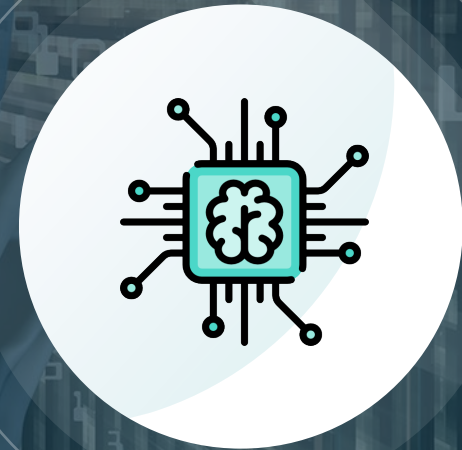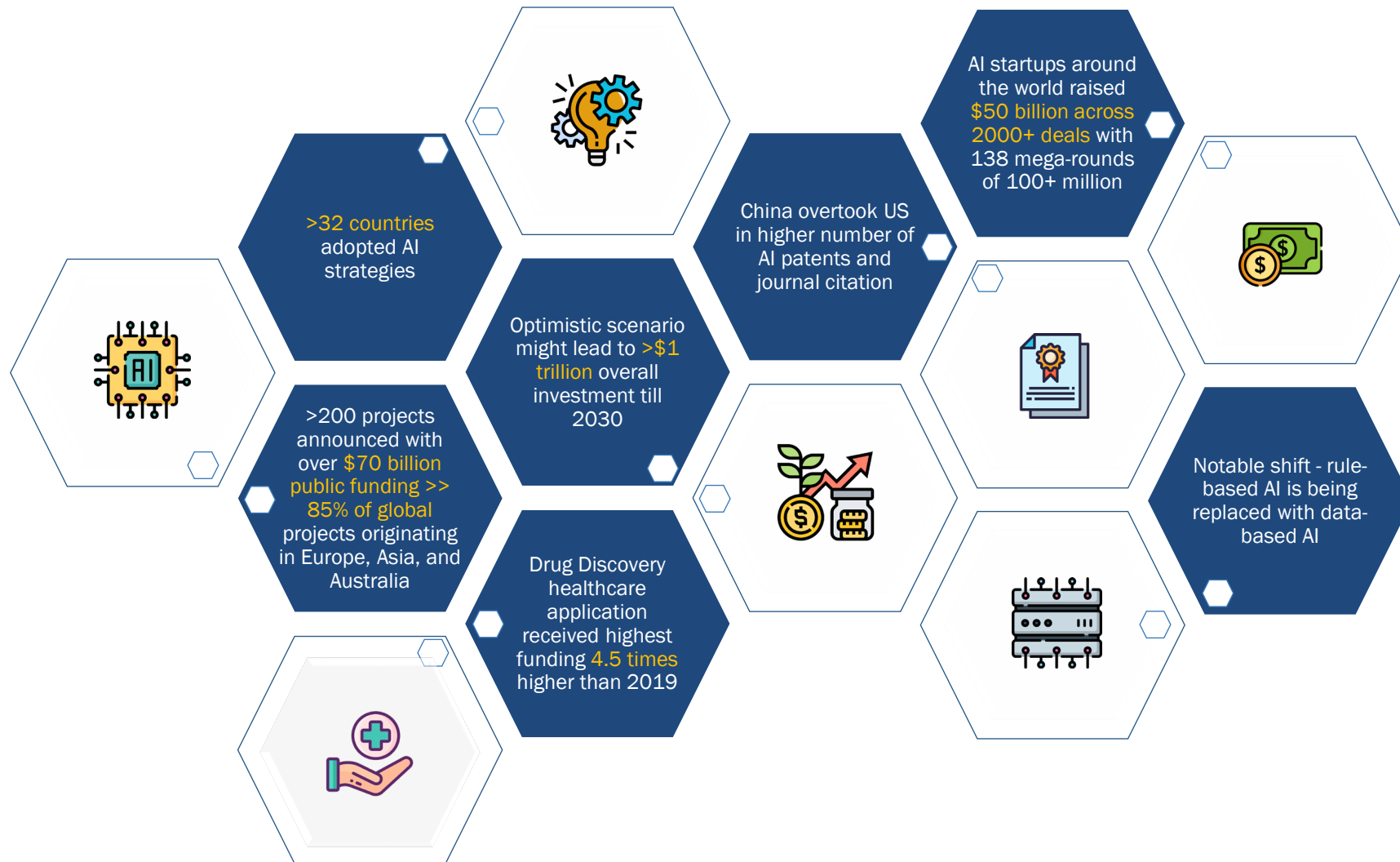# ARTIFICIAL INTELLIGENCE
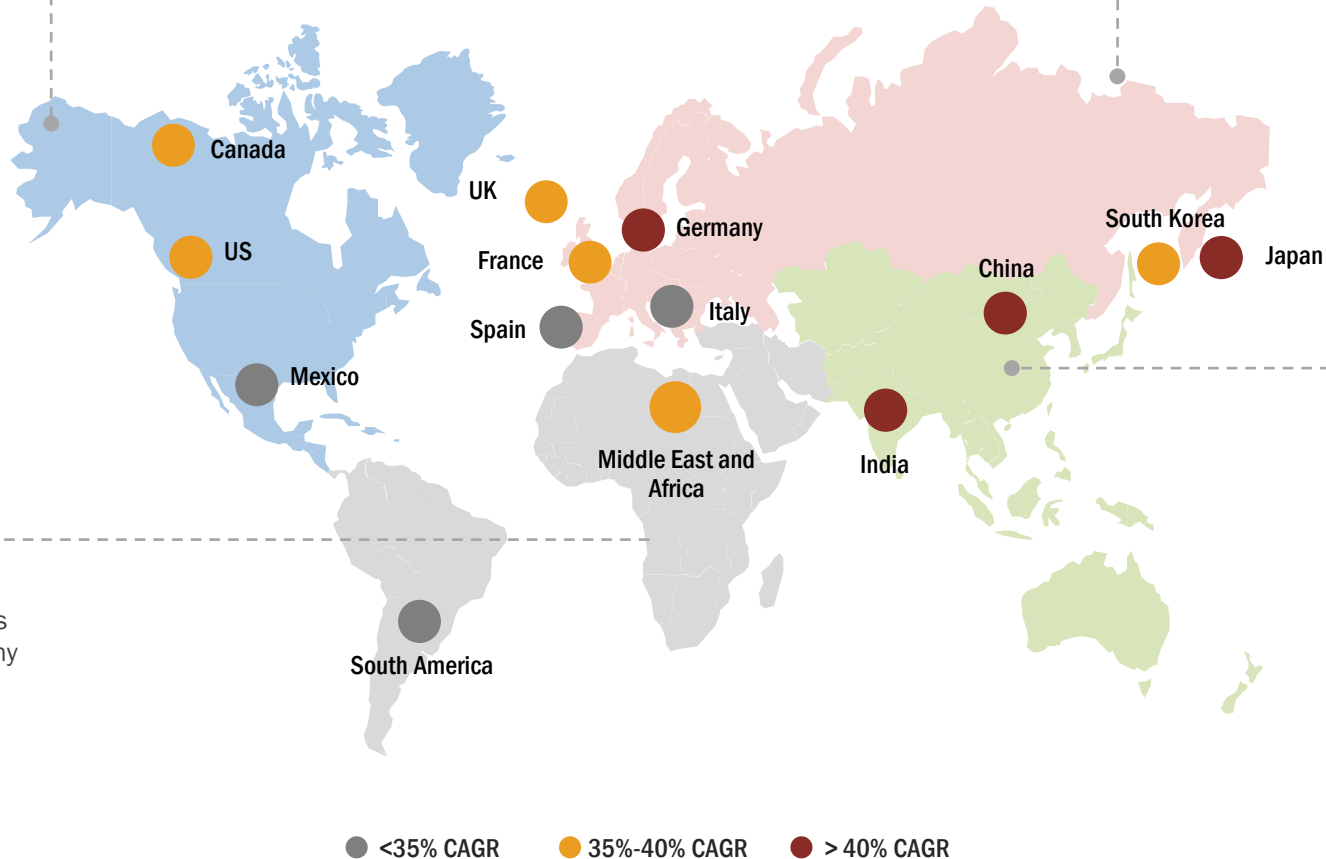
JANUARY 2022

DISRUPTIVE TRENDS

DISRUPTION – ARTIFICIAL INTELLIGENCE HAVE OPENED US$ 50+ BILLION OPPORTUNITIES FOR AI COMPANIES, WHICH IS GOING TO BECOME US$ 300+ BILLION BY 2026

>32 countries adopted AI strategies

>200 projects announced with over **$70 billion public funding >> 85% of global** projects originating in Europe, Asia, and Australia

Optimistic scenario might lead to **>$1 trillion** overall investment till 2030

Drug Discovery healthcare application received highest funding **4.5 times** higher than 2019

China overtook US in higher number of AI patents and journal citation

AI startups around the world raised **$50 billion across 2000+ deals** with 138 mega-rounds of 100+ million

Notable shift - rule-based AI is being replaced with data-based AI

SERVAL AI COMPANIES ARE EXPANDING THEIR REACH IN EXPLORING OPPORTUNITIES IN APAC, DUE TO RAPID DIGITAL TRANSFORMATION OF MULTIPLE COUNTRIES IN THE REGION

- US government spent USD 4 billion to accelerate the acceptance of autonomous vehicle on US road coupled with growing adoption of predictive analytics tools for financial fraud detection are the major drivers driving the adoption of AI in North America.
- Second-largest share holder for AI funding and financing

- In November 2020, the Kingdom of Saudi Arabia invested USD 20 billion in AI projects as the country seeks to diversify its economy amidst low crude oil prices.
- The UAE, Saudi Arabia and Qatar, in particular, have demonstrated strong commitment towards the development and implementation of AI technologies.

- European automakers are partnering with the companies such as NVIDIA, Intel and Mobileye (an Intel Company) to accelerate the development of AI technology in vehicles.
- In addition , The Germen government's industry 4.0 project to computerized the manufacturing industry for increasing resource efficiency and industrial output.

- China is now a leading global hub for AI development. Startups and major tech companies like Baidu, Alibaba, Tencent, and DiDi Chuxing are developing cutting edge products, solutions, and services using AI.
- Governments in the region have shown great interest in AI, with China, Singapore and India, among others, announcing ambitious national strategies.

Canada · US · Mexico · UK · France · Spain · Germany · Italy · Middle East and Africa · South America · India · China · South Korea · Japan

● <35% CAGR   ● 35%-40% CAGR   ● > 40% CAGR

MARKET POTENTIAL &
HIGH GROWTH OPPORTUNITIES

AI MARKET IS ESTIMATED TO GROW AT A CAGR OF 38-40% IN THE COMING 5 YEARS, COMPELLED BY TECHNOLOGICAL SHIFT TOWARDS DATA-DRIVEN AI, AI-DRIVEN AUTOMATION AND APPLICATIONS, INCREASED INVESTMENTS IN AI AND START-UPS

GLOBAL AI MARKET (2021 VS 2026)

CAGR :
38-40%

55-60 Bn

300-310 Bn

2021

2026

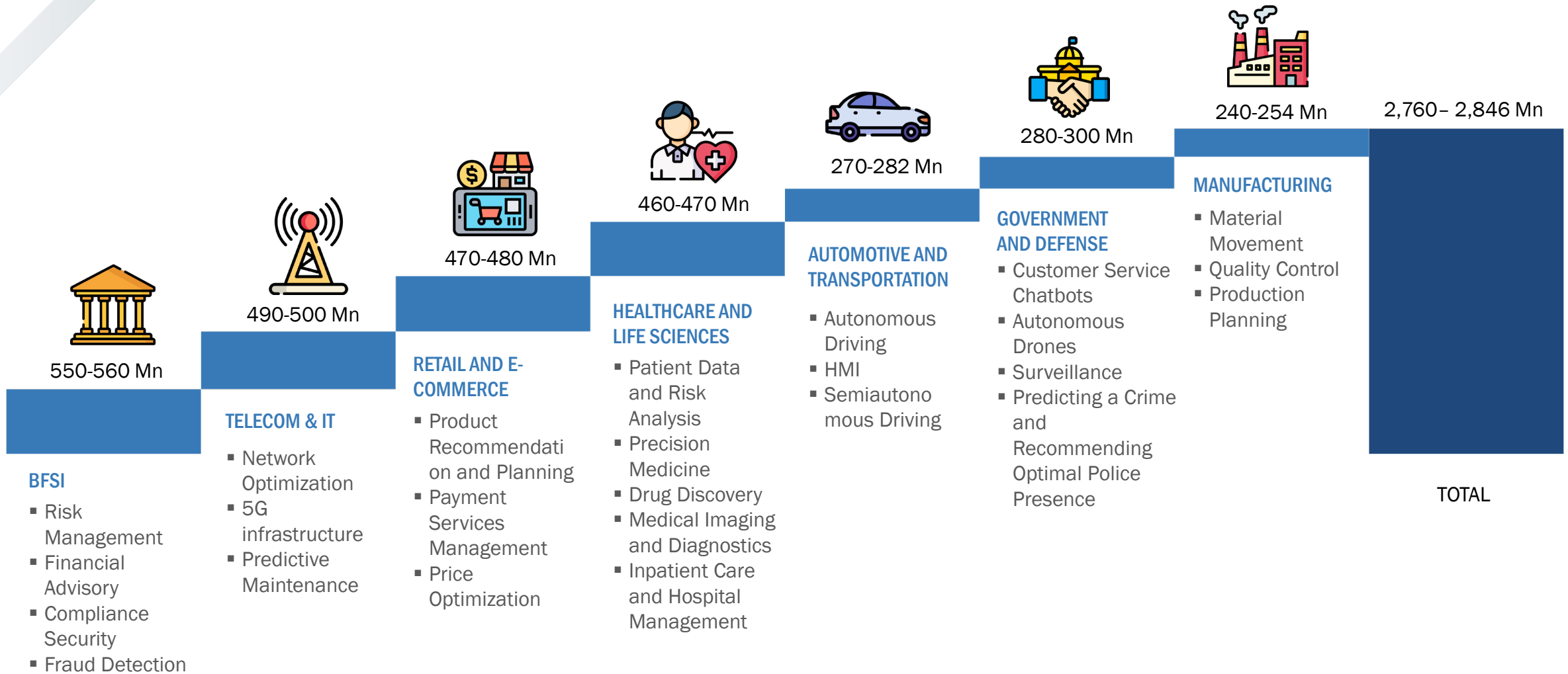*Source: MarketsandMarkets Knowledge Store*
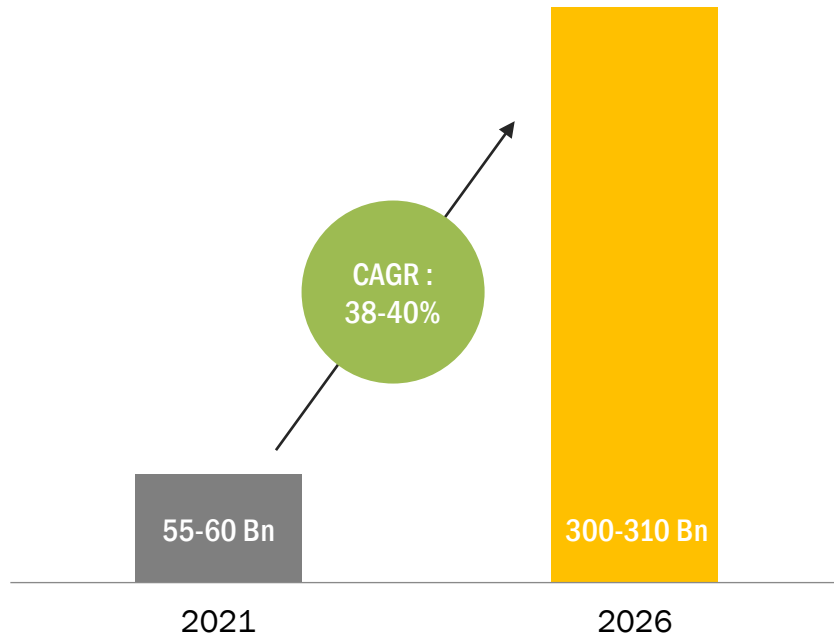
DRIVERS & OPPORTUNITIES

- A critical development in AI is the rate at which rule-based AI is being replaced with data-based AI. Machines have started learning and implementing processes on their own instead of applying if/then rules.

- AI-driven automation has proven useful in various applications across numerous industries, including the aviation, medical, agriculture, energy, and material-handling markets. AI is being used not only to automate tasks but also to diagnose equipment malfunctions or detect product anomalies.

- AI is being used across the board to automate dangerous tasks, augment or replace skilled labor, and streamline operations.

- The growing applications and easy deployment modes have dragged governments' attention toward the AI technology, which has led to the growing investments by governments in AI and its related technologies. Government authorities, public sector organizations, and NGOs have started allocating the budget for AI-based pilot programs for numerous AI applications, including road and public safety, traffic management, and digitization of government documents.

PROMINENT PLAYERS AND STARTUPS LEADING THE MARKET GROWTH

- Since 2013, the number of deals involving companies in AI space has increased exponentially with steady investments made by venture capital firms.

- AI acquisitions saw a more than 6x uptick from 2015 to 2020. Where 2019 witnessed 200+ Mergers and Acquisitions (M&As) and 10 Initial Public Offerings (IPOs).

ARTIFICIAL INTELLIGENCE MARKET REPRESENTS AN OPPORTUNITY WORTH USD 2,760-2,846 MN FOR EVERY AI SOLUTION PROVIDER

2,760 – 2,846 Mn

240-254 Mn

280-300 Mn

270-282 Mn

460-470 Mn

470-480 Mn

490-500 Mn

550-560 Mn

MANUFACTURING
- Material Movement
- Quality Control
- Production Planning

GOVERNMENT AND DEFENSE
- Customer Service Chatbots
- Autonomous Drones
- Surveillance
- Predicting a Crime and Recommending Optimal Police Presence

AUTOMOTIVE AND TRANSPORTATION
- Autonomous Driving
- HMI
- Semiautonomous Driving

HEALTHCARE AND LIFE SCIENCES
- Patient Data and Risk Analysis
- Precision Medicine
- Drug Discovery
- Medical Imaging and Diagnostics
- Inpatient Care and Hospital Management

RETAIL AND E-COMMERCE
- Product Recommendation and Planning
- Payment Services Management
- Price Optimization

TELECOM & IT
- Network Optimization
- 5G infrastructure
- Predictive Maintenance

BFSI
- Risk Management
- Financial Advisory
- Compliance Security
- Fraud Detection

TOTAL

MARKET OPPORTUNITY WITHIN AI MARKET BY 2026 (US$ MILLION)

GROWTH PROBLEMS COMPANIES WANT TO SOLVE – BY PERSONA

GROWTH PROBLEMS ENCOUNTERED BY AI COMPANIES

CUSTOMER PRIORITIZATION AND ASSESSING UNMET NEEDS:
- What are the disruptions in our clients' businesses? How can we support them for our own growth?
- Who are the most potential customers going forward? Should we prioritize healthcare over retail or manufacturing companies?
- What are the key unmet needs of customers? Who are the key stakeholders in different settings? Do vendor selection criteria differ by settings? Which new product features should be added to the existing products?

WHERE TO PLAY:
- Which technologies should we focus on? Should it be NLP, ML, Computer Vision, or any other?
- Which regions should we place our bets on? Should we continue with developed countries or do developing countries offer more growth opportunities?

BUILDING A COMPELLING RIGHT TO WIN (RTW):
- For M&A, which are the right targets for us? Should we target horizontal AI companies or vertical AI companies? Should we enter new markets directly or through partners?
- How can we differentiate from top players? What is their right-to-win vs ours?

OBSTACLES TO GROWTH FOR CURRENT PLAYERS

- Not able to keep pace with fast evolving AI industry – New applications and use cases are emerging leading to new technological complexities
- Many start-ups and emerging companies eating up market share of established companies
- Limited clarity on unmet needs, hence requirements for product features
- Limited clarity on relevant vs redundant AI services for the future
- Unclear picture about the regulatory scenario

KEY UNCERTAINTIES/ PERSPECTIVES WHICH INDUSTRY LEADERS SEEK ANSWERS TO:

KEY QUESTIONS OF NGS COMPANIES

- What AI services will be relevant and redundant in the next 5 years?
- Can genetic sequencing become affordable for routine testing, or will it continue being used for specific diseases?
- What is the level of sensitivity that will be required for advanced genetic sequencing?
- How can companies optimize the manufacturing processes to be more agile and efficient to achieve a more seamless workflow?
- What regulatory policies can help strategize and achieve volumetric scale-up?
- What can be done to train more people into performing and analyzing advanced sequencing techniques on crops and microorganisms?

KEY QUESTIONS OF COMPANIES IN ADJACENT MARKETS

- What are the regulations surrounding data privacy and security?
- Which machine learning approaches can be used to address data limitations so that AI models do not lead to misleading insights or faulty predictions?
- How are companies handling machine bias?
- When can a 100% AI integration into genomics be expected?
- What will be the impact of automation on genomics market?

Strategic Clients

Not only 80% of Fortune 500 companies from the automotive & transportation industry and other focused industries, but also Tier 1 consulting firms such as McKinsey, BCG, and Bain, as well as the Big 4 audit firms are MnM's clients.

LEARN HOW MARKETSANDMARKETS CAN HELP YOU

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