



# Experian teach-in

4 December 2019



# Agenda

Welcome

Nadia Ridout-Jamieson

Technology update

Barry Libenson

Experian Health

Jennifer Schulz

Latin America regional overview

José Luiz Rossi

Consumer Information North America

Alex Lintner





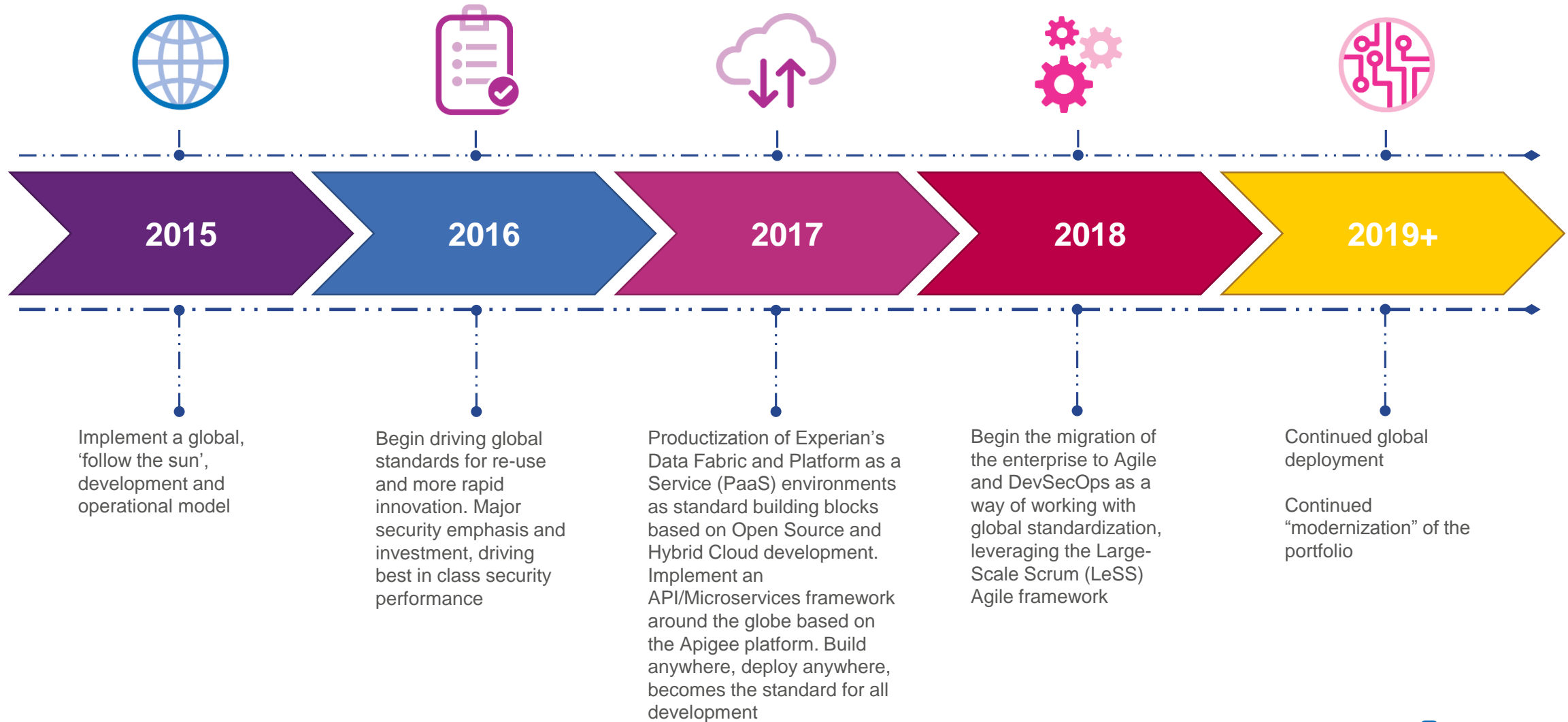
# Technology update

Barry Libenson

*Global Chief Information Officer*



# 4 years of major technology change





# Benefit for customers

1. High level of confidence in Experian's ability to keep its data secure.
2. Increase in the release of innovative products such as Ascend, Boost, and modernized bureaus, e.g. Colombia and India
3. Ability to run applications in any cloud, public or private, as well as incorporate customer data regardless of location, leveraging technology such as AWS Direct Connect
4. Increased application reliability based on newer hardware as well as newer architecture
5. Flexibility in how customers consume data, including API data access as well as programmatic access



# Security, a closer look

1. We have a multi-tiered approach to security:
  - Prevention – stopping bad actors from entering the estate
  - Detection – knowing if a bad actor has entered the estate
  - Mitigation – minimizing a bad actor's ability to extract anything of value if they do enter the estate
2. Global Security Operations Center (SOC) coverage with 'follow the sun' capabilities, based in the US, UK and Malaysia
3. Major emphasis on automation and tools to improve efficiency, speed and efficiency
4. Move to DevSecOps increases the velocity of development while ensuring a robust security discipline is followed



# Deployment and development strategy

1. Applications can be deployed into any operating environment including, but not limited to:
  - Any public cloud – AWS, Azure, GCP, Oracle Cloud
  - On-prem – in the customer's data center, in an Experian data center/private cloud, in a co-located facility
  - Hybrid – Any combination of the above (via Docker containers and orchestration)
2. Applications can combine Experian and customer data seamlessly while maintaining confidentiality
3. Code is developed using Experian's PaaS environment based on OpenShift to drive consistency, re-usability and portability
4. Code is deployed using containers to facilitate scaling and portability



# By the numbers

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We typically deploy 20,000+ containers a day. From an overall metrics perspective, this is leading-edge and dramatically accelerates application testing by creating multiple test environments that are ephemeral. This reduces testing time from hours to minutes.

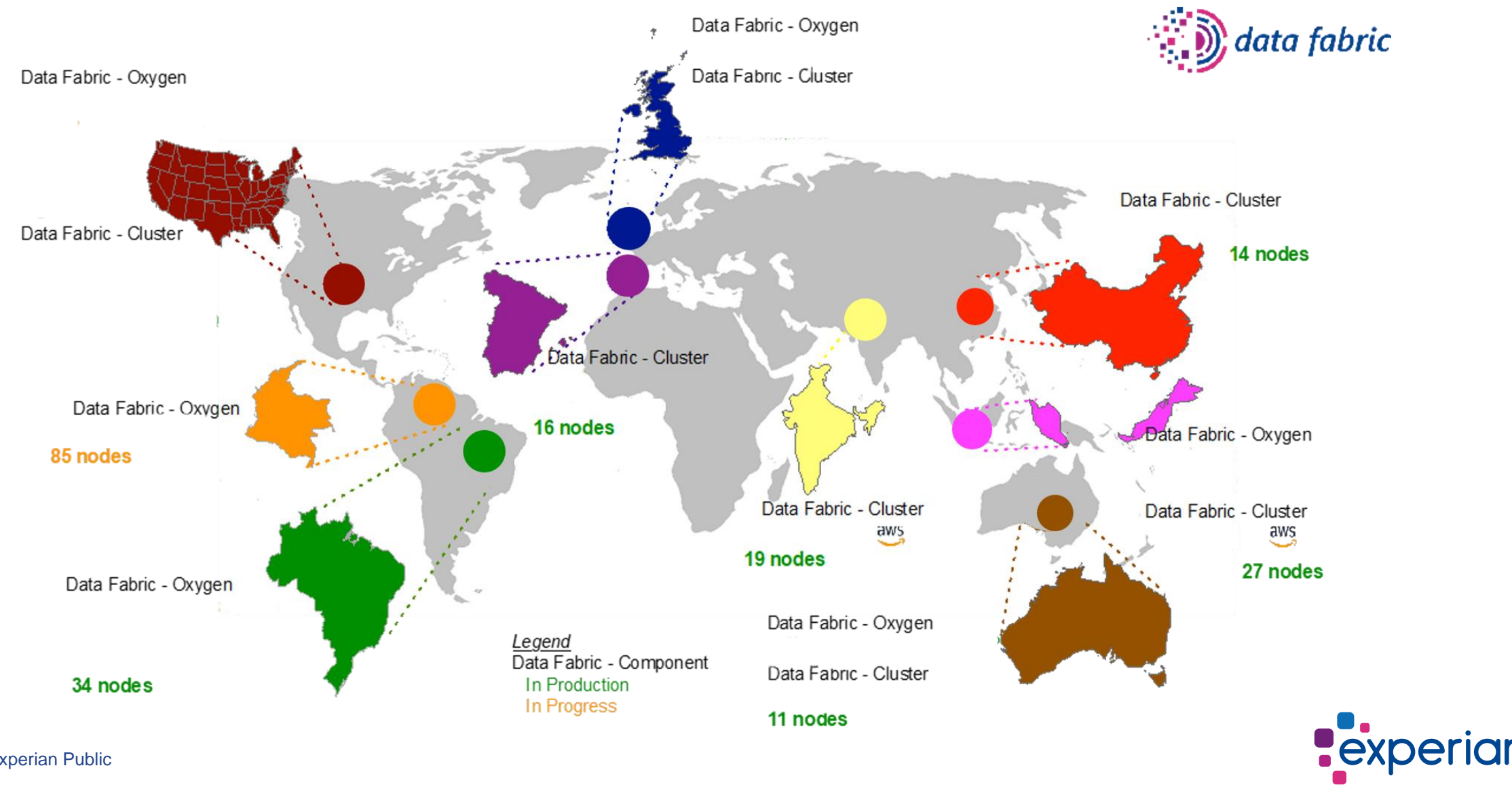
We are operating one of the largest global Kubernetes development clusters in the world with over 12TB of RAM. Running a single global cluster provides both financial and operational efficiency.

Over a third of Experian's software developers are now doing 100% of their work using the Platform as a Service (PaaS) environment, which we call AppCanvas. By the year end, we expect more than half of our developers to be up and running on AppCanvas.

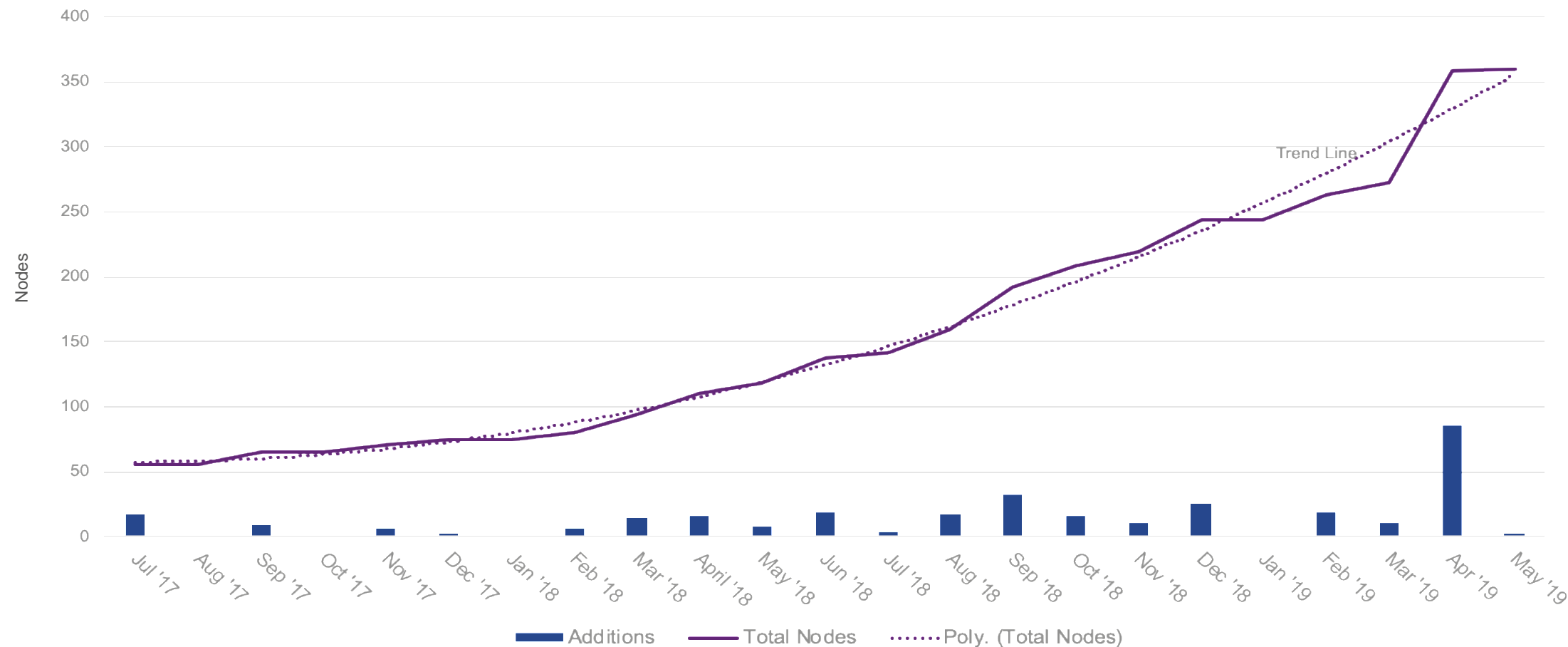
API Calls exceed 30 million/month.



# Data Fabric and Oxygen global adoption

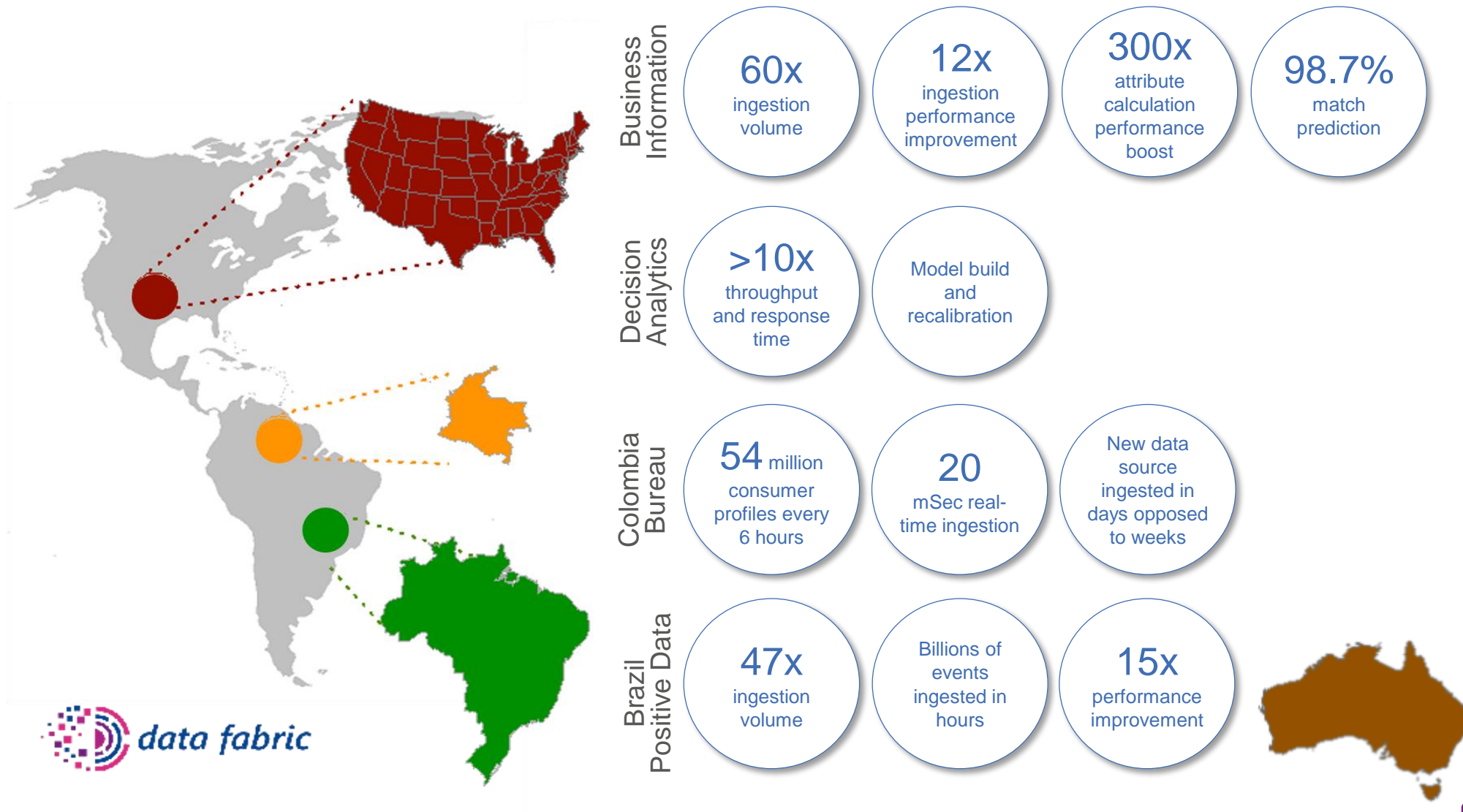


# Data Fabric - global cluster growth



Average node capacity – 24 vCPU, 256 GB memory and 40 TB storage  
Total Capacity (approx.) – 7500 vCPU, 80 TB memory and 12 PB storage

# Data Fabric – early results





# Speed to market

- US – Decision Analytics pipeline configured and operationalized in 3 weeks
- Brazil – positive data basic pipeline configured in 4 weeks or 2 Agile Sprints
- Colombia – new data sources configured for ingestions, linking and profile creation in 3 to 5 days
- Australia – SAS replacement MVP – the overall processing time reduced from almost 2 days to a couple of hours

# Positioning Experian for the future

- Customer obsession - introduce new data products that delight customers, rapidly and at a low cost
- Speed of execution - bolt-on alternative data sources, link identities, generate insights through configuration, not coding
- Data accuracy - improve data accuracy through stochastic, artificial intelligence/machine learning and high-throughput algorithms







# Experian Health

Jennifer Schulz

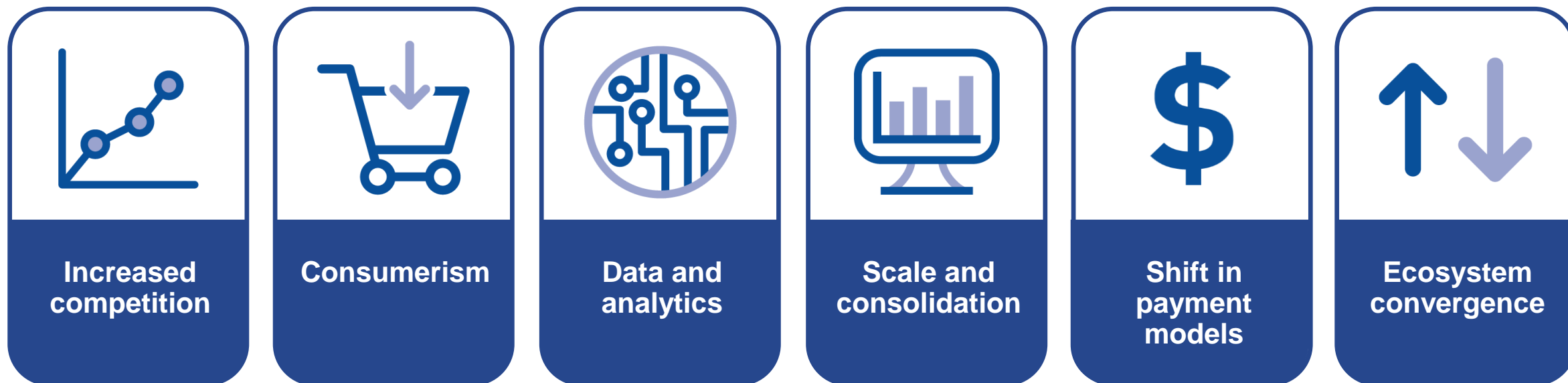
*Group President, Health,  
Auto and Marketing Services*





# US healthcare market context

The American healthcare system is ripe for disruption, and a number of trends are driving the need for payers and providers to evolve and change.

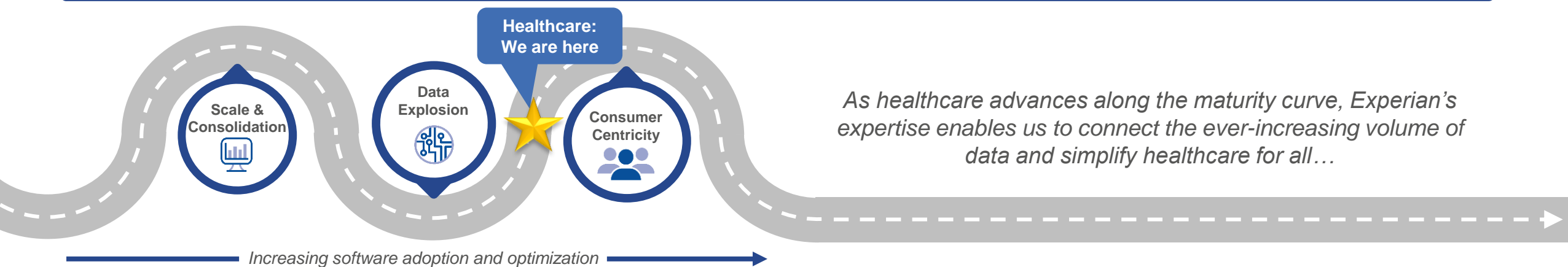


US healthcare spend, estimated at US\$3.65 trillion in 2018, represents ~18% of US GDP.

# Experian's role in healthcare

In many industries, we use data and analytics to drive efficiencies in credit, payments, and fraud pre-vention. Healthcare has encountered the same market dynamics, with Experian fulfilling similar needs...

## Similar market dynamics



## How we help in Health

We increase efficiencies across financial and administrative tasks to make smarter business decisions, boost bottom lines, and strengthen patient relationships



Verify and manage identity, reducing fraud and errors



Drive better decisions with our data and, unique to our health business, drive better processes with smart workflow software



Help our customers get paid by their customers, with an improved consumer financial experience



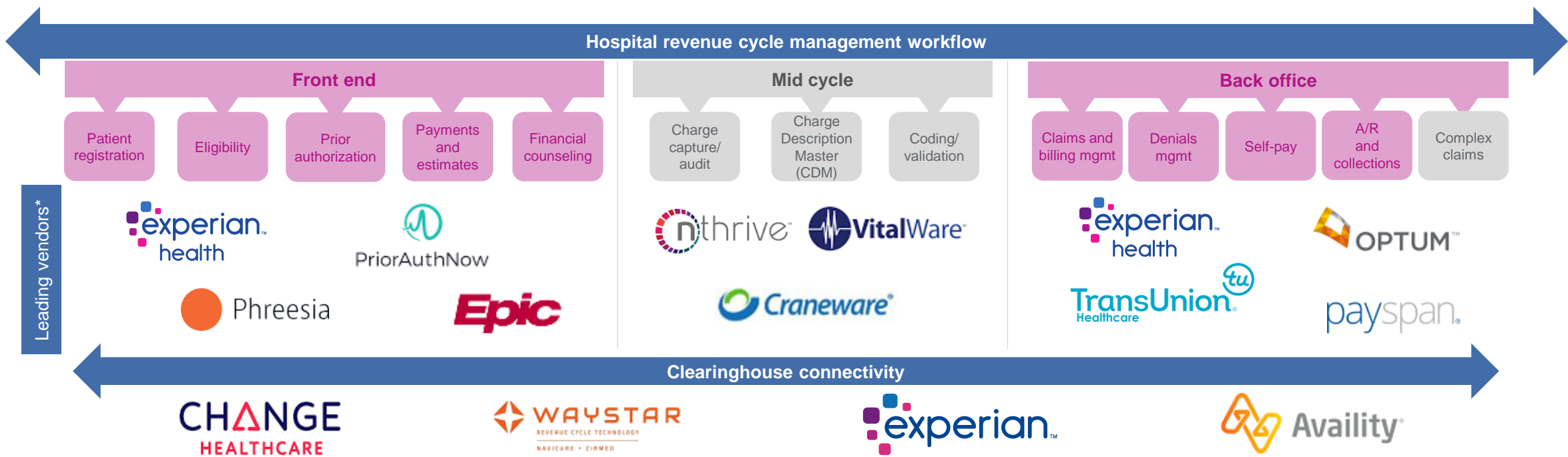
# Our mission

To use data-driven insight  
to **connect and simplify**  
healthcare for all



# Where we win

- Experian Health offers **front- and back-end products** primarily to **large hospitals and medical groups**; over 60% of all US hospitals use at least one Experian solution
- Our RCM solutions help providers manage the **financial and administrative aspects of the healthcare journey**
- No single competitor has capabilities at scale across revenue cycle (front – mid – back); incumbents and disruptors are working to **move upstream to front-end** to the start of the patient relationship)
- We are uniquely positioned — with strong front-end patient access offerings — to **own the patient relationship from the beginning of the healthcare journey** through to collections. Experian's broad capabilities will allow us to move even further upstream, as we leverage targeting and consumer (patient) acquisition expertise



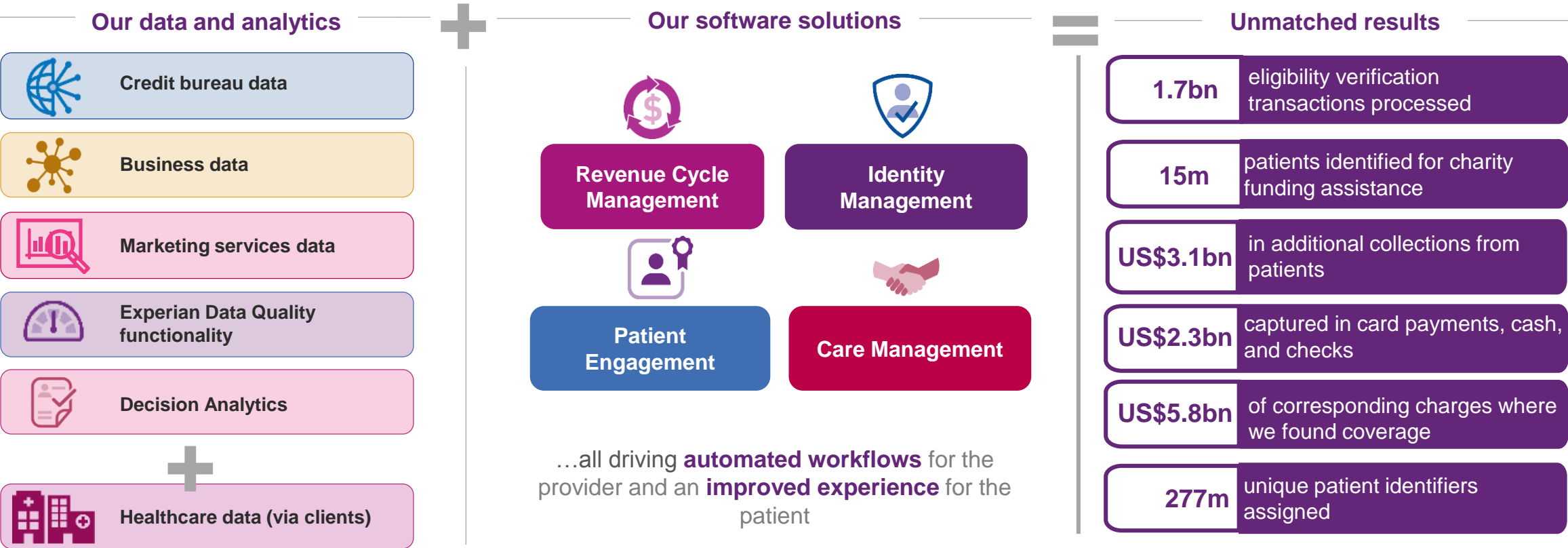
*\*This is a condensed, illustrative list of leading vendors and in no way encompasses the entire market*

Key:   
  Experian Health offers solution



# The Experian advantage

It is the combination and quality of our data and our deep analytics capability where clients benefit from tremendous gains in intel and insight—driving greater productivity within health systems’ workflows.

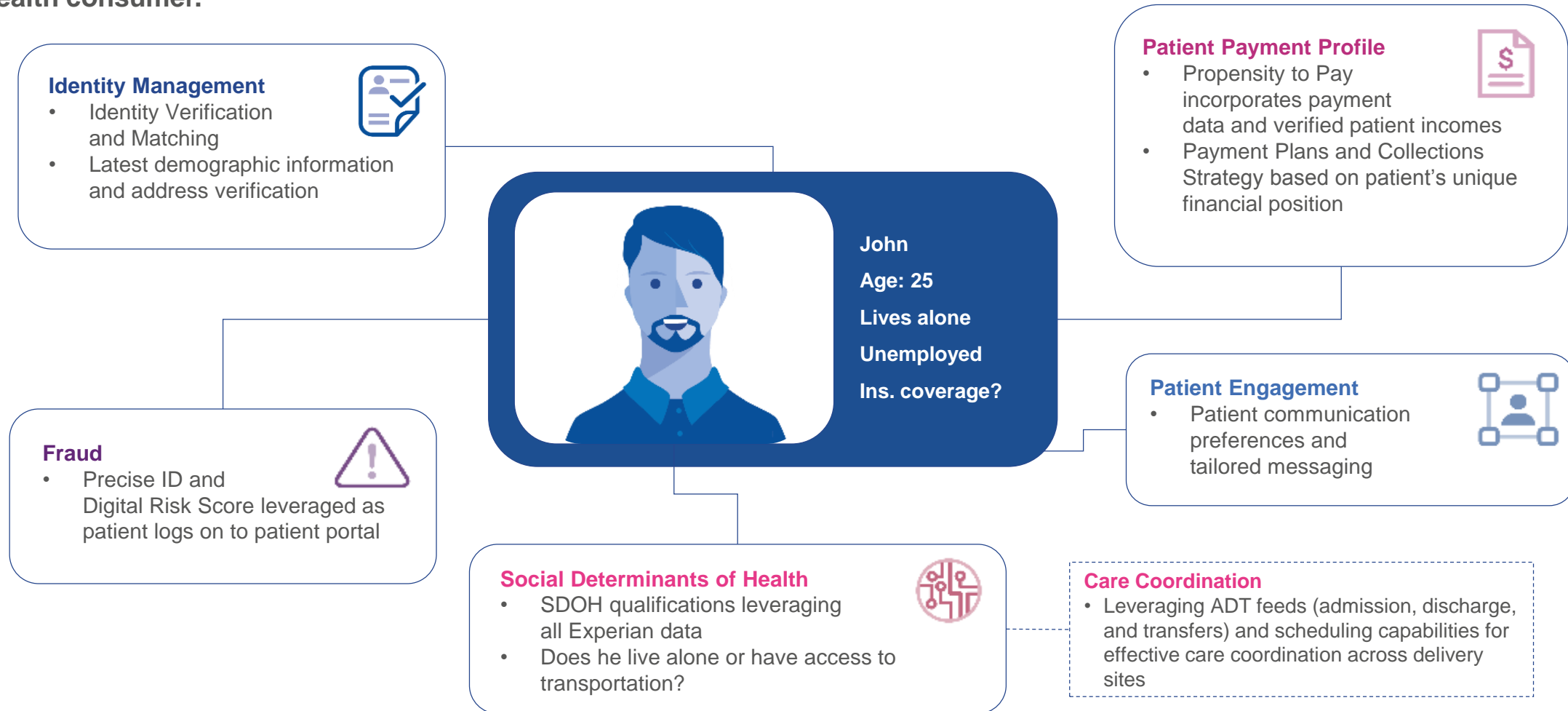


**The right data can transform healthcare**—from leveraging credit data to create a personalized, nearly invisible, payment experience for patients, to having consumer data insights into how and when to reach patients to improve the quality of care and their overall healthcare experience.



# Experian's unmatched view of the patient

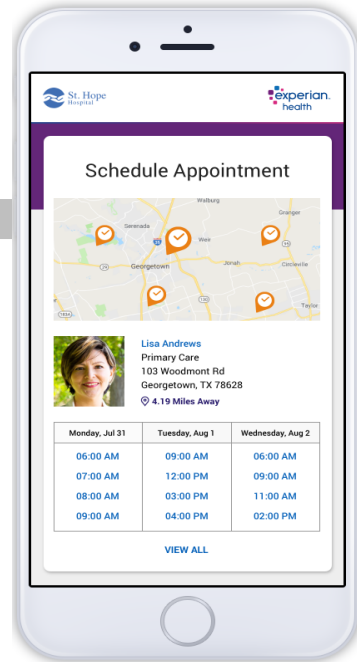
With the backing of Experian's robust platforms and data assets, we can deliver the most comprehensive view of today's health consumer.





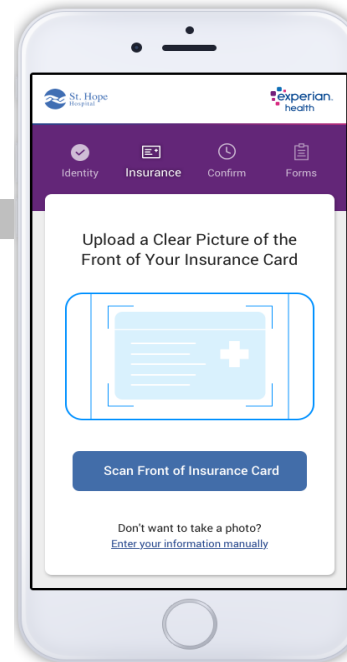
# Delivering an improved consumer experience

Patient schedule



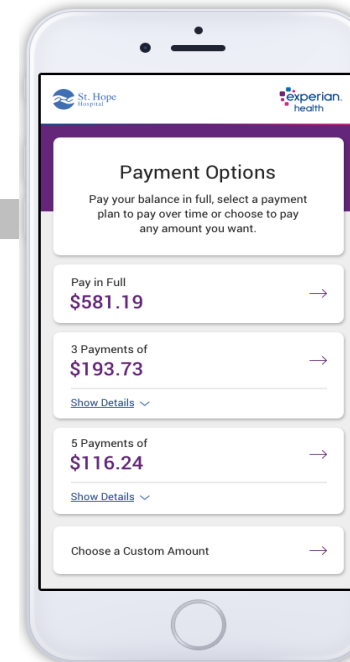
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Registration accelerator



2

Patient financial advisor



3

Modular digital platform helps providers improve their customer experience—while helping consumers navigate the financial and administrative aspects of their health journey

# Experian Health: Vision for FY24

Experian Health's mission is to use data-driven insight to connect and simplify healthcare for all.

## Where we are now...

- Leading products in both **front-end** and **back office RCM**
- Customer reach of over **60% of US hospitals**

## Where we are going...

- Value-added solutions fueled by **data and analytics**
- The **patient identity connector** in the health ecosystem
- Broader customer mix of **providers, payers, and pharmacies**

## How we get there...



### **Evolve**

Core RCM Business



### **Innovate**

Offerings around Key Growth Opportunities



### **Diversify**

with Targeted Strikes in New Markets

All three components bring a heightened focus on **consumerism** and **data** – learning from the data we have and acquiring data assets to drive future innovation for our customers



# Latin America regional overview

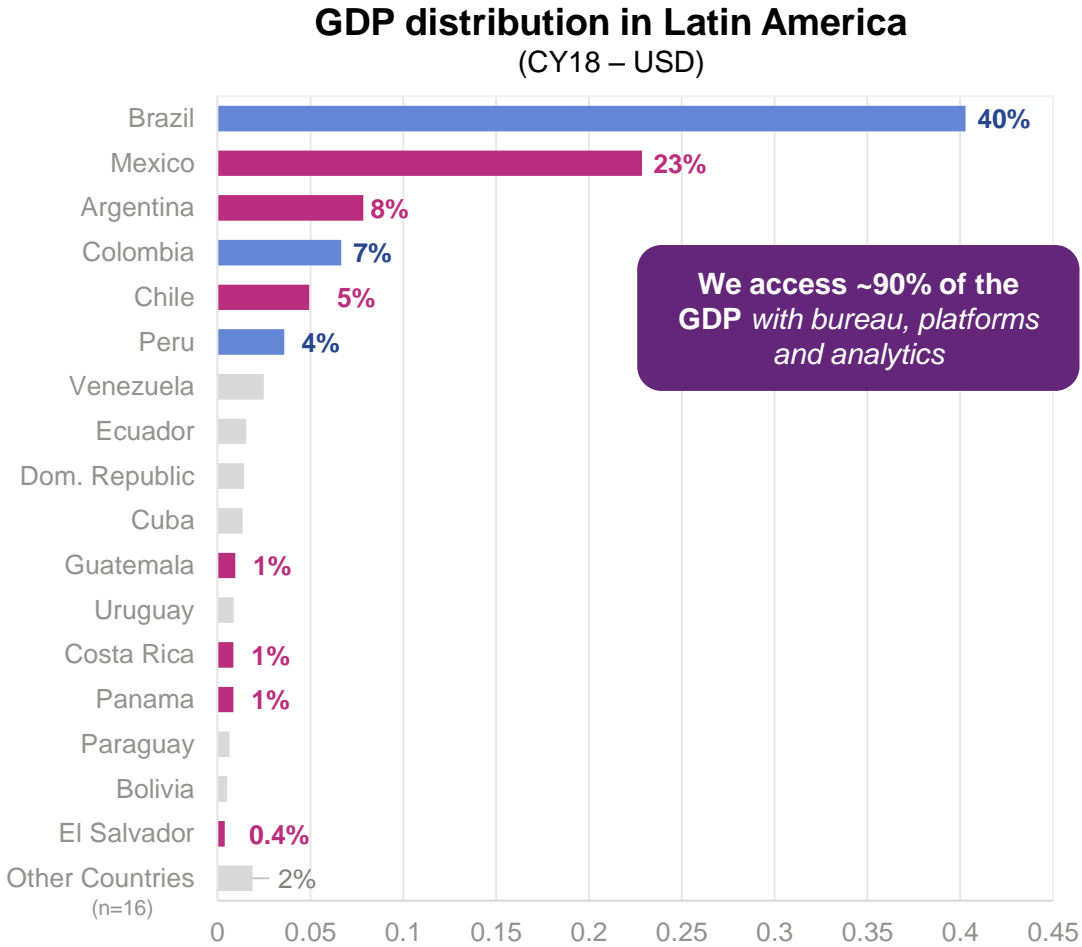
José Luiz Rossi

Managing Director, Experian Latin America



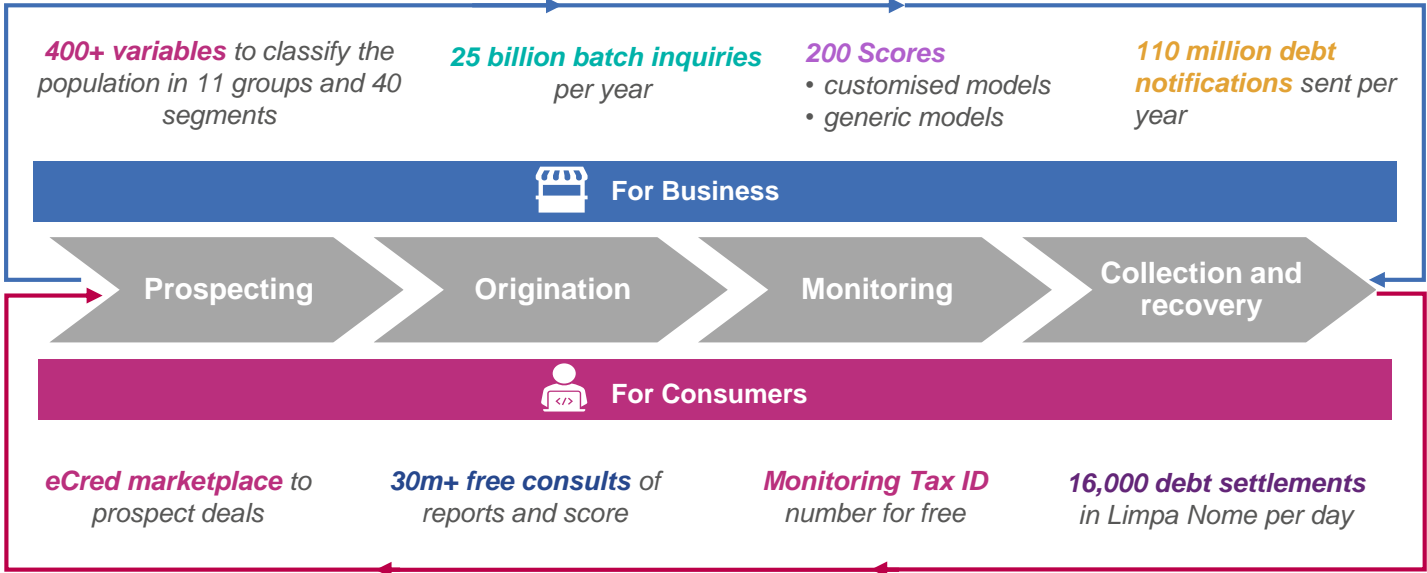


# We have a bold footprint over the main countries of Latin America




# Our business in Brazil has unique strengths


## We solve problems for clients and consumers across the financial lifecycle



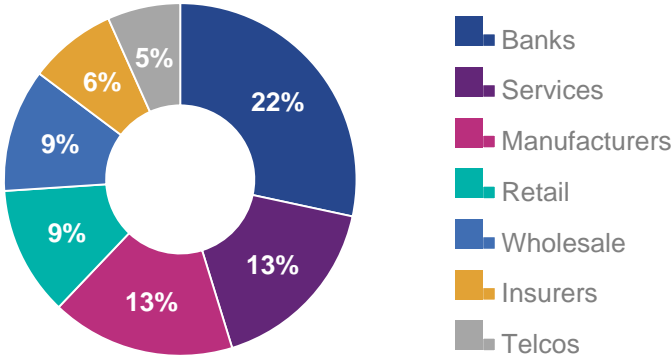
## Key competitive advantages

 **Global capabilities delivered locally**

 **The biggest data portfolio in Brazil**

 **Unique direct relationship with consumers**

## Revenue per main business sector



Services: Google, Facebook, Uber, Netflix etc and represents 77% of total revenue

 **Clients**  
**500,000+**  
direct and indirect

 **Brand and media**  
**18,555**  
positive mentions (H1 19)

 **Employees**  
**2,500+**  
direct

 **Consumers**  
**39m+**  
enrolled in database

# Macro factors

## Structurally improving economy

- Slow recovery (GDP to grow 1-2% in 2019), but important **structural reforms** are being implemented
- Pension **reform approved** (set to save US\$230bn to US\$340bn in 10y). Additional measures such as **privatisations** and **tax simplification** under consideration
- Consumer **delinquency rate has halted**
- **Low interest rates** (5.5%) and inflation (2.9%) leading to real earnings increase and **faster consumer credit growth**

## Technology and analytics adoption

- Rapid adoption by businesses of all sizes, creating **new growth opportunities**
- Automation and fraud prevention in **focus across many sectors** – financial services, insurance, retail, telco and manufacturing
- Growing demand for **Software-as-a-Service** (SaaS)



## Regulatory environment evolving

- **Open banking** discussions in early stages, targeting implementation by 2020
- **Data protection law** to be enacted by 2020, raising data security standards
- Central Bank seeking to improve competitiveness and efficiency with **liberalising measures**

## Engaged consumers

- Broad **adoption of digital** & mobile (Brazilians spend 9h/day on internet, being 44% on mobile devices)
- Consumer **behaviour changing** as digital journeys become more prevalent: 36% of Brazilians (75m) are digital buyers, the highest share in Latam countries
- **Growing expectations** of frictionless and prompt services with blurring separations between **online and offline experience**

BRL-USD @ 3.79



# Positive data impacts

## Positive data overview

- Positive data is part of a broader Central Bank agenda to **improve efficiency in the financial sector**. In April 2019 the law was amended to replace the former opt-in system by **opt-out**.
- 4 companies (Serasa Experian, Quod, BVS and SPC) were **accredited by the central bank** in October 2019 to access positive data
- Financial Institutions **register data** transmission started in October 2019; historical data in November 2019
- **Commercialisation** expected to start in January 2019
- **Telco, retail and others** to start data transmission in H1 2020

## More on central bank agenda

### Widen access to credit at more affordable rates

- Positive data
- Credit card receivables
- Simple credit enterprise

### Simplify and modernise the banking system

- Regulatory sandbox
- Open banking
- Instant payments

## Impacts



2.5m SMEs expected to access **better financial services** at **lower rates**



Consumers with negative data: **63m**;  
Consumers with positive data: **>150m**



**Lower interest rates** (current consumer annual averages: personal loans - 165%; credit cards - 346%)



Potential **increase of credit-to-GDP ratio** from 47% to 67% in 10 years



22.6m consumers expected to access **better financial services** at **lower rates**

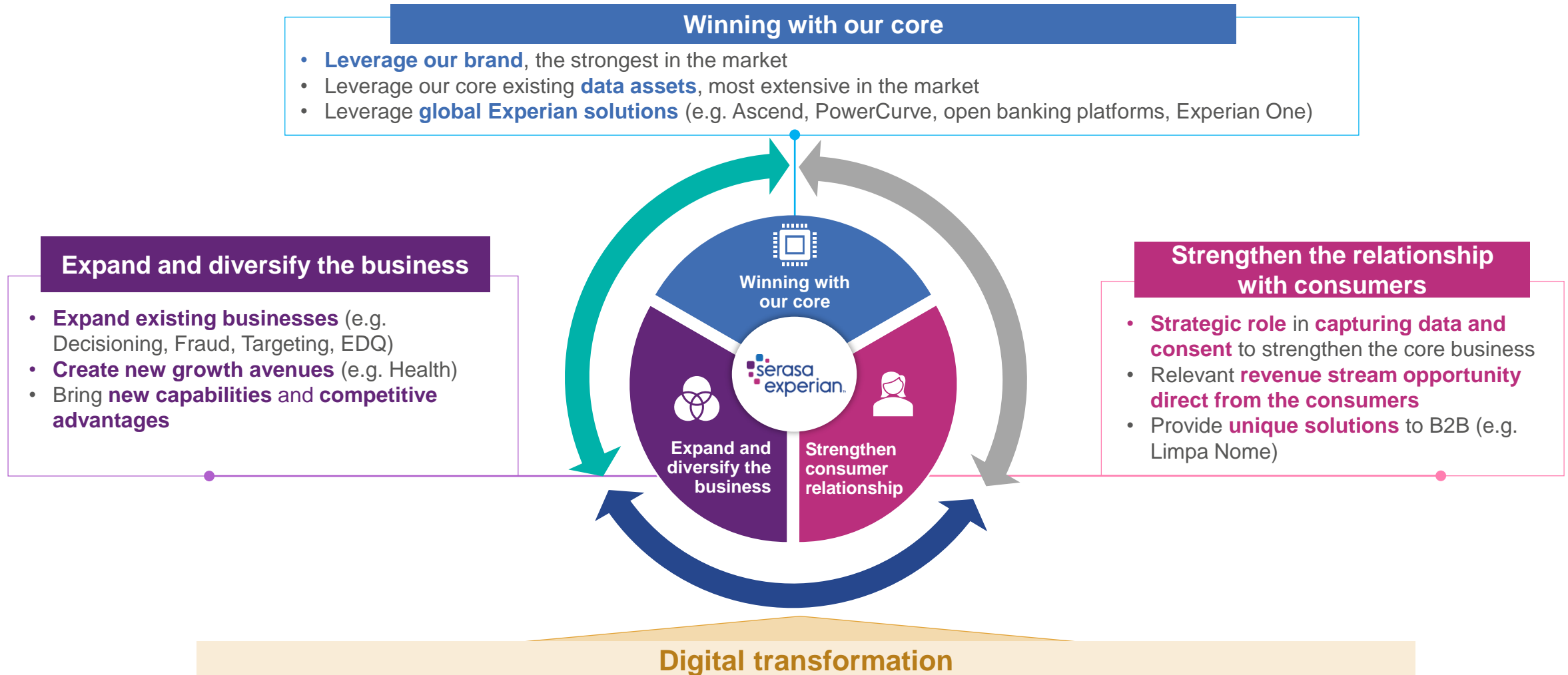


**Score improvement expected** for 75% of consumers

# Our strategic focus areas are our guide in everything we do to solve businesses' and consumers' problems



# Growth strategy in Brazil





# Spotlight on positive data

We are creating a unique product portfolio that will differentiate us in the market and allow our clients to extract the most of value from positive data

## Credit reports

Enrich credit reports including additional positive data

## Credit scores

Performance Improvement of our credit risk scores

## Other analytics

Introduction of new analytics solutions

## New products

Enable new product capabilities



**More accurate** scores



**Fewer thin-files** on database



**Better coverage** of unbanked population



**More comprehensive** data & credit reports

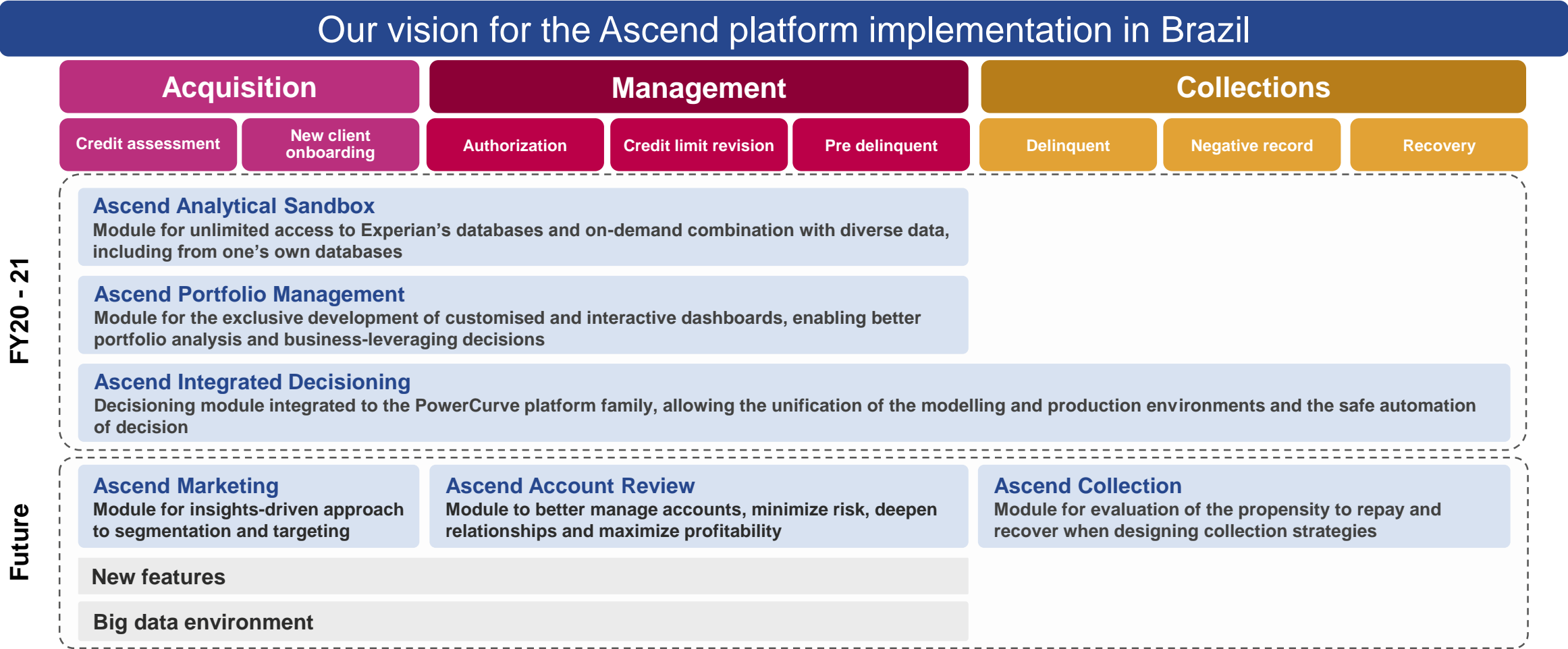


**ASCEND  
PLATFORM**

**Best-in-class solution that empowers our clients to accelerate the value generation from Positive Data in combination with traditional negative data**

# Spotlight on the Ascend platform

Ascend to support the expansion of our leadership in credit data and analytics



# Spotlight on Decisioning

The strategy unfolds in three steps that will expand our market coverage



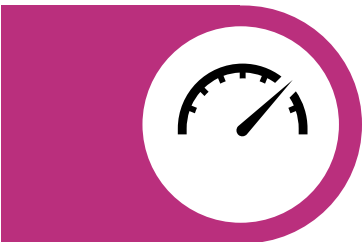
## Expand

Grow footprint by delivering superior solutions to new markets / clients



## Sustain

grow decisioning portfolio in existing key clients



## Scale

new distribution channels to target broader market for specific solutions

### Replicate successful offerings, combine capabilities and expand portfolio

#### Large banks

targeting focus areas / solutions

#### Telco

becoming the undisputed market leader

#### Retail and payments

leveraging success cases, being part of digital transformation efforts

#### Medium banks

leveraging digital transformation efforts

### Offer innovative solutions and commercial models

#### New verticals

Insurance, CPG, Fintechs, Startups & Digital Businesses, Credit Unions, Utilities, Industry & Services, Public Sector

### Scale through targeted offerings

#### Regionals / Tier 3

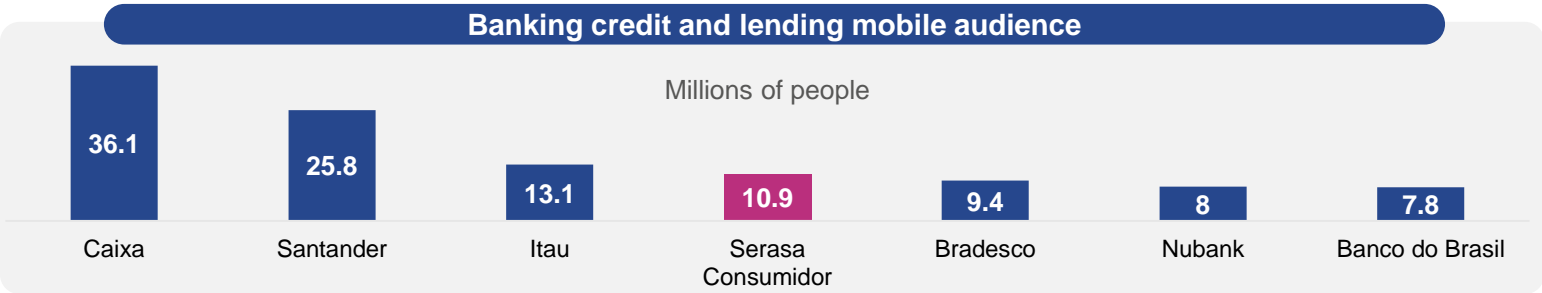
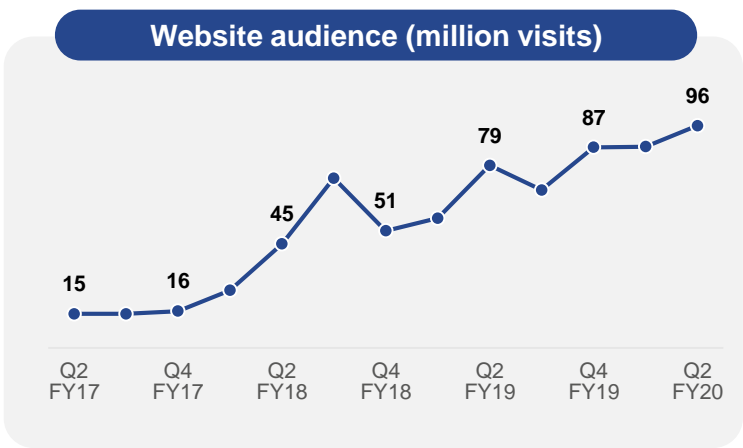
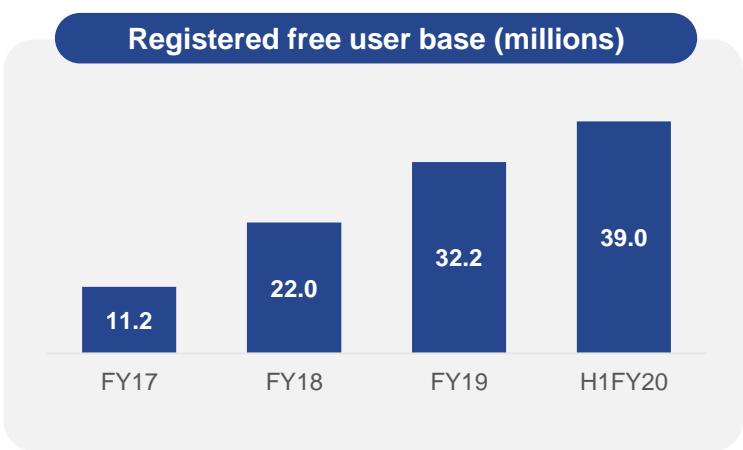
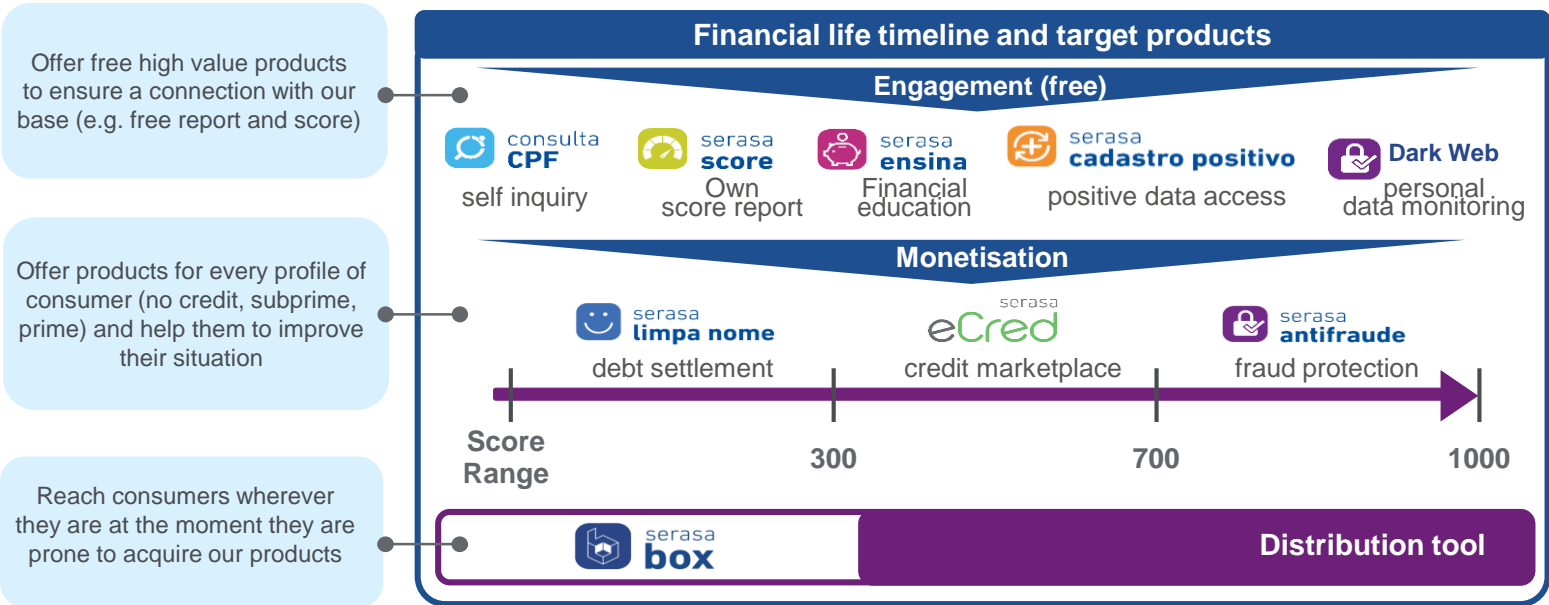
Targeted, replicable solutions  
Experian One use cases



# Spotlight on our consumer engagement strategy

Through our mission, we deliver suitable products for each moment of customer's financial life

Mission: credit for all



Source: SimilarWeb (Apps not considered)



# Consumer Information North America

Alex Lintner

*Group President*





# Consumer Information Solutions – strategy for North America

US\$9bn market opportunity

MISSION: **BE THE CONSUMER'S BUREAU**



## STRENGTHEN THE CORE

- Maintain Industry-Leading Data Accuracy and Consumer-Friendly Support Services
- Give Consumers More Control and Ability to Contribute
- Continue to Strengthen Our Market Position



## GROWTH THROUGH INNOVATION

- Deliver New Products on Ascend Data and Technology Platform
- Enrich the Credit Profile Report
- Unlock Synergy Growth through Clarity
- Build More Mortgage-Focused Products
- Evolve Prescreen and Prequalification competency to Digital Credit Marketing
- Establish New Models for Verification Services



## DELIVER ADVANCED ANALYTICS

- Ascend Platform to Extend Our Lead in Analytical Consulting
- Provide Additional Data through our Alternative Data Strategy
- Deploy Artificial Intelligence and Machine Learning



**ENABLERS:** Technology, People, Productivity and Acquisitions Driving Competitive Advantage and Margin Growth



In the past four years, US\$250m+ organic CIS North America revenue growth PLUS successful M&A

# CIS North America business grows through three levers

## Core market execution

- Mortgage Profiles
- Core Profiles
- MLA Profiles

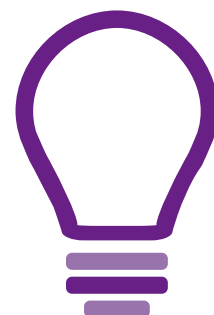


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- Prequalification
- Ascend Marketing

## New products/innovation

- Verification Services (similar to UK affordability)
- Data Integrity Services
- Ascend Data Platform
- Trended Data



2

## Inorganic investments (Acquisitions)

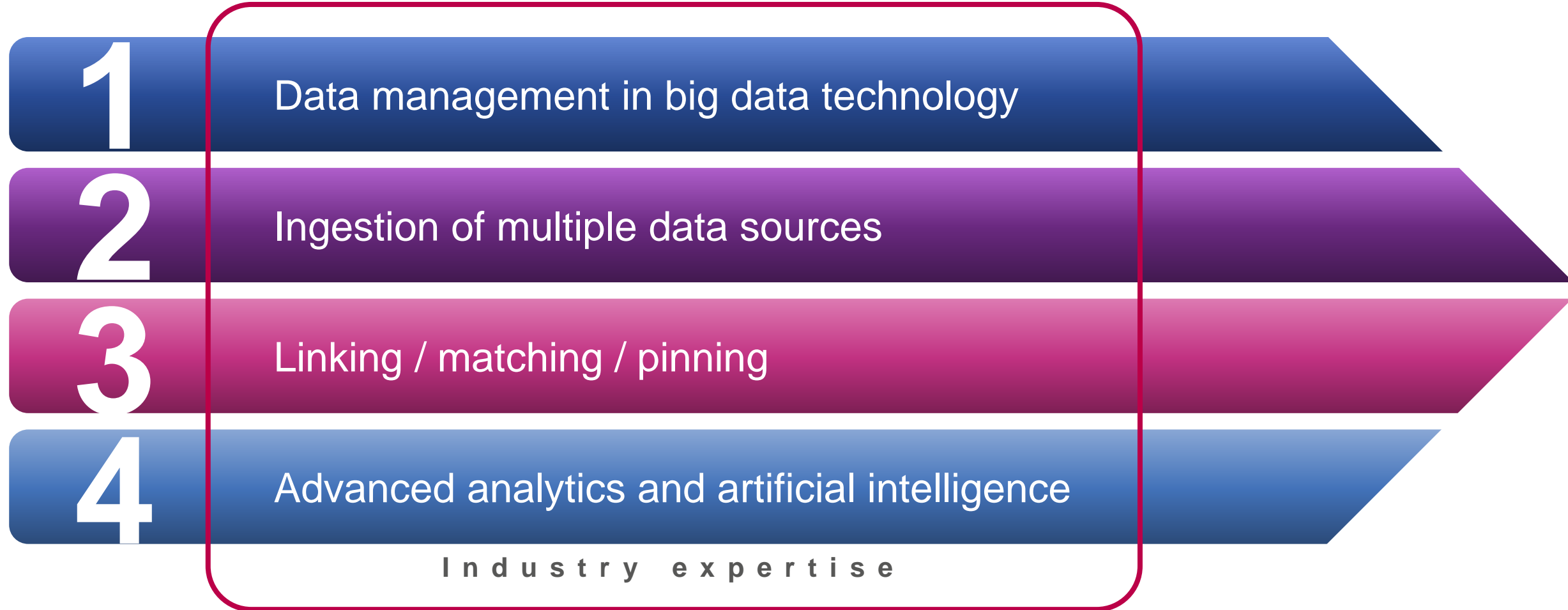
- Clarity Services



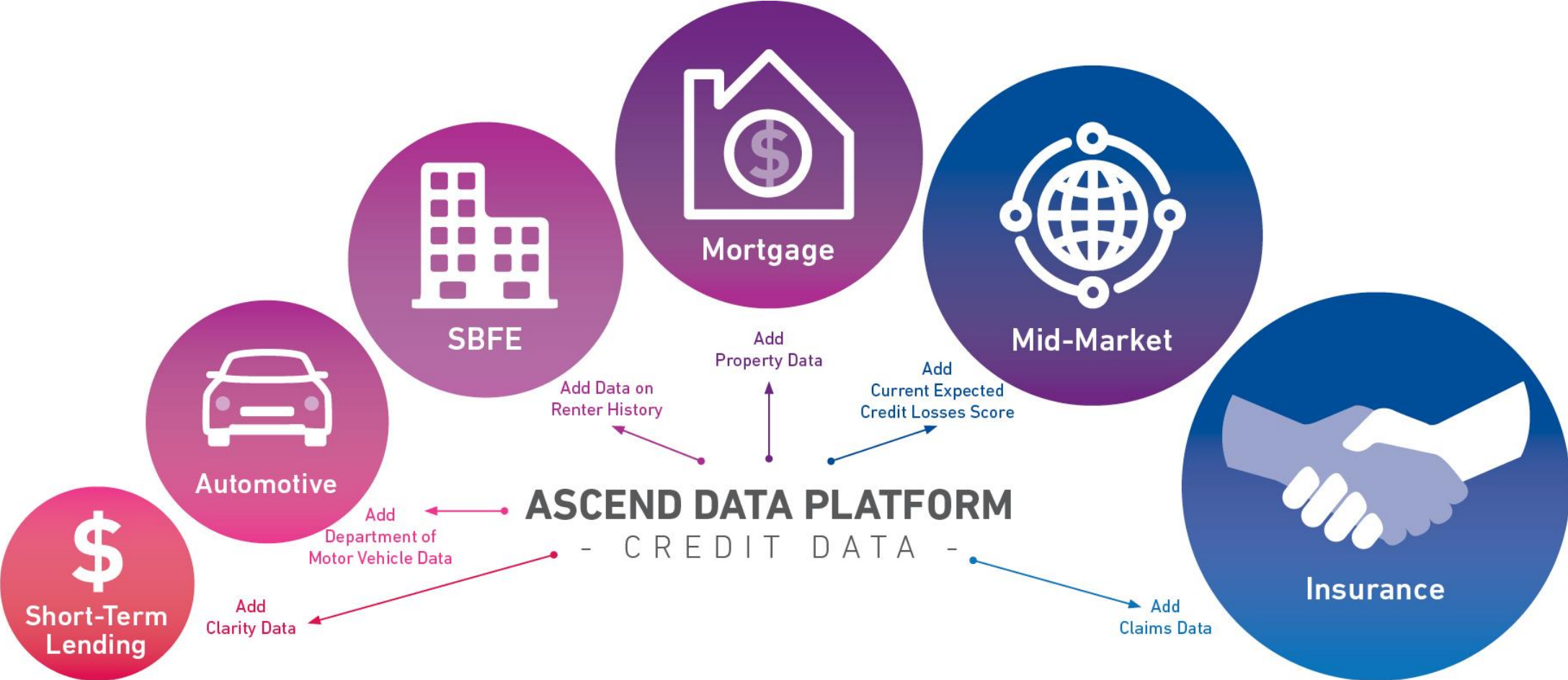
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# Ascend data and technology platform allows us to stay one step ahead of the competition

We have established first mover advantage with a superior analytical sandbox and continue to add further differentiation



# Adding six additional data elements, four of which enable expansion to four strategic vertical markets



# Not only one product, FOUR Ascend products built on the platform

Ascend Analytical Sandbox



Ascend Account Review



Ascend Marketing



Ascend Data Services



## Ascend Technology Platform

Products built to-date (as of December 2019)

Auto Sandbox



Small Business  
Financial Exchange Sandbox



Mortgage Sandbox



Mid-Market Sandbox



Insurance Sandbox





# We're already delivering high-value production workflow solutions for two major clients

A financial services company with more than:

- US\$30bn in revenue
- 33k employees
- 12m customers

## Account review\*

### Results

- ✓ Increased efficiency in account review by 97%
- ✓ Integrated decisioning environment

A consumer financial services company with more than:

- US\$18bn in revenue
- 16k employees
- 80m customer accounts

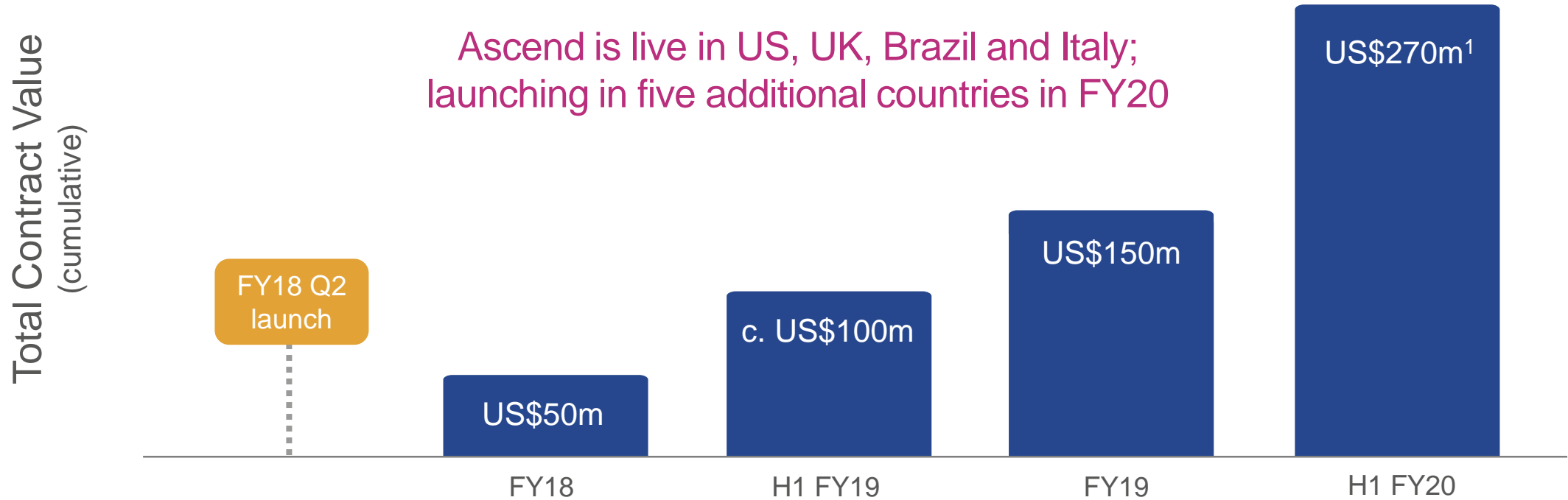
## Marketing/prospecting

### Results

- ✓ 12% increase in response rates with first campaign
- ✓ Achieved 120% of goal (accounts booked) with first drop of second campaign, far exceeding expectations
- ✓ Scheduled additional campaigns for Nov and Dec 2019

\*Account Review = Ascend + PowerCurve Integration

# Update on Ascend platform rollout



<sup>1</sup> As at 31 October 2019.

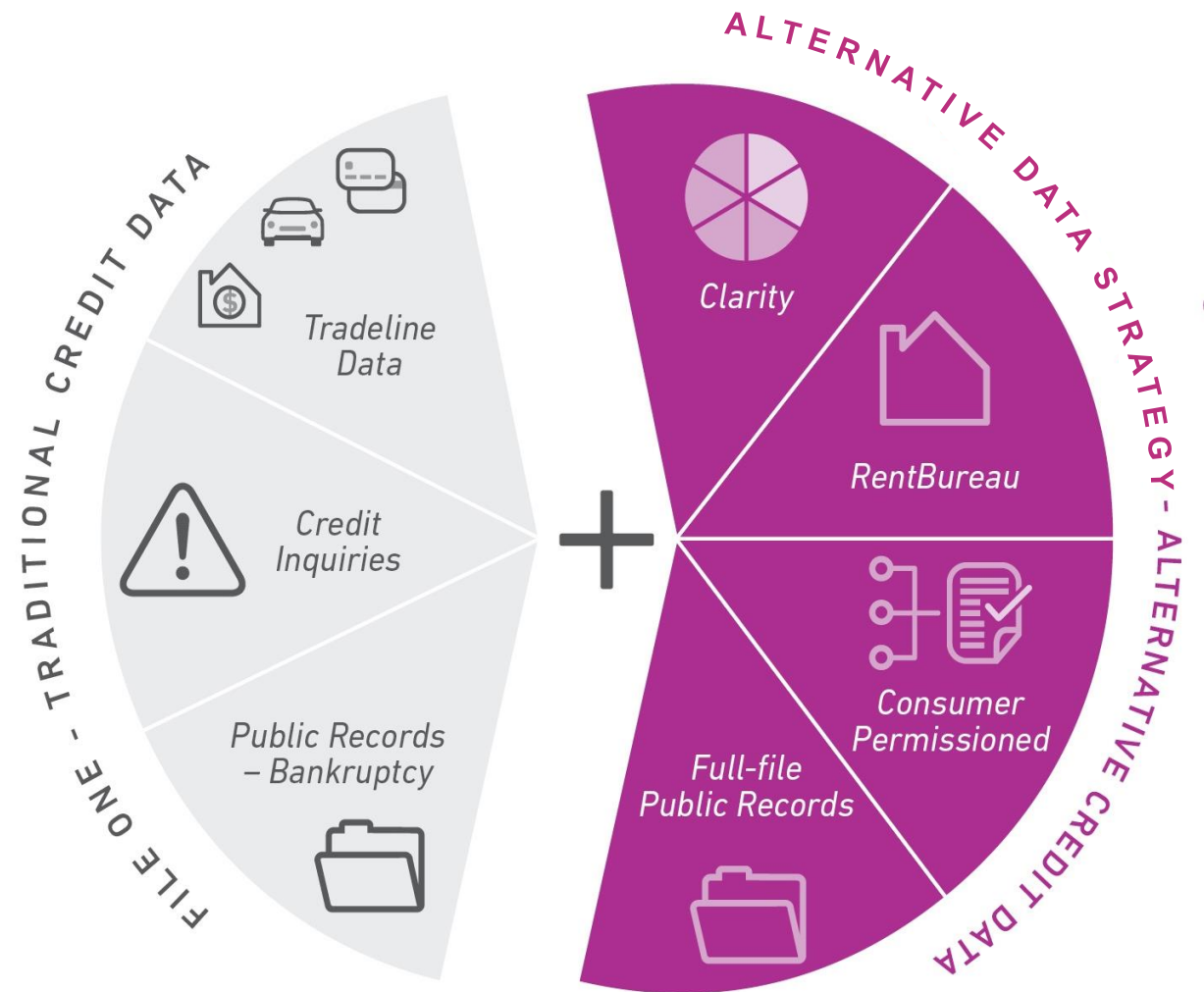
# Experian's alternative data strategy

## Vision

Enable more complete credit decisions and greater access to credit for millions of Americans by integrating historically fragmented data sources to reduce the time, cost, and effort of leveraging alternative credit data in traditional credit decisions.

## Solutions & capabilities

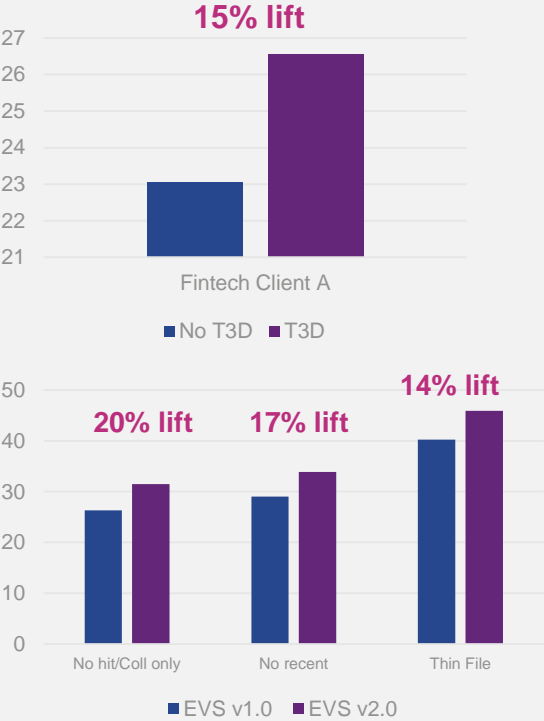
- **Clarity Credit Attributes** – Alternative Financial Services trade and inquiry attributes
- **Clarity Fraud Solutions** – Alternative Financial Services fraud and risk attributes
- **Experian Lift** – Supplemental alternative data risk score
- **RentBureau** – Rental history credit bureau
- **Finicity** – User permissioned



# Artificial intelligence and machine learning opening client opportunities through advanced analytics differentiation with our unique data sets

## Predictive power

of machine learning  
and unique data



## Attribute packages

- Trended 3D
- Premiers
- Alternative Financial Services (AFS)

## Generic scores

- VantageScore
- In the Market Models
- Extended View Score
- Precise ID

## Analytical services

- Custom Models
- Machine Learning
- Benchmarking

## Decision services

- PowerCurve platform
- CrossCore platform



# Ascend Sandbox use cases

## Existing

### Robust benchmarking

#### On-us vs. off-us

- Reject inferencing
- New accounts past performance metrics
- Portfolio performance vs. best-in-class

#### Cross-sell relationship status

- Wallet share analysis (balances and available spend)
- Relationship performance (accounts opened on-us vs. off-us)

### Credit risk strategy

#### Exploration of credit data and attributes

- “Always on” strategy development / enhancement
- Market segment and new market targeting

#### Model development, with or without AI/ML

- (Traditional) attribute development
- Machine learning models
- Custom models

## Future

### Enterprise risk modeling

#### CECL accounting

- Compliance and reserve calcs

#### BASEL

- Minimum capital requirements

#### D-FAST and CCAR

- Stress testing

### Marketing analytics

- Forecasting and selection
- Campaign design
- Attribution and reporting



# Experian teach-in

4 December 2019

