



NSDAI

الاستراتيجية الوطنية
للبيانات والذكاء الاصطناعي
National Strategy for Data & AI

REALIZING OUR BEST TOMORROW

STRATEGY NARRATIVE

OCTOBER 2020



SDAIA

الهيئة السعودية للبيانات
والذكاء الاصطناعي
Saudi Data & AI Authority

رؤية
2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

The Custodian of the Two Holy Mosques

King Salman bin Abdulaziz Al-Saud

Prime Minister



His Royal Highness

Prince Mohammad bin Salman Al-Saud

Crown Prince, Deputy Prime Minister, Minister of Defense

Chairman of SDAIA



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The background of the slide features a dark blue gradient. It is overlaid with a network diagram consisting of numerous small, light blue dots connected by thin, glowing lines. Scattered throughout the scene are large, semi-transparent binary digits (0s and 1s) in various shades of blue and green, some appearing to float in the foreground while others are blurred in the background.

1.0

EXECUTIVE SUMMARY

Nations are transitioning from traditional economic models to a learning economy – leveraging technologies, including Data & AI that are disrupting almost every sector. Data & AI are massively transforming the world we live in, from businesses to industries, to human lives. The ever-expanding data volume and the exponential growth of computing power have led to promising breakthroughs and new Data & AI applications in the real world.

1.0

Data in particular, has become an essential resource to countries, some calling it “the new oil,” to illustrate the tremendous opportunities it creates in terms of efficiency, development of AI solutions, and public services. A large number of data-generated opportunities create value, both social and financial. Countries learning to maximize data collection opportunities, processing, and integration into valuable solutions, will gain significance, both in the short and long term.

KSA has a critical role in developing the Data & AI agenda to position the country in the league of data-driven economies.

KSA displays attractive characteristics to serve as our foundation for success. We have a unique scale in industries and investment powerhouse with an appetite for the tech industry. We also have a thriving environment for test-beds in new/ smart cities such as NEOM and a unique data infrastructure with a centralized ecosystem. In parallel, we are hosting key international events on Data & AI. To support this wide variety of efforts, Saudi Data & AI Authority (SDAIA) has recently been established to support and drive the KSA Data & AI agenda. To capitalize on Data & AI for the Kingdom economically and socially through national combined efforts by all stakeholders, SDAIA has developed the **National Strategy for Data & AI**.

This ecosystem will help us achieve our ambitious vision to be the place “Where the best of Data & AI is made reality.” We will deploy our best capabilities to invest in the field.

1.0

We aim to achieve this ambitious long-term vision through a multi-phased approach focused on addressing the national priorities by 2025, building foundations for competitive advantage in key niche areas by 2030, and becoming one of the leading economies utilizing and exporting Data & AI after 2030.

More concretely, the realization of this vision is based on six key dimensions which, by the time it is fully achieved, would have KSA become:

DIMENSION 1: Ambition

The global hub where the best of Data & AI is made reality.
We are aiming to be at the center of a large local and international network of partners

DIMENSION 2: Skills

The source of a steady local supply of Data & AI talent

DIMENSION 3: Policies & Regulations

A top destination for Data & AI stakeholders by creating attractive and business-friendly policies and regulatory environment to achieve their full potential

DIMENSION 4: Investment

A place where investments are facilitated for the most promising Data & AI projects

DIMENSION 5: Research & Innovation

An international platform for priority Research & Innovation (R&I) activities in Data & AI topics to spearhead innovation and impact creation

DIMENSION 6: Ecosystem

The host of a groundbreaking and stimulating Infrastructure to enable the realization of the Data & AI potential

2.0

INTERNATIONAL LANDSCAPE IN DATA & AI

Since the Dartmouth Summer Research Project on Artificial Intelligence in 1956, where the term AI was coined by Professor John McCarthy, Data & AI have mainly been fields of specialists in academic institutions, government, and private research organizations. However, the recent years have been characterized by a shift of interest towards the public sphere to include political actors, the general public, and private companies in nearly all sectors.

2.0

Two main trends have contributed to this shift. First, the extensive use of digital applications by the general public, such as natural language processing, has generated a significant amount of data essential to AI development. The other factor has been the fast developments in computing capabilities, enabling the processing of increasingly large amounts of data. This development happened in parallel with significant advances in machine learning, a branch of AI.

Data & AI are already disrupting several sectors and will become a key factor in economic development. While a tremendous amount of opportunities are provided by AI solutions (disaster management, road safety, or energy consumption management), some challenges are emerging (data protection, automation, cybersecurity).

In order for societies to benefit from the opportunities provided by Data & AI and to address the challenges and threats they generate, governments have been framing their approach to support and regulate Data & AI. There are currently around 50 governments that have developed or are developing a national AI strategy in the past two to three years.

One of the central issues where government action is expected will be around data sharing and open data strategies. Countries have adopted different approaches to collect, generate, and process data. Countries also took strides in making public data available, ranging from limited data releases to open data by default. Having large amounts of data available to public, private, academic, and research actors would provide key economic benefits, increased citizens engagement, attractive environment for investors and accelerating innovation. For example, having access to data from municipalities can support local government in designing policies and public services taking into account the specific needs of populations.

3.0

KSA'S LANDSCAPE INCLUDING OPPORTUNITIES & CHALLENGES

As a G20 country, it is necessary for KSA to bring its contribution and to benefit from the immense opportunities data and AI would generate for the country's development. Becoming a key international actor in the field of Data & AI would require significant investments, upskilling and regulatory measures to create and enable the development of a domestic ecosystem KSA's landscape including opportunities and challenges

3.0

We are writing a new chapter for our generation and many others to come. We acknowledge that data is the oil of the 21st century, and we have therefore set for our nation a clear vision to elevate the country to a leading position among the world's pioneering Data & AI-driven economies. In fact, the large-scale transformation Saudi Arabia is going through under Vision 2030 requires the fast integration of the most advanced technological capabilities to accelerate the transition. To achieve this vision efficiently, we need to make the right data-driven decisions, and this requires a lot of meaningful data, and the full power to unlock and to generate as many deep insights from the data as possible, and here comes the role of Artificial Intelligence.

Saudi Arabia has long been recognized as a powerhouse of the Middle East. Saudi displays several unique strategic advantages. The potential lies in –

UNIQUE SECTORS AT SCALE AND INVESTMENT POWERHOUSE

Unique sectors at scale and an investment powerhouse with tech appetite through the Public Investment Fund (PIF) and the vision fund

LARGE SCALE TRANSFORMATION PROGRAMS

KSA's top leadership is committed to making change happen and to embrace the latest technologies.

YOUNG AND VIBRANT POPULATION

60% of the population are under 30 years and are deeply entwined with the digital economy

THRIVING ENVIRONMENT FOR TEST-BEDS IN NEW/SMART CITIES

Proliferation of new and smart cities such as NEOM that will provide opportunities to explore untested areas in Data & AI

3.0

UNIQUE CENTRALIZED ECOSYSTEM

One single source of truth for all government data, centrally managed cloud platform for all government entities and whole-government analytics and AI platform

ESTABLISHED NATIONAL DATA & AI GOVERNANCE

SDAIA has been established to lead the national Data & AI agenda and is empowered strongly by reporting directly to the highest authority in the Kingdom. Very few entities around the world have been given such an empowerment

HEART OF THE ISLAMIC AND ARAB WORLD

Unique positioning with over 15 million Hajj and Umrah visitors yearly and around 420M Arabic speakers worldwide

GLOBAL DATA & AI EVENTS

International network through the upcoming events held in the country. For example, the Global AI summit will be hosted in 2020 and will bring global thought leaders, decision-makers and innovators to showcase, debate and shape the future agenda of AI for governments, private sector and NGOs, to amplify the overall value from Data & AI



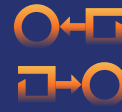
Scale in industries & investments

Unique sectors at scale (e.g. Energy,) Investment powerhouse with tech appetite (e.g. PIF, Vision Fund)



Young & vibrant population

60% of the population are under 30 years old and adoptive of new technology



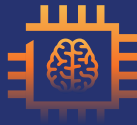
Transformation momentum

Large scale transformation programs and top leadership willingness to change and to embrace the latest technologies



Global Data & AI events

Events that would place KSA on the map as a driver of the global Data & AI agenda



Thriving environment for test-beds

Smart city of NEOM and other mega projects/initiatives (e.g. Qiddiya & NIDLP Industry 4.0)



Heart of Islamic/Arab world

Unique positioning with over 15 million Hajj/Umrah visitors yearly and ~420m Arabic speakers worldwide



Unique data infrastructure

Unique centralized ecosystem (e.g. National Data Bank, G-Cloud, whole government analytics and AI platform)



Established national Data & AI governance

Entity (SDAIA¹) created to support and drive Data & AI agenda in KSA

1- Saudi Data & AI Authority

3.0

SDAIA was created to set the national Data & AI agenda for the Kingdom, orchestrate implementation of Data & AI agenda across the government, and oversee agenda execution across its child entities – National Information Center (NIC), the National Data Management Office (NDMO), and the National Center for Artificial Intelligence (NCAI).

Key initiatives have been launched by the different entities:

- NIC is the national data bank, hosting all government data, and acting as the main government insights provider using the power of AI. Within NIC, Estishraf was created to act as the provider of insights. Estishraf uses government data to support the decision-making process. The work is supervised by multi-disciplinary teams in order to improve the value of the extracted insights, address key priorities for government leaders, and to improve the lives of citizens through better government services
- NDMO manages national data as a digital asset and is responsible for the development of standards, policies and regulations as well as driving compliance. On policies and regulations, NDMO is developing a number of regulatory frameworks including topics such as data privacy and freedom of information. In particular, Open Data has been identified as a priority topic, and the government has already made investments in open data platforms
- NCAI will drive AI strategy execution, orchestrate AI research focused on innovations in the field of Data & AI, develop AI solutions and build AI expertise

3.0

In order to cultivate Data & AI skills and talent, selected private schools introduced AI to the curriculum. Ministry of Communications and Information Technology (MCIT) introduced training programs focused on machine learning to be infused into the Ministry of Education (MoE) curricula. Key STEM trainings and courses were introduced to enhance AI and technology skills. In addition, there are several AI boot camps currently held in KSA.

Furthermore, to facilitate research and innovation and research activities, the AI Center of Advanced Studies (Thakaa) was established. In parallel, the King AbdulAziz City for Science and Technology (KACST) created a Data Analytics and AI Center providing best in class research environment.

KSA's commitment to Data & AI is also shown through the large scale investments made in technologies that leverage Data & AI. Notably, the Saudi Government has made multi-billion investments in Tesla, Uber, Softbank Group Corp. and Virgin Group. In addition, Ministry of Investment Saudi Arabia (MISA) is working to attract foreign AI companies to start investing and operating in KSA.

Finally, numerous Vision 2030 projects aim to leverage Data & AI. NEOM is seeking to harness the power of Data & AI seamlessly into every aspect of citizens' lives. KSA is also set to host the Global AI Summit that boldly explores all aspects of AI, including its impact on socioeconomic development and challenges the global community is facing.



4.0

DATA & AI VISION
& STRATEGIC
DIRECTION

4.1

KSA'S DATA & AI VISION & STRATEGIC DIRECTION

KSA'S NATIONAL DATA & AI VISION

Development, creation, and adoption of Data & AI technologies across the Kingdom

Attractive ecosystem, world-class infrastructure, test-bed environments, data governance, commercial incentives, gov't-sponsored incentives, minimum red-tape, unique

Where the best of Data & AI is made reality

Innovative, sustainable, practical and ethical Data & AI applications

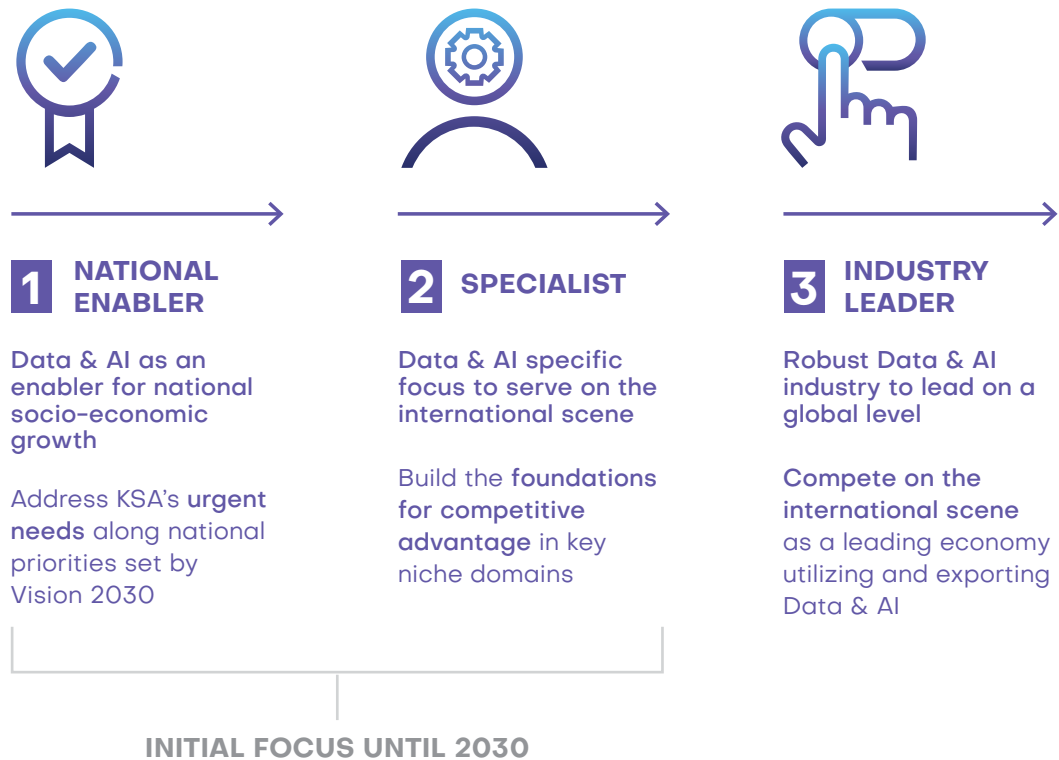
4.1

This long-term Data & AI strategy is an integral part of the transformative journey the Kingdom is going through. The development of megacities, the unprecedented educational reform the government has engaged as well as the emergence of new sectors such as tourism, all require mobilizing the most advanced technological capabilities, skills and investments. The National Strategy for Data & AI will fulfill the Vision 2030 aspiration. We aim at scaling Data & AI applications and build the foundations for a strong economy.

This would enable us to ultimately become users and exporters of Data & AI enabled products and services. To serve this ambition, we will make full use of the country's leadership support and the large government investments creating tremendous test-bed opportunities. We will also develop a strong Data & AI domestic workforce at different levels, create an attractive regulatory and investment environment for domestic and foreign investment, promote top level research and innovation, as well as a competitive domestic ecosystem enabled by international partnerships and networks. All the initiatives we will launch will integrate the best sustainability and ethical standards available.

Making Saudi Arabia the place where the best of Data & AI is made reality is not only a government objective but also a societal aspiration which requires all the key stakeholders (government, private sector, academic institutions, specialist, general workforce, and the wider public) to contribute to its success.

4.1



A multi-phased approach will be needed to account for the aspects of strategy. We will focus initially on addressing our **national priorities and building foundations for competitive advantage in key niche areas by 2030**, and ultimately becoming one of the leading economies utilizing and exporting Data & AI after 2030.

4.1

As a result, this strategy would concentrate on the first phase – This first phase is about maximizing the use cases of Data & AI to achieve the objectives set under Vision 2030 and accompany the transition and focus on key domains and niche topics to serve on the international scene. This includes –

- Supporting data and skills within both government and the private sector to prepare for a growing labor market demand
- Enhancing the regulatory environment to enable the development of a performing domestic ecosystem
- Creating sector-specific Data & AI plans
- Driving adoption of data management standards and policies across government entities to collect data in readable and usable formats
- Creating dynamic domestic and healthy Data & AI start-up ecosystem. This would require government support such as the establishment of a favorable regulatory environment, credit facilities and trainings
- Building highly qualified national talents to respond to the needs of the market
- Attracting sustained private and international investment into the Saudi market
- Elevating Data & AI R&I capabilities, quality and commercialization outcomes and establishing test-beds in new and smart cities

Building on the first phase would allow for setting the foundations for a new strategy after 2030 to establish a Data & AI industry to compete on the global scene.

4.1

Our vision is translated into six key strategic objectives:

OBJECTIVE 1

Position KSA as the global hub where the best of Data & AI is made reality

KSA's vision as an international/regional hub for Data & AI activities requires a solid presence on the global landscape of Data & AI through publicly available contributions. Therefore, we are developing a comprehensive plan for KSA's contributions in global/local Data & AI global initiatives and events. In fact, we are planning to host the first Global AI summit in KSA. The Summit will be a unique annual platform for global thought leaders, decision-makers and innovators to showcase, debate and shape the future agenda of AI for governments, private sector and NGOs, to amplify AI's positive value for humanity.

OBJECTIVE 2

Transform KSA's workforce with a steady local supply of Data & AI - empowered talents

Data & AI are transforming labor markets globally. Most sectors will have to adapt in order to maximize the benefits this transformation is bringing. The faster we are in integrating Data & AI into our education system, professional trainings and into general public knowledge, the greater advantage we will gain in terms of employment, productivity and innovation.

As for most countries undergoing the Data & AI transition, the Kingdom, with its ambitious plan to develop its Data & AI sector, will face a skills shortage. Most governments and private sector companies globally are competing to attract data scientists, data architects, coders and many of the professions needed to build Data & AI capabilities. The same actors are making efforts to attract talent from overseas but they also invest in the development of their own workforce. While this strategy aims at attracting foreign talent, it is crucial for the country to sustainably develop local talent and to provide the necessary incentives for them to stay in Saudi Arabia. Developing local talent requires to concentrate on three categories of the workforce –

4.1

- Data & AI experts – specialists committed to innovation activities
- Data & AI specialists – graduates from the field and who can potentially support its development
- General workforce – labor force not necessarily working on Data & AI topics but whose literacy in the field needs to be strengthened

For the three categories, there should be an adapted effort in order to build the local workforce. Within the framework of this strategy, we aim at creating educational tracks in Data & AI in K-12 and university degrees, some of which leading to specialist tracks supported by educational scholarships and professional training. We are also strengthening our cooperation with academic institutions while developing a certification program to recognize the efforts of professionals interested in developing Data & AI skills

OBJECTIVE 3

Enact the most welcoming legislation for Data & AI businesses and talents

Our goal is to develop welcoming, flexible, and stable regulatory frameworks and incentives schemes to attract companies, investors and talents. Regulations will also focus on developing adaptive policy frameworks and standards on Data & AI including the ethical use of AI. These policies will provide direction to key stakeholders and certainty over Data & AI activities.

As part of providing an attractive regulatory framework for Data & AI investments and businesses, we aim at having a strong framework to promote and support ethical development of Data & AI research and solutions. This framework will provide guidelines for the development of our data protection and privacy standards. This is beneficial to both society as well as businesses and investors who need a stable regulatory framework to operate in the Kingdom.

4.1

In addition, the creation of and access to open data is a crucial asset which any strong Data & AI ecosystem will need. Opening government data provides significant opportunities to public and private sector organizations as well as individuals. It would contribute to creating an attractive environment for startups, provide visibility on policy formation, decision-making and drive economic growth and innovation. Therefore, our ambition is to roll-out open data by default – the implication being that all government data should be published as long as it does not compromise security, data protection, and privacy.

However, this initiative requires a strong regulatory framework to provide high standards in terms of data protection and privacy, in line with our ethical approach to developing our data sector. Doing this would define the framework through which government and private organizations will be able to benefit from the opportunities provided by data. The regulatory framework will include specifications on data collection, classification, sharing, open data policy and freedom of information.

In order to achieve this, we will collaborate across government to ensure data is captured in readable formats, then start publishing the most timely and comprehensive datasets, to ultimately roll-out open data by default across government entities after 2025. This illustrates our effort to facilitate access to public data for organizations contributing to the development of the sector. This process starts with data collection where a standardized format will be required to capture data, followed by the publication of initial datasets from selected government organizations (ministries, agencies, or other), to test adoption from interested organizations. This two-step initial phase would take place over the 2020–2025 period before transitioning to scaling our open data by default program across the whole-of-government from 2025 onwards.

4.1



INITIATE

Launch government-wide open data policy and ensure that data is captured in a readable form



ADOPT

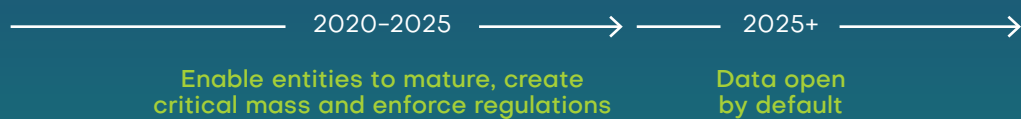
Publish additional data sets from select ministries with the most timely and comprehensive data sets



SCALE & EXCEL

Roll-out open data by default across government

In collaboration with NDMO and sector regulators



Ongoing efforts are made under Vision 2030 to promote doing business in the Kingdom. Our objective as part of this strategy is to ensure private sector development ambitions also benefit Data & AI. Therefore, we will build an incentive package aimed at attracting foreign companies and facilitating the creation of local businesses in the Data & AI sector. This would encourage foreign firms to invest in the Kingdom and facilitate knowledge transfer to empower local firms.

4.1

OBJECTIVE 4

Attract efficient, stable funding for qualified Data & AI investment opportunities

Our goal is to incentivize and enable local and foreign investors to effectively identify and fund available Data & AI investment opportunities in KSA. We will build targeted funds and investor support programs to attract and guide domestic and foreign investments in Data & AI.

The Data & AI sector in KSA will need large amounts of investments to grow. These investments can be encouraged by a fund that adds incentives by reducing the risk of subsidizing returns. Therefore, we will setup a fund/financial mechanism incentivizing Foreign Direct Investment / local investments in Data & AI priority areas. We will invest in relevant cutting-edge Data & AI applications to the KSA market and new promising technologies to gain first-mover advantage.

We will also setup an investors' support program providing professional services such as investment screening and business plan development. The pace of technological innovation in the Data & AI sector generates a continuous need to adapt. Our support would provide guidance to both foreign and domestic investors on the Saudi ecosystem in terms of domestic financial facilities, the regulatory framework as well as the business ecosystem (high potential startups, key projects, and planned initiatives).

4.1

OBJECTIVE 5

Empower top Data & AI institutions to spearhead innovation and impact creation

Fostering an environment conducive to innovation is a critical element for Data & AI exploration. Our goal is to elevate the quantity and quality of Data & AI R&I capabilities including researchers, equipment, topics, commercialization vehicles, while expanding the capacity in new areas in Data & AI.

KSA has a unique offering for innovation, as it is currently developing multiple giga-projects where technology is a central high-priority. The proliferation of these new and smart cities will constitute the best environment for new and creative use of Data & AI. These cities will become test-beds to innovative use of AI across multiple domains such as policies and regulations, and algorithms and applications development. We will aim to develop specialized clusters and hubs focused on providing a collaborative and forward thinking environment for researchers to come and explore the latest Data & AI possibilities. As a result, innovation and research are expected to be centered not only around technological development but also in terms of Data & AI policies and regulations, developing ethical frameworks and the integration of AI-enabled solutions into megacities' design.

We will also focus on expanding current Data & AI R&I capabilities. As a result, we aim at increasing the number of high quality R&I papers to capture the most promising initiatives and contribute to the advancement of the sector globally. This will require close cooperation with both international and domestic academic institutions.

4.1

OBJECTIVE 6

Stimulate Data & AI adoption with the most collaborative, and forward-thinking ecosystem

One of the key success factors for Data & AI strategies will be attributed to the adoption of innovative solutions enabled by Data & AI, across the public and private sectors, as well as individuals. Developing a robust digital infrastructure that developers could utilize would be of utmost importance.

In addition, public awareness of ongoing activities will be key to ensuring citizen understanding of the benefits generated by the fast emergence of a high number of Data & AI practical applications.

We will also develop sector-specific Data & AI plans. These sectors will be identified based on the current digital maturity of each sector, alignment with Vision 2030 objectives and Data & AI expected impact. In fact, while all sectors will be disrupted to a certain extent, some sectors will expect major shifts due to Data & AI.

In order to promote nation-wide AI adoption and utilization, it is crucial to provide the opportunity for individuals and small businesses to access well-established and sophisticated Data & AI platforms. We will develop sector-focused partnerships in the domain of Data & AI platforms and provide accessible Data & AI platforms at country level through partnerships with major companies with efficient and sophisticated platforms. Promoting close cooperation within the ecosystem to include all key stakeholders such as the government, businesses, academic institutions, financial actors and the general public to develop linkages which are essential to achieve scale.

4.2

KSA'S DATA & AI STRATEGIC TARGETS

Key highlights from the strategy:

During the execution phase, a wide range of KPIs will be used to measure progress. Indicators will be used to track the implementation on the level of the below six objectives. By 2030, we aim to achieve:

- ▶ **~40%** of the total workforce trained on basic Data & AI literacy skills
- ▶ **~15K** local Data & AI specialists in workforce
- ▶ **~5K** Data & AI experts
- ▶ **Top 10** countries in Open data index
- ▶ **High maturity** of legislative aspects
- ▶ **~30Bn SAR** cumulative FDI in Data & AI in KSA
- ▶ **~45Bn SAR** cumulative local investment in Data & AI
- ▶ **Top 20** countries in peer reviewed KSA's Data & AI publications
- ▶ **~300** Data & AI startups

To realize our Data & AI vision and to achieve its objectives, we need to design actionable priorities to steer not only the institutional initiatives we are launching but also the policy, regulatory, investment and stakeholder engagement efforts needed to make Saudi Arabia the place where the best of Data & AI is made reality.

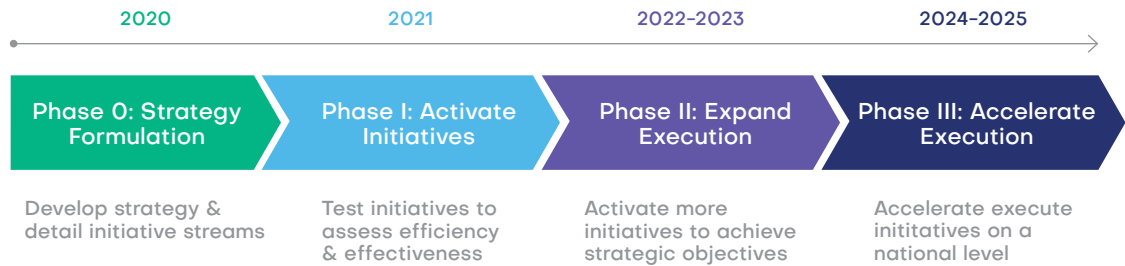
5.0

KSA ROADMAP FOR ACTION

Our ambition to make the Kingdom the place where the best of Data & AI is made reality goes in parallel with our national priorities under Vision 2030. The country is going through an unprecedented transformation and we are aiming to maximize the benefits provided by Data & AI to support and accelerate this transition.

We want to ensure the continuity of our endeavor throughout the design and implementation of the different phases of our strategy by focusing on six broad dimensions – ambition, skills, policies & regulations, investment, research & innovation and the Data & AI ecosystem. The six dimensions will support the four phases we are planning for – strategy formulation, activate initiatives, expand execution and accelerate execution.

5.0



MAJOR INITIATIVE OUTCOMES

-  **LAUNCHING**
global initiatives & events organized or led by KSA
-  **IMPLEMENTING**
national multi-tier Data & AI workforce certification program & establishing Data & AI focus in educational system
-  **ACTIVATING**
regulatory frameworks for Data & AI activities, & incentive schemes to attract Data & AI companies & talents
-  **BUILDING**
targeted funds & investor support programs to attract & guide domestic/foreign investments in Data & AI
-  **ELEVATING DATA & AI INSTITUTIONS'**
innovation, quality & commercialization outcomes & establishing test-beds in new cities
-  **BUILDING**
an integral infrastructure & establishing Data & AI platforms to accelerate adoption of Data & AI applications

This strategy demonstrates' the Kingdom's full support for the inclusion of Data & AI as a key factor to its fast development. This support is illustrated by the launch of high profile initiatives such as the preparation of the Global AI Summit, the establishment of an integrated government ecosystem for Data & AI of which SDAIA is a key factor in, as well as strong partnerships including academic institutions to promote research and innovation and building domestic skills. In parallel, the government has been conducting multi-billion investments in technologies centered around Data & AI.

Furthermore, our initiatives are directly contributing to Vision 2030 objectives and developments plans.

5.0

15 initiatives' streams have been developed to activate the implementation of the National Strategy for Data & AI

DIMENSION	INITIATIVES STREAMS
 AMBITION	Global Data & AI agenda – Position KSA as a global hub for Data & AI through a comprehensive agenda initiatives & partnerships
 SKILLS	Data & AI literacy – Instill basic Data & AI skills for the national workforce and students Data & AI specialists – Build a sustainable pool of national specialized talents in Data & AI Data & AI experts – Nurture Data & AI scientists through local & international partnerships at academic & professional level
 POLICY & REGULATIONS	Regulatory framework – Activate the regulatory framework for data generation, collection, & usage including AI application Companies incentives program – Attract local/foreign companies to Data & AI sector through an incentives framework Talents incentives program – Attract foreign talents to KSA Data & AI sector through attractive & welcoming immigration policies
 INVESTMENT	Data & AI investment funds – Stimulate Data & AI domestic & foreign investment through targeted investment funds Investors support program – Activate specialized program to support investors in Data & AI, providing professional and administrative services
 RESEARCH & INNOVATION	R&D & innovation excellence – Elevate Data & AI R&D & innovation capabilities in universities & research centers National innovation test beds – Create an attractive Data & AI test bed environment in giga-projects and smart cities
 ECOSYSTEM	Data & AI sector strategies – Develop Data & AI domain in sectors identified as a priority through specialized strategies Data & AI platforms – Accelerate Data & AI technology adoption through nationally accessible platforms Smart cities – Drive the smart city agenda in major and new cities powered by Data & AI Government CDO's – Adopt data management practices and use of AI in the government apparatus

- **AMBITION INITIATIVE** will promote KSA's national character as a global shaper in the domain of Data & AI
- **SKILLS INITIATIVES** aim to enhance KSA's human capital with a steady local supply of Data & AI-empowered talents to cope up with the disruption that will be caused by this technology
- **POLICY AND REGULATION INITIATIVES** will be part of legislative national transformation of KSA enacting the most welcoming legislation for Data & AI businesses and talents
- **INVESTMENT INITIATIVES** will support increase assets and enable KSA's economy by attracting local and foreign investors to identify and fund Data & AI investment opportunities in KSA
- **RESEARCH & INNOVATION INITIATIVES** will target top human capital talents to nurture their skills through state-of-the-art R&I environment in new/smart cities to spearhead innovation and impact creation
- **ECOSYSTEM INITIATIVES** aim to stimulate Data & AI adoption across giga-projects and across major cities, improving productivity, quality of services and wellbeing

5.0

And to ensure relevance and focus, five key sectors were identified as priority sectors for Data & AI adoption in KSA, based on Vision 2030 and VRP strategies, KSA's GDP and budget reports and AI thought leadership reports.



EDUCATION: Integrating Data & AI in education to align the education system with labor market needs and improve the student's journey



GOVERNMENT: Assimilating Data & AI in Government to create a smarter and more efficient public sector



HEALTHCARE: Integrating Data & AI into healthcare to increase access, enhance preventative care, and accommodate growing demand



ENERGY: Integrating Data & AI into Energy to increase capacity, enhance efficiency, and develop adjacent industries



MOBILITY: Incorporating Data & AI in Mobility to build a regional hub, create smart city Mobility technology, and enhance traffic safety in cities

We are also aware that FDI and domestic investment, both from the government and the private sector, would be essential to support the development of the Data & AI support in the Kingdom. By creating a stable and attractive policy and regulatory framework for investments in the sector, we could aim at an estimated 75 Bn SAR total both FDI and domestic investment which would include government and private investment by 2030. This large amount should contribute to the development of a domestic Data & AI ecosystem that would create value not only for the Saudi economy but also for society.

As a result, the interdependency of the initiatives we are conducting aim at positioning the Kingdom as a global hub for Data & AI. As a G20 country, we are expected to pursue and maximize the benefits brought by Data & AI not only for our citizens but also for humanity. Becoming the place **where the best of Data & AI is made reality** requires a strong long-term commitment and this is what this strategy is inviting us to do.

