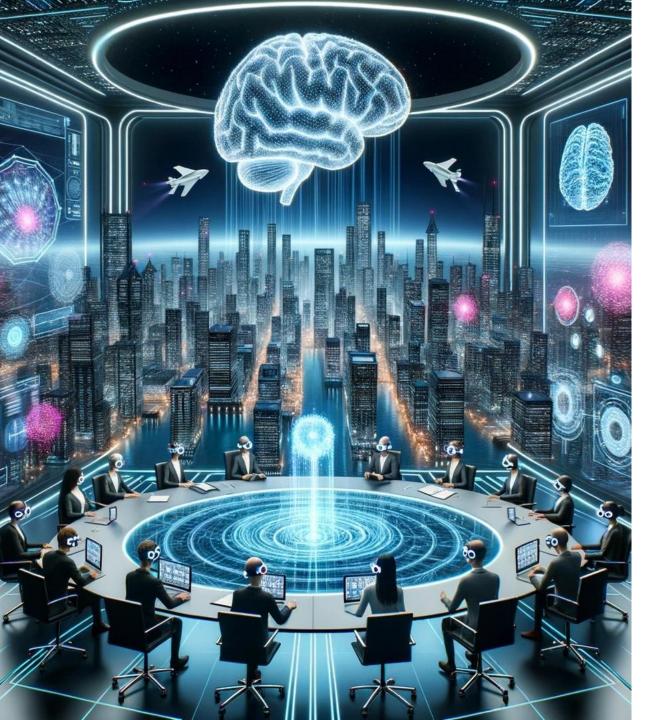


D-BRAIN

Digital **B**usiness **Reinvention & Artificial** Intelligence **N**imbleness **Model & Scorecard**

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36 months of research with global organizations at Startech Alliance, Inc and Asebuss – KSU MBA&EMBA executives

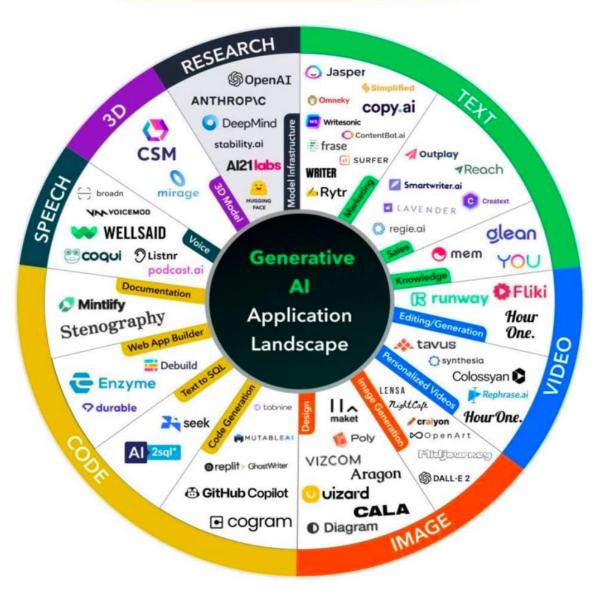
Hundreds of companies interviews

Study of previous models of digital maturity including IDC, Forrester, Gartner, McKinsey and MIT CISR

Integrating Artificial Intelligence at the core of the Maturity Model of Digital Business Transformation & AI Readiness



AI APPLICATIONS





The value is NOT where everybody is going and using what everyone is using

anagement Marketir

Legal

Co

Prod

uman Resources

es Informatic

Finance

Research&Develor

- Digital Business Reinvention emphasizes the transformation and adaptation of a business to leverage digital technologies fully.
- Artificial Intelligence Nimbleness focuses on a company's ability to quickly and effectively integrate artificial intelligence (AI) into its core

- Scorecard model with a practical scoring system
- 10 dimensions circumplex
- Offering real-life, practical solutions of improvements on all dimensions

eting Compliance es Accounting ation Technology **Supply Chain** elopment oduction

Human Brain

Interconnected Neurons Adaptive Learning by experience **Digital Brain** Interconnected **Systems** Ready to Pivot Learning by insights and analysis

Responding to sensory input

Responding to stakeholders

General Manag Operations Hum Logistics Sales Rese

AGI + Agile = AGILe

*AGI – Artificial General Intelligence – a type of artificial intelligence that could learn to accomplish and intellectual task that a human being can perform.

*AGILE – a term used primary within the world of software development, though its principles have been applied to various other industries as well, which focus on prioritizing collaboration, customer feedback and adaptive responses to change.

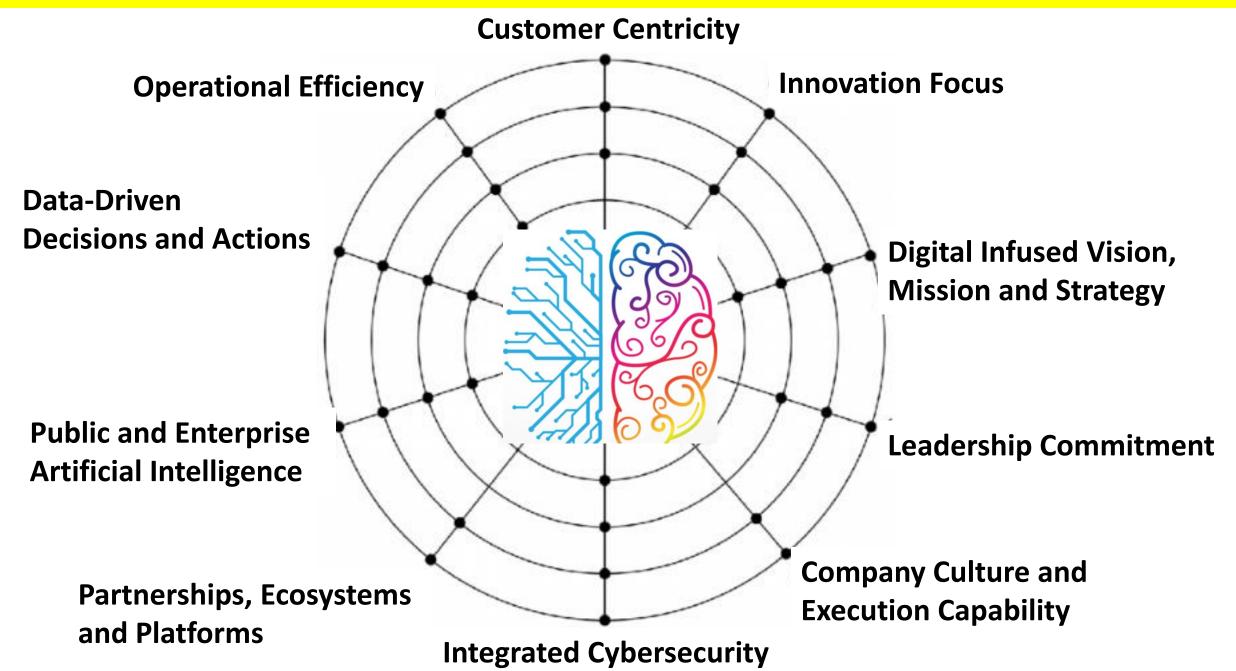
*AGILE – written with bold for AGI followed by normal LE is a combination between AGI and AGILE used through this model as an organization using Agile principles to reach an AGI digital transformation level.

Compliance es Accounting ation Technology **Supply Chain** elopment roduction

eting

Implementing a recurrent business transformations using the D-BRAIN Model will lead in the long run to the achievement of a level where everything if well-orchestrated will act like having a second collective brain for a company.

Digital Business Reinvention & Al Nimbleness Model



Customer Centricity

Customer Journey Mapping and Iterative Design Assimilation	Tools and processes to map and analyze the customer journey, refining, refining and refining the customer's path across all touchpoints to understand and enhance their experience	
Digital Touchpoints Consistency	Providing a seamless customer experience across all digital touchpoints with the same "look and feel" no matter the interaction point. Uniformity in user experience across all digital interfaces, from mobile apps to websites.	
Universal Availability and Accessibility	For B2C, accessibility through all digital channels web, email, SMS, Whatsapp, mobile apps and all social media channels including latest trends, natural language solutions like Siri or Alexa if applies, including generative AI answers. For a B2B means having an EDI a computer-based interface used by trading partners to send and receive critical business messages (such as purchase orders, invoices, shipping notices, etc.) automatically.	
Personalization at Scale through Customer Data Integration	Leveraging collected customer data to deliver tailored experiences across digital platforms. Tailoring customer interactions based on individual preferences and past behaviors and by leveraging data analytics anticipate customer needs and provide relevant content or product recommendations.	
User Research & Engagement Analytics	User research conducted and monitoring metrics are in place, that provide insights into how users interact with the business and help businesses understand what's working and what's not in their digital strategy.	
Digital Customer Support and Training	The old paper manual is a thing of the past. Offering online video tutorials, document, webinars or interactive guides can cater to the modern customer. The modern customer is offered digital channels for support. Tools like chatbots, AI assistants and interactive help sections can provide immediate assistance followed by modern WhatsApp support channels or any other familiar modalities for customer support.	
Digital Metrics and KPIs Incorporation	Modern metrics that complement CAC – Customer Acquisition Cost, Total Revenue per Customer, Upsell/Cross-sell Rate, CCR – Customer Retention Rate, Customer Churn Rate, CLV - Customer Lifetime Value, CES – Customer Effort Score, Average Resolution Time, First Contact Resolution and other specific ones are available and focused on predictive analysis.	
Voice of Customer Programs and Feedback Loops	Systems to regularly gather and analyze customer feedback but not in a static way, understanding what and where this is necessary. This ongoing loop provides invaluable insights for continuous improvement using NPS, CSAT and other techniques in order to collect, analyze and ACT on customers input.	
Adoption of Full Spectrum of Digital Platforms for Customer Management	CRM Systems are now from last century and we cannot imagine a company without one but most of the customer- centric activities below are part of a specific or integrated platform like Customer Support and Helpdesk Software, Customer Feedback Tools, Marketing Automation Platforms, Customer Analytics Platforms, Social Media and Monitoring Platforms, Self-Service Platforms, Customer Onboarding, CMS and Al-driven chatbots	
Customer Data Protection	With increasing concerns about data privacy and all security breaching situations, businesses can differentiate by making it a priority that all customer data is stored, processed and operated with the highest security standards.	

	OPENNESS TO DIGITAL ADAPTATION, AGILITY AND FLEXIBILITY	CULTIVATING A MINDSET WHERE CHALLENGES AND VIEWED AS OPPORTUNITIES AND CASCADES INTO READINESS AND WILLINGNESS TO CHANGE STRATEGIES, TOOLS OR MINDSETS IN RESPONSE TO NEW DIGITAL INFORMATION, MARKET SHIFTS OR TECHNOLOGICAL ADVANCEMENTS.
	Cultural Emphasis on Data, Skills and Methodologies Assimilation	Ensuring every member of the organization is comfortable and conversant about data, digital tools, platforms and methodologies central to the business. Using Proof of Concepts, Pilots and Rollout Plans and Methodologies like Agile, Scrum, Kanban and sometimes Waterfall, flexible in its approach depending on the project.
Company Culture	Empowerment and Autonomy Focus	Trusting and empowering employees to make decisions, knowing that when employees feel ownership, they're more likely to buy into new initiatives and drive them forward and when hiring new employees, look for those who are adaptable, curious, and have a track record of continuous learning. Skills can be taught, but the right mindset is invaluable.
Culture	Cooperation, Collaboration on Cross- functional Teams Integration	Encouraging departments, often with varied expertise, to work closely together on digital projects to ensure all aspects of the business are integrated into the digital strategy. Using Unified Collaboration Platforms like Slack or Teams, Document Sharing and Collaboration
	Flattened Organization Structure and Transparent Communication Adoption	Fostering a culture where feedback is routinely given, received and actioned upon, promoting continuous improvement and refinement. Mechanisms to take learnings from monitoring and reviews back into project planning and execution. Defined cycles for taking in feedback, making improvements, and releasing updates.
and	Digital Upskilling and Certification Programs Integration	Enhancing employees' abilities and competencies in the digital domain to keep pace with evolving technology trends. Organizing regular seminars or workshops to educate employees on the latest digital trends, tools or methodologies. Encouraging and providing pathways for employees to earn certifications in relevant digital disciplines to validate their expertise.
Execution	Performance Management, Recognition and Rewards	Creating mechanisms to recognize and reward employees for digital innovations, accomplishments and exceptional contributions. Real-time visualization of KPIs and metrics related to the transformation. Weekly or monthly review sessions to analyze progress and address any issues.
Capability	Internal and External Knowledge Sharing	Actively encouraging the sharing of insights, learnings and best practices related to digital endeavors across the entire organization and inviting industry experts or thought leaders to share their insights, experiences and knowledge with employees. Using Knowledge Repositories, Wiki Pages or platforms like Confluence.
	Digital Infrastructure	Sound technology Infrastructure making sure the digital progress is not affected by technical issues. Functional teams dedicated to specific digital transformation projects. Clearly allocated budgets for each initiative, with contingencies in place.
	Scaling Capability	Encouraging teams to test, iterate and try out new digital ideas, platforms or strategies without fear of failure, promoting innovation and offering practical, immersive training sessions where employees can tackle real-world digital challenges or projects.

Operational Excelence

Critical Business Software Adoption Level	Complete set of management tools like integrated enterprise resource planning (ERP), E-Invoicing, Digital Payments and supply chain management (SCM) systems that break down silos, streamline processes, and provide real-time insights.
Digital Collaboration and Communication Platforms Deployment	Using a full set platforms that improve intra-organizational communication, collaboration and information sharing like DMS, E-learning, Knowledge Management, Internal Feedback and Well Being, Digital Onboarding and Collaboration and other
Real-time Monitoring of 'Everything' in Business	Leveraging tools like IoT, Mobile Solutions, VR, AR to continuously monitor operations, enabling immediate responses and informed decision-making.
Digital Process Streamlining	Evaluate the level each business function has digitalized processes.
Integration of Process Mapping, Optimization and Automation Tools (EBPA & BPM)	Amalgamating tools for mapping out business processes, optimizing them for efficiency, and automating routine tasks. Employing Enterprise Business Process Analysis (EBPA) and Business Process Management (BPM) technologies, this integration facilitates a streamlined operational framework
Lean and Agile Methodology Adoption	Embracing practices that focus on minimizing waste in processes while maximizing productivity.
Business Automation Scale	Employing technology to automate manual and repetitive tasks, enhancing efficiency and consistency in all departments like Robotic Process Automation at the very base and gradually moving to Cognitive Process Automation step-by-step.
Artificial Intelligence Adoption	incorporation of AI technologies to enhance operations, decision-making processes, customer experiences, and to create new business models
Remote Work Utilization	Deploying tools and best practices that enable employees to work productively from any location.
Outsourcing and Cloud Computing Deployment	Using external providers for repetitive jobs that doesn't provide much value or cloud resources to provide greater scalability, flexibility and efficiency in operations.

Innovation Focus

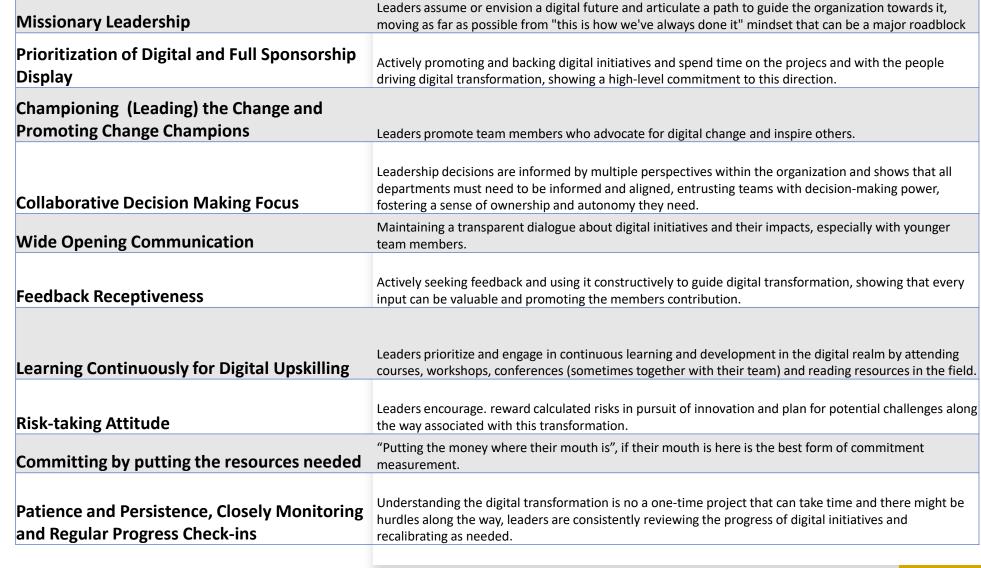
Integration of Emerging Technologies	Adopting and integrating technologies from various sources.
Open Innovation and Collaboration Embedment	Seeking external inputs and ideas to drive innovation, often from users, third-party developers or other industries.
Planning Flexibility and Adaptability	Ensuring that strategic or project plans can be adjusted swiftly in response to changing conditions or fresh insights.
Change Management Programs	Structured approaches to help individuals and teams transition from the current state to a desired future state, especially during innovation initiatives.
Agile and Rapid Prototyping Methodologies Focus	Adopting a set of practices and values that prioritize adaptability and customer feedback in product development. Quickly building preliminary versions of a digital solution to visualize, test, gather feedback and iterate upon
Dedicated Innovation Teams	Teams solely focused on ideation, research, and development of new digital solutions.
Scalable Innovation Frameworks	Designing systems with a foundation that allows them to expand or contract as needed without complete overhauls.
Continuous Delivery Application	Ensuring projects can be reliably released at any time, facilitating regular and incremental updates.
Innovation Metrics Integration	All starts with using specific metrics or KPIs to gauge the effectiveness, impact and ROI of innovation initiatives.
Digital Labs Utilization	Spaces or teams specifically dedicated to pursuing and testing new digital ideas, technologies and solutions.

Digital Infused Vision,

Mission and Strategy

Digital Centric Vision	Establishing a vision statement that encapsulates digital transformation as a core component or having a standalone digital vision, guiding the organization towards digital-centric endeavors.
Digital Inclusive Mission	Having a clear mission statement that outlines the digital trajectory of the company, emphasizing how digital touchpoints enhance customer interaction and engagement.
Competitive Digital Advantage Assessment	Analyzing competitors' digital strategies to discover gaps and opportunities, enabling a competitive edge in digital capabilities and market positioning.
Digital Strategy Documentation	Crafting comprehensive documents that delineate digital strategies and tactics, serving as a blueprint for digital transformation efforts across the organization.
Digital Transformation Roadmap and Rollup	Developing a structured plan detailing the steps towards achieving digital goals, ensuring a systematic and organized approach to digital transformation.
Commitment of Resources for Digital Initiatives	Allocating necessary resources such as funds, time, and personnel towards digital initiatives, embodying a tangible commitment to the digital transformation journey.
Digital SWOT Instillation	Conducting a thorough SWOT analysis in the digital realm to evaluate strengths, weaknesses, opportunities, and threats, fostering informed digital strategy development.
Prioritized List of Digital Bets Alignment	Aligning digital strategies with overarching business objectives, ensuring that digital initiatives are prioritized according to their potential impact and alignment with business goals.
Stakeholder Involvement	Involving all pertinent stakeholders in strategy formulation, promoting a collaborative approach to digital transformation and ensuring alignment with stakeholder expectations.
Future-Focused Mindset	Cultivating a forward-thinking culture that anticipates market shifts and technological advancements, regularly revisiting and adjusting the strategy to remain relevant and effective.

Leadership Commitment



Data Driven and

Decisions Actions

Unified Data Platforms Integration	Capability of combining various data sources into a single platform that provides easy access and management and repositories that can store and structured and unstructured data at scale.
Real-time Data Access	Ensuring stakeholders have immediate access to the necessary data, enabling prompt utilization for decision-making and other crucial activities
Data Quality and Accuracy Focus	Implementing stringent processes and systems to assure the data's accuracy, completeness, reliability, and relevance, which is crucial for informed decision-making and maintaining trust in data systems.
Data Governance Assimilation	Establishing a robust framework for data management and usage across the organization, ensuring compliance with internal policies and external regulations.
Data Literacy Training Rollout	Launching educational initiatives to enlighten the workforce on the importance of data, and equipping them with the necessary skills to understand and utilize it effectively.
API and EDI Integration	Utilizing Application Programming Interfaces (APIs) and Electronic Data Interchanges (EDIs) to enable communication and data exchange among disparate systems, both internally and externally, thus fostering a unified data ecosystem.
Machine Learning Readiness	Preparing the organization by employing data tagging and labeling, which facilitates the processing and extraction of insights from extensive datasets using machine learning algorithms.
Advanced Analytics Deployment	Deploying sophisticated statistical, mathematical, and computational techniques to extract valuable insights from data, which can inform strategic decisions and optimize operations
Prescriptive or Actionable Analytics Level	Applying statistical algorithms and machine learning to analyze historical data, identify future outcomes, and provide actionable insights that guide decision-making and strategy formulation.
Embrace of AI based Cognitive Analytics with Feedback Mechanisms	Implementing cognitive analytics using AI models to process and predict outcomes, alongside establishing feedback mechanisms that validate data-driven decisions and refine processes based on this feedback, enhancing the overall analytical ecosystem.

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Intelligence

Strategic Integration of AI	Understand AI implications, exploring all intricacies in business, including product enhancements, operational efficiency, customer experience or new business models.
LLM Generative AI Integration	Incorporating Large Language Models (LLMs) with generative capabilities to foster innovation, improve communication, and automate various tasks, thus driving efficiency and new opportunities.
LLM API Accessibility via App Frame	Enabling accessibility to Large Language Models through APIs within an application framework, facilitating seamless integration and interaction with AI capabilities to enhance functionalities. Establishing a robust data and computing infrastructure with organized data storage, ample capacity, and
Data and Computing Infrastructure	sturdy systems for data collection, cleaning, and labeling. Ensuring clear data governance, dedicated machine learning hardware, and scalability tools to support AI/ML endeavors.
Expertise & Training Assimilation	Fostering a culture of continuous learning with skilled personnel and resources for training to stay abreast of evolving AI/ML technologies, ensuring the workforce is well-equipped to leverage AI capabilities effectively.
Cloud-based LLM with Private Data with Privacy, Policies and Protection	Ensuring using own data through a robust framework of privacy policies and protection measures while integrating Large Language Models to safeguard data and comply with regulatory requirements, instilling trust and confidence among stakeholders.
Holistic Deployment & Integration	A comprehensive approach to AI integration, ensuring AI is not a siloed effort but is seamlessly integrated across various departments like marketing, HR, and production. Establishing systems to transition models into real-world applications effectively.
ML/AI Frameworks Deployment and Modeling Workflow Incorporation	Libraries and platforms to build and refine models. Prototyping, feature engineering and model refinement
Validation, Testing Implementation and constant Monitoring & Maintenance	Model evaluation, data splitting and validation practices. Tools to check model health and update as needed
Interpretability & Fairness Ethical and Responsible AI	Understanding model decisions and ensuring fairness. Develop an ethical framework. Address concerns about data privacy, ssure stakeholders that data will be protected and bias and Fairness, ensure AI models are trained on diverse datasets to avoid biased outcomes.

Partnerships, Ecosystems

and Platforms

Partner Ecosystems Focus	Focusing on pverseeing and managing partner relationships to ensure alignment with the company' digital objectives and performance standards.	
Collaboration Platforms Embedment	Having digital tools and platforms designed to facilitate promotion, seamless communication, project management and collaboration with partners.	
API Integrations Utilization	Utilizing Application Programming Interfaces to seamlessly integrate and communicate with partner systems, platforms or tools.	
Open Innovation Mindset	Having a serious number of innovation partners and not focusing only on internal options, inviting ideas, solutions and technologies from external entities, such as startups, experts or the public, to solve digital challenges.	
Joint Ventures	Creating a new business entity or project by two or more parties for mutual benefit, especially in the digital domain.	
Co-Creation Opportunities Infusion	Collaborating closely with partners, often from different industries or domains, to jointly develop innovative solutions.	
Community Engagement	Actively participating in and contributing to broader digital or industry-specific communities for collective insights, networking and collaboration.	
Partnership KPIs Embedment	Specific metrics or indicators used to assess and measure the performance, success or ROI of partnerships.	
Partners Feedback Mechanisms Infusion	Establishing channels or systems to actively gather, assess and act upon feedback received from partners to improve the partnership.	
Continuous Partnership Assessment	Evaluating potential partners based on shared objectives, values and the strategic benefit of the collaboration.	

Integrated Cybersecurity

Security-First Mindset	Adopting a security-first mindset involves prioritizing robust measures to protect data, prevent breaches, and ensure secure integrations. It emphasizes maintaining full visibility of each IT asset, keeping systems updated, imposing multi-factor authentication (MFA), and adhering to IT security rules and regulations.
Artificial Intelligence Security	Strategic implementation of robust measures and policies to protect your organization's AI systems, data, and operations from unauthorized access, tampering, malicious attacks, and other digital threats
Business Continuity and Disaster Recovery Planning	Adopting a mindset that a disaster can happen at anytime timp and designing technology in a modular fashion, allowing components to be added, removed, or replaced without disrupting the entire system. This approach supports business continuity and disaster recovery by ensuring system resilience and rapid restoration of operations in case of disruptions.
Open Standards & Interoperability Assimilation	Assimilating open standards and interoperability to ensure compatibility and seamless communication across a diverse range of systems. This promotes flexibility, extensibility, and ease of integration within the digital ecosystem.
Proactivity, Continuous Monitoring and Response Uptake	Employing a proactive stance by utilizing advanced threat detection and monitoring tools to continuously scan for vulnerabilities or breaches. Having rapid response capabilities to mitigate damage significantly in the event of a breach, ensuring timely data transfer and processing to maintain operational integrity.
Holistic IT Security Approach	Understand the entire digital ecosystem – from front-end customer interactions to back-end infrastructure. This understanding will allow for better risk assessment and security protocol design.
Data Security, Encryption and Compliance Focus	Emphasizing strong encryption and access controls to safeguard data. Translating data into an encrypted form ensures only authorized individuals with the correct key can access it. Complying with regulatory requirements and industry standards to demonstrate a strong commitment to data security and privacy.
Zero Trust, User-Centric Security Solutions	Assuming that employees often represent the weakest link in security chains. Knowing that 92.3% of the security incidents in the last years happened because of a user was trapped into providing critical details that allowed attackers to orchestrate an attack on the company and acting accordingly.
Incident Response Planning	Preparedness to handle and respond to security incidents or breaches, having a well-defined and tested incident response plan. This ensures that in the event of a cyber incident, the organization can respond effectively and efficiently.
Continuous Security Awareness Training	Educating employees about the principles and practices to protect information systems.

Digital Business Reinvention and AI Nimbleness Scorecard

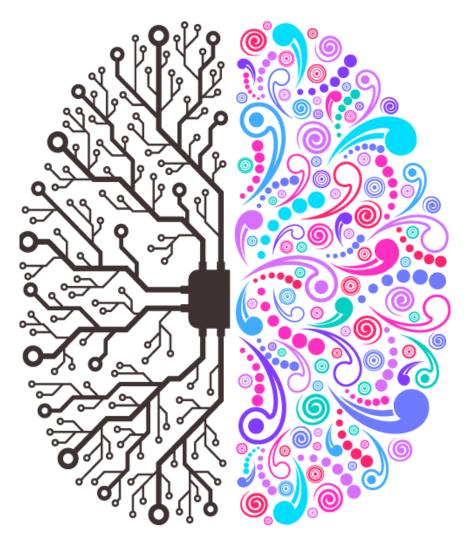
Customer Centricity

Operational Efficiency

Data-Driven Decisions and Actions

Public and Enterprise Artificial Intelligence

> Partnerships, Ecosystems and Platforms



Innovation Focus

Digital Infused Vision, Mission and Strategy

Leadership Commitment

Company Culture and Execution Capability

Integrated Cybersecurity

General Manag

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Sales

Operations

Logistics

1. Customer-Centricity 1 71

2. Operational Efficiency 1 79

3. Data-Driven Decision Making 1 71

4. Innovation and Agility 1 65

5. Clear Vision and Strategy 1 72

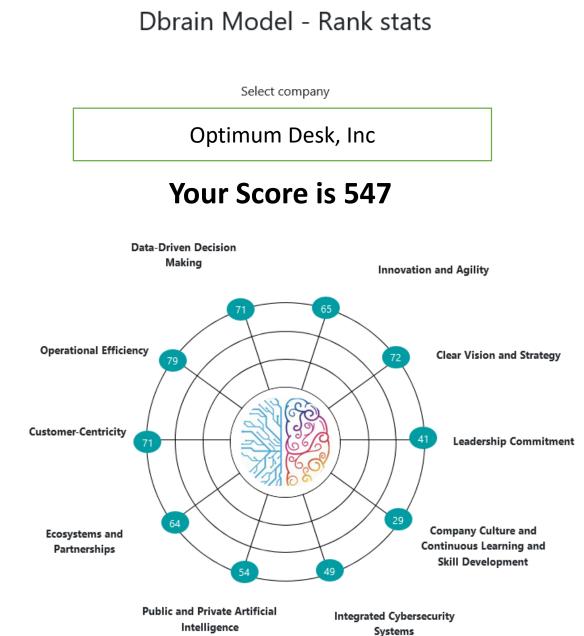
6. Leadership Commitment 1 41

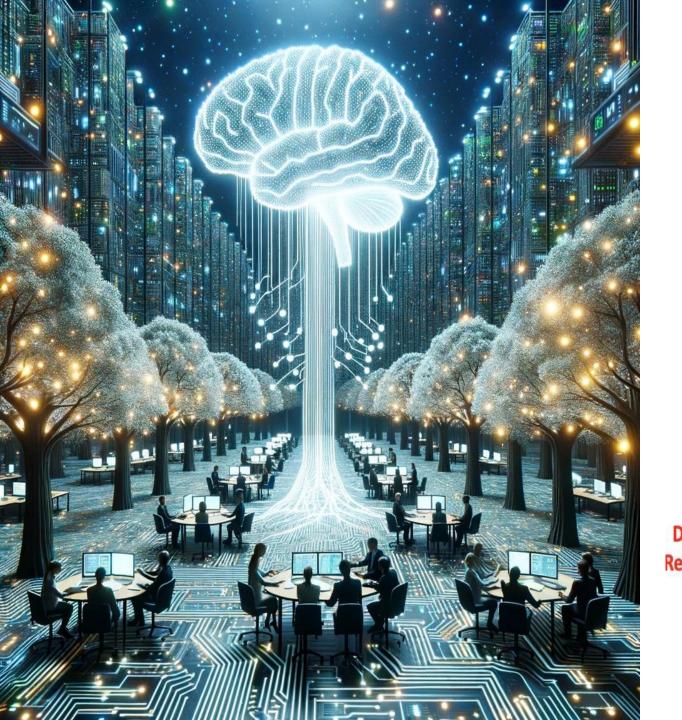
7. Company Culture and Continuous Learning and Sk

8. Integrated Cybersecurity Systems 1 49

9. Public and Private Artificial Intelligence 1 54

10. Ecosystems and Partnerships 1 64





Five Organizational Levels







Download the D-BRAIN Model Summary

Official Launch Calendar

- 1st November 2023 Limited Availability Release for CIO Council Romania members
- **1st December 2023** Availability for Startech Alliance, Inc partners
- **1st January 2024** General Availability including D-BRAIN Digital Business Reinvention and Artificial Intelligence Nimbleness Book Launch