



## DATA READINESS FOR AI INITIATIVES

### Abstract

With the rapid advancement of Artificial Intelligence (AI), executives are often faced, with the challenge of deciding the best time to adopt AI in their enterprise. Many of the ambiguities surrounding AI stem from its polyhedric nature and its ability to simulate cognitive processes. To identify the necessary success factors for AI readiness, this paper examines five categories: technology & security, data & information, people & organization, process & standardization, and social values of data & data solidarity. Through an in-depth interview study with 25 AI experts, we reveal the ethical framework that should be developed and standards and definitions, the organization's knowledge information flows, and data quality that should be taken into account. We also provide insight into the need for a national roadmap for AI data availability with social backing and the importance of promoting AI transparency. By understanding the success factors for AI readiness, executives can make an informed decision about the best time to adopt AI in their enterprise.

## Traditional Methods



Cleaning



Organizing



Structuring



Access



Test

## Typical Success

While we go to the CIO/CTO of the organization, they investigate other aspects which are especially important for the Data Readiness



Technology &  
Security



People &  
Organisation



Data &  
Information



Process &  
Standardization

Implementing these success factors locally will encourage/create a great supply of data



### Technology & Security

Technical experts need to sensitize policymakers regarding ethical threats. AI researchers involved in AI technology development should acknowledge that their works could be used maliciously if it doesn't follow ethical guidelines. The protection gears and techniques should be brought into use with the help of cybersecurity experts. An ethical framework for AI should be developed and followed in accordance with the individual or the technology



### People & Organization

- Budget/finances
- Knowledge process/technology
- Change strategy and readiness



### Data & Information

Strategy, and competitive advantage—keep in mind your data and your people. These are also additional elements to consider as part of the process

- Use of standards and definitions
- Organization's knowledge information flows
- Limit human actions / automate
- Safe data exchange with AI
- Improve/ensure data quality



### Process & Standardization

International standards – the technical specifications and requirements needed for AI and other technologies to perform well – can help address real and perceived risks by setting clear boundaries and making machine learning (ML) predictable, reliable, and efficient. AI and ML are gaining ground in ITU's standardization work, with research, analysis, and stakeholder discussions focusing on network orchestration and management, multimedia coding, service quality assessment, and various aspects of telecom management, operation, and services, as well as cable networks, digital health, environmental efficiency, and autonomous

## Blank Spots

As we our success health and life sciences organizations are missing out on the key aspects of nonconventional blank spots. Below are blank spots that we need to be looking at to make the data ready for:



Social Values of Data & Data Solidarity



Organizing National Control of Knowledge & Expertise



Legal & Ethics



Social Appeal & Transparency

Implementing these success factors locally will encourage/create a great supply of data



### Social Values of Data & Data Solidarity



### Organizing National Control of Knowledge & Expertise

# ASSESS YOUR ORGANISATION

ACROSS 4 FACTORS



ENTERPRISE READINESS



STATE OF DATA & CONTENT



SKILLS SETS & TECHNICAL CAPABILITIES



CHANGE READINESS

- National roadmap for AI data availability with social backing
- Overview, monitoring progress such as innovation / international
- Careful introduction: tools and resources

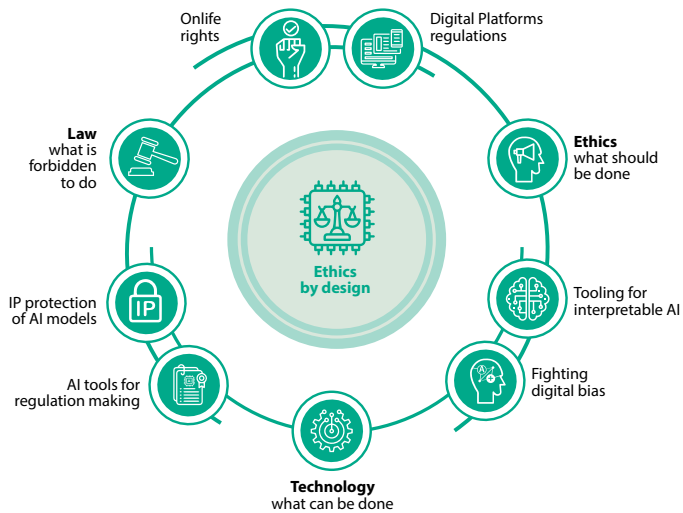






## Legal & Ethics

- Everyone involved has feeling and responsibility for data usage
- Apply protection for medical data, permissions, etc.
- All involved party's involvement and privileges



## Social Appeal & Transparency

- Confidence in how it works thanks to AI transparency
- Confidence thanks to national AI "supervision & monitoring: in health and life sciences
- Burden of proof and value of AI
- Influence and appeals in the debate





This paper examines success factors for increasing data availability and preparing it for development, training, validation, and application for Artificial Intelligence (AI). Even though we focus on five categories of success factors: technology & security, data & information, people & organization, process & standardization, and social values of data & data solidarity. We conducted an in-depth interview study and collected data from 25 AI experts to identify these success factors. Our results indicate that technical experts need to sensitize policymakers regarding ethical threats and an ethical framework for AI should be developed. We also found that standards and definitions, organization's knowledge information flows, limiting human actions, automated data exchange, and improving/ensuring data quality should be considered. Further, we reveal that a national roadmap for AI data availability with social backing should be organized and AI transparency should be promoted to increase confidence in AI.





## About the Authors



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Madhavi Koppaka, M.Phil. Statistics has 22+ years of experience with Program Management and a Certified Scrum Master. She has practical and comprehensive experience helping clients – across all verticals – solve complex problems using a combination of Data and Analytics and developed Visualizations.



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