

Artificial Intelligence
The Dance of Data and
Diligence: A Net Positive



# No rush hour for AI, let's steady the pace!



Artificial Intelligence (AI) has emerged as a technological marvel that is reshaping our world in profound ways. With each passing day, AI's influence expands, touching diverse aspects of our lives, from healthcare to entertainment and finance to transportation, among a few.

Mr Jean-Michel Felix, CEO

Mindful that some of the readers of this article might have tripped their adolescences [just like the undersigned] by watching blockbusters like Terminator, Matrix and others, the fears of a frightening future dictated by super artificial intelligences, or the 'mere' loss of jobs and the blurred cohabitation model are legitimate. As evidenced by the research work carried out with our colleagues of MCB Group associated with thoughts and insights of our trusted partners, AI, if harnessed astutely, shall bring an ocean of 'net' opportunities and benefits.

As the CEO of an international management consulting company, which is in itself a very dynamic ecosystem built on technological solutions, my perspective points towards the following main principles.

### In the financial world and other industries alike, AI is a game-changer

Algorithmic trading powered by AI can execute thousands of trades in milliseconds, reacting to market changes with lightning speed. AI-driven data analysis aids in risk assessment and fraud detection, safeguarding financial systems. Moreover, AI-driven chatbots provide personalised financial advice, making financial services more accessible to a broader audience.

We all know Africa has a unique context that is well-positioned to leverage AI technologies to address local socio-economic challenges. AI is used to improve agriculture, healthcare, education, and more, tailored to the specific needs of African communities. African countries are witnessing the emergence of AI startups and innovation hubs for instance. These startups are working on AI-driven solutions that cater to local demands, such as precision agriculture, healthcare diagnostics, and financial inclusion [refer to one of the case studies of this paper]

### The need to have accurate and complete data; a 'burden' ... yet an essential one

The positive impacts of an astute usage of AI shall significantly be impaired should there not be sufficient emphasis on the importance of quality data via, amongst others, ring-fenced business processes and information flows, system embedded controls and general staff's awareness. In certain jurisdictions, the AI readiness and attractiveness shall be influenced by feeble financial literacy rates or the new market players without the 'blessing' of historical data.

### Al should always remain an enabler in the true spirit of Industry 5.0

Al's impact on the job market is a subject of debate. While Robotic Process Automation does automate repetitive tasks, it also creates opportunities for humans to focus on more creative and strategic roles. The future of work may involve humans and Al working hand in hand, with Robotic Process Automation (RPA) handling routine tasks and humans providing critical thinking and innovation, a definite must that requires new ways of being.

We should also shelve this wishful thinking: upskilling and reskilling shall not always work, dictating, therefore, some bold and potentially harsh decisions regarding the contract of employment of loyal employees: If jobs cannot be all saved, dignity of each employee must be safeguarded.

### The ethical concern is much real

While AI holds incredible promise, it also raises ethical concerns in the realm of privacy and data protection. And as the Data Protection Commissioner of Mauritius rightly says in this paper, AI should not only be viewed as a technology feat, because it is invasive and delves into fundamental and interdisciplinary human, intellectual property rights and freedoms. There are so many stories out there about cases of lawsuits as human rights are violated...

This paper, as it unfolds, hopefully provides you with a broadened view of these multiple facets and cases, and there are various schools of thought around AI (5 according to a latest study of Harvard Business Review).

A decade ago, I was privileged enough to successfully complete the ascension of the highest mountain in Africa [the mighty Kilimanjaro]. As per the official website of the Kilimanjaro National Park, the success rate of a 5-day route to climb the mountain is as low as 28%. Not surprisingly, the aforesaid rate climbs to 84% for an 8-day route I still can remember my guide [John] brainwashing me with the Swahili expression for step by step "polé polé".

Is this not somehow an inspiring coincidence for us, Africans embarking on our Aljourneys with, in sight, our nuanced destinations and qualities?

# "Go polé polé" - a Swahili phrase meaning "go slowly"

...encapsulates the cautious yet optimistic approach Mainland africa is taking to-wards... In a continent teeming with untapped potential and diverse cultures, Al is not merely a technological advancement; it's a catalyst for transformation. This transformation is offering unprecedented opportunities for innovation and inclusion across various sectors, including agriculture, healthcare, and notably, banking.

In this paper, we present a broad overview of Artificial Intelligence (AI), and its potential impact on various markets. We look specifically at Generative AI (e.g ChatGPT and Bard), a market which is, as reported by EY, already valued at USD13.7 billion globally in 2023 and is expected to increase to USD 165 billion (CAGR 34.6%) by 2032.

Drawing on case studies from MCB Consulting\* and MCB Innovation lab, we aim to shed light on this novel technology and showcase the benefits these tools could offer to the Mainland Africa, the Mauritian financial sector, and the broader consultancy domain. Readers will have a glimpse of the impact of AI on the workplace and the key considerations for companies.

In a perspective of levelling-up the audience's comprehension on the term 'Al', it is pertinent to provide some basic definition in a very layman language (generated by CHATGPT):

### What is AI?

"Artificial Intelligence (AI) refers to the simulation of human intelligence processes by machines, particularly computer systems."

## Capabilities?

Al processes include learning, reasoning, problem-solving, perception, language understanding, and decision-making. Al technology aims to create systems that can perform tasks that typically require human intelligence.

## Most popular use?

Al can be categorised into two main types:

Narrow or Weak AI: This type of AI is designed and trained for a specific task or a narrow range of tasks. Examples include voice assistants like Siri and Alexa, recommendation systems on streaming platforms, and image recognition software.

General or Strong AI: General AI refers to a hypothetical system that possesses human-like intelligence and is capable of understanding, learning, and performing any intellectual task that a human being can. It can understand different domains, adapt to new situations, and even exhibit creativity and emotions.

Al has seen significant advancements in recent years, with applications in various industries, including healthcare, finance, transportation, and entertainment.

# From Silicon Valley to the Sahara: Africa's Evolving Tech Ecosystem

### Al in Mainland Africa

Broadly speaking, McKinsey estimates that Generative Al's impact on productivity could add trillions of dollars in value to the global economy. What does it mean for vibrant and diverse landscape of Africa? Al could play a transformative role in the region, catalysing technology to overcome Africa's social, economic and environmental disparities through its inherent benefits of efficiency, automation and scalability.

In essence, generative AI technologies have the potential to open new frontiers in creativity and business, revolutionising functions from customer operations to research and development. While the state of AI in Mainland Africa is still in the early stages, there are already 30+ AI/Deep Tech communities on the African continent. Major companies such as IBM and Google have set up AI research labs in Kenya and Ghana. Furthermore, the continent boasts over 2,400 companies with a specialisation in AI.

# Banking and artificial intelligence: Orange Bank a forerunner in French-speaking Africa



Orange Bank Africa (OBA) is the Orange Group's mobile bank launched in Côte d'Ivoire in 2020, with its main activities extending to the WAEMU zone. The bank has strategically adopted a digital-first banking approach to enhance access to financial services for all populations, regardless of their geographical location and mobile phone generation. In pursuing this effort, OBA relies cutting-edge

technologies such as artificial intelligence, Temenos Transact, and its cloud-native infrastructure, hosted on Microsoft Azure.

### **OBA's Mission**

OBA's global mission is focused on advancing financial inclusion by extending financial services to the region's unbanked and underbanked populations, while simultaneously driving the proliferation of mobile technology and digital transformation in Africa. Through the use of Orange Money, OBA offers fully digital microcredit products, enabling customers to access sums of money, from FCFA 5,000 up to the current limit of FCFA 1,000,000. (Note: USD 1 = CFA 610) Customers can also take advantage of a digital savings offer, available from FCFA 1.

## **Key Statistics**

According to the World Bank, the prevalence of bank account ownership in sub-Saharan Africa is just 37% for women and 48% for men, while in the West African Economic and Monetary Union (WAEMU) this figure falls to less than 20%. The region also has a high illiteracy rate, which makes it difficult for customers to engage effectively with innovative customer service channels such as mobile applications, phone calls and email communications.

# **Operational Initiatives**

In addition to democratising financial solutions for a wider segment of unbanked customers, Orange Bank Africa has leveraged the power of artificial intelligence (AI) to simplify the customer experience. By leveraging data derived from Orange Money transactions, OBA assesses lending risk and streamlines the lending decision-making process. It does this by analysing customer behaviour, including loyalty to Orange, frequency of cash deposits and account balances. As a result, OBA has achieved remarkable efficiency gains, reducing the cycle from loan initiation to disbursement to a matter of seconds. More than 200 billion CFA francs of digital credit have been disbursed by the bank in 3 years of operation.

In addition, OBA has developed a chatbot capable of providing 24/7 customer assistance. This chatbot is able to identify and pass on complex problems to customer service agents seamlessly. As a result, customers have better access to financial education and can move on to more sophisticated financial services.

### **Achievements**

In the 3 years since its inception, OBA has successfully acquired over 1.2 million customers and distributed over 2 million credits. OBA's effective deployment of AI technology is emblematic of a success story that has not only simplified customer service, but has also contributed significantly to improving the financial well-being of the community.

# Building on Automation: The Al-Driven Revolution in the Financial Sector

Artificial Intelligence is no longer a futuristic concept; it's here, transforming the way financial institutions strategise, operate, and engage with their customers. Financial institutions are making substantial investments in AI and announcing several use cases for generative Al. For example, J.P Morgan is working on a ChatGPT-like tool which aims to revolutionise investment decisions by providing advanced Al-powered assistance in analysing and recommending financial securities such as stocks, bonds, commodities, and alternatives. More broadly, from intelligent algorithms that optimise investment portfolios to real-time troubleshooting of financial challenges, Al is setting new benchmarks for efficiency, innovation, and customer-centricity. The impact of AI on risk management cannot be overstated. By employing machine learning algorithms, financial institutions can now predict and mitigate risks with improved accuracy. This not only safeguards the financial institutions but also builds trust among consumers, a crucial factor in the banking sector. Furthermore, AI is revolutionising the way financial institutions handle data. With the advent of Big Data and analytics, the ability to process and analyse large volumes of data has become a game-changer. This data-driven approach is enabling financial institutions to offer personalised services, thereby enhancing customer satisfaction and loyalty.

In this Al-driven future, the potential value of generative Al in customer operations could increase productivity at a value ranging from **30 to 45 percent of current function costs, as per McKinsey's research.** This is the future that the banking industry is committed to creating, a future where innovation, creativity, and value converge in ways never thought possible. It's a future where your business is not just keeping pace with change but leading it.

# MCB's Al Evolution: From Curiosity to Strategy



Over the decades, to remain the leading bank in a highly competitive environment, MCB has been adapting to emerging technologies including the now trending Artificial Intelligence (AI). Initially curious about Al's potential, MCB embarked on experiments and proof-of-value projects. This led to the adoption of AI technologies like Chatbots and Robotic Process Automation (RPA). In 2019, the bank dove into RPA, targeting manual, repetitive, and error-prone

processes across various departments. This move substantially improved efficiency and led to cost-savings in the Bank's day-to-day operations.

RPA not only reduced errors but also accelerated business processes, freeing up employees for more value-added activities while contributing to smoother operations, making RPA a pivotal bridge between the digital and physical realms.

Beyond RPA, MCB is experimenting the customer document recognition using AI, which is intended of saving significant time and resources. The traditional method, which relies heavily on human intervention, is more susceptible to errors and delays, ultimately impacting the customer experience. MCB recognised the need for an efficient, scalable, and error-free solution leading them to explore the world of AI.

Other initiatives include an Al-powered credit scoring system that assesses the credit worthiness of individual loan applicants and the Next Best Offer Al Models to analyse customer behaviours, preferences, and transaction histories. Both are designed to provide tailored financial advice to our valuable customers. As MCB is looking to strengthen its current offerings through digitalisation, unfolding Al possibilities align to our customer-centric philosophy whilst translating our quest for innovation and continuous improvement.

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# The rise of the one-person army

### Essence of a consultant

Another sphere where AI is resounding is the consultancy industry. It is a prevailing wisdom for firms to solicit the valuable insights of consultants, to make sense of today's dynamic business context and to navigate across the challenges with peace of mind. The consultant is often referred to as a connector and a trusted guide, helping clients to navigate across the so-called "information fog" which C-suites Executives encounter. As the designation of the Consultant contrasts from one industry to another – as we usually end-up unearthing multiple terminologies like Whole-Person Consulting, One-man Consultant, Challenger Consultant or Management Consultant – one thing in common for consultants is that they act as innovators and disruptors of business or systems? Mostly paradoxal, today AI is disrupting the world of these so-called "thinkers".

# Impact on consultants

The coming of age of Generative artificial intelligence, compounded by economical disruptions and environmental pressures will put enhanced pressure on consultants to review their operating model, as this will require implementing policies and programmes that support the upskilling and re-skilling of workers.

As we navigate this evolving landscape, technology is both empowering individuals and streamlining tasks that were once exclusively human-driven. This shift facilitates greater value-added work for consultants at all levels.

Both Junior and Senior consultants can now consistently engage more directly with their clients. This transformation would emphasise the importance of human touch while consultants would also be able to broaden their expertise and engage in various domains thanks to Al. It's clear that while Al will not supplant consultants, it will undeniably redefine the consulting industry.

Value creation is a matter of well-crafted value chain encompassing stream-lined front and back-office operations, sound financial performance and delicate attention to stakeholder engagement. Equivalently, the trust & reputation of the Consultant lies in the value created stemming from the embryonic relationship with the client and throughout the whole journey & milestones. Generative AI is adding further value by fluidifying the process with faster content creation and editing thereby allowing consultants to fulfil their mandates in an optimum way.

Think of a world a world where strategic planning is reimagined. Our new breed of consultants, equipped with AI, is turning data into actionable insights with unprecedented precision. Banking clients are optimising investment portfolios through market trend analysis, all driven by intelligent algorithms. Troubleshooting financial challenges becomes a seamless process, with AI providing real-time solutions and predictive analytics to foresee potential obstacles. This is not a distant dream; it's a reality we are creating.

As the impact of AI on the consultancy world is both urgent and serious, it's important to stress that AI will not replace the job of the human consultant. Although AI will help at bringing efficiency in multiple ways, it will never showcase the level of contextual reasoning, creativity and emotional intelligence of a human. Therefore, what does this mean for the future of the consultancy world? It means consultants need to get abreast of this evolution and focus on the tasks that AI cannot do for further differentiation.

It was opportune for MCB Consulting to jump onto that bandwagon and to explore other applications of Al, notably in the field of Data Analytics, and Customer service. Its CEO, Mr Jean-Michel Felix explains that the technological firm is laying the groundwork for further Al exploration in line with the boundary-pushing philosophy of MCBCS. In the limelight are the use of Chatbots for seamless service-delivery and sharpening its current business intelligence solutions with Alembedded frameworks.

# Al: a future-proof force or undermining power



Exploring the flip side of this new technology, the Data Protection Commissioner for the Mauritian jurisdiction issues a stark warning about adopting and using AI without fully understanding and managing its myriad risks, or controlling its parameters.

**Drudeisha Madhub, Data Protection Commissioner** 

Emerging digital technologies and services including Artificial Intelligence (AI) creates an unprecedented promise to the world with limitless benefits in terms of enhanced efficiency, accuracy and timeliness. But just like the saying that everything that glitters is not gold, the simulation of human intelligence towards virtual intelligence also brings along human weaknesses and risks in its path.

For instance, AI presents significant challenges and concerns in the realm of privacy and data protection.

Al is not just about technology but delves into fundamental and interdisciplinary human rights and freedoms.

Not only does AI force us to better understand its impact on human rights and fundamental freedoms, but it also entails in-depth reflection on who is responsible for its harmful consequences.

The foundational principles of any AI system should rely on transparency, fairness and accountability.

This will ensure that processing operations are not opaque to individuals and that they are informed of the identity of the AI institutions processing their data as well as how their data is used, decisions that are made on this basis and the logic behind those decisions to prevent any unfair bias against them. AI institutions must establish the provenance of data and ensure the quality and relevance of the data entered into the algorithms.

Additionally, adopting a risk-based approach to AI is of paramount importance. Robust data security measures and the use of pseudonymisation and anonymisation techniques should be advocated to prevent personal data from being easily linked to specific individuals. Since AI systems process huge amounts of data, they are often the target of cyber threats. Therefore, deploying the necessary organisational and technical measures will prevent data control from falling into the wrong hands. Regular audits and assessments are also necessary to identify and mitigate data privacy and security issues. Privacy design should be embedded at the heart of technological development.

The essence of all technological developments, including AI, should be based on user consent and control. Users should have the right to understand and control how their data is used in AI systems. This perspective strengthens the idea that individuals should be active participants in the data-driven AI ecosystem. The caution line in this environment is:

it's someone else controlling you!

The rapid development of AI, especially in the case of OpenAI ChatGPT, has transformed the current business landscape. Businesses leverage on ChatGPT for a variety of purposes, including automating customer service, improving business intelligence, and facilitating strategic decision-making. However, the adoption of ChatGPT is not universal. Some countries have even banned its use. This situation highlights a paradox: while AI has the potential to drive innovation by automating many digital tasks, it is also seen as a potential threat that requires regulation.

The European Union introduced a groundbreaking initiative by the formulation of the EU AI Act and paved the way for comprehensive AI regulation. The European Parliament passed the EU AI Act on 14 June 2023. It is the first legislation of its kind in the world, which regulates the use of AI in Europe, respects the values and rules, and harnesses the potential of AI for industry. The gist of the AI Act is a classification system that determines the level of risk an AI technology could pose to the health and safety or fundamental rights of a person. The framework incorporates four risk tiers: unacceptable, high, limited and minimal.

Our Mauritius Data Protection Act 2017 (DPA) caters for strong and robust principles applicable in the AI sphere, covering amongst others:

### **SECTIONS**

21	Principles relating to processing of personal data	31	Security of processing
22	Duties of controller	34	Data protection impact assessment
23	Collection of personal data	37	Right of access
25	Notification of personal data breach	38	Automated individual decision making
27	Duty to destroy personal data	39	Rectification, erasure or restriction of processing
28	Lawful processing	40	Right to object
29	Special categories of personal data		

Setting up the right data governance, legal and ethical framework is crucial to contain the risks associated with Al. This requires a multi-faceted approach to Al, including robust data governance, privacy-preserving Al techniques, responsible Al development practices, transparency in Al decision-making, and adherence to relevant legal and ethical frameworks. Al organisations and policymakers need to collaborate to strike a balance between harnessing the potential of Al and safeguarding individuals' rights and interests regarding their data.

# The dangers of AI, as identified by AI itself

We have queried BARD, the generative AI tool of Google, to depict the data protection risks arising from AI, and below is the outcome:



### Collecting and processing of personal data on a massive scale

Leading to tracking and building profiles of individuals

- Movements
- Habits
- Preferences



### Decision making based on biased or inaccurate data

Impact on individual's life

- Hiring decision
- Loan decision
- Medical decision

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### **Exposure to hackers**

Unauthorised access to personal data leading to

- Identity theft
- Financial loss
- Physical harm

# **About MCB Consulting**

Launched in 2014, MCB Consulting, consulting arm of the MCB Group, is an international management consulting company headquartered in Mauritius, having delivered over the past 9 years, 755+ assignments to 95+ clients in 45 countries across 5 continents, enabling them to achieve their innovation and business development goals sustainably.

Its key areas of focus include the provision of advisory services – which range from strategic planning and execution to risk management – business process reviews and organisation reviews, assistance in the selection, implementation and maintenance of Information Technology solutions as well as the delivery of training services.

MCBC' scope of intervention is multi-fold, focusing primarily on ensuring that the three pillars of an organisation - people, process and technology - are in-tune, thus supporting the overall business strategy. Hence, leveraging its very agile and multicultural team, MCB Consulting draws upon proven frontline expertise and experience to bring successful solutions and accompany clients all the way through the transformation process and beyond. This proven expertise has led the company into signing strategic partnerships with major international solution providers with a unique differentiating factor: we only represent and sell what we use.

MCB Consulting is an accredited partner and training partner of Temenos. For its commitment to the Temenos community as well as its service to its clients globally, MCB Consulting has recently been recognised as Temenos' Regional Delivery Partner of the Year 2021 after its recognition back in 2019 as 'MEA Best Project Delivery Partner' and 'MEA Best Sales Partner of the Year'.

MCB Consulting adheres to the UN Sustainable Development Goals and has shown a solid commitment to 6 out of 17 SDGs (individual and collective wellbeing, quality education, sustainable and local economy, climate and marine action and strategic partnerships).

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