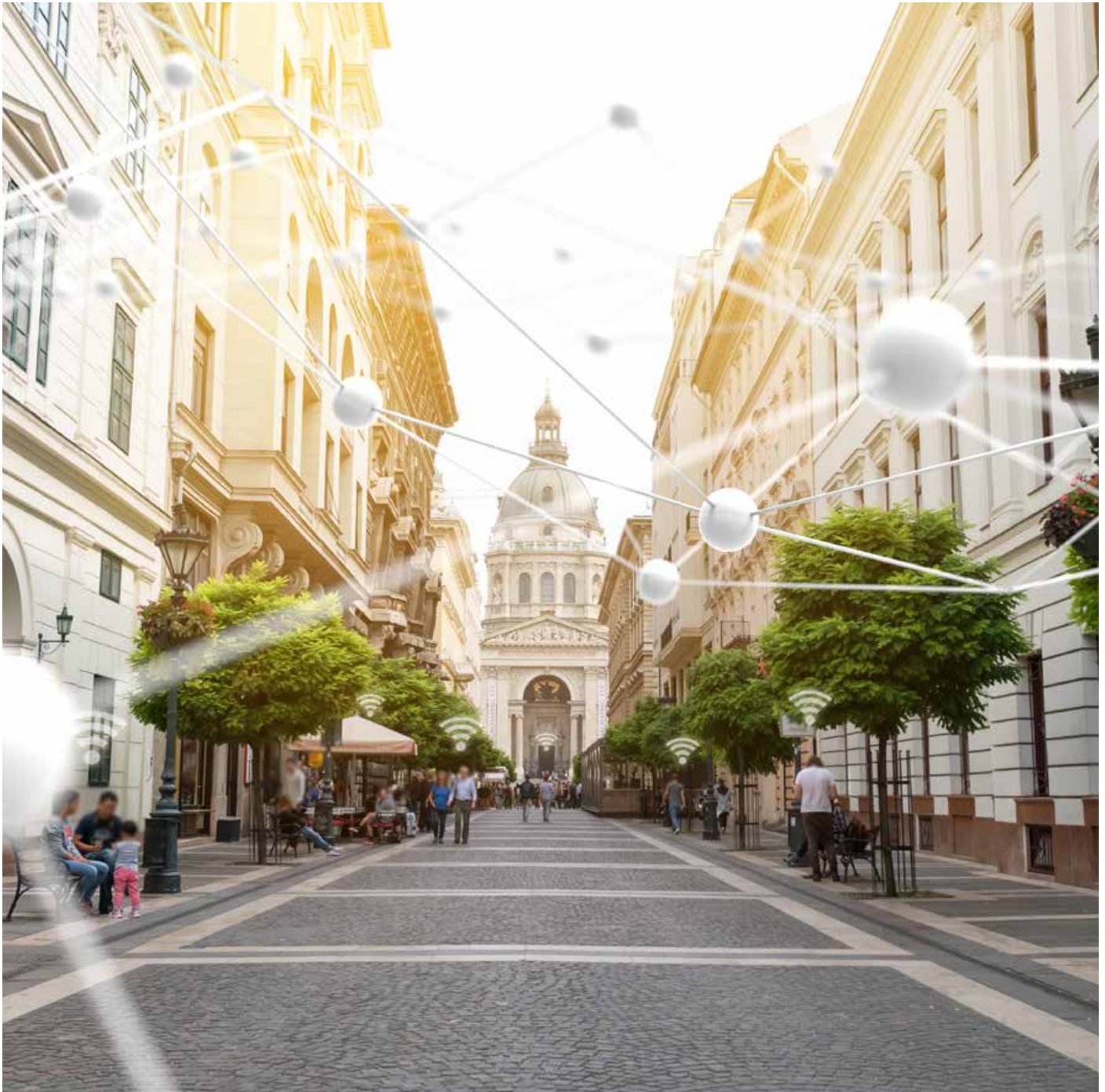# Analytics

Unlock and harness the power of your data to become analytically focused improving decision-making, driving profitability, optimizing performance, reducing risk and gaining valuable customer insight.

TEMENOS

THE BANKING SOFTWARE COMPANY

"

At BlueShore we knew what customers and segments we wanted to target, but what we didn't have was a tool that could actually help us confirm how we would do that. **Temenos Analytics allows us to be more surgical in how we target a segment and gives us more knowledge in terms of how we develop products.**

Fred Cook - CIO, BlueShore Financial

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We now have a meaningful, accurate and complete dashboard that makes us better positioned to make informed decisions. People spend less time performing manual data extractions and reporting and more time analyzing. **That gives us more time to spend with customers, and more time to design the products that they really need.**

Jean-Michel Félix, CEO, MCB Consulting Services Ltd

Introduction

Temenos Analytics provides banking specific analytical solutions that improve business decisions, optimize performance and enrich customer interaction. Financial institutions can transform their organizations to be analytically driven with pre-built models, KPIs, dashboards, applications and reports, coupled with real-time data and predictive analytics, allowing them to compete in the digital world. Analytics can be embedded directly into core banking, channels, CRM and other solutions empowering people to make smarter decisions and work more efficiently.

Banking is one of the most data rich businesses in the world, with estimates that the average financial and securities organizations are managing more than

3.8 petabytes of data

That is the equivalent to

76 million
four-drawer filing cabinets of text
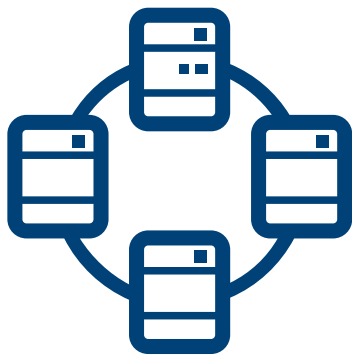or

8,000 years
of continuous playing MP3 songs

Source: Deutsche Bank

Market background

All generations are witnessing the dawn of a new digital era which is changing the world we live in. Across the globe, people are embracing digital technologies and mobile devices into their daily lives to the point where digital interactions and engagement in both personal and business day-to-day life is considered the norm.

Massive disruption and transformation is occurring in all industries, and as a result, business models are being turned completely upside down. The financial services industry is faced with challenges including everything from changing customer behavior and expectations, intense competition, the low interest rate environment, higher operating costs, stringent regulations to erosion of profits margins. This is forcing financial institutions to revisit their business models and underlying technologies to reinvent themselves so that they can thrive in this new digital landscape.

Established financial institutions do have a very powerful asset that, if harnessed properly, can provide significant competitive advantage and help transform their business into becoming analytically focused and customer centric – that asset is DATA.

Data that is harnessed and analyzed intelligently can empower business users to make smarter, faster decision making to improve efficiencies throughout the business, enable business agility, drive innovation, competitor differentiation and profitable growth.

Financial institutions are indeed data rich, with a quarter of the world's data generated from within financial services. However, there are many challenges in leveraging this data and transforming in to valuable intelligence and predictive insight, so despite the enormous potential, it still remains largely untapped. For the financial institutions that can embrace the transformation taking place – the opportunities are limitless.

Key challenges

Overcoming data silos

One of the biggest barriers to getting value from data is that financial institutions typically have multiple disparate legacy systems. The data is bound up in siloed, product focused systems with no conformity on semantic standards, making it difficult to access and leverage. Financial institutions struggle to get a much needed single version of the truth with product information being so siloed.

Increasing volumes and varieties of data

Volumes of data are continuing to explode with experts predict a daunting 4300% increase in annual data generation by 2020. However, with data storage being a commodity; it is the ability to mine, capture and analyze diverse data sets and new data types that are unstructured, inconsistent in definition and often real time that is the key challenge. With the advent of the Internet of Things (IoT), and predictions of 30 billion devices being connected by 2020, this takes the amount of data to a whole new level as well as the sheer speed of data being generated.

Data accuracy

The quality and integrity of data is absolutely critical, and often a major obstacle in harnessing the value of data. The use of inaccurate or incomplete data can cause problems ranging from delivering ineffective marketing campaigns thereby lowering ROI, delivering a poor customer experience, crippling the use of collateral to manage derivative exposures and limit risk, and last but not least, non-regulatory compliance. Banks need the confidence that the data is correct and complete and can provide one version of the truth.

Data strategy and exploitation

A vast majority of financial institutions have a data strategy; however, it tends to be around control, governance and architecture rather than how best to use and leverage the data. Ownership of data is also an issue – does IT own the data or the business? The challenge for banks is attracting and retaining the right talent such as emerging data scientists who are in high demand across many alluring industries.

Ease of integration

An exciting prospect for banks is the use of embedded analytics within day-to-day, front line banking processes across all channels. Embedded analytics can bring significant business benefits such as driving customer centricity with an enriched, personalized needs-based user experience, and providing valuable customer insight that can impact customer retention and loyalty. The challenge for financial institutions is defining how and where best to embed the analytics and then the ease of integration with existing software platforms.

Right information, right format, right time, right person

Business intelligence is vital to the entire enterprise including, financial, operational, sales, marketing, risk and compliance departments and it is fundamental to empowering the right business user to make smarter decisions and actions. The challenge is ensuring that the right people have access to accurate information when they need it, which is delivered to them in a format that is visually easy to consume, understand and act upon.

Need for speed

Financial institutions need to be agile and respond quickly to changing customer, market and regulatory demands. All of this requires intelligent data and often the business is reliant on already pressured IT departments to provide this. Many reporting processes are still done manually, which is very time consuming and can impact a financial institution's ability to respond to regulatory and central bank reporting needs as well as market opportunities. The challenge for organizations is to spend less time gathering information and manually producing reports and spend more time on analyzing data to gain competitive advantage.
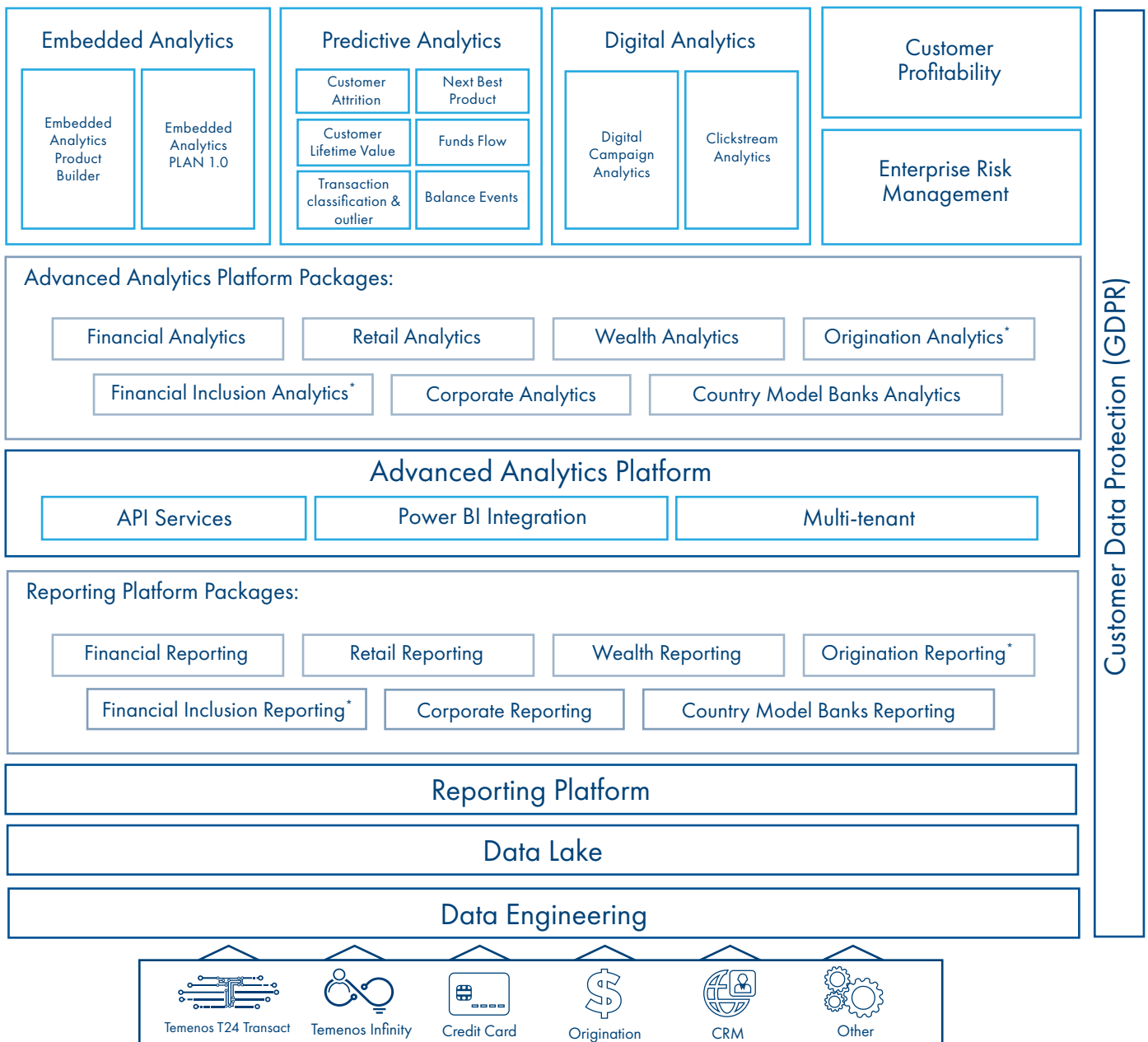
Increasing competition

With increasing competition, FinTechs targeting profitable business lines, transparent product pricing, account switching made easy and consumers' attitude to managing their finances changing, customer loyalty is declining and the number of financial service providers per customer is increasing. Reducing attrition of profitable, or potentially profitable, customers is key to increasing balance sheet growth and survival.

Analytics overview

Temenos Analytics takes a three-tiered approach to help your financial institution obtain the perfect tailored solution. The first tier offers **"Platforms"**, which is determined by the requirements of the financial institution and where you are in your analytical roadmap. The second tier offers **"Add-On Modules"**, which extend the capability of our platforms with advanced analytical capabilities. This allows you to pick and choose certain value-add features for current and future needs. The third tier provides **"Content Packages"** that break out our dashboards, analytics, KPIs, cubes and reports to align directly with the available Temenos Suites giving you the option to purchase analytical and reporting content for the type of banking that you do.

Country pre-packaged solutions with built-in best practice processes are available for fast implementation, meeting local and global regulatory requirements, which can also be easily extended to meet specific needs. Flexible deployment models are available both on premise and for SaaS deployment utilizing the secure and trusted Microsoft Azure Cloud.

Embedded Analytics

Embedded Analytics Product Builder	Embedded Analytics PLAN 1.0

Predictive Analytics

Customer Attrition	Next Best Product
Customer Lifetime Value	Funds Flow
Transaction classification & outlier	Balance Events

Digital Analytics

Digital Campaign Analytics	Clickstream Analytics

Customer Profitability

Enterprise Risk Management

Advanced Analytics Platform Packages:

Financial Analytics	Retail Analytics	Wealth Analytics	Origination Analytics*
Financial Inclusion Analytics*	Corporate Analytics	Country Model Banks Analytics	

Advanced Analytics Platform

API Services	Power BI Integration	Multi-tenant

Reporting Platform Packages:

Financial Reporting	Retail Reporting	Wealth Reporting	Origination Reporting*
Financial Inclusion Reporting*	Corporate Reporting	Country Model Banks Reporting	

Reporting Platform

Data Lake

Data Engineering

Temenos T24 Transact | Temenos Infinity | Credit Card | Origination | CRM | Other

Customer Data Protection (GDPR)

*Coming soon. Currently in development pipeline.

Analytics platforms

All financial institutions are different, which is why we offer different platforms for Temenos Analytics so financial institutions can customize the solution packages to the needs of their organization. Choose from the Reporting Platform or the Advanced Analytics Platform based on your financial institution's size, strategy, roadmap or the level of analytical sophistication needed.

Platforms

Features	Reporting Platform	Advanced Analytics Platform
Temenos Core Banking Integration	✔	✔
Data Archiving and Landing	✔	✔
Roles Based Web Interface	✔	✔
Customizable Report Builder	✔	✔
Analysis Reports: Interactive Pivot Reports		✔
Analytical Data Warehouse		✔
OLAP Cube and Tabular Model Integration		✔
KPI Designer		✔

Analytics add-on modules

Temenos Analytics Add-On Modules are made to meet specific requirements that financial institutions may have, which are not met by the Platform or Content Package that they have licensed. These add-on modules are truly an additional level of added value for clients who are looking for additional functionality.

API Services

Publish analytical APIs using no code and make this data securely available to any consuming application. Utilize open standards like OData and JSON to ensure analytical information can be freely used across the application ecosystem. Leverage API Services to feed dynamic live data feeds to any other system, such as Temenos Core Banking or any third-party applications.

Customer Profitability

Out-of-the-box add-on modules focused on customer profitability calculations, which includes funds transfer pricing and activity based costing modules. In addition, the "What-If" pricing capability enables informed pricing decisions at the front-lines to increase overall margin.

Dashboard Hub

Mash-up powerful and engaging dashboards using content from the Analytics content packages. Configure dashboards for each individual user, enabling them with up-to-date information for managing their business more effectively.

Digital Analytics

For clients that have purchased Temenos Digital Engagement, this application integrates data from Core Banking in near real-time providing immediate and continuous monitoring of their digital campaigns. Digital Analytics also provides a click-stream analytics capability which captures essential customer journey data which can be fed back to the Digital Engagement Platform for real-time customer interaction.

Embedded Analytics

Embedded intelligent data analytics enables a 360° single view of the customer empowering your front line staff to recommend relevant offers and advice, increasing cross selling and quality of service. Embedded Analytics provides a capability to deliver analytical information via an interactive API infrastructure. These APIs provide analytical data via OData services, which can be easily consumed by downstream systems such as core banking, CRM and third party BI products such as Power BI.

Power BI Integration

Analytics offers the ability to seamlessly integrate with Microsoft Power BI. This add-on module unlocks that feature and fully integrates with Microsoft Azure to allow for delivery of Microsoft Power BI content across the organization.

Predictive Analytics

Predictive Analytics Platform

The Predictive Analytics Platform provides data discovery, data mining and predictive modelling capabilities. Temenos uses this platform to build and package predictive models for financial institutions; however, they can also develop tailored predictive models in-house for specific needs using this simple to understand solution.

Next Best Product

A pre-built predictive model that uses consumer data analysis and algorithms to determine customers' "next best product" according to their profiles. This allows the bank to recommend additional products to their customers/prospects.

Customer Lifetime Value

This model uses each customer's historical information and statistical algorithms to predict the future value/profitability of each customer in the financial institution. This information can then be used to drive marketing and customer intimate strategies which will maximize long term bank profitability.

Customer Attrition

Customer Attrition is an out-of-the-box set of predictive models that uses data analysis and algorithms to determine the likelihood of a customer leaving the financial institution. This enables the bank to develop a customer retention plan for customers it wishes to keep.

Analytics content packages

Content Packages for Advanced Analytics and Reporting are now available to financial institutions. We've broken out our reports, KPIs, dashboards, datasets and cubes to align with the available Temenos Suites. Currently, available are Advanced Analytics Platform content packages for Temenos Suites such as Retail, Wealth and more. The Advanced Analytics Platform also offers a Financial Analytics Package for a financial institution utilizing ANY Temenos Suite that is looking for sophisticated financial analytics capability such as multi-company, multi-currency, and GL adjustments.

Financial Analytics

The Financial Analytics Package aligns to ANY of the Temenos Suites and includes advanced functionality for multi-currency, multi-company and general ledger adjustments. This package offers a set of reports, datasets, KPIs and OLAP cubes to support standard financial analysis and reporting essential for financial institutions.

KPIs
Net income
Return on assets
Excess capital
Return on equity
Net interest margin
Loan to deposit ratio

Dashboards
Asset/liability growth
Revenue/expense growth

Analytics
Line of business analysis
Company analysis
Static gap

Retail

The Retail Analytics Package aligns to the Temenos RetailSuite and includes a base set of reports, dashboards, datasets, KPIs and OLAP cubes to support advanced analysis which are essential for retail banks.

KPIs
Customer growth
Product growth & pricing
Transactional activity
Card usage
Share of wallet

Dashboards
Branch dashboards
Account Officer dashboards

Analytics
Geographical analysis
Loan delinquency
Transaction efficiency

Wealth

The Wealth Analytics Package aligns to the Temenos WealthSuite and includes an advanced set of KPIs, dashboards, datasets and OLAP cubes to support analytics specifically geared towards the private banking/wealth management business.

KPIs
Client growth
AUM growth & pricing
Assets/liabilities to AUM Ratio
Share of wallet
Average AUM per client

Dashboards
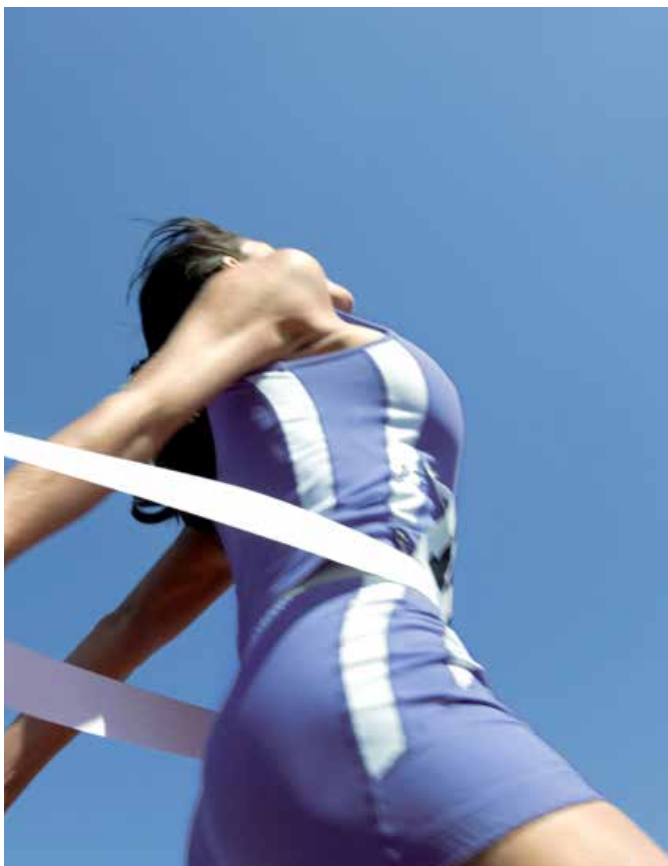Account Officer dashboards
Broker performance

Analytics
Corporate actions
Securities
Structured products

Turning challenges into opportunities

Challenges

- Overcoming data silos
- Increasing volumes and varieties of data
- Data accuracy
- Competitor differentiation
- Data strategy and exploitation
- Ease of integration
- Right information, right format, right time, right person
- Need for speed
- Increasing competition

Opportunities

- Increase productivity, efficiencies and profitability
- Availability of accurate data, right person, right time
- Single version of the truth
- Smarter, faster decision making across the enterprise
- Transform from being product centric to customer centric
- Increase customer wallet share and reduce customer churn
- Develop value added, differentiated products and services
- Enriched customer experience – relevant, contextual timely
- Deep understanding of customer behavior and buying trends
- Predictive insights into the future
- Leverage big data not just banking data

Benefits of the Analytics product family

Rapid deployment, low cost & reduced risk

Smarter decision making, enterprise-wide

Better understand customers

Personalize customer experiences

Improve profitability

Increase value of customers

Increased productivity and efficiencies

Real time cross-selling and campaigns

Only **37%**

of customers feel their banks understand their needs and preferences reported Capgemini

Summary

Temenos Analytics is supported by a strong community of developers and users. It is the choice of more than 120 financial institutions worldwide.

Next steps

To find out more about how Temenos delivers Analytics solutions all from a single platform contact sales@temenos.com

temenos.com