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.
“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

“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 which 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 not only to amount of data to a whole new level but 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 much in 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 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 is a market leading business intelligence, analytics, and reporting solution specifically designed for financial institutions to access and benefit from the wealth of data residing in their core banking, general ledger, and other systems. All modules are built on the Business Intelligence (BI) Platform (based on the newest Microsoft BI technologies) and include pre-built banking focused content based on our experience implementing technology across thousands of financial institutions.

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. Analytics modules are fully integrated to Temenos Core Banking and have the capability to easily integrate to multiple data sources. The Analytics product family has been developed to provide customers with rapid deployment, low total cost of ownership, lower risk and better business results.

Flexible deployment models are available both on-premise and for SaaS deployment utilizing the secure and trusted Microsoft Azure Cloud platform.
Analytics functionality

All Analytics modules are based on a common platform. The BI Platform is the foundation and extracts, transforms, and loads the data required for analysis in each module. The Analytics web application provides a portal, through which financial institution staff can access all business intelligence content, including self-service reporting, dashboards, analytics and visualization tools.

The range of pre-packaged, Analytics solutions available are:

- Financial Intelligence
- Customer Intelligence
- Operational Intelligence
- Predictive Analytics & Models
- Embedded Analytics

Financial Intelligence
Integrate data from Temenos Core Banking and other General Ledger (GL) systems to provide a comprehensive set of accounting and financial performance reports, dashboards, analytics and key performance indicators (KPIs). This module includes the capability to analyze financial performance and all metrics over years, quarters, months, weeks and days using interactive time intelligence. Other financial analytical tools are available within this module such as automated inclusion of post-closing adjustment entries in month end reporting, budget analysis for variance to targets and cost allocation for attributing expense and revenue items to cost centers or branches. Financial Intelligence can handle multiple local currencies using a common reporting tool.

Customer Intelligence

Profitability
An out-of-the-box module focused on customer profitability. This module includes robust funds transfer pricing and cost allocation modules along with pre-configured Temenos Core Banking integration to automatically calculate profitability at the account level, aggregating all interest, fees, commissions and charges along with highly configurable transfer rates. Granular customer profitability data can be analyzed across numerous hierarchies and customer attributes including cost center, branch, account officer, sector, industry and more. It provides intuitive dashboards based on pre-configured segments and KPIs enabling banks to pinpoint areas for profitability improvements.

Pricing
An out-of-the-box module that uses ‘What-if’ scenario modelling to determine the optimal pricing based on both risk and characteristics of a customer relationship. Profitability benchmarks and goals can be communicated to all front line staff through an intuitive visual user interface. This product has been proven to increase margins up to 30 basis points.

Advanced Analytics
A module focused on enabling full insight into the financial institution’s customers by providing hundreds of aggregations, configurable customer segments and calculated customer metrics giving you a 360° view of the customer. These metrics include demographic, geographic, psychographic, behavioral, product mix and other attributes that allow you to gain incredible insight into your customers and their relationship with your institution. See at a glance the entire relationship including their full product holdings and how they are interacting with you across your different channels. Information from this module can be fed back into your core banking, CRM and other solutions to enable actionable analytics at the front lines of the institution.

Operational Intelligence
This module provides robust capability to produce big data analytics for large account and transactional data objects from sources such as channels, branches and tellers. The account/contract objects enable hundreds of analytics for contract balances, rates, maturities, products and more. Insight into the operational efficiency of your business will help you to make informed strategic decisions regarding distribution channels, reducing costs and increasing productivity and efficiencies.
Analytics functionality cont.

Predictive Analytics and Models

Predictive Analytics Platform
The 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.

Customer attrition rates force companies to replace a significant percentage of their customer base every few years. The cost of attracting a new customer is 5-12x greater than the cost of keeping an existing customer. In addition, the ROI for a customer retention program is up to 10x higher than for the acquisition of new customers.

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.

Temenos has an Embedded Analytics module for Retail Banking which focuses on 4 main customer metrics: Profitability, Loyalty, Attrition Risk, and Number of Products. These attributes are calculated in Temenos Analytics and then surfaced in core banking screens and processes, enabling better decisioning. The module also includes a Next Best Product predictive model, which determines the next product that each customer will buy. This information is integrated into the front office which then surfaces product offers to customers via all channels.
Analytics versions

All financial institutions are different, which is why we offer different versions of Temenos Analytics so you can customize the solution to the needs of your organization. Choose from the Model, Advanced or Enterprise version of Temenos Analytics based on your financial institutions size, strategy or the level of analytical sophistication needed.

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<th>Model</th>
<th>Advanced</th>
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| **Prebuilt Data Integration**
  Pre-built integration with Temenos Core Banking and fully aligned with Model Bank. | **Third Party Data Integration**
  Integrate third party data to deliver enhanced financial and customer analytics. | **Data Blending**
  Blend Temenos Core Banking with other data sources like click-stream for unlimited analytics potential. |
| **Roust Content Out of the Box**
  Hundreds of analytics and reports are pre-packaged in the solution with simple capability to create more. | **Advanced Banking Analytics**
  Customer profitability, customer segmentation, performance management, and other advanced analytics, specifically for banks. | **Reference Architecture**
  Utilize Analytics development framework to continue to develop the solution. |
| **New Analytics User Interface**
  Brand new user interface for users to navigate analytical content | **Hybrid Cloud Integration**
  Integrate with cloud services like Microsoft Power BI (with add-on). | **Consolidation**
  Consolidate data from multiple companies within one model for consolidated analytics. |
| **Fixed Price Delivery**
  Rapid implementation delivered at a fixed price ensuring quality with low risk. | **Fixed Price Delivery**
  Implementation delivered at a fixed price included out of box models for complex analytics such as funds transfer pricing | **ILF Pricing**
  Accelerate the bank’s BI roadmap with a cost effective framework. |
| **Flexible Pricing**
  Scaled pricing based on customer accounts with subscription vs. ILF pricing available. | **Flexible Pricing**
  Scaled pricing based on customer accounts with subscription vs. ILF pricing available. | |
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 behaviour 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 productivity and efficiencies
- Increase value of customers
- Real time cross-selling and campaigns

Only 37% of customers feel their banks understand their needs and preferences reported Cap Gemeni
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 Group AG (SIX: TEMN), headquartered in Geneva, is a market leading software provider, partnering with banks and other financial institutions to transform their businesses and stay ahead of a changing marketplace. Over 2,000 firms across the globe, including 38 of the top 50 banks, rely on Temenos to process the daily transactions of more than 500 million banking customers. Temenos customers are proven to be more profitable than their peers: in the period 2008-2014, they enjoyed on average a 31% higher return on assets, a 36% higher return on equity and an 8.6 percentage point lower cost/income ratio than banks running legacy applications.

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