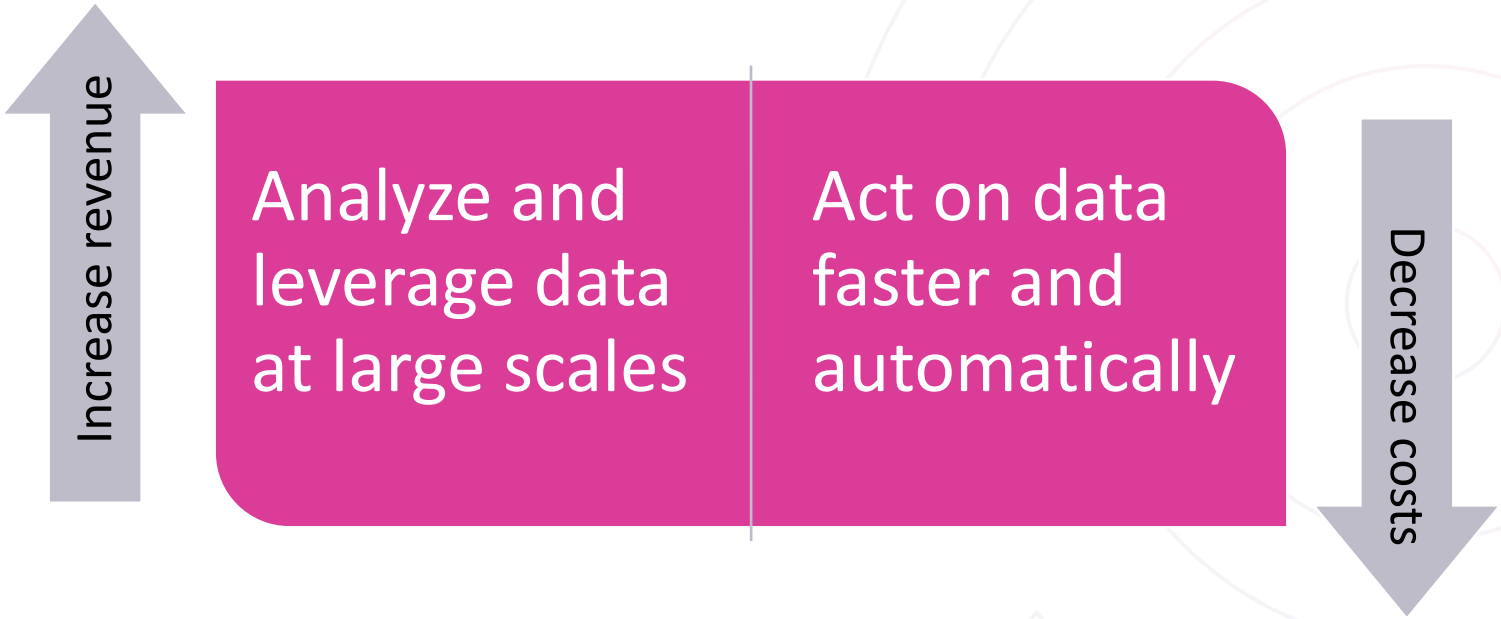
8 AI Use Cases

Why invest in AI?

Profit = Revenue - Costs



Use Case Life Cycle

Identification
- Find relevant use cases consistent with AI strategy

Assessment
- Compare the expected value with implementation complexity

Prioritization
- Rank cases based on high value and low complexity

Execution
- Start with the most valuable cases first

Identify use cases

- Talk to the right people
  - Bring together domain experts, business stakeholders and AI experts
  - Ensure that initiatives address broad organizational priorities
  - Increase adoption chances by involving end users in the application design

- Brainstorm sessions to keep communication lines open
  - Defer judgement and encourage wild ideas
  - Build on ideas but stay on target
  - Go for quantity, more is better at this stage

- Not AI-ready?
  - Bring in external expertise

Questions to ask - strategy

- What goals are driving the company right now?
  - Better customer service to increase retention
  - Increase percentage of sales made with new products
- Which challenges keep you up at night?
  - How to make our ads more successful?
  - How to keep customers from leaving?
- What is driving current bottlenecks or preventing progress?
  - High production costs
  - High storage costs
  - High employee rotation

Questions to ask - processes

- Where would you benefit from knowing the future?
  - Future demand or supplier prices
  - When to maintain the machinery
- Where are things done over and over again?
  - Repetitive processes in data entry: invoices, sales, payroll, etc.
- Which tasks involve complex planning?
  - Manufacturing: supply orders and maintenance
  - Scheduling & logistics: deliveries and workers shifts

Questions to ask - customer

- What's hard and annoying for customers?
  - Returns and refunds → streamline/automate the process
  - Poor customer service → chatbots to answer faster

- What would you like to know?
  - Why do customers leave?
  - What will they buy in the future?

- Are there friction points in the customer journey?
  - Brand awareness & leads: automatic creation of social media posts or newsletter
  - Sales & loyalty: targeted promotions and advertising

Questions to ask - data

- What things are input manually?
  - Emails, receipts, reimbursements, etc.
- Where do you have a lot of relevant data?
  - Marketing: reach of campaign & ROI from different channels
  - Retail: personal customer data & order details
- Where do you already use some data to drive decision-making?
  - Dashboards for ad campaigns
  - Some parts of a production are semi-automated (e.g., quality control)

Assess use cases

Value

- What is the desired output of a given AI application?
- What business value does use case bring?
- What strategic advantages does it bring?
- Over what time period will be the value derived?
- Is this a game changer or business extender?

Complexity

- What data is needed to train a given AI solution?
- Is data available in our organization?
- Is the infrastructure ready or do we need to build one?
- What AI capability is required and do we have this?
- What are the greatest obstacles to solve this problem?

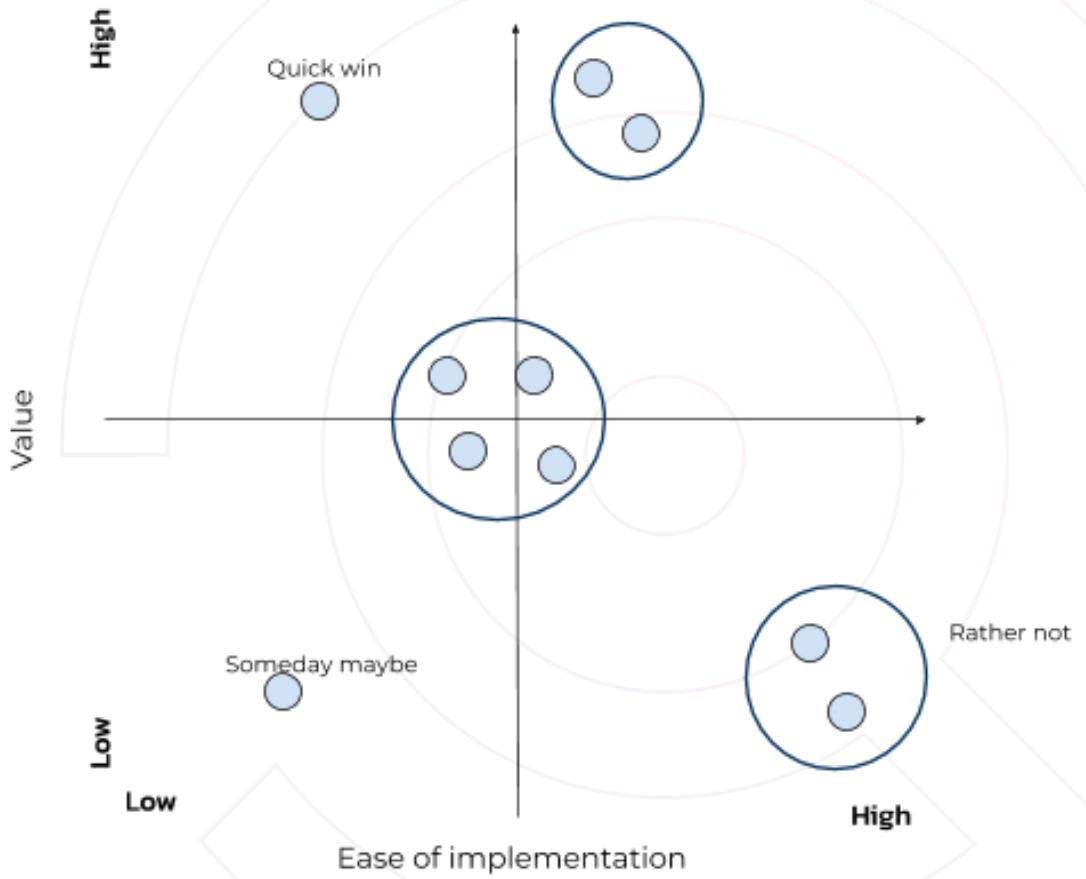
Score use cases

- Value
  - Score from 1 (no value) to 5 (lot of value)

- Complexity: average the following three components
  - Data: score from 1 (we have all data) to 5 (need to collect a lot of data, possibly hard to get)
  - AI skills: score from 1 (easy to implement) to 5 (requires research and experimentation from the team or even external experts)
  - Infrastructure: score from 1 (infrastructure is ready) to 5 (infrastructure needs to be built with lots of processing power and storage space)

Prioritize use cases

- Rank individual cases according to value and complexity scores
  - Plot value vs complexity
- Cluster use cases that are close
  - Prioritize clusters by value added and number of use cases
- Are there any quick wins?
  - Start with these



Churn modeling

- Why important?
  - Losing clients affects company revenue numbers and profits
- How does it benefit business?
  - Customer retention increases revenue and decreases costs
  - Understanding churn behavior leads to more effective retention strategies
- What data is needed?
  - Customer behavior, transactions, demographics, product usage/patterns, etc.

Recommender system

- Why important?
  - Increasing sales via personalized offers and an enhanced customer experience
- How does it benefit business?
  - Accurately guiding prospective buyers to your products increases revenue
  - Set-up of cross-selling possibilities
- What data is needed?
  - Customer data, user ratings and system interaction data (e.g., clicks, searches, visits, purchases, favorites)

Demand forecasting

- Why important?
  - Used for strategic business plans (e.g., budgeting, financial planning, sales and marketing plans, capacity planning, risk assessment and mitigation plans)
- How does it benefit business?
  - Improved inventory availability can increase revenue
  - Reducing storage waste can decrease costs
- What data is needed?
  - Sales data, product demand, market conditions, ecommerce, etc.

Fraud detection

- Why important?
  - Fraud increases costs and thereby leads to profit loss
- How does it benefit business?
  - Fraud prevention decreases costs
  - Identifying fraudsters leads to prevention of unnecessary payments
- What data is needed?
  - Customer behavior and transaction data

Targeted advertising

- Why important?
  - Cost-effective approach as it minimizes wasted advertising
- How does it benefit business?
  - Sales go up and customer satisfaction increases (less annoyed by random ads)
  - Targeting successfully leads to increased revenue and decreased costs
- What data is needed?
  - Purchase history & client personality, attitude, opinions, lifestyle and interests

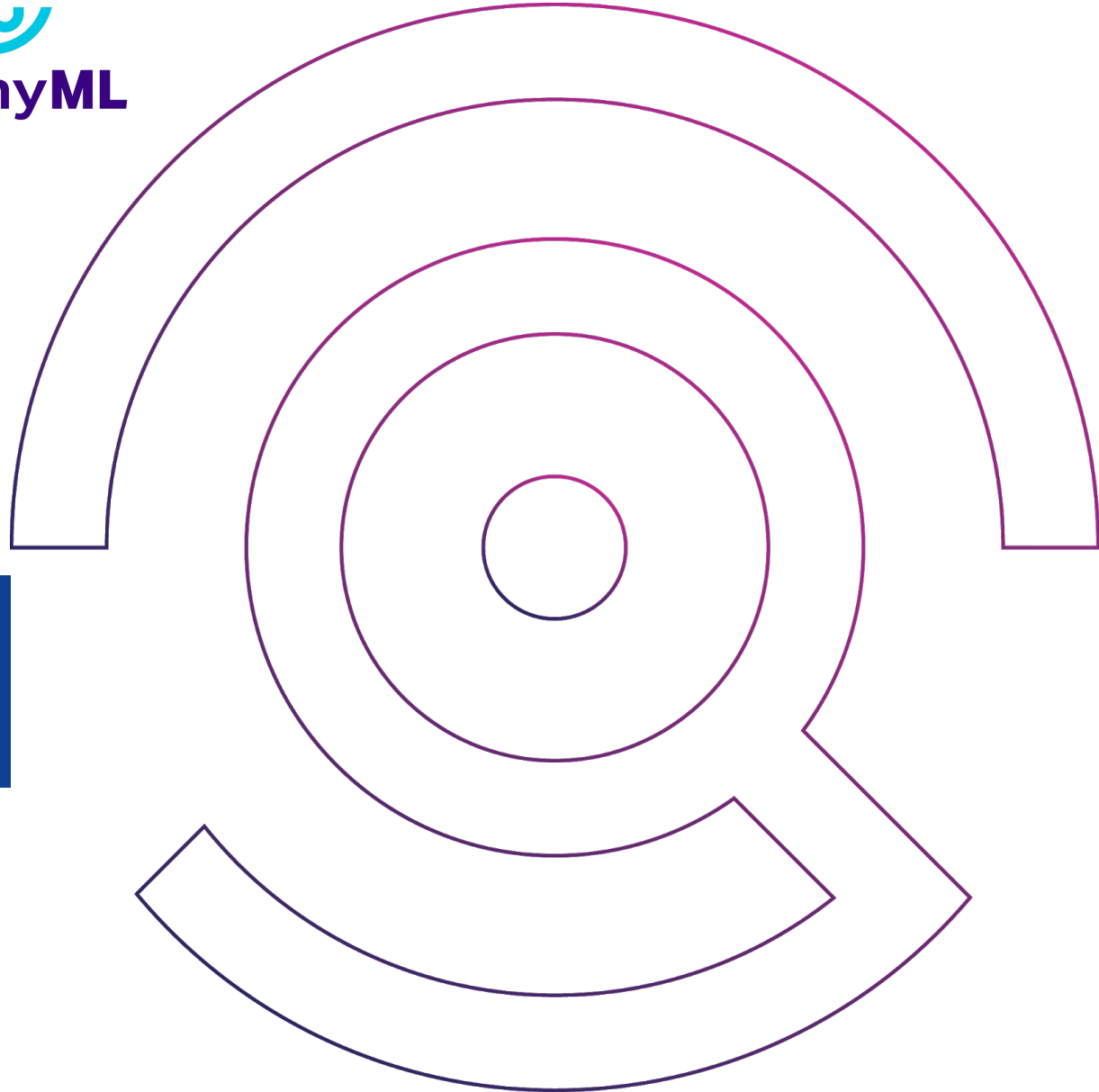
Is AI the answer to your problem?

PROPHECY LABS

ctg

nannyML

AI4Business



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