

# The 3 tenets of an intelligent enterprise in the financial services industry



The financial services industry, mature in terms of digital transformation due to strict regulations and compliance requirements, is now geared for AI disruption. The top players in the industry are working towards transforming themselves into Intelligent Enterprises.

An Intelligent enterprise is one that is nimble enough to make quick data and insights-driven decisions to deliver superior customer experience, become operationally efficient, and manage risks well. AI plays a crucial role in this regard.

The insight-driven transformation will make the core of the organization stronger with data-driven perspectives and technological innovations already facilitated by digital age. If the organization is not agile enough to adapt to disruptive technologies, it starts losing competitive edge over top three important levers (See Figure 1) in the organization:



### Customer experience

More customers are demanding personalized and curated experience.



### Risk and compliance

With stringent compliance and increasing competition, balancing portfolio risk vs return is challenging.



### Internal process efficiency

Smart and efficient processes with intelligent automation provide the much needed productivity boost over competitors.

Organizations need to invest in innovation-led data and insights transformation through applied AI in their quest to become an Intelligent enterprise. Siloed one-off customer-facing analytics implementations will not provide adequate business value; a roadmap for an end-to-end transformation is the key.

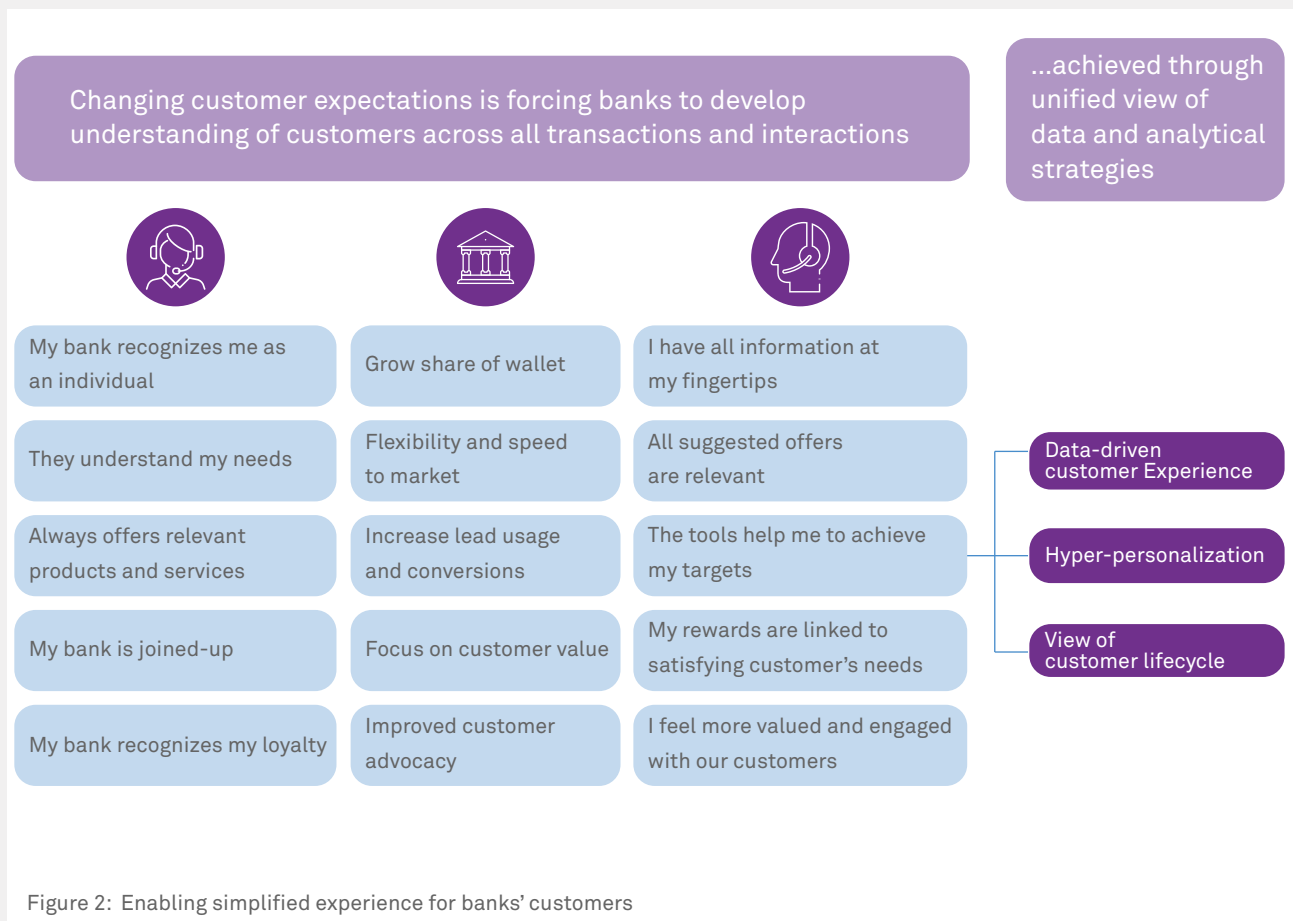


Figure 1: Three tenets of an intelligent enterprise in the financial services industry

## AI for customer experience

Customers now expect all brands, including banks, to provide meaningful and empowering experiences throughout the entire customer and employee journey. Experiences are core to any best-in-class brand as it is a leading driver of brand perception. Bank's customers want to experience the brand seamlessly across all online and offline touchpoints, be it while using their app, their products, experience with the contact center or in one of their branches (See Figure 2).

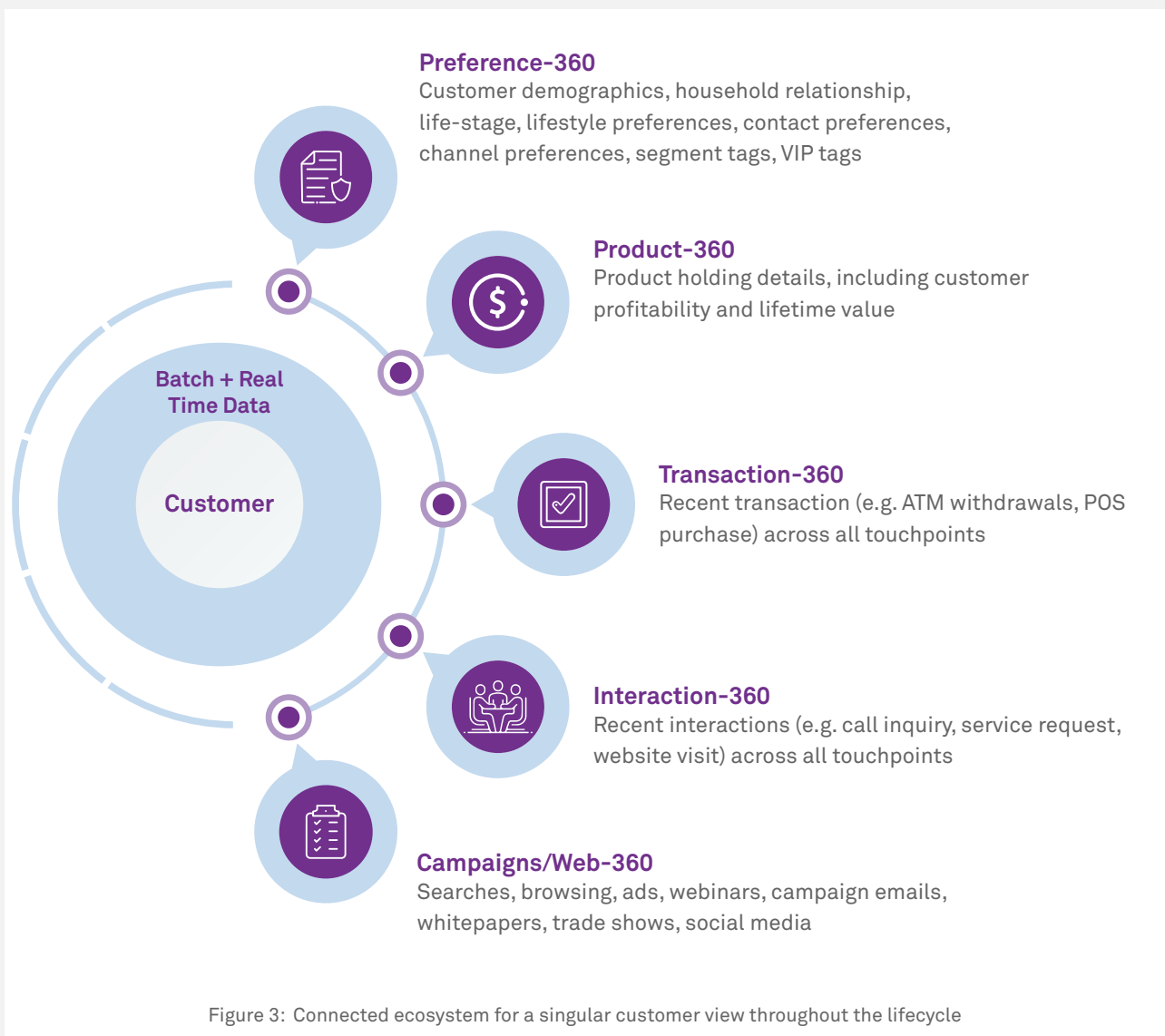
Brands are now defined by experiences, which require marketers to shift from a product-centric marketing to creating resonant brand experiences. In order to do this, banks need to use the right marketing technology and processes to drive marketing success. In addition, with an unprecedented amount of data in banks, marketers need to be equipped to use insights to drive superior brand experiences and demonstrate the value that they create.



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There is a need for Customer 360 intelligence (See Figure 3) at an individual level using customers'

risk profile, net worth value, usage behavior, price sensitivity, brand sentiment and propensity outcomes. This enables individual pricing capability to overcome delayed time to market for any price change opportunity. Enterprises are realizing the value in integration of external data to drive more effective and competitively priced products. Lack of advanced propensity models – those based on siloed product data with long lead times for deployment don't add significant value. Most acquisition offers are used for both retention as well as acquisition purposes and the lack of specific retention offers also lead to loss of business.



## AI for operational efficiency

One of the major priorities for leading banks that have invested in AI has been to drive operational efficiencies. Intelligent automation will replace labor-intensive repetitive manual tasks and augment human decision-making. The enterprises of the future will comprise of a hybrid workforce where humans and bots work together. AI has the potential to drive sustainable growth in top-line and bottom-line. The use of advanced analytics and AI to generate insights, automate and manage various backend processes will result in achieving operational excellence and superior customer experience. Some examples of how AI is used to improve business operations are:



### Insights generation

Contract intelligence – Supervised and unsupervised machine learning (ML) algorithms can be used to parse and summarize commercial agreements like contract and loan documents, and interpret financial and legal details that would have otherwise required huge manual effort and time. It uses unsupervised ML techniques like topic modeling to identify the key points. It can also summarize a document based on specific keywords using supervised ML techniques.



### Intelligent automation

Cognitive assistants – ML algorithms like NLP and NLG enable cognitive assistants to help customer-facing employees find answers to customer questions. This results in improved TAT

and reduced count of employees leading to huge cost savings.

KYC – AI is making the end-to-end KYC and customer onboarding process faster and more efficient. Technologies like NLP and facial recognition enable intelligent bots to process various documents and validate the same removing the need for a manual backend processing team.

### AI for risk and compliance management

Banks and other financial service providers, as guardians of financial assets, are liable to put risk control as the foremost priority to foster trust among customers. If responsibly applied, AI can be leveraged to ease up adherence to compliance regulations, reduce costs and free up teams to focus on more valuable tasks within their organizations (See Figure 4).

The key applications of AI in the risk and compliance domain are:



#### Operational risk analysis

AI enables financial institutions to control fraudulent behavior and delinquency using scoring techniques and real time alerts across different steps of customer lifecycle. These cognitive fraud detection systems focus on customer’s features driving fraudulent behavior to detect and prevent fraud. The ML based system continues to learn, and gets stronger with time to detect more complex fraud. The appropriate usage of ML algorithms

could result in the reduction of false positives that improves the efficiency of the acquisition quality, fraud prevention and collection effectiveness.



#### Credit risk assessment

Data driven credit scoring models help portfolio experts to take conscious decision on credit risk exposure powered by ML algorithms. A credit scoring model, based on information about the potential customer (e.g. credit history, payment defaults, age, number of previous loans, etc.), would be able to distinguish potential defaulters with fair bit of accuracy and estimate of the propensity of default. It also helps to come up with optimized pricing strategy differentiated by risk behavior to control overall portfolio risk exposure.

Analytics can further improve regulatory compliance process of credit risk evaluation using assessment methods like default risk models, loss given default, and exposure at default. These models help to assess the overall risk exposure and take the required measures to mitigate liquidity risk.

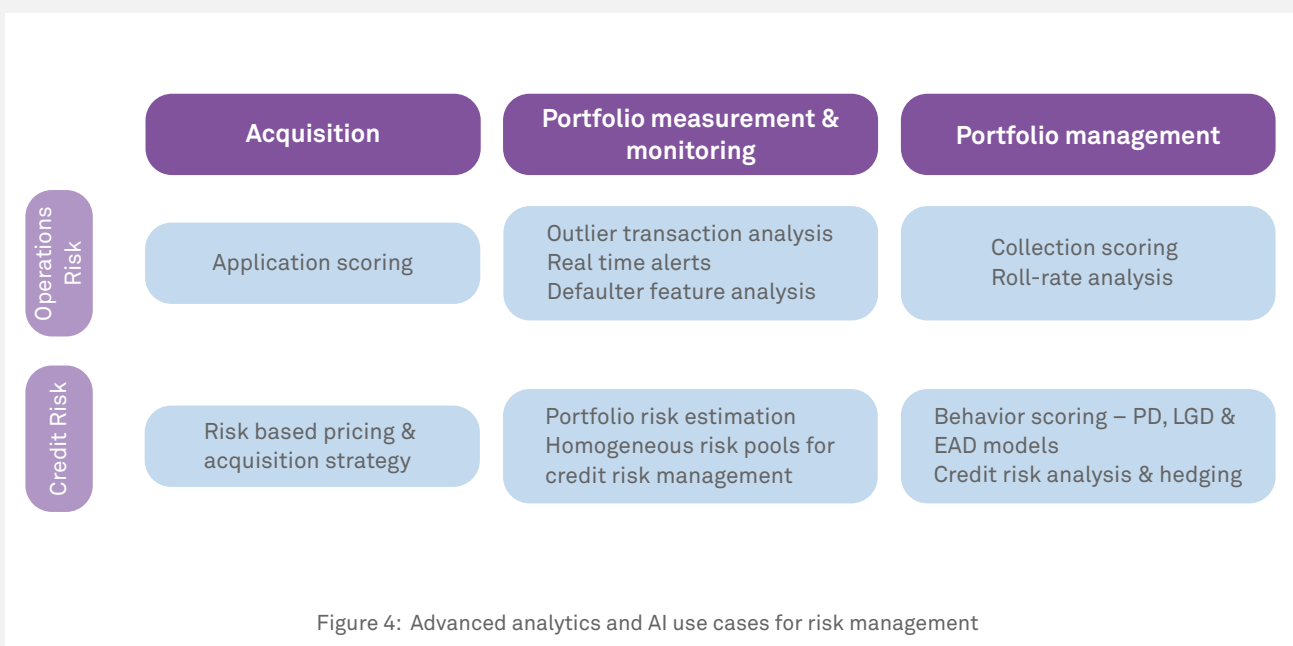


Figure 4: Advanced analytics and AI use cases for risk management

## Conclusion

It is vital that the leadership understands the potential impact of AI across the value chain and drives the AI adoption initiative. Intelligent automation of specific business and IT processes coupled with quick data-driven insights are some of the low-hanging fruits that enterprises can target as they keep an eye on an end-to-end

roadmap for AI transformation. The key to intelligent transformation is to look beyond short-term efficiency and identify visionary and innovative business models delivering superior customer experience and driving revenue growth using AI.



## About the authors

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