

# ARTEFACT

## DATA ACCELERATION PROGRAM



*People are at the core of any transformation. Successful data transformation programs focus heavily on creating and improving human capabilities that augment their capacity to make decisions using data & AI. It is as much a technical exercise as it is a cultural change. It is about embracing new ways of working, challenging the status quo and replacing intuition-led decision-making with data-driven decision-making. At Artefact, we focus on driving this change in an incremental and sustainable way for our clients."*

**Rahul Arya, CEO & Managing Partner,  
ARTEFACT MIDDLE EAST**

# A Practical Approach to Business Impact from Data & AI

## Ten Proven Tactics from the Battlefield

### **1 - Building data solutions should be driven by the business, for the business**

In today's rapidly-evolving business landscape, data intelligence has become an essential tool for companies looking to remain competitive. Organizations that fail to adopt data-driven models risk falling behind their rivals by missing out on valuable insights and opportunities for expansion, optimization and innovation. In short, leveraging data intelligence for business is no longer a luxury, but a necessity for sustainability and evolution, and business leaders should be the ones spearheading the identification, prioritization, and development of data & AI solutions. Contrary to the common belief that business stakeholders are just "consumers" of data solutions, we believe that they should lead the entire process, supported by data and technology experts.

### **2 - Identifying the "right" data solutions requires in-depth analysis of the business value chain and business processes**

A thorough analysis of the business value chain and key business processes is best carried out by business stakeholders themselves. This analysis identifies areas where data solutions can drive significant business impact in the form of revenue growth, cost optimization, customer experience enhancement or operational excellence. During this process, it's essential to identify business opportunities that align with the company's overall business strategy. For example, analysis of the supply chain and its key ratios can help identify potential gaps and inefficiencies that can benefit from data analytics and intelligence.

### **3 - Prioritizing a few data solutions will ultimately have the most business impact**

The goal shouldn't be to impress with



a long list of data solutions, but rather to identify the most critical business areas that can benefit from data-driven insights. By avoiding the temptation to pursue too many data solutions, organizations can stay focused and increase their chances of building successful data solutions. It's also important to identify the value-added capabilities of data solutions beyond simple reporting. While reporting is valuable in providing a summary of business performance, it only provides a retrospective view of data, leaving little room for analysis and decision-making. To fully leverage the power of data, organizations must identify data solutions that provide diagnostic analytics that automatically identify the root causes of performance and predictive analytics that anticipate future trends.



**Oussama Ahmad**  
Data Consulting Partner,  
Global Travel & Tourism Lead

*"As organizations seek to achieve tangible business results from their investments in data analytics and artificial intelligence, it's critical to adopt a focused approach that builds the right solutions and sets the right expectations. Through this approach, business leaders spearhead the development of data & AI solutions 'for the business by the business' - prioritizing the most impactful solutions, building quick POCs with data experts, scaling data solutions that work, and accepting 'failure' on those that don't. Having business teams lead the whole process ensures business buy-in and adoption by design."*

## Oussama Ahmad, Data Consulting Partner

### 4 - Assessing feasibility of data solutions requires a full understanding of data sources and technologies

Before embarking on the development of a data solution, it is vital to conduct a detailed feasibility study that examines the availability and quality of the required data sources, as well as the cost of the technologies and expertise required to collect and process these data sources. This includes examining the hardware and software requirements, as well as the human skills needed to implement and maintain the technology. This also helps to set realistic expectations for data solutions that are consistent with the maturity of the required data sources, technologies, and capabilities.

### 5 - Building data solutions efficiently needs a scalable AI Factory and an agile development process

Building and scaling data solutions for businesses requires a new operating model - an AI Factory - made up of feature teams led by business experts supported by

data scientists, engineers, analysts and software engineers. This team structure ensures that data solutions are always built with a business objective in mind. Adopting an agile test-and-learn process that attempts to build a successful POC in a short time span is also essential to achieve faster time-to-build.

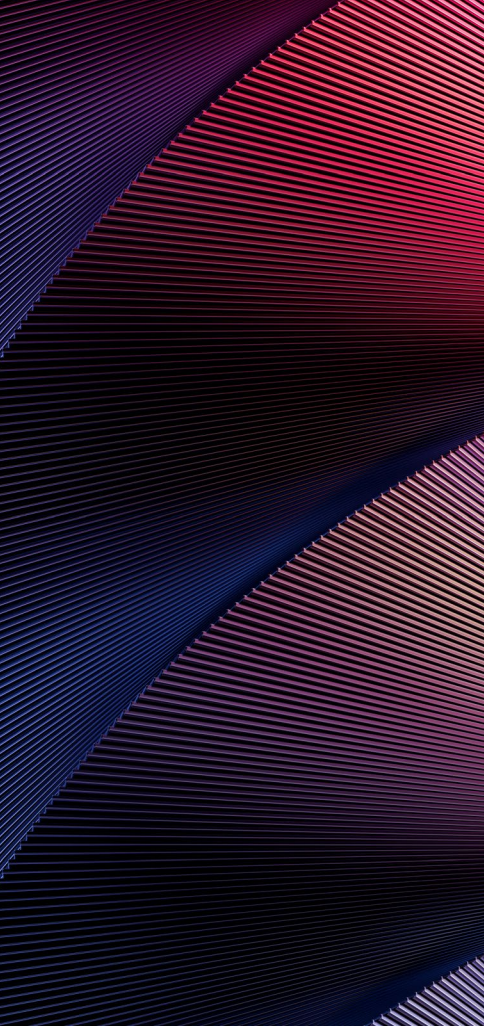
### 6 - Accepting that some data solutions will fail, and scaling and maintaining those that work

Not all data solutions will succeed; some will fail, due to technical or data limitations, despite careful planning and execution. It is crucial for organizations to recognize that failure is a natural part of the development process: it should not discourage them from pursuing future projects. Instead, companies should focus on industrializing successful data use cases, scaling them to full data domains, and optimizing their algorithms and data sources. This

also includes ongoing monitoring and improvement of the use case to ensure that it continues to meet the needs of the business users.

### 7 - Sharing knowledge is necessary but not sufficient for wide data solution adoption

Providing data solution training and easy-to-use documentation for business users is necessary, but usually not sufficient for widespread adoption of data use cases. Widespread adoption of data solutions by business users is best achieved by having users lead the development process, integrating these solutions into the organization's learning curriculum, and including adoption and impact KPIs in business user scorecards. By aligning business user scorecards with the organization's data strategy, organizations can create a culture of data-driven decision making and ensure that the adoption of data solutions leads to tangible business impact.



### 8 - Improving data solutions is continuous; prioritizing enhancements that matter is key

To achieve continuous enhancement of data solutions, it is vital to regularly collect feedback from business users, evaluate their needs and requirements, and make necessary adjustments to optimize these. The Scrum methodology provides an effective approach for gathering and implementing improvements in an iterative and incremental manner. Users of data solutions should log continuous feedback on the accuracy and usability of data solutions as well as required improvements to business processes. It's important to (1) implement improvements that increase the accuracy of the solution's output, (2) expand its features and functionality, and (3) improve its usability and user experience.

### 9 - Maintaining robust governance of data solutions ensures accurate results with minimal oversight

Maintaining high-quality data sources for data solutions is crucial for achieving automated, accurate results with minimal oversight. To achieve this, organizations should implement a robust data quality framework that enforces clear guidelines and standards for data collection and transformation. In addition, organizations should implement strong data security and privacy policies for secure and compliant data processing. This approach ensures that input data is accurate, current, and consistent, which reduces the risk of errors and improves the overall efficiency of the data processing workflow.

### 10 - Tracking the business impact of data solutions requires defining direct impact KPIs and assigning incremental business impact

Identifying the commercial or operational KPIs that are directly improved by a data solution is essential to measuring its business impact. Once these KPIs are identified, the next step is to develop a formula to measure the incremental impact of the data solution on each of these KPIs. This formula should take into account the baseline of these KPIs before (or without) the implementation of the data solution and compare it to the performance of these KPIs after (or with) the implementation of this solution, taking into account other factors that may have led to this increase. Once the incremental impact on each KPI has been calculated, it should be translated into financial terms, such as reduced costs or increased revenues. Finally, it's always recommended to use automated business impact measurement of data solutions to ensure unbiased and timely measurement of business impact.



**Karim Hayek**  
Data Consulting  
Senior Manager

*"Data acceleration projects have been surging in the MENA region in recent years, as organizations embrace the power of data for business growth. While certain challenges persist, such as maintaining data quality, especially with legacy systems, organizations are actively*

*seeking solutions to overcome these obstacles. Building the right data capabilities within business teams and the right operating model is the single most important way to ensure the successful implementation and adoption of data solutions and the realization of tangible business impact."*

**Karim Hayek, Data Consulting Senior Manager**