

If changes can be made they are unreasonably expensive, but shouldn't be.

# ISSUERS STRUGGLE TO DELIVER THEIR **ROADMAP**

Issuers are in an unenviable position. The legacy processing technology they use is unable to meet the business requirement of quickly and cost-effectively delivering differentiated payments solutions and experiences that meet the expectations of today's consumers. These platforms are typically siloed by product, functionality, and geography, and often comprised of a patchwork of different solutions. As a result, the technology stack is inflexible, costly to maintain, and difficult to scale. This obsolete design makes even simple feature changes complex and time consuming—not to mention expensive. As a result, card issuers often face months of delays and cannot execute on their product roadmaps.

Instead of building a product roadmap driven by consumer and market requirements, issuers are forced to conform to the constraints of outdated legacy platforms never designed for today's market reality.

The end result is that FIs are essentially stuck with the status quo of undifferentiated, "me-too" products. Issuers' inability to build and execute product roadmaps or even make simple changes puts their cardholder base and portfolios at risk. Consumers have little patience; if it takes too long to meet their needs and deliver what they want, they will leave or stop using your card because they have other options.

Instead of building a product roadmap driven by cardholder and market requirements, issuers are forced to conform to the constraints of outdated legacy platforms never designed for today's market reality.

#### **FI CONCERNS**

81%

are concerned about becoming and staying "top of wallet"

61%

are apprehensive about new technology threats

53%

are feeling an overall loss of control

Source: Celent Digital Research Panel, November 2015

All of these challenges create a lack of control and a constantly frustrating situation for issuers. Small wonder, then, that half (53%) of all FIs surveyed by Celent reported feeling a "loss of control" with respect to the market's digital transformation. Eighty-one percent say they worry about becoming and staying top of wallet.



# The Agile Processing Model: Configure, Respond, Grow

There is a better model for payment processing one that gives control back to card issuers so they can build and execute their product roadmap vision and make changes to programs based on business needs, customer demands, and market feedback. Agile Processing gives FIs the flexibility to rapidly and cost effectively create, test, and deliver new programs and products with the latest features so they can increase engagement with customers and drive revenue. And it accomplishes all of this with the highest levels of reliability, security, and scalability.

Agile Processing is defined by three basic principles: the ability for card issuers to configure their portfolio based on their needs, to respond quickly to market feedback, and to grow their relationships with the right tools and insight.

#### THE AGILE PROCESSING MODEL



# **Configure**

- Driven by Business Requirements
- Issuer Managed
- Rapid Deployment



# Respond

- Market Feedback
- Immediate Program Changes
- Sandbox to Scale



### Grow

- Human Centered Data
- Behavioral Engagement
- Real-Time Commerce

### **CONFIGURE**

Starting with their business requirements and their cardholders' demands, Agile Processing allows card issuers conceptualize an idea, rapidly configure the use case, test it in a sandbox, and when deemed ready, rapidly and cost-effectively deploy it to market. i2c's processing platform enables issuers to configure their credit program on their own, often without intervention from i2c.

### **RESPOND**

Agile Processing lets card issuers rapidly respond to market feedback, so they can continually improve, adjust, iterate, and scale programs based on market feedback. i2c's platform allows program changes to be made immediately, returning program elements from a sandbox back to market without wasting time. This enables issuers to scale quickly and in a very cost-effective way.

#### **GROW**

Agile Processing allows issuers to deepen customer engagement and grow relationships with their cardholders through a more comprehensive set of tools built natively into the platform. This makes communications more efficient and insight into cardholder preferences, behavior, and trends easier to obtain, which allows issuers to concentrate on components of their credit program that drive revenue and focus on the customer.

#### **CONTROL AND FLEXIBILITY**

Agile Processing gives FIs the control and flexibility to respond to a fast-changing market and capitalize on the credit market's opportunities by building and executing a product roadmap driven by cardholder and market requirements—not by the constraints inherent in legacy processing technologies. Now they can build products that meet their requirements and respond quickly to market needs, making product changes in minutes or hours—not months—and do so far more cost effectively than with legacy processing systems. All of this is delivered on a secure payment processing system that is reliable and always available.

Agile payment processing can be at the heart of financial institutions' cards and retail payments offerings and act as a hub for a broad range of transactions from different channels, devices, and payment instruments.

### Agile Processing Model — Business Component View

The diagram below provides an integrated component view of the Agile Processing model in an Fl's environment.

Social	Bots	Digital	POS	IVR	Live Agent		Omni Channel
Digital Cou Mobile   POS	ıpons	Loyalty & Rev Card Linked Offe		demption	Campaign Management Segments   Targeting   Execution		Commerce
Integrated Mobile   Onlin		Consumer Co		g			Engagement
Enterprise Issuer Contro		In-Auth Contr Complex Offer Ma			Human Centric Data Customer Orientation		Real Time Data
Portfolio Optimization Fraud Management   Profitability Modeling   Underwriting   Collections   Analytics   Program Management							Management
Configuration Issuer Managed   Deployment   Iteration							Issuer
Cloud Platform Single Platform and Code Base   Monthly Releases   No Code Freezes   "0" Downtime							Processor



# Key Attributes of The Agile Payment Processing Model

What makes a payments processing platform an Agile Processing platform? Below are listed the essential components of a reliable, secure, and flexible agile processing platform.

# CLOUD-BASED SINGLE GLOBAL PLATFORM AND CODE BASE

The foundation of Agile Processing is a cloud-based platform with a single global code base able to configure any business use case or market need. i2c's highly configurable, modular platform enables innovation with high degrees of reliability, availability, and scalability. With a single global code base, issuers are able to rapidly deploy any payment program from the standardized and constantly updated platform—with no coding required. With a cloud-based code stack, there is constant innovation with regular monthly releases that give issuers the opportunity to take advantage of new features to differentiate and respond to market needs.

i2c's modular platform is comprised of highly-configurable components that allow issuers to pick and choose elements based on their unique business and technical requirements. Issuers can rapidly configure, scale, and deploy global programs through a simple web-based interface. They can also quickly gather market feedback, make changes to the program, and re-deploy at scale within targeted timeframes.

A cloud-based platform with regular updates means constant innovation and improvement. When new capabilities or new features are added to the platform to meet local requirements in different geographies, these improvements become available to any customer using the platform around the globe—at remarkably low cost.

## **REAL-TIME. LOYALTY-DRIVEN ENGAGEMENT USE CASE**

A home improvement enthusiast, Dan is need of garden supplies and heads to the store. Dan's most frequently used credit card is one that rewards him the most, and he uses it often when shopping for home supplies. As he wanders through the store looking for fertilizer, he is recognized via beacon technology and receives a text: "Welcome back, Dan. Thank you for being a loyal customer."

Based on his recent purchases, Dan is presented with an instant coupon for 50% off of drill bits via an SMS alert on his mobile phone—which he decides to use. Dan heads to the nearest self-checkout register. He selects his credit card from his mobile wallet and places it in proximity to the NFC reader. He is greeted with "Welcome Dan" on the checkout screen. He scans his items and confirms payment. The instant coupon for the drill bits has already been captured and applied. As he's leaving, he receives an alert and checks his mobile banking app and sees he was given double awards for today's trip to the store.

### **Agile Processing in Action**



### **Engage Customers in Real Time**

Human-Centered architecture takes into account cardholder preferences, purchase history, and information relevant at that time to trigger highly targeted offers.



### **Integrated Digital Commerce**

Real-time "in auth" commerce automatically applies digital coupons with no action required by cardholder or merchant.



# Loyalty & Rewards

Integrated rewards and digital communications tools build card issuer brand equity and top of wallet loyalty.

#### **HUMAN-CENTERED DATA ARCHITECTURE**

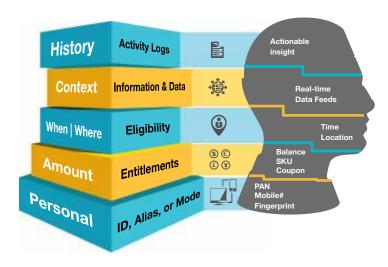
i2c's Agile Processing model leverages a "human centered" architecture—one that takes into account not just the transaction itself, but the context, preferences, entitlements, and other information relevant at that moment in time to the individual cardholder. Unlike general ledger-type legacy processing systems that were designed years ago primarily for posting debit and credit transactions, a data model representation of the customer provides comprehensive real-time information on cardholder transactions and behaviors. This puts issuers in a unique position to take action on this information to deliver an exceptional and value added payment experience—like offers or digital coupons—customized to the cardholder's personal preferences and history.

### **INTEGRATED DIGITAL**

Even years into the digital revolution, many financial institutions still don't have even the most basic mobile functionality, much less sophisticated digital integration in omni-channel environments. Their customers have much better technology in their hands from others like Facebook or Google, and they expect the same form their trusted financial services provider.

Agile Processing solutions like i2c's are mobile-ready, enabling issuers to put fully-branded and configurable web and mobile applications into hands of their customers, which has a huge impact on brand awareness and customer perception of that relationship. Integrated digital solutions should also present a wide range of digital features, including mobile pay products and wallets, text alerts, card controls, contactless, and integrated loyalty features.

#### **Human-Centered Data Model**



### **ISSUER CONTROLLED APIS**

An Agile Processing platform must have robust, well-documented APIs to support a financial institution's existing infrastructure. This allows issuers to bring rich functionality into their own products and maximize their existing IT investments.

### ISSUER/CARDHOLDER ENGAGEMENT

An Agile Processing solution has engagement features integrated directly into the platform for true two-way engagement. Engagement is not just about issuers pushing out marketing messages; it's about communication and deepening relationships by using the right tools to add value and make managing finances, and spending easier and more convenient. i2c's integrated advanced card controls and multi-step alerts give consumers more control over how they budget and spend their money and manage their own accounts. Customers can choose to receive alerts triggered by pre-set spend controls, or even geo-location and external contextual events. They can then take action, for instance, by instantly suspending their account if they discover their card has been stolen.

#### FLEXIBLE CARDHOLDER SERVICING

Flexible integrated cardholder servicing capabilities are an important part of an Agile Processing platform. A modern architecture with a single code stack and well documented APIs makes support of important cardholder servicing functionality like integrated multilingual and CRM support possible. i2c's platform supports multiple languages, has extensible CRM tools to support issuer-managed environments, and can host issuer-branded cardholder websites. Agile payment processing providers like i2c can offer a host of outsourced value-added services, ranging from IVR/VRU systems and 24x7x36 live agent support to fraud management services and collections.

### INTEGRATED LOYALTY AND REWARDS

Agile Processing platforms like i2c's have integrated loyalty and rewards modules that use marketing tools to accurately target customers and engage them with the right message at the right time over the right channel. i2c's solutions can leverage consumer preferences and data insights at the transaction level to engage them at the point of purchase via their payment devices. Reward options like points, account credits, and card-linked coupons are delivered and redeemed via a variety of methods, including in-app, SMS, email, or voice.

### **REAL-TIME "IN AUTHORIZATION" COMMERCE**

Real-time "in-auth" commerce allows you to apply offers and digital coupons directly into the authorization stream without requiring either the merchant or the consumer having to do anything to activate or apply them, even leveraging external contextual events or elements like customer location or behavior from local mobile or social media sources. This provides issuers with opportunities

to interact with customers before, during, and after purchase activities. For example, a customer who called into a bank's call center upset about an issue can be instantly issued a digital coupon redeemable for a coffee as a thank you.

### PATH FORWARD

Programs using an Agile Processing platform can be at the heart of an issuer's credit offerings, regardless of program type or configuration. What are the next steps forward?

### **Visualize Your Roadmap**

Examine your business requirements and your cardholder needs and think about what your business needs to do to be successful. Then look at these requirements through a lens that says technology is not a limitation and sketch out your ideal program roadmap.

### **Evaluate Requirements vs. Technology**

Survey the business line management and technology owners in your enterprise to understand the direct impact lack of speed to market or product differentiation has on your business. Then, document the specific areas that need to be addressed.

### **Explore a New Approach**

Look at how and where Agile Processing can be introduced into your business operations. Agile Processing isn't just about processing technology. The concept and its execution are just as applicable in other areas of credit and program management, such as acquiring, back office automation, settlement and reconciliation, customer service, fraud, and chargeback and dispute resolution.



# **Conclusion**

An issuer's business and reputation depends on rock-solid, reliable programs that deliver the high-impact, personalized experiences that the social and mobile consumers of today expect. More intense competition from new business models and technologies raise the stakes even higher. But instead of building a product roadmap driven by cardholder and market requirements, financial institutions go to market with products dictated by the constraints of outdated legacy platforms never designed for today's market reality.

Agile Processing gives credit issuers the control and flexibility to rapidly and cost effectively create, test, and build differentiated card programs, delivered on a single global platform that is highly configurable and reliable. It allows card issuers to configure their portfolio based on their needs, to respond quickly to market feedback, and to grow their relationships with the right tools and insight.







i2c Inc. provides the cloud-based infrastructure financial institutions, corporations, brands and governments need to launch and profitably manage payments and next-generation commerce products. Its global-ready platform encompasses card-based, virtual and mobile payments, loyalty, and back office solutions. Headquartered in Silicon Valley, California, i2c supports clients on five continents from seven sales and support offices worldwide.

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