



RAY BESTE
PRINCIPAL AI STRATEGIST

AI-Powered Finance

FROM TODAY'S TOOLS TO TOMORROW'S POSSIBILITIES

AGENDA

- Introduction: The Role of AI in Manufacturing Finance
- Practical AI Use Cases in Finance
- Expanding AI Beyond Finance
- Predictive Analytics & AI in Decision-Making
- Future Outlook: Agentic AI in Manufacturing Finance
- Conclusion & Q&A



THE ROLE OF AI IN MANUFACTURING FINANCE

Defining AI in simple terms

- Ability of machines to perform tasks requiring human intelligence
- Includes problem-solving, pattern recognition, and decision-making

Forms of AI

- Predictive analytics
- Generative AI models like ChatGPT
- Analyzes and produces human-like text and insights



CHALLENGES AI CAN ADDRESS

Challenges Faced by Finance Teams

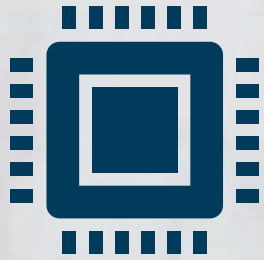
- Fluctuating material costs
- Labor inefficiencies
- Supply chain disruptions
- Budget constraints

AI Solutions

- Automating tasks
- Predicting trends
- Enhancing decision-making
- Shifting from reactive to proactive strategy



EVOLUTION OF AI IN FINANCE



AI in Fraud Detection and Financial Reporting

Previously used by large enterprises

Now accessible to mid-sized companies



Competitive Edge through AI Adoption

Reduces inefficiencies

Helps stay ahead of financial risks

BENEFITS OF AI FOR FINANCE

Automation & Efficiency

- AI handles tedious financial processes
- Tasks include reconciling transactions, generating reports, and managing invoices

Cost Savings & Optimization

- AI-driven insights reduce operational costs
- Identifies budget inefficiencies and supply chain disruptions

Better Forecasting

- Predictive analytics anticipate future cash flow fluctuations
- Helps foresee material cost spikes and financial risks

Enhanced Decision-Making

- Analyzes real-time financial data and external factors
- Supports informed business choices



IMPACT ON CFOS AND FINANCE TEAMS

AI in Financial Planning

- Reduces guesswork and increases data-driven decisions

Role of CFOs

- Shift from manual report preparation to strategic decision-making
- Focus on profitability and operational efficiency

AI Capabilities

- Data aggregation
- Generation of detailed insights in minutes



ADDRESSING COMMON CONCERNS

AI Replacing Jobs

- AI empowers finance teams
- Frees up time for higher-value activities

AI Complexity for Mid-Sized Businesses

- Latest AI tools designed for usability
- No need to be a data scientist

AI Requires Expensive Infrastructure

- Many AI solutions are cloud-based
- Subscription-driven, cost-effective, and scalable



USE CASE 1: BUDGET OPTIMIZATION

AI Analysis of Company Spending

Identifies inefficiencies not easily noticeable

Optimization Recommendations

Raw materials efficiency improvement

Equipment maintenance

Energy costs

Innovative Approaches for Budget Reallocation

Strategic procurement

Workforce optimization

Maintenance efficiency

Energy cost management

Reinvestment strategy



LIVE DEMO: BUDGET OPTIMIZATION

Step 1: Identifying Budget Inefficiencies

- AI analyzes budget data
- Highlights areas of inefficiency
- Prompt: **You are a financial analyst. Based on the provided budget data, identify inefficiencies and suggest ways to optimize spending while maintaining productivity.**

Step 2: Suggesting Alternative Allocations

- AI recommends reallocation strategies
- Focus on reducing costs
- Prompt: **Analyze the budget data and recommend a reallocation strategy to reduce costs while maintaining operational efficiency**

Step 3: Presenting Financial Optimization Plan

- AI generates summary of adjustments
- Visual breakdown of cost savings
- Prompt: **Generate a summary of recommended budget adjustments with a visual breakdown of cost savings and potential impact on business performance**

LIVE DEMO: BUDGET OPTIMIZATION

Expense Category	Subcategory	Cost (\$)	Utilization Rate (%)	Industry Benchmark (%)
Raw Materials	Aluminum	500,000	85	90
Raw Materials	Steel	1,000,000	95	92
Labor Costs	Standard Wages	1,550,000	9	
Equipment Maintenance	Routine Maintenance	400,000	10	
Equipment Maintenance	Emergency Repairs	150,000	8	
Energy Costs	Electricity (Peak)	200,000	9	
Energy Costs	Natural Gas	120,000	7	

Based on the provided budget data, here are key inefficiencies and optimization suggestions:

Identified Inefficiencies

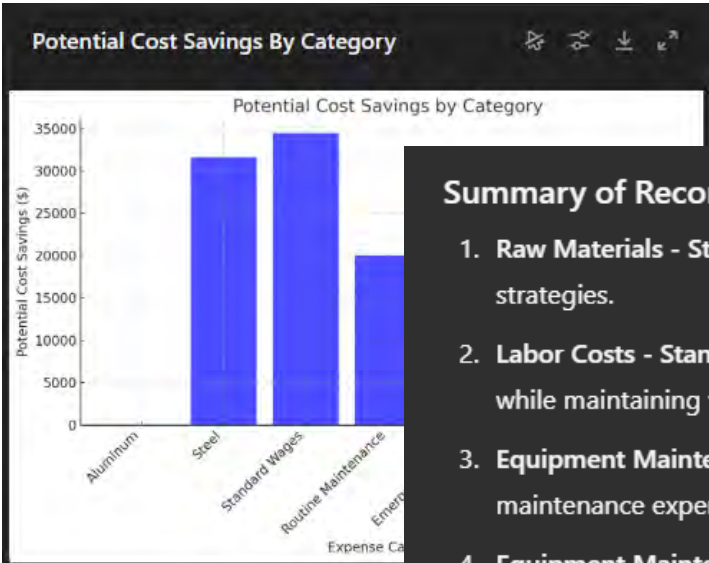
1. Aluminum Utilization Rate (85%) is Below Industry Benchmark (90%)

- The company is not fully utilizing aluminum efficiently compared to industry standards.

- Potential Issue: Possible material wastage or inefficient procurement.

2. Steel Utilization Rate (95%) Exceeds Industry Benchmark

Equipment Maintenance utilization suggests overuse or excessive



Summary of Recommended Budget Adjustments

1. **Raw Materials - Steel:** Reduce costs by \$31,579 through better procurement strategies.
2. **Labor Costs - Standard Wages:** Optimize salary distribution to save \$34,444 while maintaining workforce efficiency.
3. **Equipment Maintenance - Routine Maintenance:** Reduce unnecessary maintenance expenses by \$20,000.
4. **Equipment Maintenance - Emergency Repairs:** Implement predictive maintenance to cut emergency repairs by \$9,375.

USE CASE 2: REVENUE FORECASTING

AI Analysis of Sales Trends

- Examines past sales data

- Considers market conditions and economic factors

Proactive Strategy Adjustments

- Helps businesses prepare for demand fluctuations

- Allows for proactive strategy changes

Scenario Testing

- Analyzes impact of raw material cost changes

- Predicts outcomes of unexpected demand shifts

Revenue Projections

- Includes macroeconomic indicators like inflation



LIVE DEMO: REVENUE FORECASTING

Step 1: Analyzing Revenue Trends

- AI examines revenue data over the last three quarters
- Identifies trends, fluctuations, and key influencing factors
- Prompt: **You are a financial analyst. Analyze the revenue data and identify trends, fluctuations, and key influencing factors over the last three quarters.**

Step 2: Adjusting Revenue Forecasts

- AI projects revenue for the next quarter
- Factors in historical data, market growth trends, seasonal and economic variables
- Prompt: **Based on the historical revenue data and market growth trends, project revenue for the next quarter, factoring in seasonal and economic variables.**

Step 3: Generating Revenue Strategy

- AI provides recommendations to maximize revenue growth
- Based on forecasted trends and external factors
- Prompt: **Provide recommendations to maximize revenue growth in the next quarter based on forecasted trends and external factors.**

LIVE DEMO: REVENUE FORECASTING

Quarter	Product Line	Revenue (\$)	Units Sold	Avg. Selling Price (\$)	Market Growth Rate (%)	Competitor Market Share (%)
Q1	Industrial Tools	1,200,000	4,000			
Q2	Industrial Tools	1,500,000	5,000			
Q3	Industrial Tools	1,400,000	4,800			

Financial Analysis of Revenue Trends Over the Last Three Quarters

1. Overview of Revenue Performance

- Q1 Revenue: \$1,200,000
- Q2 Revenue: \$1,500,000 (+25% growth from Q1)
- Q3 Revenue: \$1,400,000 (-6.7% decline from Q2)

2. Detailed Revenue Trends

Q1 to Q2 Growth: Revenue increased by 25% due to a

Recommendations to Maximize Revenue Growth in Q4

1. Pricing and Value Strategy

- Maintain the average selling price (ASP) at \$290 (including warranties, bundled accessories) to sustain revenue.
- Implement tiered pricing strategies to capture premium options for high-value buyers.

2. Market Expansion & Competitive Positioning

- Capitalize on the declining competitor market share through aggressive marketing and promotions.

USE CASE 3: SUPPLIER COMPARISON

Supplier Comparison & Cost Savings

- AI compares supplier data to balance cost, quality, and reliability
- Recommends suppliers with better payment terms or fewer delivery delays
- Example: Favoring Supplier C for high-priority orders despite higher costs



LIVE DEMO: SUPPLIER COMPARISON

Step 1: AI analyzes supplier cost-benefit trade-offs

- Prompt: **"You are a procurement specialist. Analyze the supplier data and rank them based on cost efficiency, lead time, and payment terms for a manufacturing company."**

Step 2: AI suggests the best supplier based on business priorities

- Prompt: **"Based on the supplier comparison data, determine the best supplier for a company prioritizing cost savings without compromising reliability."**

Step 3: AI generates an optimal procurement strategy

- Prompt: **"Create a supplier selection report with a justification for the best choice, along with risk considerations and negotiation strategies for better terms."**

SUPPLIER COMPARISON & COST SAVINGS

Supplier	Price per Unit (\$)	Lead Time (Weeks)	Payment Terms (Days)
Supplier A	2.00	4	30
Supplier B	1.80	6	15
Supplier C	2.20	2	60

2. Supplier Comparison

Supplier	Price per Unit (\$)	Lead Time (Weeks)	Payment Terms
Supplier A	2.00	4	30
Supplier B	1.80	6	15
Supplier C	2.20	2	60

3. Evaluation Criteria

3.1 Cost Efficiency

- Supplier B offers the lowest unit price at **\$1.80**, providing direct cost savings.
- Supplier A is slightly higher at **\$2.00**, while Supplier C is the most expensive at **\$2.20**.

To rank the suppliers based on cost efficiency, lead time, and payment terms, we use the following criterion:

1. Cost Efficiency (Lower Price is Better)

- Supplier B: \$1.80 (Best)
- Supplier A: \$2.00 (Second)
- Supplier C: \$2.20 (Third)

2. Lead Time (Shorter Lead Time is Better)

- Supplier C: 2 weeks (Best)

USE CASE 4: FINANCIAL SUMMARIES & REPORTING

Time-Consuming Financial Tasks

- Compiling financial summaries and reports is labor-intensive

AI-Generated Financial Summaries

- AI can create financial performance summaries in seconds
- Allows finance teams to focus on analysis



LIVE DEMO: FINANCIAL SUMMARIES & REPORTING

Step 1: Generate a financial summary

- **Prompt: You are a financial analyst. Based on the provided data, generate a detailed financial summary highlighting revenue, costs, and profit trends over the last three months.**

Step 2: AI highlights profit drivers and costs areas needing attention

- **Prompt: Analyze the financial data and identify the top three profit drivers and the top three cost challenges. Provide specific recommendations to improve profitability.**

Step 3: Convert data to executive-level summary and visualization

- **Prompt: Create a one-page executive summary with clear key takeaways, visual charts, and suggested actions based on the financial data provided.**

FINANCIAL SUMMARIES & REPORTING

Month	Product Line	Revenue (\$)	COGS (\$)	Labor Costs (\$)	Shipping Costs (\$)	Overhead (\$)	Profit (\$)
January	Office Desks	343,635.03	238,004.08	59,517.38	27,467.75	29,635.34	-10,989.52
January	Conference Tables	288,998.63	161,467.16	53,932.23	23,136.00	31,305.17	19,158.07
February	Filing Cabinets	295,851.13	176,219.68	45,110.09	21,182.13	27,114.51	26,224.72
March	Wooden Bookshelves	402,963.2					

Key Cost Challenges

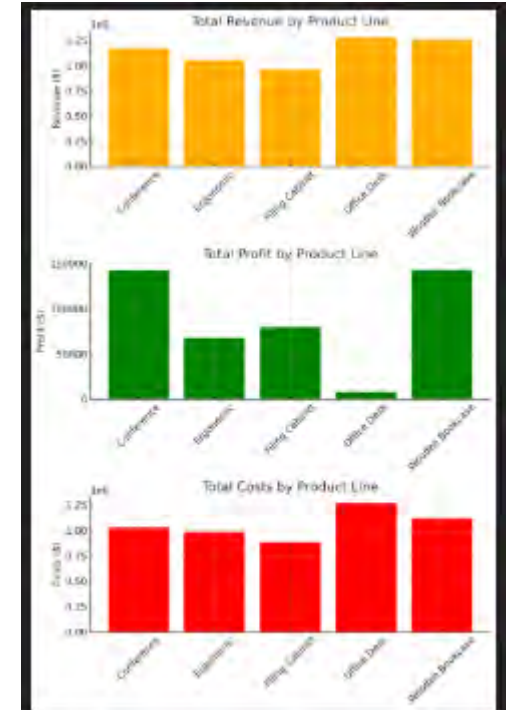
1. **Office Desk Profitability Issue** – Consistently low or negative profit margin due to high COGS and labor costs.
2. **High Labor Costs** – Labor represents 14.6% of total revenue, impacting multiple product lines.
3. **Shipping Cost Discrepancies** – Certain products incur disproportionately high shipping costs.

Suggested Actions

- ✅ **Expand High-Margin Products** – Increase marketing and sales of Conference Furniture and Wooden Bookcases.
- ✅ **Restructure Office Desk Pricing & Costs** – Reduce material and labor costs, adjust pricing for sustainable margins.
- ✅ **Optimize Logistics & Shipping Costs** – Improve warehouse efficiency, negotiate better carrier contracts.
- ✅ **Enhance Labor Efficiency** – Invest in automation and workflow optimizations to reduce production time.

Conclusion

The company is experiencing strong revenue growth but faces profitability challenges in select product lines. By focusing on cost reductions in labor and logistics, optimizing product pricing, and investing in high-margin categories, profitability can be significantly improved.



PROMPT ENGINEERING

Let AI build your best prompt

I want you to become my Prompt engineer. Your goal is to help me craft the best possible prompt for my needs. The prompt will be used by you, ChatGPT/Copilot/Gemini/MetaAI/Claude.

You will follow the following process:

1. Your first response will be to ask me what the prompt should be about. I will provide my answer, but we will need to improve it through continual iterations by going through the next steps.
2. Based on my input, you will generate 2 sections.
 - a) Revised prompt (provide your rewritten prompt. It should be clear, concise, and easily understood by you)
 - b) Questions (ask any relevant questions pertaining to what additional information is needed from me to improve the prompt).
3. We will continue this iterative process with me providing additional information to you and you updating the prompt in the Revised prompt section until I say we are done.

EXPANDING AI BEYOND FINANCE

Automating Customer Communications

- AI-powered chatbots handle common inquiries
- Email automation frees up human teams

HR & Talent Management

- AI screens resumes and analyzes employee sentiment
- Recommends training programs based on skills gaps
- Enables data-driven HR decisions

Operations & Inventory Management

- AI predicts demand shifts and automates reorder alerts
- Prevents overstocking and ensures product availability
- Saves businesses money



PREDICTIVE ANALYTICS & AI IN DECISION-MAKING

Role of Predictive Analytics

- Uses AI to forecast future financial trends
- Analyzes historical data and external factors
- Proactive Financial Decisions
- AI analyzes patterns for proactive decision-making

Use Case: **Cash Flow Forecasting**

- Examines past cash flow patterns and payment cycles
- Predicts cash shortages or surpluses
- Suggests strategies like adjusting invoice terms

Use Case: **Risk Management**

- Detects financial anomalies and predicts supplier issues
- Flags customers likely to delay payments



FUTURE OUTLOOK: AGENTIC AI IN MANUFACTURING FINANCE

Introduction to Agentic AI

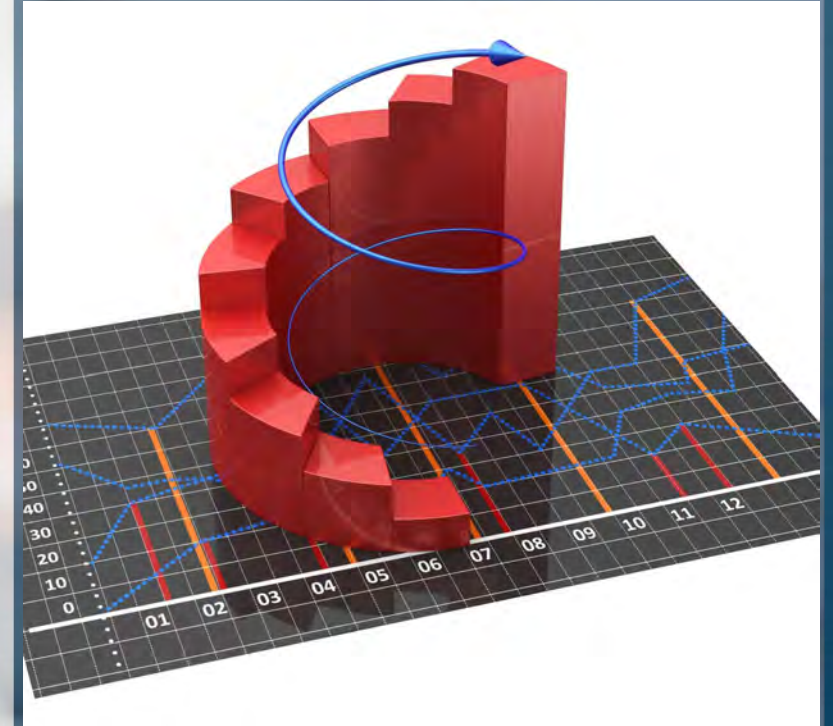
- AI systems that take proactive steps based on rules and learning
- Difference from current AI requiring human intervention

Examples of Agentic AI in Finance

- AI-driven treasury management optimizing cash flow
- AI-driven contract negotiation adjusting vendor payment terms
- AI-powered investment management handling asset allocations

Preparation for Agentic AI

- Identify repetitive financial tasks for automation
- Start with AI-driven decision support tools
- Develop AI oversight strategies



KEY TAKEAWAYS FOR FINANCE PROFESSIONALS

Agentic AI Enhances Finance Teams

- AI will not replace finance teams
- Enhances ability to make data-driven decisions

Adopting AI-driven Automation

- Companies adopting AI today will be best positioned
- Integration of true Agentic AI as it evolves

Future Role of Finance Teams

- Manage AI-driven financial ecosystems
- Not just managing numbers



A blurred photograph of a crowd of people walking in a modern, brightly lit interior space, possibly a transit hub or office lobby. The background features a wall with a grid of circular ventilation holes. The image is split vertically: the left side has a blue tint, and the right side is more neutral. A semi-transparent dark blue horizontal band is overlaid across the middle of the image.

BONUS OUTLOOK – INTELLIGENT AUTOMATION

CONCLUSION & Q&A

