



WEST MONROE'S GUIDE TO

AI for Mid-Market Banks



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CHAPTER 1

What do financial institutions need to understand when it comes to AI?

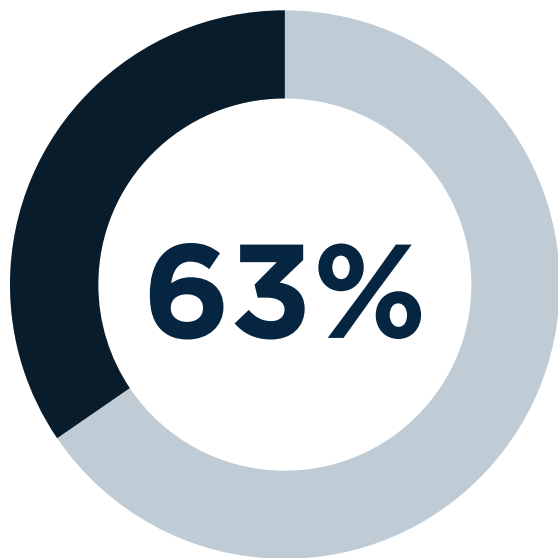
Introduction

You've seen it everywhere—the news, industry trades, and across social media—how can we better understand AI and the ways it will impact our personal and professional lives? At this point, we're no strangers to it.

This guide will take you through the broader context and macroenvironment within artificial intelligence (AI) and provide on-the-ground intel on the “why” and “how” when it comes to leveraging the value of AI in banking.



AI has changed over time.



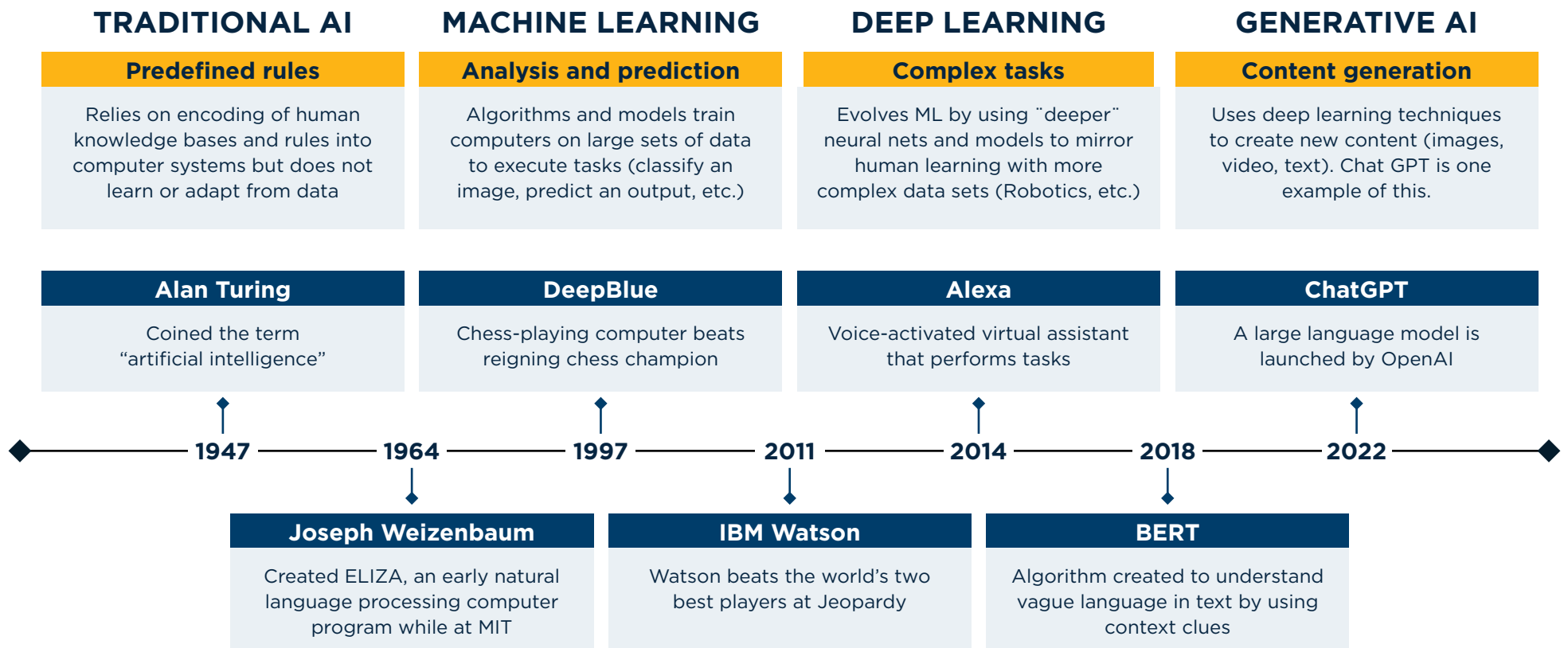
With 63% of companies prioritizing AI over other digital tech initiatives, we're seeing the financial services industry highlight the significance of data, value, and technology fluency as the backbone of investment.

The middle market can benefit from considering these trends and how they can streamline operations.

How did we get to this point? →

Artificial Intelligence

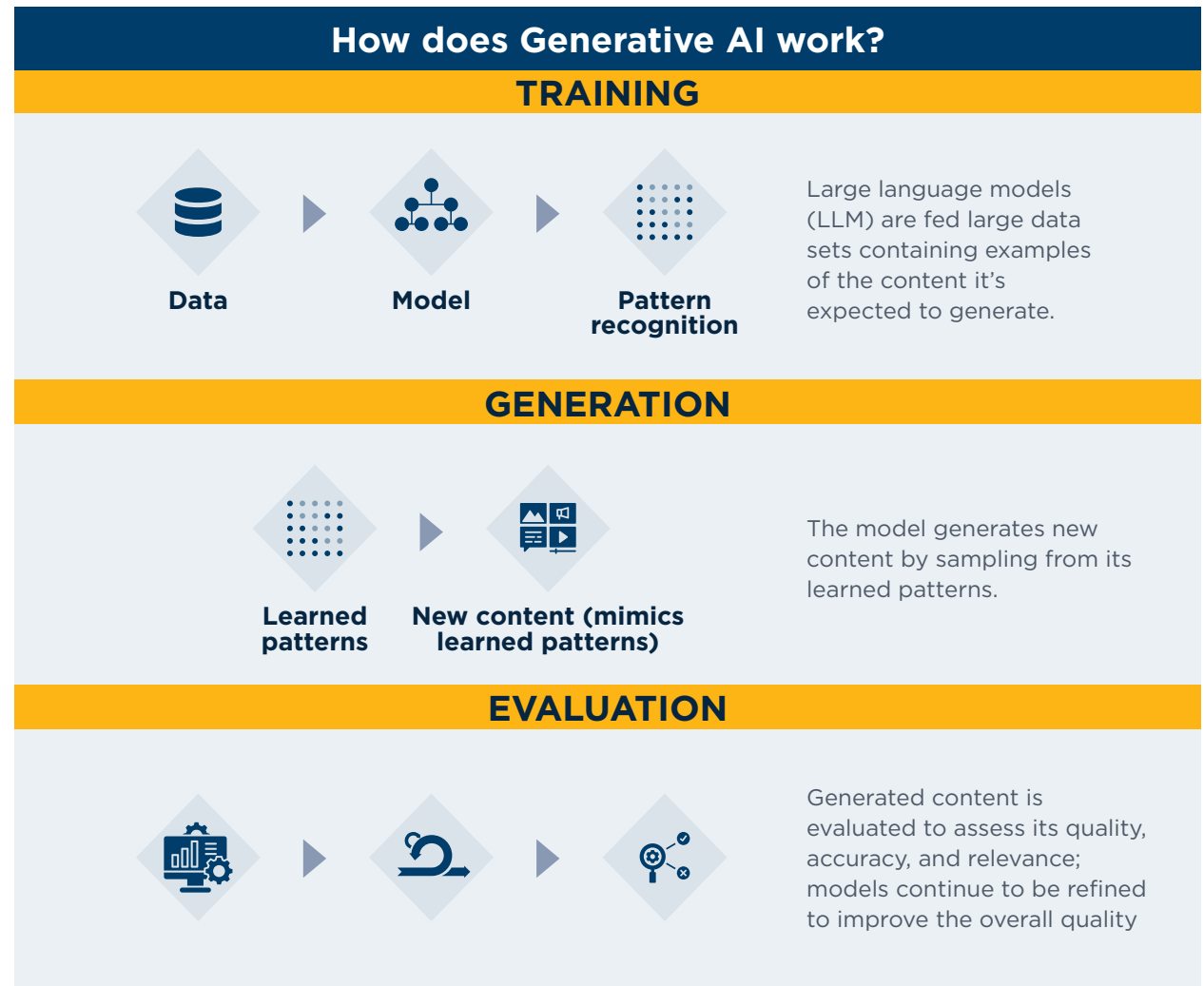
The development of AI can be traced from the conceptualization in the mid-20th century to its evolution, leading to the contemporary era of machine learning and Generative AI.



Generative AI is the forefront of new technology that will revolutionize how organizations operate.

Generative AI refers to AI systems that can generate new content or outputs (e.g., text, images, or even videos) by analyzing large amounts of data. Unlike other AI models that rely on pre-defined rules or specific inputs, generative AI models can produce original, creative outputs by identifying patterns and gaining knowledge from training data.

It's not about replacing people with computers and algorithms. It's about how middle-market banks can enable their people to focus on more critical functions and tasks with the help of AI.



Gen AI is an advancement in machine intelligence that has been evolving for more than 60 years, distinct from traditional AI and machine learning.

Traditional AI/ML

- Solves specific tasks in a single domain
- Input and output is usually numerical
- Typically requires lots of data
- Great at math, poor at reasoning and content generation
- Generally used to make a few high-value decisions much better, e.g.:
 - Targeting models
 - Pricing optimization
 - Segmentation

Generative AI

- General-purpose reasoning engines for multiple domains
- Input & output is usually unstructured
- Advanced models need 1000x less data
- Great at reasoning & content generation, poor at math
- Used to augment and automate tasks:
 - Summaries, collateral creation, translations
 - Generating new images, text, music, code
 - Interacting using natural language- ChatUX

Our take? Middle-market banks must embrace AI in all its forms or risk becoming irrelevant in the experience-driven future of banking.

Why is this so important right now?

Competition

Leading banks increasingly embrace advanced AI tech, using at least one AI capability in their processes throughout the organization.

New entrants

Technology giants like Amazon and Apple are expanding into financial services, with competitive advantages threatening the status quo.

Consumer needs

Post-pandemic digital banking demand is driving increased customer expectations for enhanced personalization, stressing the urgency to invest in AI to meet these needs.

Banks are investing in data-driven infrastructures, sparking the need to explore opportunities and implications of implementing AI across the organization.

Bridging AI technologies successfully with your bank's goals requires envisioning capabilities holistically across these five areas.

Reimagined customer engagement

Banks need to create a streamlined omnichannel experience by combining platforms to create an engaging, seamless journey.

Core technology

Widespread AI adoption requires a robust foundation, leveraging trusted data, core banking, and analytics with a cloud infrastructure and modern API architecture.

Responsible AI

The implementation of AI requires a governance program that ensures responsible management of your vendors and any bespoke tools.

Platform operating model

In becoming an AI-powered bank, it is essential to evaluate the operating and governance model, break down functional silos, and position teams around application platforms to leverage integrated solutions.

AI-powered decision making

Organizations must shift toward an enterprise-wide plan to leverage AI and ML and strategically engage with vendors that integrate smoothly with one another to create an optimized customer and employee experience.

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What are the potential benefits and use cases of AI for banks?

Where does it all lead for banks?

AI ultimately serves three different areas of the bank: front office, middle office, and back office. Forward-thinking banks need to grasp this potential and create a strategic roadmap that centers around critical impact areas, ensuring the long-term financial success of the organization.

By investing in a digital operating model bolstered by AI, banks will ultimately reduce expenses, increase efficiency, and be better equipped to pivot and evolve as the market changes.



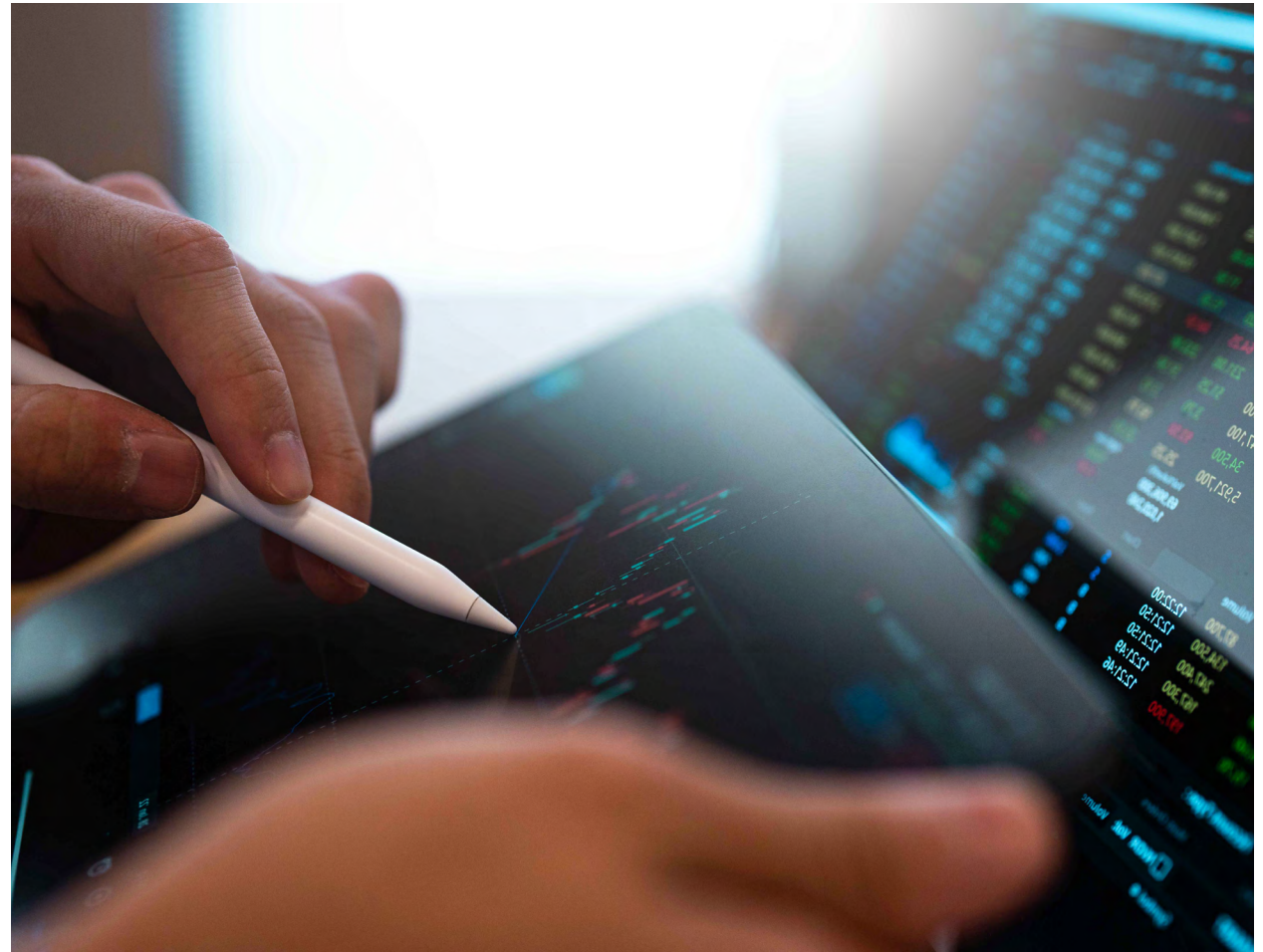
FRONT OFFICE



MIDDLE OFFICE



BACK OFFICE





Potential Benefits – Front Office

A well-rounded digital operating model reaches all areas of the bank and centralizes data and insights for use across the enterprise. When it comes to AI in the front office, these four areas of impact present the greatest opportunity to use AI to create value.

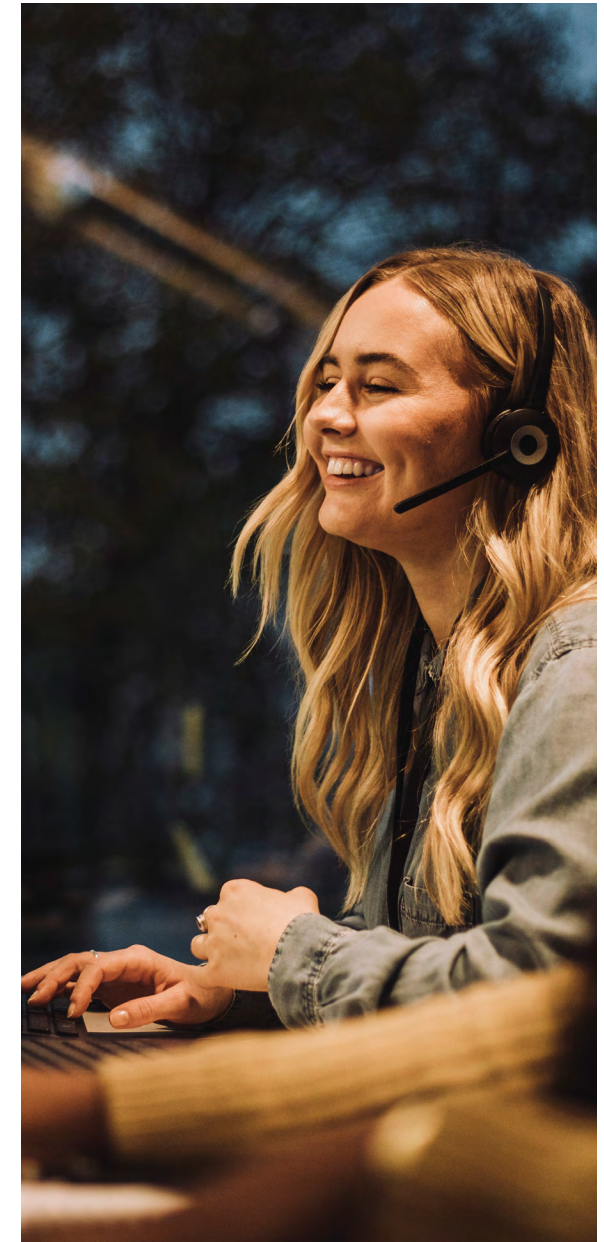
When customer support can be largely managed through AI, support professionals can reserve their time to help customers navigate more challenging or timely needs that require human guidance. But those who need help completing a self-service function like check depositing will be able to get direction from AI to get the task done.

Robo-advisors and broader financial planning can be backed by AI, leveraging prompts, algorithms, and other formulas to help customers and employees understand trend lines and projections without need an analyst to run them each time.

Pricing & promotion decisions and campaigns can also be informed by AI, providing initial trends and strategies for management and leaders to refine and adjust to fit the business goals.

And, ultimately, the digital operating model and AI can centralize customer data and identify customer insights that can then be used to make decisions and identify any gaps and opportunities for the bank to provide additional service or resources to support. Having these front-office data points and insights available becomes invaluable in a time where customer preferences and habits are everchanging.

- Pricing & promotion
- Financial planning
- Customer support
- Customer insights





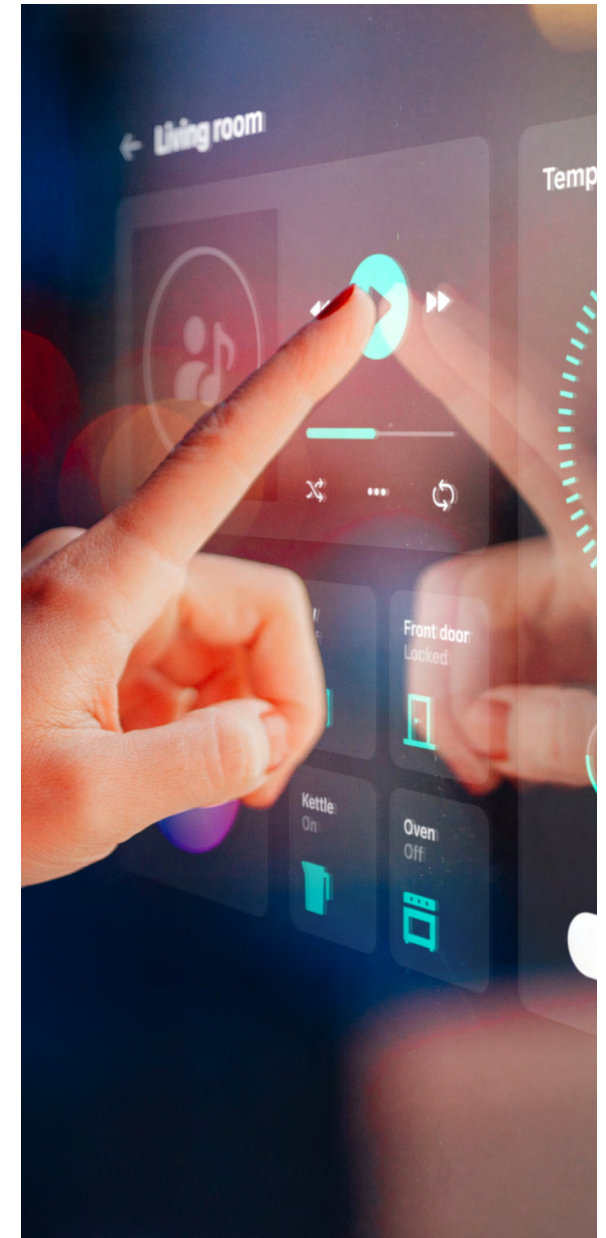
Potential Benefits – Middle Office

As the more behind-the-scenes areas embrace tech solutions, AI can accelerate processes that tend to be repetitive and tedious, taking time away from personnel.

Loan processing & underwriting can – and should – be one of the first elements implemented as it almost instantly alleviates time pressure and to-do list demands. Additional software support with AI includes third-party exposure and requirements reporting, which can ensure safety and help mitigate risk over time.

A vital element for banks is customer retention and deposit expansion. By using AI to glean insights and adjust mobile and in-person products to align with user needs and habits, banks can re-engage clients who may be on the cusp of making a change before it gets to that point.

- Loan processing & underwriting
- Customer retention
- Third party exposure
- Requirements reporting





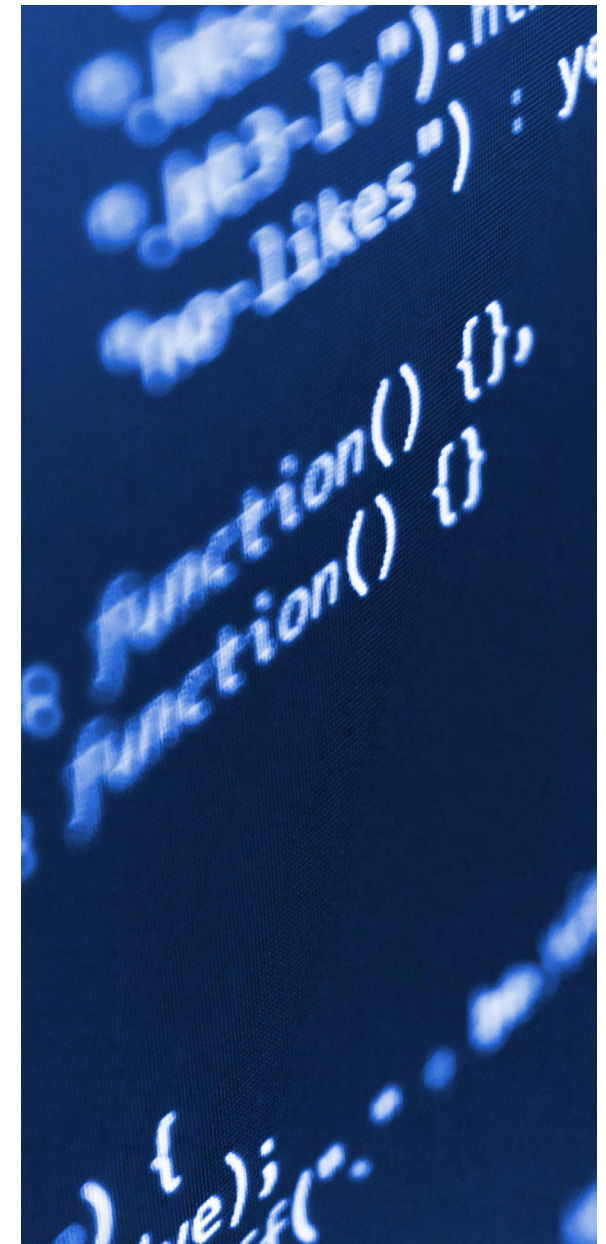
Potential Benefits – Back Office

And, perhaps where the greatest digital operating model impact is felt: the back office.

AI can streamline processes and take on a bulk of the hands-on work when it comes to document management and process automation. With additional tech-enabled solutions to monitor cybersecurity and fraud detection (including navigating cybersecurity audits and regulatory shifts), tech teams can weave in additional barriers of protection of data. With automated alerts and monitoring, AI can alert of potential threats and trigger additional layers of protection as needed, while tech teams navigate the situation live.

All the data gathered, insights gleaned, and processed automated help bank leaders also determine what's next: where are customers spending the most time, what are the most common customer support challenges, and how can the bank innovate to help fill in gaps? This leads to a brand new approach to offering development.

- Cybersecurity and fraud detection
- Document management
- Process automation
- Offering development



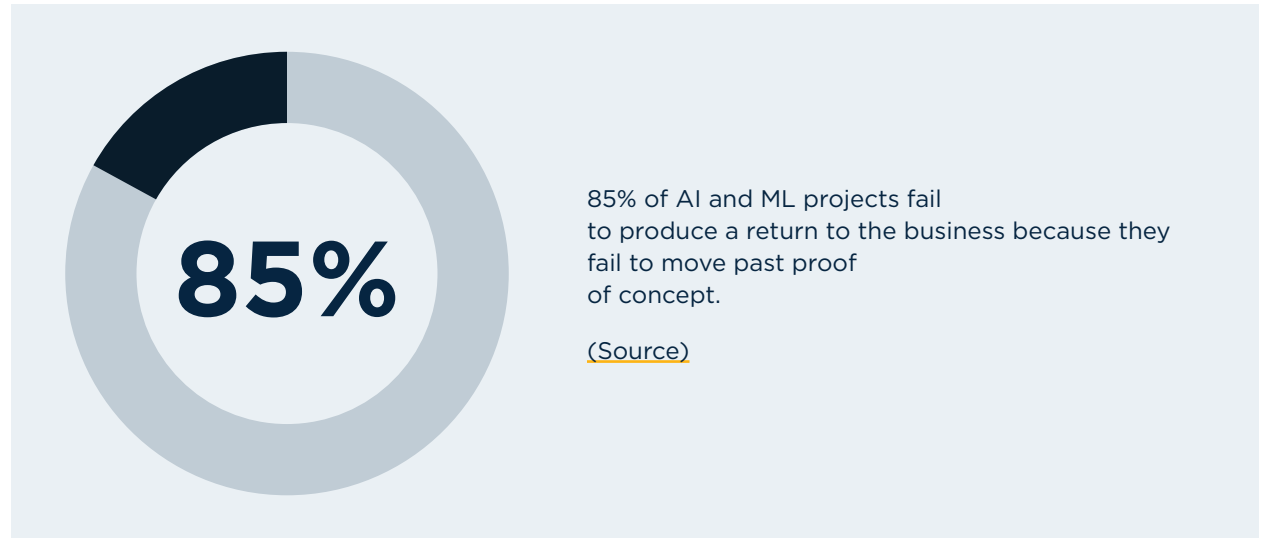
Keeping the value-add in mind, even when the beginning is challenging

Why?

- Lack of business alignment on value potential
- Failure to operationalize insights
- Insufficient data quality
- Poor scoping and success criteria

Business leaders and all involved in an AI pilot need to understand these common pitfalls from the outset and develop a cohesive strategy to act on insights, ensure data quality, and create realistic, measurable KPIs.

Getting buy-in from those involved is a critical factor of success; AI and ML are only as successful as the humans driving it.



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How do you mitigate risk when it comes to AI?

What is responsible AI?

Responsible AI refers to the ethical and moral framework and practices surrounding the development, deployment, and use of artificial intelligence (AI) technologies. It encompasses a set of principles, guidelines, and best practices aimed at ensuring that AI is developed and utilized in a way that is fair, safe, transparent, and respectful of human rights and values. Responsible AI seeks to mitigate potential harms and biases associated with AI while maximizing its benefits.

Ethical Considerations

AI systems need to align with societal values and not cause harm, discriminate against individual or groups, or infringe upon human rights.

Fairness

AI systems cannot exhibit biases that discriminate against specific demographic groups.

Accountability

Developers and organizations are accountable for the actions and decisions of AI systems.

Education & Training

It's critical that those involved in AI understand the ethical considerations and potential risks.

Transparency

Developers and organizations need to be transparent about the use of AI, the data used to train AI models, and the decision-making processes of AI systems.

Privacy

Protecting user data and privacy is paramount and involves adhering to data protection regulations, ensuring that data is collected and used with consent, and implementing strong security measures to prevent data breaches.

Stakeholder Oversight

Responsible AI acknowledges the importance of human oversight in AI decision-making.

Regulatory Compliance

Developers and organizations must comply with existing regulations and standards related to AI, data protection, and industry-specific requirements.

AI is an ever-evolving entity.

Banks must review and enhance controls and governance frameworks to identify and account for emerging risks to sustain a responsible AI environment.

What are the high impact AI/ML considerations?

Explainability

Ability to interpret predictions made by models in a transparent and documentable fashion

Fairness/Bias

Ensure predicative results are not discriminatory toward specific demographic groups

Privacy Risk

Monitor usage and exposure of sensitive client data to avoid unauthorized access or inaccurate results

Model Governance

Adequate oversight of model development, deployment, and performance management

How does model development differ from software development?

Data Use

Requires large sets of high-quality and sensitive data

Training & Experimentation

Extremely iterative approach required to refine algorithm, features, parameters, and output

Testing & Monitoring

AI/ML tools require unique testing in both development and production stages

Model Governance

Auditors and examiners will seek to understand the inputs to models and how models arrive at their outputs

What are key considerations when outsourcing capabilities?

Outsourced Risks

Evaluate model life-cycle risks that will be controlled by third-party providers

Vendor Due Diligence

Review vendor capabilities against expected performance and your unique risk profile

Vendor Controls

Overlay high-impact risks onto controls inherent to their platform and tooling

SLAs and Performance Check-Ins

Establish recurring performance reviews and overall performance expectations

There is no one-size-fits-all when it comes to AI.

In the future state, the architecture of AI in financial institutions will be a combination of comprehensive platforms and specific use-case applications, highlighting the importance of governance and cybersecurity controls to protect data integrity.

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How do you get started?

Starting an AI journey requires a swift strategic shift to facilitate broad integration within your organization.

With this, we recommend kicking off two parallel paths: modernize your data and build an AI task force.

Successful implementation of AI into an organization's operating model heavily relies on the associated governance of these systems and the controls put into place to mitigate risk.

DATA MODERNIZATION

Evaluate Data

Organizations will need to undergo a data clean-up initiative to safeguard data integrity and ensure suitability for AI models.

Digital Transformation

Data cleanse, data warehouse, strong governance policies, migration to cloud platforms

AI TASK FORCE

Dedicated AI Team

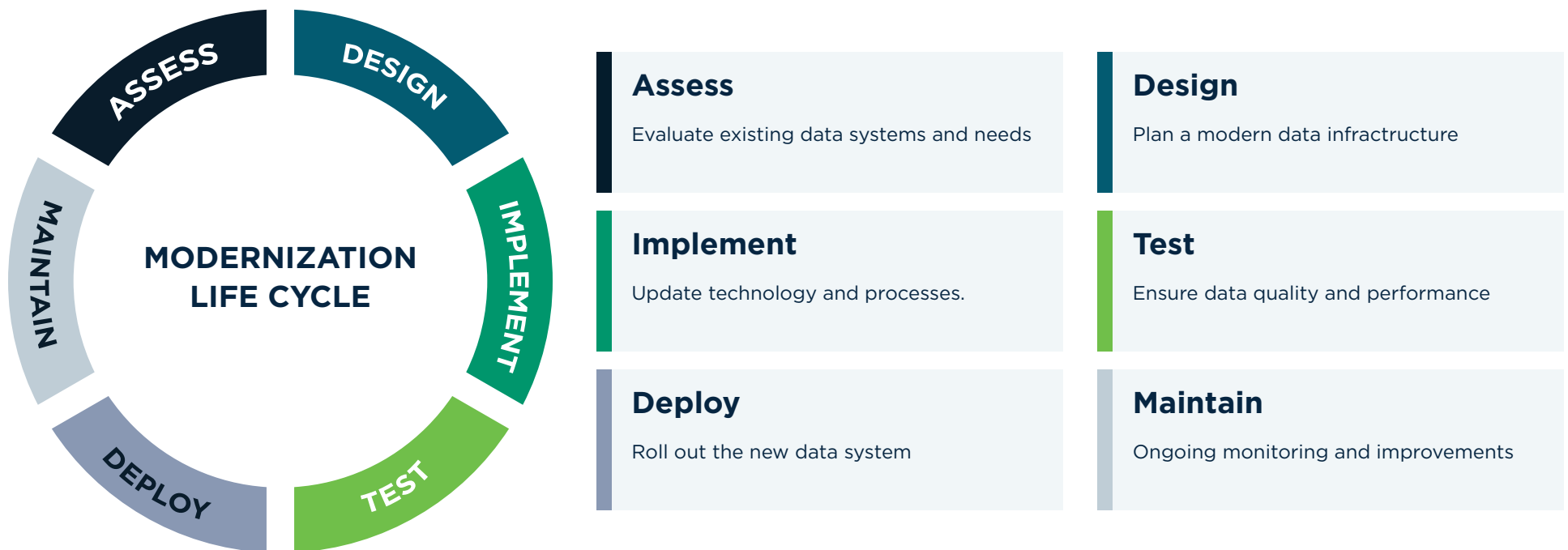
Establish a specialized team knowledgeable about AI and capable of evaluating the tools and opportunities that will benefit the organization.

Team Composition

Data architect, AI/ML engineer, software developer, data privacy expert, legal and compliance specialist

Getting Started: Data Modernization

Data modernization projects contain several components, each integral to creating a sustainable ecosystem that supports AI capabilities in the workplace.



Embrace a new, tech-enabled operating model

Organizations will reap substantial advantages by embracing AI, and the impact on the operating model will become evident when the overarching use case strategy is determined.

Shift in roles

Positions may evolve toward focus on managing, training, and fine-tuning AI systems where employees will need support in learning new skills.

Process automation

AI has the potential to increase productivity by 0.5 to 0.9 percentage points annually.

Reducing tasks enables a move to higher value activities.

Customer centricity

Drive revenue growth by uncovering predictors of customers' demands and delivering a personalized approach to maximize value.

Functional silo to operational journey

Focusing on the stakeholder journey that spans organizational boundaries will upend the current, segmented approach with separate initiatives across business units.

Changes in the operating model will result from operational and process adjustments depending on the use cases adopted, resulting in shifts of responsibilities among business units.

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What does AI look like in banking?

Finding AI closer to home and your bank

AI can be consumed in a variety of areas within a bank. In addition to efficiency optimizing and innovation capabilities, there is also platform-based GenAI that can create value within a middle-market bank.

With many widely-used platforms housing existing capabilities—from online banking to cloud-based loan origination systems—these may be initial areas to adopt AI and begin the test-and-learn experience.

See for yourself. Explore case studies.

With the expanded background and understanding of how to take steps toward a proof of concept or pilot program, let's look at a few key examples of how to help solve business challenges through AI, with examples of the common organizational barriers and expected positive outcomes.

We'll look at:

- **AI-supported deposit gathering**
- **AI-supported risk and control management**
- **AI-supported commercial lending**



AI-Supported Deposit Gathering

Use AI to drive deposit growth and retention

- Stop deposit runoff through AI transaction and behavioral analysis
- Use a combination of predictive analytics and segmentation to identify patterns where the bank can cross-sell/upsell and create high customer lifetime value
- Implement a virtual assistant to provide consultative advice to commercial banking clients regarding retail products/prices
- Mine customer data to look for deposit opportunities when interacting with different products (i.e., loan to deposit account)
- Track online behaviors with cookies to collect and analyze data for potential information on deposit drivers
- Use transaction data for business banking clients to provide insight on where they're moving money

Organizational barriers

- Data is not readily available
- A modern data platform and integrated systems are necessary
- Employees need skills and capabilities to manage the data and utilize AI
- Industry is highly regulated but pressure exists to adopt the technology quickly
- Need a risk-tolerant culture
- Bank may begin to capture out-of-market clients that don't fit the geography or demographics they traditionally serve
- Risk of deposits leaving and creating

Expected outcomes

- Increased deposits, profit, and engagement
- Lowered cost of capital
- Improved customer experience and employee experience
- Increased efficiency with automation
- Reduction of relationship management efforts

Other uses

- Customize online experiences
- Utilize AI to identify opportunities
- Direct and automated cross-selling
- Expanded areas for employee growth
- Access to external partnership's ecosystem (payroll, insurance, etc.)
- Drive expansion to households

AI-Supported Risk and Control Management

Discover areas of improvement in risk and compliance

- Manage loan documents and compliance requirements with a checklist through AI collection of documentation/evidence of processes and the data that is captured
- Different loan types have different criteria; use AI to manage those nuances
- Impact analysis when there are changes in regulations
- Loan controls are manual and need to align to the procedure that is out there; can use AI to automate loan controls and align to standardized processes
- Most covenants are in the documents and the loan system; can use AI to pull information and manage
- Privacy concerns: Access to systems/PII by third parties, vendors, or exiting employees
- Enhanced due diligence

Organizational barriers

- Funding for initiatives: not a priority since function doesn't generate revenues or impact bottom line immediately
- Operational gains/efficiencies are less obvious
- Common mindset around implementation is "AI will take my job" instead of shifting/upskilling
- Passive resistance: if it's not broken, why would management fix or enhance this?
- General knowledge barrier and not knowing where to even begin
- Look to success with RPA or other technological changes; may need change management

Expected outcomes

- Protection against bad actors and negative consequences (reputational risk)
- Efficiency/effectiveness: Unlock time to do more valuable tasks
- Monetary savings based on time or elimination of tasks
- Good standing with regulators given the additional capacity for work to be done
- Ease of data access and clarity

Other uses

- Repeatability on other areas of the financial institution
- Leveraging patterns for other types of fraud or other compliance concerns
- Thresholds delegated authority, smurfing, etc.

AI-Supported Commercial Lending

Where can AI improve commercial lending processes

- Lengthy loan processing times: Delays in commercial lending processes due to manual document collection and analysis
- Inconsistent data handling: Errors and inconsistencies in manually extracted and entered financial data
- Missed lending opportunities: Processing inefficiencies cause potential profitable lending opportunities to be missed
- Borrower dissatisfaction: Negative feedback or complaints related to the time and complexity of the lending process
- High operational costs: Elevated costs associated with manual document processing, data entry, and financial analysis

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Taking the leap

Embracing AI isn't simply the flip of a switch. It's an investment that makes marked change for both the short and longer term to equip your bank for the future, no matter what uncertainty or headwinds may come your way. With the ability to centralize and act on data, streamline processes, and continue to meet your customers where they are while also anticipating what they will need next, the initial stage will lay the foundation for an efficient, effective future powered by AI.

Middle-market banks should be focusing on exploration and experimentation that leads to innovation, ultimately driving better customer experiences and engagement, with refreshed opportunities for revenue generation.

About West Monroe

West Monroe is a digital services firm that was born in technology but built for business—partnering with companies in transformative industries to deliver quantifiable financial value. We believe that digital is a mindset—not a project, a team, or a destination—and it’s something companies become, not something they do. That’s why we work in diverse, multidisciplinary teams that blend management consulting, digital design, and product engineering to move companies from traditional ways of working to digital operating models—and create experiences that transcend the digital and physical worlds.

Visit westmonroe.com to learn more.



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