

// 2025

SPARK BEYOND

AI for 'Always Optimized' Banking Operations

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About us

Established in 2013 to accelerate AI-powered problem-solving.

Since then we have **delivered \$Bns in tangible ROI** for our customers **across 100s of use cases.**

Mission

Unlock AI-driven **'Always Optimized' KPIs** for any organization



Global Footprint

Presence across Asia, Europe and US with employees spread across **8 countries**



Partner first DnA

Partner-first organisation with global reach with GSIs



Industry Validated

100s of success stories across within **Fortune 500 companies**

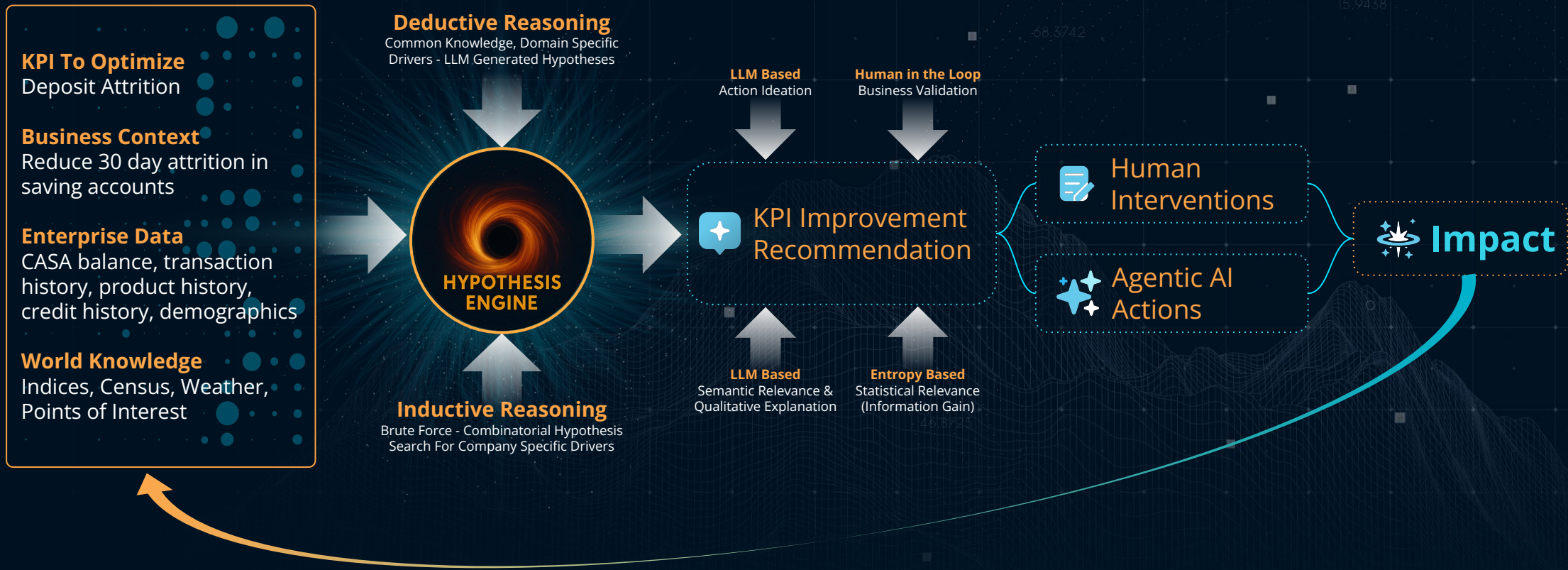


Enterprise Ecosystem



'Always Optimized' KPI Architecture

Continuous feedback loop creating impact from enterprise structured data



Existing approaches to link LLMs to enterprise data are **insufficient to address structured data needs**

Overview of current approaches (not-exhaustive)

Pre-Training & Fine Tuning

What is it?

Pre-training a model on a selected corpus applicable to your enterprise domain
Fine-tuning LLMs to answer domain specific questions

Limitations

- Expensive to re-train
- Does not address structured data sources
- Fine-tuning is better suited to teaching specialized tasks or styles and less reliable for factual recall.

Retrieval Augmented Generation

What is it?

Retrieve data from outside a foundation model and augment your prompts by adding the relevant retrieved data in context

Limitations

- Structured data requires a query for RAG based solution to retrieve
- Retrieved query needs to be LLM compatible
- RAG is largely limited to searchable documents

Code Interpretation & Generation

What is it?

LLM task to translate a query spoken in natural language into SQL/code automatically

Limitations

- User needs to define the intent and insights
- Path to using the insight in an LLM use case is several steps away for a user

In-Context Learning

What is it?

One/few-shot learning example to gain new knowledge (e.g. feeding an existing ppt report about a quantitative analysis)

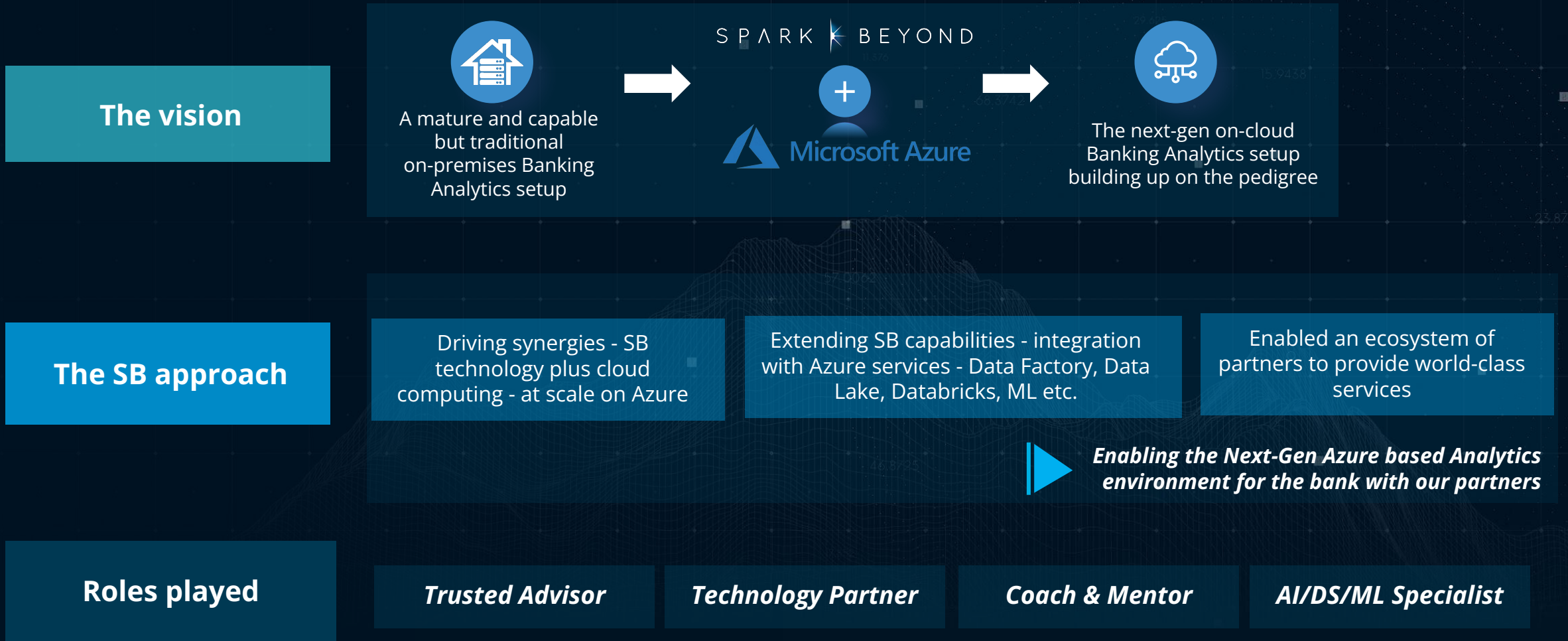
Limitations

- Context needs to be textual
- Context document can get easily outdated



Banking Credentials

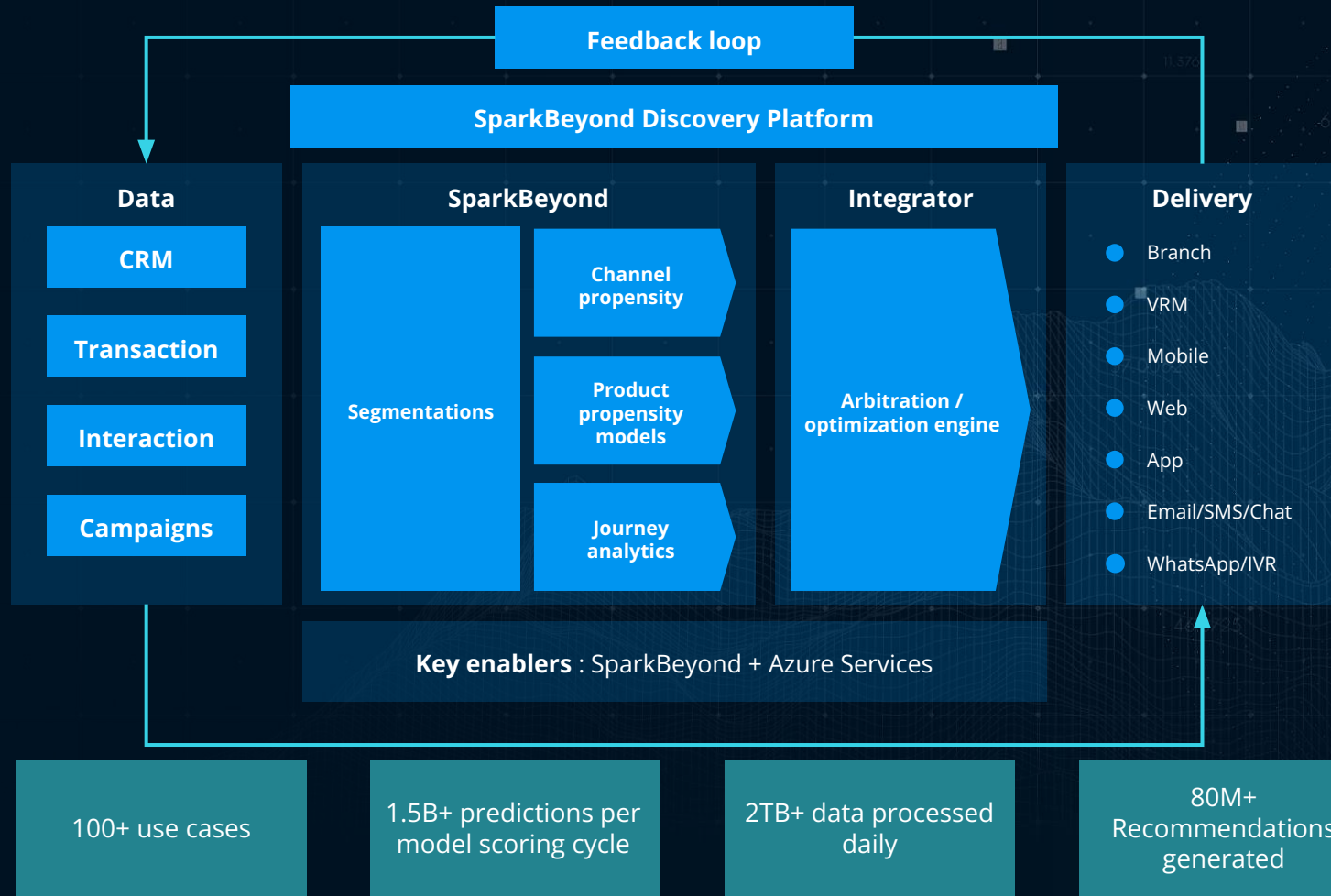
Banking Transformation - Our 5 Year Journey



Value Creation in Numbers

Business	\$100M+ cumulative impact	4 - 9X increase in conversion rates* <small>*varies based on asset or liability product</small>	100+ use cases developed	8 - 12X faster time to implementation
Technology	30% reduction in TCO	80M+ recommendations generated	2TB+ daily data processed	1.5BN+ predictions per cycle underpinned by an inclusive architecture
Organization	8 cross-functional pods created, inc. DE and ML Ops	50% improvement in team productivity	50+ SAS users upskilled to DS/ML professionals	40% more interaction between business and DS team

Hyper-personalized Segments at Scale - Delivering tailored experiences across 10+ channels for 45M customers



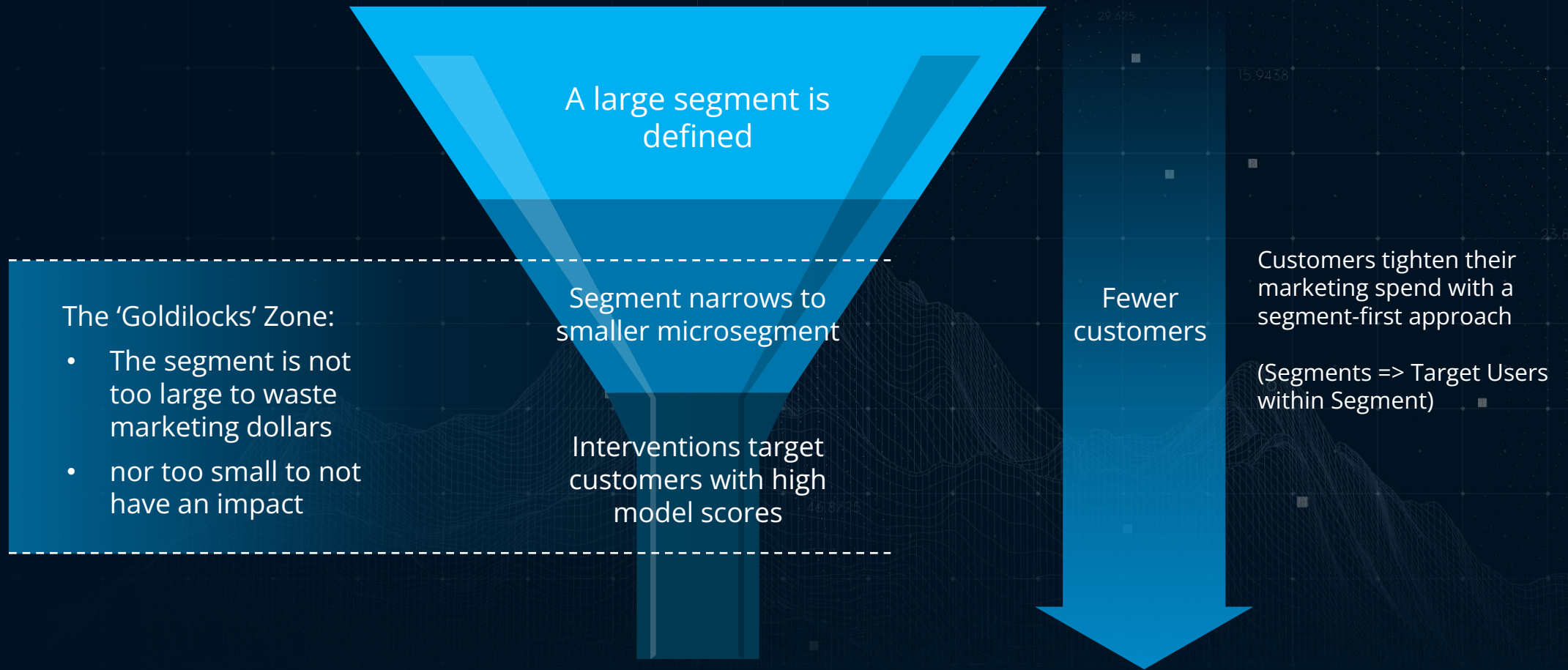
Personalized narratives at n=1 customer level for:
40M+ customers
delivered to **20,000 frontline sales agents**

3K+ hyper-personalized omnichannel campaigns executed monthly (500 for retention alone)

Next Best Action recommends top product for each customer
90% of RMs use recommendations

Increased productivity by outbound call center agents due to personalized information about customers

SparkBeyond Approach - Focused interventions for high propensity microsegments to maximise marketing ROI



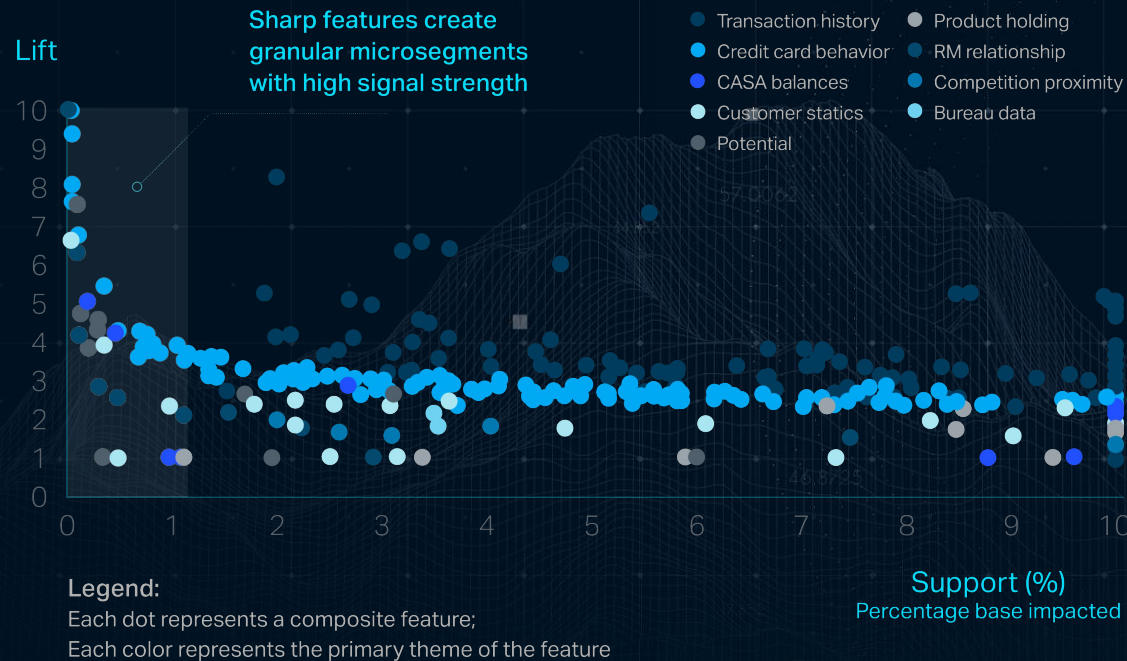
Hyper personalization with microsegments - deep dive

Context

Objective was to uncover thousands of sharper micro-segments (size less than 1%) for every use case

Nuanced interventions designed to these specific segments

Feature evaluation grid for predicting attrition (signal strength vs. base impacted)



Illustrative micro-segments

High propensity to attrite, if :

High transfers to family members located in other cities, with established relationships with competition banks

Customer is CXO at a top company, living within 2 KM radius of foreign banks and has had service issues in the past

Customer typically transfers out at least 50% of maximum inflow within 2-3 days of credits (possibly not primary bank)

Next Best Action - Impact Numbers

Enabled AI-powered, cloud-hosted Analytics practice to drive personalization @ n = 1

Next Best Action (NBA)

First-ever implementation of Recommendation Advisor in BFSI in India led to **4x improvement in employee productivity**

Model trained on latest time-points every month to ensure relevance, and addition of new feedback channels (digital and manual)

Immediate NBA (i-NBA)

Recognized amongst top 9 global AI innovative analytical solutions by EFMA

This dynamic AI engine extracts daily hot leads from the near-real time data

>4X lift in conversion rate over NBA
(>10X higher conversions than BAU)

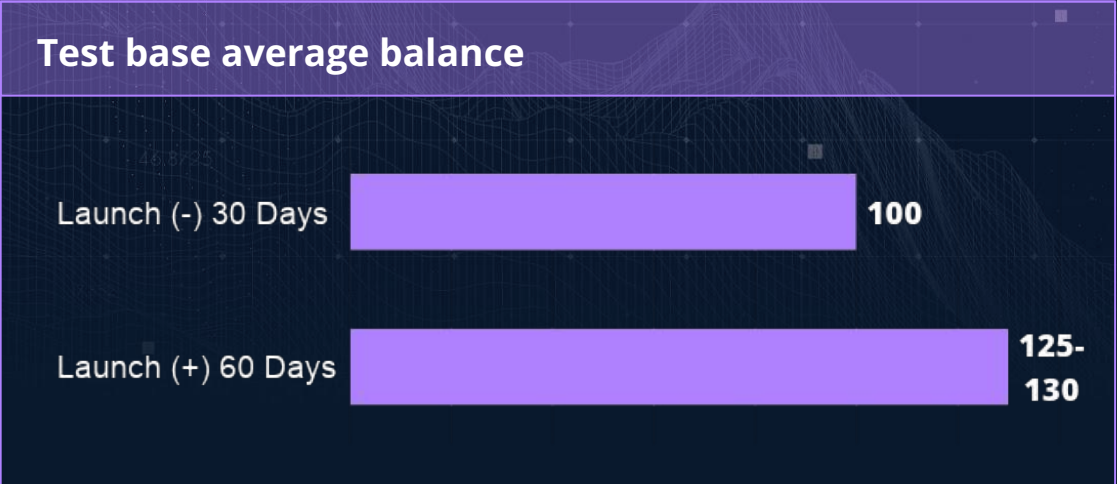
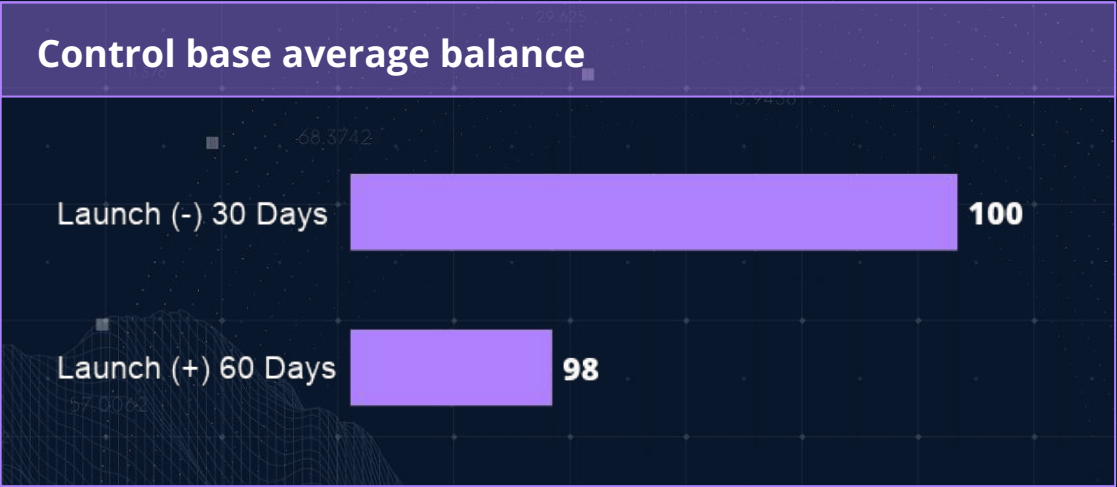
Product	% Conv (1 month)	Lift over NBA	Lift over BAU
PL	5.3%	4	13
LACC	12.9%	4	12
AL	1.6%	8	27

These products along with HL, CC (recently gone alive) have ~ 9.5 lakh I NBA recommendations / month

Deposit attrition - USD 80 million of balance build seen within 60 days of launch - 25-30% higher balance build vs control group

Success metrics

-  **10x** Higher conversion rates within ~30 days of campaign launch
-  **3x** Higher engagement with personalized videos and landing pages
-  **\$80mn** Balance build within 60 days of launch of first set of tests



Client Reference – Santander Bank Polska

Pioneering AI-Driven Cybersecurity Audit

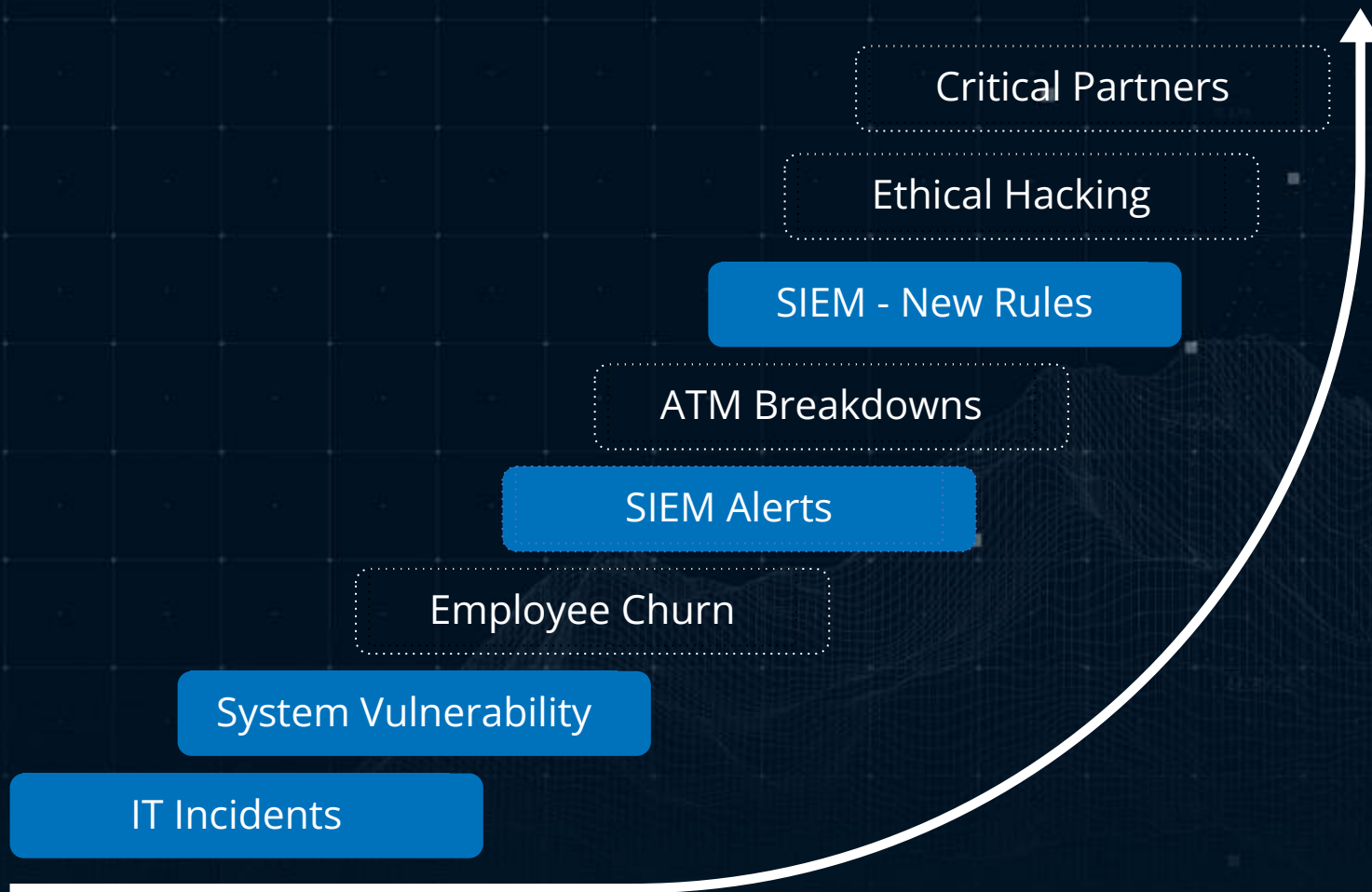
<https://www.sparkbeyond.com/press/santander-bank-polska-and-sparkbeyond-pioneering-ai-driven-cybersecurity-audit>

Malgorzata Kalach, **Audit Director** at Santander Bank Polska says:

“The unique solution deployed in partnership with SparkBeyond signifies a **shift in approach and development of modern audit practices**, thereby presenting an opportunity to redefine the role of the auditor to maximise the value gained from the growing volume of information available. SparkBeyond-supported audit processes can help improve the efficiency, significantly increase precision and improve the quality of audit testing. This initiative may also reimagine security operations based on artificial intelligence, setting a new standard for cyber security resilience.”

Santander Bank
Polska and
SparkBeyond:
Pioneering AI-Driven
Cybersecurity Audit

8+ use cases delivered for **Santander Bank Polska**



Key Success Factors:

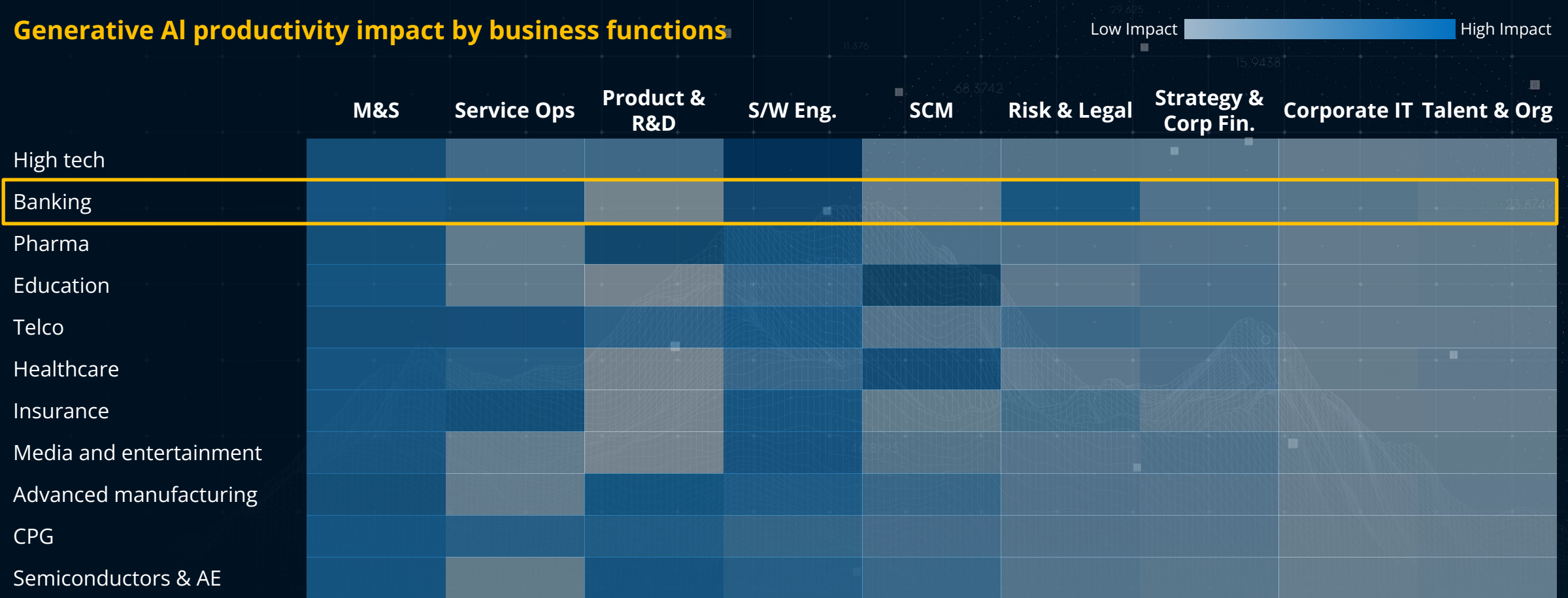
- Assisted Onboarding Programme to train and help solve first use cases
- No Code / Low Code interface
- 40% reduction in false positive
- New SIEM Rules and efficiency delivered for SoC



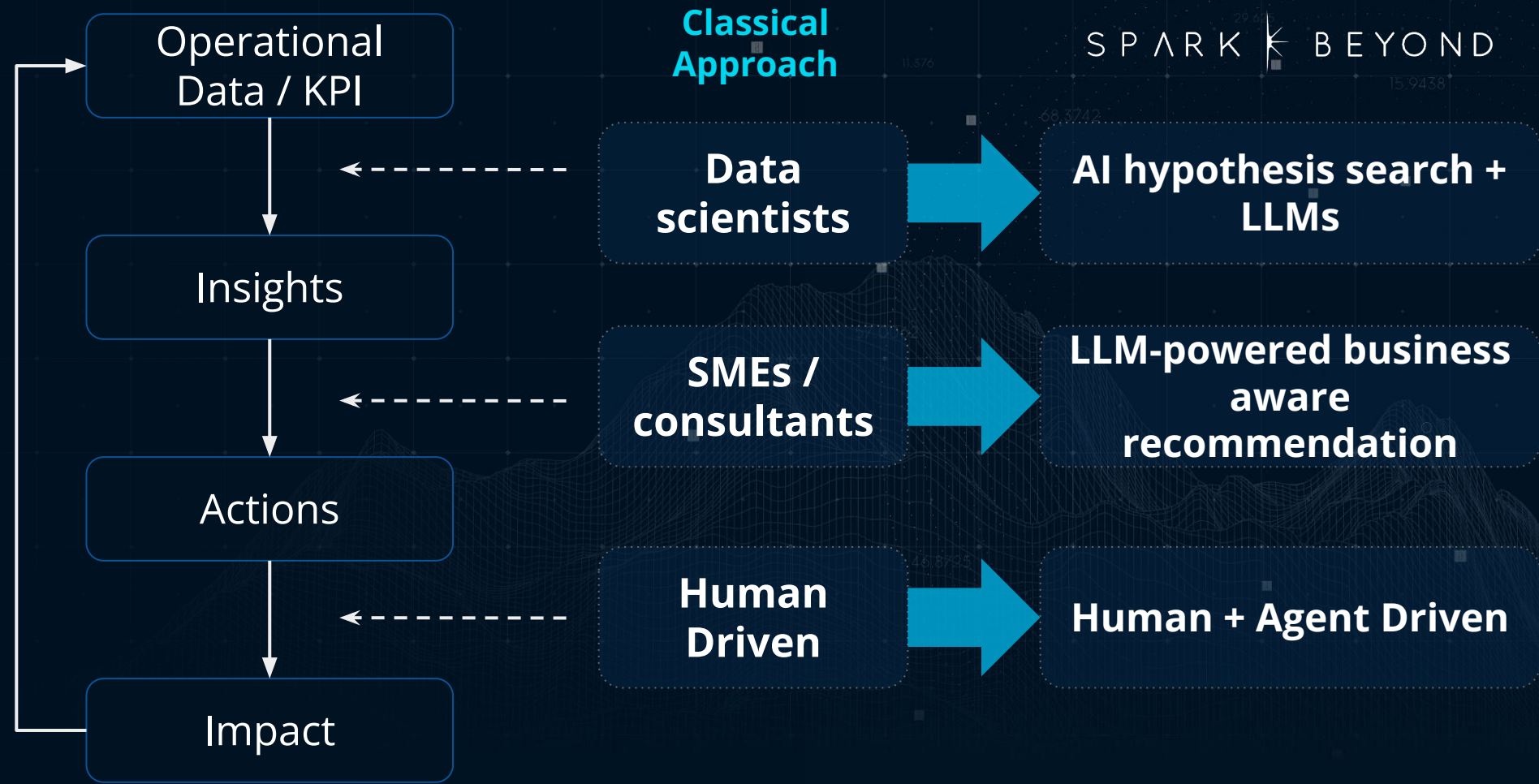
What's possible with Gen AI?

For banks, most impact will come from M&S, service ops and risk management functions

Generative AI productivity impact by business functions



How? Enable the paradigm shift to 'Always Optimized' KPI Optimization



Marketing & Sales - Accelerating campaign execution

	Campaign Objective	Target Segment Identification	Persona Development	Key Message Development	Execution
Common Activities	<ul style="list-style-type: none"> Marketing team decides on KPI of choice (churn, upsell, cross-sell) 	<ul style="list-style-type: none"> A segment is defined through manual exploration of data or intuition 	<ul style="list-style-type: none"> A persona is developed, and customers identified 	<ul style="list-style-type: none"> A unique message per segment/persona is then tailored for the campaign 	<ul style="list-style-type: none"> Tailored message gets executed via selected marketing channels
The Boost with LLMs	<ul style="list-style-type: none"> A menu of potential segments get generated by LLMs (but unclear applicability to your customer base) 	<ul style="list-style-type: none"> Personas get automatically defined (but not specific customers) 	<ul style="list-style-type: none"> Generic message based on select segment and personas (with no customer context) 	<ul style="list-style-type: none"> With agents and plug-ins, execution happens in the relevant enterprise system 	
The Boost with SparkBeyond	<ul style="list-style-type: none"> Segments generated are based on your objective and enterprise data from CRM, customer service and customer 360 systems with high propensity to influence the objective 	<ul style="list-style-type: none"> Specific customers can get mapped to personas 	<ul style="list-style-type: none"> Message developed based on customer context and personas backed by data 	<ul style="list-style-type: none"> NIL 	

Gen AI based full stack marketing content optimization

Data Used

Customer attributes

- Categorization based on Net Worth
- Relationship
- Salary & other income streams
- Product holdings (convenience & engagement)

Customer product data

- Fixed Deposit
- Recurring Deposit
- Mutual Fund
- Insurance
- CASA
- Loan
- Online billpay

Customer transactional data

- Credit cards
- CASA

Customer estimated potential

Branch data where customer has the account

Resulticks email campaigns

Outbound telemarketing data

Adobe analytics

Zineone campaign & events

Bureau data

Methodology

Step

Description

1

Using 20+ data sources, SparkBeyond generates insights, segments and models

2

SparkBeyond translates insights in human interpretable format

3

Output A: Persona are generated using these insights (which have high conversion rates)

4

Output B: Personalized email for each persona segment

High propensity segments for personal loan offer acceptance

Microsegment generated by SparkBeyond	% Population exhibiting this behavior	Incremental conversion over baseline	Persona label	Persona description
<ul style="list-style-type: none"> - Customer has few missed payments, average DPD between 1-10 days - Customer visits PL webpages often 	2%	4.67x	Credit considerate Explorers	These individuals display a responsible payment behavior, with occasional instances of being 1-10 days past due . Notably, they frequently browse our personal loan web page, indicating an interest in accessing credit options . This persona is characterized by their cautious approach to managing their finances and seeking additional lending opportunities when needed.
<ul style="list-style-type: none"> - Customer has received PL marketing offers previously - Customer spent about 3 minutes reviewing the loan offers 	1%	4.1x	Engaged Prospects	These individuals have previously received marketing offers for Personal Loans (PL) from our bank, indicating their potential interest in accessing credit. Spending around 3 minutes reviewing the loan offers demonstrates their engagement and consideration in exploring financial options . This persona is characterized by their receptiveness to loan products and willingness to invest time in evaluating offers .
<ul style="list-style-type: none"> - Customer make Loan payments outside the bank - Gap in AQB between current and estimated potential - Customer visits PL webpages often 	2%	4.97x	Potential Optimizers	These individuals stand out due to their loan payment behavior, which often occurs outside our bank. Despite having the capacity for higher average quarterly balances, they exhibit a considerable gap between their current and potential balances. This persona is characterized by untapped financial potential and the possibility for increased engagement with our bank's products and services .
<ul style="list-style-type: none"> - Customer currently has a PL with the bank - Customer continues to check on Easy EMI & calculator pages 	1%	5.72x	EMI Trackers	These individuals currently hold a Personal Loan (PL) with our bank and display ongoing interest in managing their finances efficiently . Continuously checking the Easy EMI and calculator pages showcases their focus on understanding their repayment options and planning for future financial commitments . This persona is characterized by their proactive approach to loan management , seeking clarity on instalment structures, and staying informed about their financial responsibilities.

Email variation for potential optimizer

Generic Chat-GPT version of email without the customer persona personalization

Email customized based on persona



Subject: Instant Personal Loan for Your Needs

Dear Customer,

Seize opportunities with our seamless online application process, quick access to funds, competitive rates, loan up to Rs.40 Lakh, flexible tenure up to 5 years, minimal fees and documentation. Pre-approved customers enjoy 10-second disbursements. Apply now at [Bank Name].

Regards,

[Your Name]

[Your Designation]

[Bank Name]

- Customer make Loan payments outside the bank
- Gap in AQB between current and estimated potential
- Customer visits PL webpages often

Subject: Unlock Your Financial Potential with Our Tailored Personal Loans!

Dear [Customer's Name],

As a valued customer of [Bank Name], **we understand your desire to maximize your financial journey.** That's why we're excited to introduce exclusive **personal loan offers** designed for customers like you. Our flexible loans **can bridge the gap between your current and potential financial status.**

Why choose us?

Tailored Solutions: Our loans match your unique needs, with competitive interest rates and flexible terms.

Quick and Hassle-Free: Apply online or visit us with minimal paperwork, guided by our expert team.

Build Credit: Regular payments on our loans boost your credit score for future financial opportunities.

Don't wait to seize the opportunities ahead! Contact our financial advisors at [Bank's Contact Number] or visit [Bank's Website/Nearest Branch]. Let's unlock your full financial potential together!

Best regards,

[Your Name]

[Your Title/Position]

[Bank Name]

Incorporating demographics for **differentiated messaging @ n=1**

Subject: Unlock Your Financial Potential with Our Tailored Personal Loans!

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Don't wait to seize the opportunities ahead! Contact our financial advisors at [Bank's Contact Number] or visit [Bank's Website/Nearest Branch]. Let's unlock your full financial potential together!

Best regards,

[Your Name]
[Your Title/Position]
[Bank Name]

As a **young and ambitious individual**, we know you're eager to **make the most of your financial journey**. That's why we're thrilled to introduce our exclusive personal loan offers, **specially designed for young adults like you**. **Our flexible loans can bridge the gap between your current aspirations and potential financial status.**

Personalized for customer who is a senior citizen living in metro city

As a **wise and esteemed senior residing in vibrant city**, we **understand the value you place on financial security and independence**. That's why we're excited to introduce our exclusive personal loan offers, specially crafted to meet the unique needs of seniors like you. Our flexible loans can **bridge the gap between your aspirations and potential financial status**.

A/B testing Gen AI content creation with **image gen**

CONTEXT

A major bank in Europe wanted to **improve their marketing campaigns with generative ai** aiming to see **higher conversion** rates, increase **client engagement** through personalization and gain **operational efficiencies**.

They choose a campaign offering a loan to SMEs in their mobile and desktop channels which runs monthly

Currently every customer receives the same offer in terms of both credit terms and marketing banner

The value from tailoring marketing banners (ie headline and visual) to customer segments while keeping the offer the same across the board will be **validated through a/b tests**.

RESULTS & FINDINGS

It took **less than a week** to generate marketing content which was accepted by the marketing department

The process was highly iterative and required cross functional collaboration

Keeping **Humans-in-the-loop is essential** for ensuring quality and **not a blocker to scale** the framework if integrated properly

Tailoring marketing content is **highly dependant on** the ability to extract **customer knowledge stored in structured data**

We've designed a framework to allow the bank test the latest and greatest models while staying compliant with regulations and internal policies

Tailoring marketing content to customer and cultural contexts - examples

SEGMENT

BANNER

Construction and Manufacturing SMEs

SMEs from the construction and manufacturing industries who have a high volume of transactions, are likely to experience fluctuations in their cash flow, and rely heavily on credit facilities



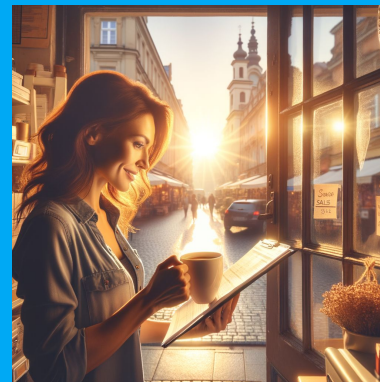
Build a Strong Foundation for Your Business!

Apply online for a credit loan or book a meeting with our advisor

Retail and Service Entrepreneurs

Primarily engaged in retail trade, such as clothing stores, bookstores, and catering services, with a secondary focus on service-oriented businesses like medical practices, pet stores, cafeterias.

They rely heavily on credit transactions to manage their daily operations



Open The Doors To Success!

Apply online for a credit loan or book a meeting with our advisor



Case Studies

Banking Use Cases

Always Optimized top-line and bottom-line impact generating use cases

MARKETING & COMMERCE

Hyper Personalized Campaign / Engagement

Deliver tailored experiences across channels with continuously refined micro-segments to optimize campaigns

Deposit Retention Safeguard

Predict and preemptively engage high-risk customers through adaptive models that identify attrition patterns 60-90 days in advance

Cross-Sell Autonomous Targeting

Dynamically predict purchase propensity with self-updating models that adapt to changing customer preferences

Location-Based Revenue Optimization

Continuously refine localized drivers of loyalty & sales to automatically adjust offers and branch targets

RISK & OPERATIONS

Collection Strategy Refinement

Autonomously flag high-risk debts and automatically optimize intervention timing and channels

Fraud Prevention Shield

Reduce emerging fraud through continuously evolving behavioral pattern recognition

SLA Predictive Monitoring

Continuously forecast IT support ticket resolution against service levels with adaptive intervention triggers

Talent Performance Optimization

Automatically identify evolving characteristics of high performers and continuously refine retention drivers

Cross/Up-Sell | Data-Adaptive Revenue Streams

SPARK ✦ BEYOND

**ROI of
high-value
audience
segments:
15x in 5 months**

CHALLENGE

- An American & Swiss multinational financial services corporation needed to deploy AI that could **continuously refine customer acquisition** and up-sell strategies rather than relying on static models

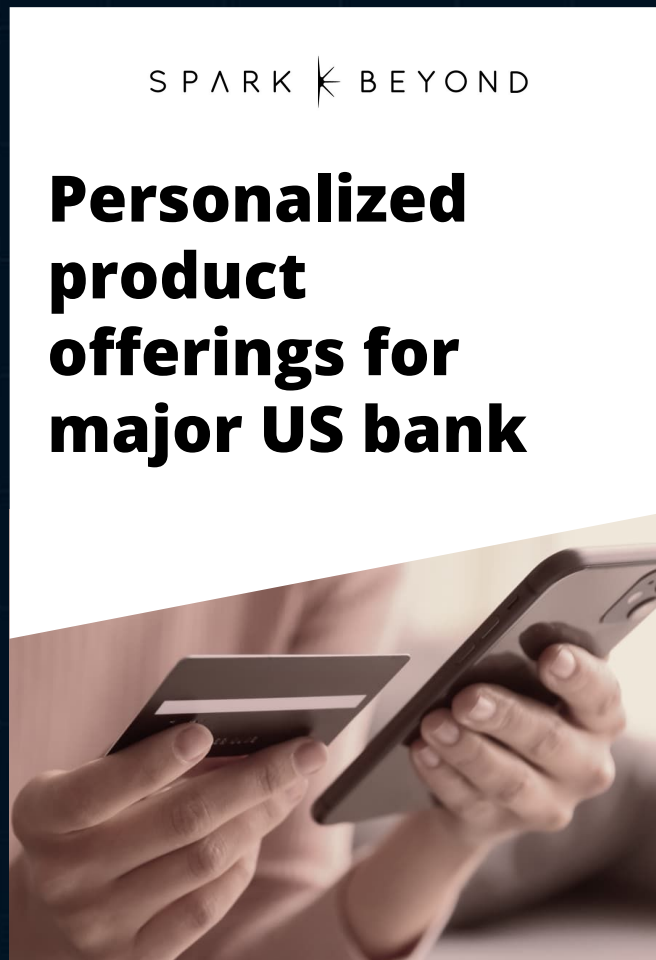
RESULTS

- This adaptive approach improved target response rate translated to **7x greater returns** from the campaign
- SparkBeyond uncovered over 4 million CHF in potential bottom-line value for the business at an **ROI of 15x in 5 months** establishing a foundation for perpetually improving KPI performance

APPROACH

- SparkBeyond connected multiple datasets (including GDPR-compliant external sources) to analyze 100+ million potential drivers behind customer behavior patterns
- Unlike static analytics, the system **continuously evaluated new patterns** and adapted targeting strategies as customer behaviors evolved

Personalized Marketing | Dynamic Offer Engine



CHALLENGE

- A major US Bank sought to **move beyond static product recommendations** for credit card customers to a system that could continuously learn and adapt based on changing behaviors

APPROACH

- Implemented a **dynamic decision engine** combining web-browsing history with transactional data
- Created personalization logic that **continuously refined** itself based on customer interactions
- Generated and tested thousands of product recommendation rules that evolved with customer preferences

RESULTS

The decision personalization logic tree quickly mobilized **several state-focused interventions**, including:

- Identified and automatically prioritized high-converting customer journey touchpoints
- **Dynamically adjusted targeting across web applications** as user preferences evolved
- Systematically improved engagement with previously low-response customers through continuous offer optimization

Deposit Attrition Prevention | Predictive Retention

SPARK ✦ BEYOND

Deposit Attrition Prevention: \$80mn balance build



CHALLENGE

- A **leading Indian private sector bank** was struggling with attrition in deposits (savings and current account balances) at the rate of 15-20% p.a. for existing customers. They wanted to arrest attrition (loss in deposit balances) by continuously identifying high-risk customers

RESULTS

- **\$80mn balance build (>25%) achieved within 60 days** through continuously refined retention campaigns, with ongoing discovery of over 5,000 intelligent insights and approximately 300 niche customer segments

APPROACH

- Deployed hypothesis generation that **continuously evaluated millions of possibilities**
- Leveraged intelligent features to identify and track evolving customer micro-segments
- Implemented automated data ingestion to ensure models reflected current conditions
- Created 30+ adaptive segmented models across 3 portfolios that improved with each iteration

Loan Compliance & Agent Performance | Autonomous Risk Control

Reduced cost of credit & enabled pre-emptive action on agent performance



CHALLENGE

- A South East Asian bank needed to replace static predictive models with a system that **could continuously adapt to changing patterns** in loan compliance and agent performance

APPROACH

- The platform continually analyzed 150 variables across 8 categories, **constantly discovering new insights** and updating predictions for loan compliance while simultaneously tracking shifting factors affecting agent performance

RESULTS

Late Payments & Defaults

- **Reduced cost of credit** by dynamically optimizing collection visits by rank-ordering customers (according to their propensity to be late payers) in over a 12-month period

Agent Performance

- **Proactively identified agents whose performance would improve or deteriorate**, enabling pre-emptive action to be taken for each group

Money Mule | Pattern-Learning Security

Multinational bank identified mule accounts with 95% accuracy



CHALLENGE

- A leading global bank needed to **replace rigid fraud models** with a solution that automatically adapts to evolving financial crime patterns

APPROACH

- The platform continuously enriched internal data with contextual external sources, **dynamically creating and refining risk clusters** for SME clients

RESULTS

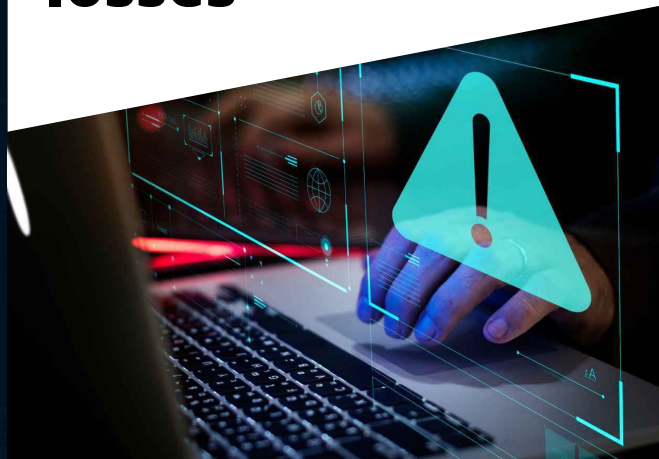
Implemented an alert system that autonomously updates monthly with **95% accuracy based on emerging patterns such as:**

- At least 7 transactions with amount higher than 30K
- Most frequent operation on the account is transfer to other accounts
- Most frequent title of transaction is "transfer to own account"

Fraud & Financial Crime | Adaptive Safeguards

SPARK BEYOND

Fraud detection & prevention mitigates 8% of total fraud losses



CHALLENGE

- A top US-based prepaid card company needed to replace their static rule-based engine with a system that could continuously adapt to evolving fraud patterns

APPROACH

- SparkBeyond platform constantly ingested anonymized customer data, developing predictive models that **automatically adjusted to new fraud patterns** without requiring manual updates

RESULTS

- The continuously evolving fraud detection capabilities drove **10x ROI within 6 months** addressing **>\$30M** in fraudulent cases
- **8% of total fraud losses were mitigated** through daily card reissuance based on constantly updating risk assessments

Electronic Fraud | Auto-Refining Protections

SPARK BEYOND

**European bank
reduces 40%
of undetected
fraud attempts**



CHALLENGE

- A European bank required a fraud prevention system that could **continuously adapt to emerging electronic fraud tactics** without manual intervention

APPROACH

- The platform integrated electronic log data with internal client data to dynamically design and refine fraud detection rules, **automatically back-testing to minimize false positives**

RESULTS

The self-adapting detection rules reduced undetected **fraud attempts were significantly reduced by 40%** with models that continuously evolved to identify new fraud patterns through automatically updated rules - example include:

- More than 2 IPs used in the 24 hours prior to a transaction
- Checking the transaction limit online prior to making a payment
- On transaction day, services added to the account related to payment management

HR Performance Analytics | Proactive Talent Management

SPARK | BEYOND

Identified drivers of employee performance for leading EMEA bank



CHALLENGE

- A leading EMEA bank sought to move beyond traditional static performance metrics to continuously identify **evolving drivers of employee success** despite union regulation constraints

APPROACH

- The platform integrated multiple HR data sources, constantly analyzing and **refining predictors of high performance** across the organization

RESULTS

The system identified **continuously monitored performance indicators** across compensation, age, seniority, education, and team factors, enabling three self-improving initiatives:

- Dynamically refined reskilling programs
- Evolving new hire practices
- Identification of role fit issues

Commodity Price Forecast

New ALPHA strategies see 25% uplift over baseline performance



CHALLENGE

Commodity Trading with an Oil Major wanted to harness explainable signals

- Quickly identify risk signals and price movements for multiple time horizons
- Target physical and financial markets across commodities

APPROACH

- Leveraging historical trades and weather data (on/offshore) to predict gas price movements
- Leverage trade flows at national/delivery points
- Leverage news and geospatial data sources to increase prediction accuracy

RESULTS

- **Direct PnL increase** related to model performance
- **25% uplift** in model performance over existing ones
- Improved understanding of **market risk and market drivers**
- **Productivity:** Quick turnaround in re-training models for the new geo-political scenarios
- **Trading with new asset classes** by quickly generating interpretable and accurate models

Treasury and Asset Management: Bond Rating Forecast

SPARK BEYOND

Global asset manager predicts ~80% credit rating downgrades

CHALLENGE

This global asset management firm wanted to predict credit rating downgrades across 12,000 listed fixed income assets to drive investment decisions and decrease risk.

- Adjust portfolio positions
- Understand and measure asset performance against hard accounting KPIs

APPROACH

- Drawing on fixed income market data, company financials, macro-economic indicators, and financial news, the automated Feature Discovery allowed rapid testing of millions of time series dependencies with both linear and non-linear approaches.

RESULTS

Produced natural language research insights (feature descriptions) that described key drivers behind predicted downgrades which the investment committee could understand.

Enabled **automatic reporting of downgrade action probabilities for exposure** across energy, industrial, materials, utilities and consumer cyclical/non-cyclical sectors.

Historical backtesting detected

- **€76M increase in provisions**
- **€91M increase in stress on assets**
- **80% of held debt asset downgrades**

Branch Optimization

Quantified geo-spatial data driving branch performance



CHALLENGE

- A leading bank in Poland wanted to identify the factors that drove branch performance and set branch targets more accurately based on important factors.

APPROACH

- Integrated internal branch and customer data with external web knowledge to cluster branches, identify performance drivers per cluster and set accurate targets

RESULTS

- Quantified the importance of **geo-spatial data as a factor driving branch performance**
- Identified that despite different branch characteristics (number of clients, type of location), **branch results were driven by sales rep performance**
- This insight enabled the bank to set more realistic individual targets per branch

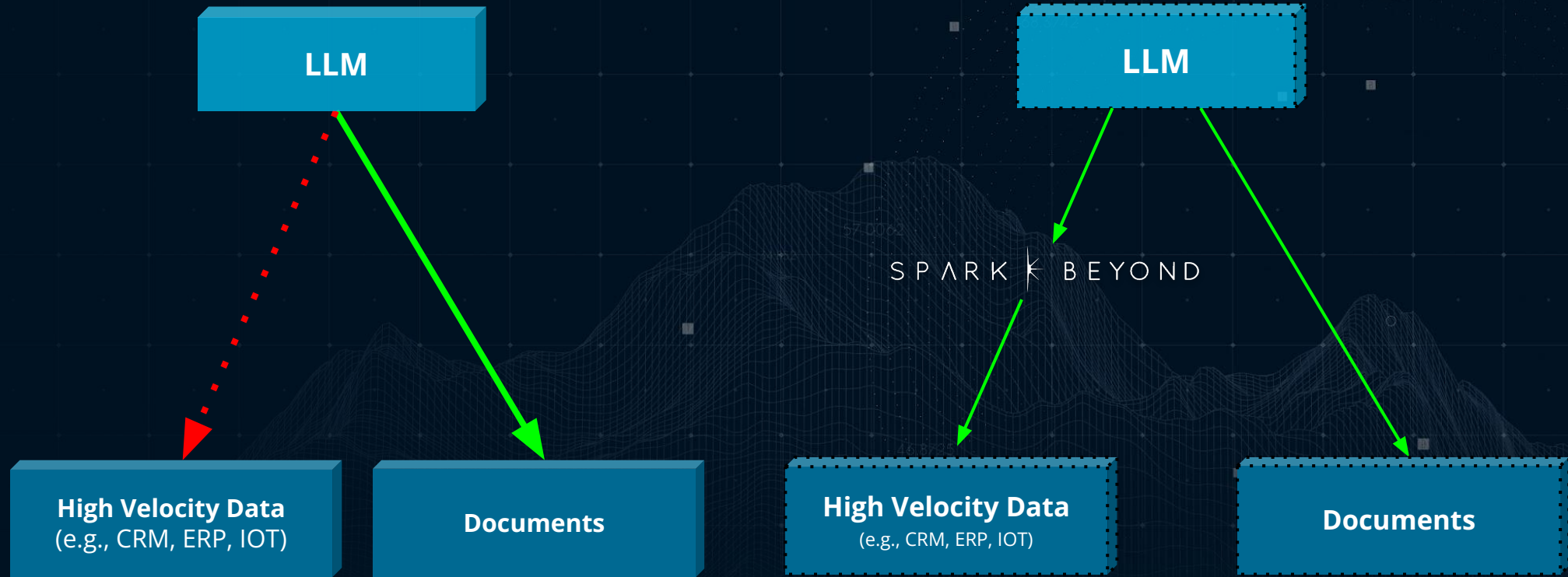
A person's hands are shown holding a glowing digital network of nodes and lines. The network is composed of small white and blue dots connected by thin lines, creating a complex, interconnected structure. The background is dark with a grid pattern and some faint, glowing elements. The overall color palette is dominated by deep blues and purples, with a bright white glow emanating from the center of the hands.

Thank You

SPARK  BEYOND

Generative AI doesn't understand **YOUR** business.

For substantive impact, AI must leverage knowledge from operational data



Always Optimized KPI Solution

Systematically discover drivers of Enterprise KPIs and identify interventions to drive operational performance

INPUT

- Customer 360
- CASA Balance
- Transactions
- Payments
- ATB, WTB
- Credit info
- SKU, Product
- Location



LLM Hypothesis Generation World Knowledge

OUTPUT

Date analysed: 30 Dec

KPI: Churn

Baseline churn rate: 17%

Insight: High variability of time between deposits in the last year, 70% more likely to churn

Support: 33%

Explanation: Customers with irregular deposit habits are more likely to churn. This could stem from factors such as reduced financial capacity, lack of engagement, or interest in alternative financial platforms.

Action Recommendation: Encourage consistent deposit behavior by offering incentives such as deposit bonuses, tiered interest rates, or exclusive perks for regular deposits.

Code:
`variance(days_since_deposit of customer_id in the last 1 year before date) ≥ 117.883`

Source table: order_history

EXPERIENCES

- Operating Systems
- Agents
- CoPilots
- BI Tools