

Szoleczki Zoltán Innovation Tribe Digitális Divízió

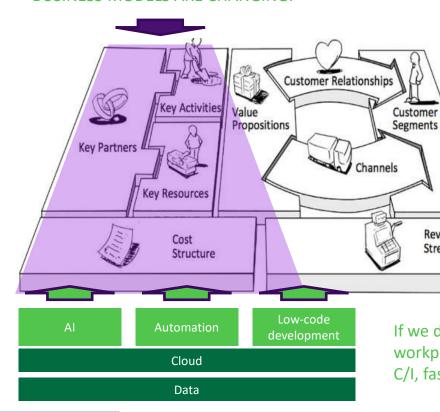
2025-11-05







KEY PILLARS OF TRADITIONAL BANKS' BUSINESS MODELS ARE CHANGING:



KEY ACTIVITIES DISRUPTED:

New industrial revolution is here: Thousands of our colleagues' jobs are changing. Today's boring, repetitive and low-value-added tasks will be executed by **automations**, **robots** and **AI**.

KEY RESOURCES DISRUPTED:

Revenue

Streams

Machine intelligence is part of the processes, alongside humans as new resources, increasing efficiency. IT developments will also change as technologies shift towards Low Code / No Code. Data and Cloud capabilities therefore are more critical then ever.

COST STRUCTURE DISRUPTED: Less unnecessary, costly manual tasks in administration and in IT **results in less expenditures**.

We will use the human workforce much more effectively, increasing stakeholder value, while learning how to efficiently use and scale in cloud services.

If we do it right, everyone wins: More freedom and creativity in the workplace + a much higher value creation for the bank (much lower C/I, faster time-to-market, error-free processes).



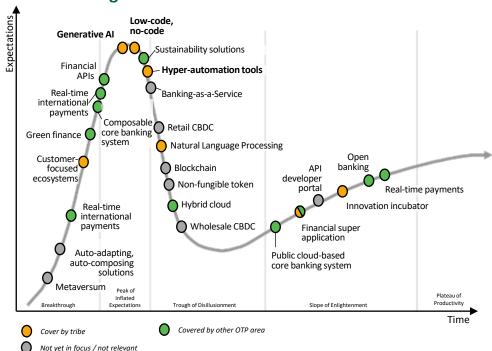
External Challenges



OTP Learnings

| Hype is enormous, a new dotcom-like bubble is forming, there is no sign that the rate of innovation — and thus the investments — will slow down in the near future. | We shall increase the strategic importance of Al & Automation , but only with a value-based approach. | |
|--|---|--|
| Everything is about GenAI, while that is only a fraction of the answers to the digitalization challenges. Solutions usually require complex application developments besides the AI development. | 90% of the work is achieving process, cloud and data maturity. We should consider all kinds of automation, not just GenAI. | |
| Vendors engage in "Al washing", packaging zero value added third-party services and selling it at a premium, skip-ping enterprise compliance and scalability. | Group level knowledge building, governance and quality assurance (of solutions and vendors) is a must. | |
| There is an extreme shortage of talents. Low capacity and the hype together means overreliance on a few key – not just AI - experts, who are overloaded already with projects. | Capability building and talent management is crucial, along with a shift towards federalized, low-code technologies. | |
| Finalta worldwide study shows, that only 11% of enterprise AI applications end up in production (and only 3-5% for generative AI)*. AI-based applications that have no chance of scaling ("pilot purgatory").* | Building scalable operations is more important than being the quickest, organization-wide transformation and priorization of impact is the key. | |

If we want to realize transformational value, we need to look past the hype and scale for the long term with an organization-wide initiative.



^{*} McKinsey & Company - Finalta, Study 2024 - Based on a research of ~1,800 business leaders globally

^{**} Gartner Hype Cycle for Emerging Technologies in Banking 2023 és Hype Cycle for Digital Banking Transformation 2023 - What-a-venture The state of corporate venture building 2024



AI & AUTOMATION STRATEGIC FRAMEWORK*

3 USE CASE ENABLEMENT

CUSTOM SOLUTION DEVELOPMENT

STANDARD PRODUCT ENABLEMENT

COMPETENCE & COMPLIANCE

SOLUTION GOVERNANCE

VALUE REALIZATION – FINANCIAL LAYER:

Ensure top-level financial impact. Steer value creation, control costs, monitor them and report to all stakeholders for competitive advantage.

3 USE CASE DELIVERY ENABLEMENT – CLIENT LAYER:

CUSTOM SOLUTION DEVELOPMENT: Complex service delivery (typically with many system developments) with large business impact, with QBR integrated operations and constraints. Usually requires full code development (e.g. fine-

tuned models).

STANDARD PRODUCT ENABLEMENT: Fast application building capabilities

with business-user ready, loveable platforms where app development can be federalized in large scale. Usually covered with LC/NC platforms.

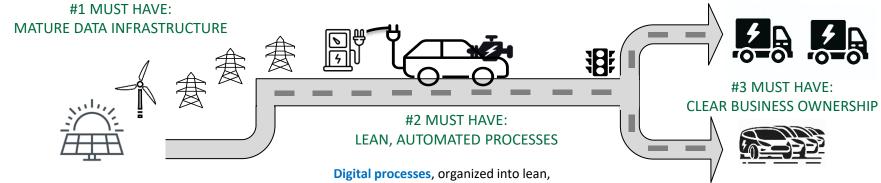
- 2 SOLUTION GOVERNANCE INTERNAL PROCESSES LAYER:
 Automation Solution Design process to guide automation and AI related initiatives with the right technology mix. Applied R&D and enablement of new core enterprise grade technologies.
- COMPETENCE & COMPLIANCE LEARNING & GROWTH LAYER:
 Framework for responsible AI services, tools and standards. IT architecture,
 IT security and legal compliance, data protection. Awareness, capability
 building (education programs) on different levels.

^{*} Applicable to transformative technology introductions, specifically to new generation AI (Modern Deep Learning based AI as Natural Language Understanding, Generative AI etc.)



Al solutions and use cases - Enablers of successful Al developments

Data, cloud and process maturity is a must have + clear business targets for AI use cases



IT infrastructure architecture maturity, enterprisegrade, scalable infrastructure including tenant readiness, landing zones, governance and controls, standard building blocks - (land)

Data architecture maturity and clarified data compliance, including data governance, master data management, data quality and data availability – data hub: e.g. data lakehouse, data streaming - (refined energy network)

automated workflows where AI models can fit into it with the proper data and other compliance controls - (roads with traffic lights)

Al model development requires matured

Machine Learning operations – (electric engine development)

Al (based) systems are surrounded by governance and execution frameworks, standard tools and services - (the whole car)

Clear business priorization with dedicated organizational ownership and allocated resources for large impact use cases - (B2B electric fleet)

Responsibly governed and educated organization to enable products, that can be universally accessed for personal and team productivity gains - (B2C car sharing)

Blue: Al development prerequisites Purple: Actual Al developments



| Service level | Fully custom, onprem Al-stack | Custom training + modeling on cloud infra resources | Finetuning, boosting of prebuilt models (e.g. Al Foundry) | LC/NC app building (e.g. in PowerPlatform with Copilot Studio) with no custom model | End-user ready product, prompt engineering (e.g. M365 Copilot) |
|-----------------------------|----------------------------------|---|--|--|---|
| Software-as-a-Service | Build | Build | Build | Build | Buy |
| Model-as-a-Service | Build | Build | Build | Buy | Buy |
| Platform-as-a-Service | Build | Build | Buy | Buy | Buy |
| Infrastructure-as-a-Service | Build | Buy | Buy | Buy | Buy |

Custom, fullstack development – High data & cloud maturity company, Few, enterprise-large use cases Standard, LC/NC enablement – Low data & cloud maturity company, A lot, domain-specific use cases



History of AI solutions

First wave since the 70's, 90's & 2000's Banks began adopting machine learning for fraud detection, credit scoring, and risk management. As of now machine learning is extensively used by banks for several use cases.

Second wave since the 2020's, breakthrough in innovation

sophisticated and widely available, the emergence of Modern Deep Learning, especially Large Language Model enterprise use cases + integrated personal AI assistants

Al Solution categories

Traditional Machine Learning based enterprise services

Highest impact OTP use cases

Fraud Detection Anti-Money Laundering (AML) Know-your-customer (KYC) Credit Risk Assessment Personalized recommendations Customer lifetime value management Report generation Back-office automation

OTP HQ Status

Large history in OTP with dozens of active use cases, some classical deep learning use cases (Fraud prevention with Fraudsentry)



Modern As GenerativeAI became more Deep Learning based **Enterprise hyperautomations** (custom built services)

Retrieval Augmented Generation (RAG) & Large Language Model (LLM):

Knowledge management services Client intent recognition services Process automation services (e.g. corporate credit) Client and back-office facing are in production and under preparation



Al Coding Assistant: Development automation Example applications: GitHub Copilot, Code Llama

Al Office Assistant: Business automation

Example applications: M365 Copilot, Copilot Chat

Office assistants and "ChatGPT-like" Copilot services are introduced, coding assistant's introduction in progress

