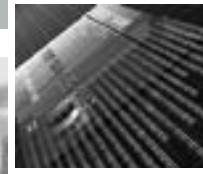




TAG

FinTech

Georgia – at the Epicenter of the Global Payment System and Financial Services



A look at the Georgia FinTech Ecosystem

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Introduction

Did you know that the state of Georgia is the epicenter of the payments industry, a key economic component of the worldwide financial services industry?

According to The Nilson Report, there were over 135 billion payment card transactions in 2011, representing about \$2.3 trillion in total consumer and commercial purchases. Over 85 billion, or nearly two-thirds of these transactions, passed through the global networks of Georgia FinTech organizations.

Numbering over 70 companies, the Georgia FinTech community is a diverse group of organizations that support the payment systems and greater financial services industry. It is made up of a mix of merchant acquirers and card processors such as First Data, Global Payments, Elavon and TSYS; Point of Sale (POS) device manufacturers such as Ingenico and NCR; retail banking solution providers such as Fiserv (CheckFree) and Intuit (Digital Insight); Identity, Analytics and Risk firms such as Equifax and LexisNexis (ChoicePoint), as well as a number of entrepreneurial firms setting the pace for innovation in the financial services marketplace. (See the FinTech company listing on page 2.)

Georgia ranks first in the U.S for entrepreneurship, according to the Kauffman Index of Entrepreneurial Activity (March 2011) and has had the largest increase in entrepreneurship of any state in the last decade, providing a healthy marketplace for financial services.

In sizing the ecosystem, we estimate that Georgia-based FinTech companies exceed \$20 billion in annual revenue. The market capitalization of the eight Georgia-based publicly held FinTech companies exceeds \$22 billion. Measured in employees, we estimate the total number of FinTech company staff to exceed 25,000. For example, the publicly held organizations employ more than 105,000 employees worldwide, with about 20% working in Georgia driving FinTech innovation and ensuring payment transactions are flowing smoothly.

The FinTech Society of the Technology Association of Georgia (TAG) launched an initiative to define the FinTech ecosystem and quantify its impact on Georgia's economy, with the goal of raising visibility for this key business sector and identifying opportunities to foster its continued growth and success. Our research is NOT intended as equity analysis; we worked with publicly available data and the guidance of equity professionals, whose assistance we greatly appreciate. We also conducted qualitative interviews with firms across Georgia's FinTech spectrum, whose perspectives were invaluable and will clearly shape the sector's future direction. As we build awareness of the FinTech community and promote synergies between its companies and the resources of the state, the entire Georgia ecosystem will benefit.

Key Georgia FinTech Statistics

- Over 85 billion payment transactions pass through the computer systems of Georgia FinTech companies.
- Of the 30+ million global card-enabled merchants, over half rely on the technologies of Georgia FinTech organizations.
- The publicly held FinTech companies with headquarters in Georgia have a combined market capitalization of \$22+ billion.
- The Georgia-based FinTech community employs more than 25,000 professionals.
- The combined annual revenue of the Georgia FinTech organizations exceeds \$20 billion.

TAG FinTech Mission

TAG FinTech's mission is to build recognition of Georgia as the hub of choice for the world's leading financial services and payment processing organizations.



TSYS® is authorized to produce a range of payment cards, including Visa®, MasterCard®, American Express®, Discover®, private-label, prepaid and other unbranded payment cards.

Georgia FinTech Organizations

The FinTech ecosystem comprises a number of sub-segments that further define the specialties of the companies. The table below lists the segments and a representative sample of companies in each segment.

Georgia FinTech Organizations	Card Processing/ Merchant Processing/ Point of Sale	<ul style="list-style-type: none"> • Bank of America Merchant Services • BlueFin Payment Services • Cynergy Data • Elavon • EVO Payments International 	<ul style="list-style-type: none"> • First Data • FleetCor • Global Payments • Ingenico • NCR (Radiant Systems) • NOWaccount • Payscale Advisors 	<ul style="list-style-type: none"> • Priority Payment Systems • SunTrust Merchant Services • TSYS • Veracity Payment Solutions • Verifone • WorldPay
	Gateways/ Alternative Payments	<ul style="list-style-type: none"> • Acculynk • ControlScan 	<ul style="list-style-type: none"> • Paymetric • Seergate 	
	Prepaid/Loyalty & Points	<ul style="list-style-type: none"> • Cardlytics • Cartera (Vesdia) • Coindata 	<ul style="list-style-type: none"> • CoreCard Software • Coredata • Directo 	<ul style="list-style-type: none"> • FirstView Financial • InComm
	Retail Banking Solutions, including Electronic Bill Payment and Presentment	<ul style="list-style-type: none"> • ACI Worldwide (S1) • Chexar • Deluxe Corp. (Bankers Dashboard) 	<ul style="list-style-type: none"> • FIS (Certegy) • Fiserv (CheckFree) • Intuit (Digital Insight) • Jack Henry (Goldleaf) 	<ul style="list-style-type: none"> • Qualcomm (Firethorn) • VSoft
	Identity/Analytics/Risk	<ul style="list-style-type: none"> • Black Box Insight • Compliance 360 • CompuCredit 	<ul style="list-style-type: none"> • Equifax • FactorTrust • IDology 	<ul style="list-style-type: none"> • L2C • LexisNexis • Microbilt
	Trade/Payment/ Lending Solutions	<ul style="list-style-type: none"> • AdvanceMe • FTRANS • GreenSky Credit 	<ul style="list-style-type: none"> • Kabbage • Official Payments • ParkMobile 	<ul style="list-style-type: none"> • Paymetric • PrimeRevenue • TransCentra
	Capital Markets	<ul style="list-style-type: none"> • Cash Flow Analytics • eRecover 	<ul style="list-style-type: none"> • FxBridge • IAS 	

What is payment processing?

In simple terms, payment processors handle the transfer of non-cash negotiable instruments including checks, credit transfers, direct debits, credit and debit cards, electronic funds transfer, etc.

The global payments and settlement infrastructure comprises a complex network of domestic and cross-border payment systems with various regulatory and governing bodies overseeing the smooth functioning of these networks.



TSYS Real-time Authorizations is TSYS Merchants Solutions' in-house product line for authorizing and capturing payment transactions in real time. 24 hours a day, 7 days a week.

Georgia - Source of Innovation

Since the mid-1960's, Georgia FinTech companies have been leaders in the development and running of innovative financial services and payments solutions. Today, as technology improves and younger generations are driving online commerce, FinTech organizations continue to drive new products and services to market. Here is a sampling of some of the new technologies driving the global payments industry:

- **Mobile Commerce:** With the proliferation of smart mobile phones, mobile commerce has become a logical extension of this technology platform. Juniper Research's Mobile Payments Study forecasts mobile transactions and money transfers to be valued at over \$600 billion by 2013.
- **Merchant POS Devices:** POS devices are evolving quickly to support consumers and merchant needs for mobile payments. Georgia FinTech organizations are developing new devices that enable the mobile phone to be used as the cardholder device, while the merchant is accepting the signal on its POS devices via methods such as Near Field Communications (NFC).
- **Mobile Wallet:** a mobile wallet enables the storage of credit card, debit card, gift card, loyalty card information and more on a mobile phone. While very early in its market acceptance, this payment methodology could become a game changer.
- **Big Data:** as more and more purchases occur online via non-cash transactions, an enormous volume of data is being created. This vast quantity of data (Big Data) represents a treasure trove of marketing information providing valuable insights for both merchants and transaction card vendors. The challenge organizations face is how to analyze the vast quantities of data and extract the information needed – data that is often unstructured. New software and hardware technologies are providing better ways to analyze the volume, velocity and variety of data points.

The Georgia FinTech Ecosystem

As with any thriving ecosystem, Georgia's FinTech community depends on diversity for its sustenance and regeneration: large and small companies in various stages of their lifecycles; an ample supply of labor offering various skill sets; and, a solid supporting infrastructure and business climate. To better understand Georgia's standing on these more qualitative measures, TAG FinTech members engaged in open-ended interviews with companies across the FinTech spectrum. These interviews – conducted over the second and third quarters of 2012 – validated some existing hypotheses, added new insights, debunked some common misperceptions, and revealed an impressive commonality of purpose essential to a healthy ecosystem.

The flagships of Georgia's FinTech community include corporate headquarters for well-known public companies like Equifax, Global Payments, and TSYS. As a further endorsement of Atlanta's prominence First Data and NCR each relocated its corporate headquarters to metro Atlanta in the past decade.

Mining Big Data

Every day, we create 2.5 quintillion bytes of data – so much that 90% of the data in the world today has been created in the last two years alone.

The online and electronic data we create can be a goldmine to financial institutions, merchants and processors. Knowing more about buying trends and preferences enables marketing organizations to understand consumer needs and push special offers to consumers.

The economic value of Big Data analysis can yield excellent returns. Recent research from the McKinsey Global Institute suggests that the annual value of deciphering Big Data can be measured in the billions of dollars, much of it in the financial services industry.



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Additionally, several industry leaders (Fiserv, FIS Global, and Intuit - through its Digital Insight/IFS business unit) have chosen to locate their strategic/thought leaders in Georgia, as well as other significant operations. As further validation of Georgia's central role, Online Resources recently announced the opening of an Atlanta office with the stated intent of tapping into a robust payments knowledge talent pool which a recent article in the trade publication *Cards & Payments* called "a financial technology recruiter's dream." Cementing Georgia's status, American Banker's 2012 FinTech 100 rankings list four Georgia headquartered companies among the top 20 global FinTech firms, with two additional firms having significant Georgia presence.

On the other end of the FinTech spectrum, Cardlytics is among the industry's brightest recent success stories, in Georgia or anywhere. Cardlytics is itself an example of Georgia as a magnet for innovation, as its founders chose to relocate to Atlanta to pursue this startup.

A Rich Ecosystem – Building Awareness

At TAG FinTech, we believe there is a lot to be said about the attractive ecosystem. Building awareness is part of our charter.

Talent: Georgia boasts an ample supply of senior-level talent as well as entry level tech talent, the latter thanks to an excellent feeder system as well as Atlanta's status as a regional mecca for recent college graduates. To the extent that any shortage exists it is at the mid-tenure ranks, a period where high-potential tech talent may perceive a need to relocate.

- We propose the pursuit of a "Faces of FinTech" campaign featuring case studies of successful Georgia tech careers. Such a campaign could encourage more high school/college students to consider tech careers and more importantly, help relatively recent graduates to visualize a local career path.

Transportation: Atlanta's status as a transportation hub, particularly the 2012 unveiling of Hartsfield Jackson's state of the art international terminal, was cited by several companies as a key geographic benefit- this is particularly true for firms with global footprints and/or aspirations, given the flight corridors and convenient transit times. As the FinTech industry continues its rapid globalization, this benefit will pay even greater future dividends.

Culture: Atlanta's expanding status as a cultural hub also yields benefits as a talent magnet, particularly at the senior levels. Companies report no issues in enticing top talent to Georgia, and anecdotally there are cases of firms accommodating leaders with a specific desire to situate here. If there is an issue, it is in combatting the surface-level perception that up-and-coming talent must migrate to Silicon Valley to earn its tech stripes.

FinTech Innovations

Georgia FinTech companies have created many industry innovations. Here is a sampling of recent new products or services.

BankAmeriDeals™ – Georgia-based Cardlytics is powering the Bank of America's roll out of merchant funded rewards to its account holders.

Kabbage® – Provides real time lending solutions to small merchants active on sites such as eBay, Amazon and Yahoo Stores. Kabbage has developed advanced data analytics to provide risk-scoring metrics based on sales data, customer traffic and buyer feedback to deliver a lending decision in an average of 8 minutes.

NCR Silver™ – the first tablet-based Point-of-Sale (POS) device from a major manufacturer, NCR. NCR Silver accepts cash and credit cards, and tracks sales by item or category.

OfferWise™ – First Data's OfferWise enables publishers to deliver card-linked offers to consumers on behalf of merchants.

OTC Network™ – InComm's Medagate unit provides an innovative restricted spend payment card enabling Medicare and Medicaid members to purchase over-the-counter medications and other health and wellness items.

Spectrum™ – recently introduced by Georgia-based Equifax, the Spectrum Verification Services Platform provides loan-level verifications to help lenders increase the quality of loans, streamline processes and mitigate loan repurchase risks.



"Take Payments, Anywhere, Anytime with VirtualMerchant Mobile from Elavon."

Education: Thanks to an excellent university system (Georgia Tech, University of Georgia, Emory, Georgia State, etc.), Georgia is the ideal training ground for future FinTech professionals. For example, Georgia educational institutions will be responding to one of the hottest sectors within FinTech – the analysis and harnessing of Big Data. A recent study indicates a nationwide shortage of 149,000 data analysts.

- Georgia universities should take a leadership role in equipping students with these skills; industry leaders can offer perspective through lectures, fireside chats, etc.

Building Awareness for the FinTech Community

Any awareness campaign should also endeavor to dispel a few misperceptions we have heard across our interviews.

Venture Capital: One challenge with VC money raised outside of Georgia is that the new funders may lack sufficient familiarity with the depth of Georgia's FinTech ecosystem. Founders have occasionally faced questions of "when are you going to move your start-up to Austin or Mountain View?" until funders can be educated.

Innovation: Another misperception is that Georgia's standing relies more on legacy systems than innovation. This stereotype runs counter to the reality of Google having selected First Data's technologies to enable key aspects of Google Wallet; or Cardlytics' solution serving as the backbone for BankAmeriDeals; or NCR's Silver offering revolutionizing tablet-based POS capabilities. (See sidebar on page 4.)

In fact, many of the market's innovators have been acquired by larger firms at varying stages of their evolution (e.g., Digital Insight by Intuit, CheckFree by Fiserv, Goldleaf by Jack Henry). These acquisitions have provided target companies with the resources to continue their expansion, brought new lifeblood and fresh perspectives to the buyers, and perhaps most importantly, set into motion additional waves of serial entrepreneurs branching off to pursue their next market-redefining innovation. It is this very act of regeneration- and the mix of companies spanning all stages of product life cycles – that creates the vibrancy that distinguishes Georgia's FinTech ecosystem.

Starting in Georgia

"For several quarters, if not years, one of our primary investors regularly asked management why they were not going to move the company to another location, a location that was perceived as being a better business environment for the company. After 14 consecutive quarters of meeting/exceeding plan, the investor stopped asking, recognizing that Atlanta was indeed an excellent choice based on availability of talent and the work/life culture. The mindshare of the capital community is not commensurate with the FinTech talent pool and history of innovation. There is real value to generating awareness, capital access and technology investments in the Georgia FinTech community."

Georgia FinTech CEO



First Data's STAR® Network offers deposit sharing and surcharge-free ATM access, as well as real-time network management for financial institutions.

Meeting the Business Challenges

Like all industries, FinTech organizations have unique challenges that drive their business strategies. At the core is the need to balance technology innovation against the burdens of seamlessly and securely moving billions of dollars through the world's financial systems day in and day out. Among the challenges:

- **Regulatory and governance:** Increasingly complex rules governing money movement and the disclosure of personal information; often, these rules differ by geographic market.
- **Risk Management:** Managing personal and transaction information, data security and fraud are fundamental.
- **Technology infrastructure and innovation:** FinTech organizations must support their legacy products and systems, and support existing commerce, while still innovating and investing in new platforms for the future.
- **Market acceptance:** Innovation clearly matters, but is irrelevant if consumers do not accept the new products and new ways of paying for their goods and services. Adoption rates of new payment platforms must be strong at a market level to justify continuing investments.
- **Compliance:** The cost to achieve compliance with ever-growing regulatory requirements is a constant challenge for all FinTech entities. For example, PCI-DSS compliance (data privacy) is an ongoing challenge for merchants and processors alike.
- **Competition:** leveraging product differentiation is another battle that competitors in the FinTech landscape fight constantly. In turn, helping financial institutions educate generations of consumers on new technologies, be it online banking or mobile wallets, keeps the landscape highly competitive.

GA Legal Change Facilitates Credit Card Industry - 1987

In 1987, the Georgia General Assembly was asked to remove the archaic restrictions on bank issued credit cards. Back then, there was a restriction that the cards could charge no more than 18% and an annual fee of no more than \$12. We promised the General Assembly if they would let the free market act, rates and fees would be lowered and jobs would be created as we would attract credit card industries from other states where legislatures wanted to control the rates and fees. Within days of the law going into effect, the credit card companies were dropping rates as low as 12% and the annual fee all but disappeared. Companies that had either subsidiary banks or credit card operations announced they were opening offices in Georgia. Several out of state banks moved their credit card operations to Georgia to take advantage of our free market when their own states chose to not act.

Joe Brannen, President & CEO, Georgia Bankers Association



"Take Payments, Anywhere, Anytime with VirtualMerchant Mobile from Elavon."

About TAG FinTech

TAG FinTech is the TAG society focused on building an interactive and healthy business environment for Georgia-based payment processing and related financial technology organizations. Launched in 2010, TAG FinTech today represents about 70 organizations comprising eight sub-market sectors that include both very large and established organizations and smaller start-up organizations.

About The Technology Association of Georgia (TAG)

The Technology Association of Georgia (TAG) is the leading technology industry association in the state, serving more than 17,800 members and hosting over 200 events each year. TAG serves as an umbrella organization for 31 industry societies, each of which provides rich content for TAG constituents. TAG's mission is to educate, promote, influence and unite Georgia's technology community to foster an innovative and connected marketplace that stimulates and enhances a tech-based economy. The association provides members with access to networking and educational programs; recognizes and promotes Georgia's technology leaders and companies; and advocates for legislative action that enhances the state's economic climate for technology. Additionally, the TAG Education Collaborative (TAG's charitable arm) focuses on helping science, technology, engineering and math (STEM) education initiatives thrive. For more information visit the TAG website at www.tagonline.org or TAG's community website at www.TAGthink.com. To learn about the TAG-Ed Collaborative visit <http://www.tagedonline.org/>.

FinTech Organizations Interviewed

We would like to thank these Georgia-based FinTech organizations for their participation in providing data and counsel in the preparation of this white paper, as well as their support of TAG FinTech.

- Acculynk
- Cardlytics
- Elavon
- First Data
- Fiserv
- Global Payments
- Kabbage
- Paymetric
- TSYS

Front Cover Photo

NCR Silver™ is a complete point-of-sale solution that runs on an iPad®, iPhone® or iPod touch®.



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