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Unpacking the 'Black Boxes' of Analytics: A Data Value Map Analysis

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Abstract

This paper reports on a three-stage research design pursued to uncover the shared understanding of practices linked to the execution of a Data & Analytics (D&A) strategy, within the HEINEKEN AME (Africa and Middle East) region. This research uses the Data Value Map (DVM) to present a visualised representation of the "experiential stories" of ten key informants. These key informants represent a snapshot of the important roles constituting the D&A team within the HEINEKEN AME region. The DVM analysis reveals eight 'black boxes' that represent the most frequently occurring topics of conversation across the ten key informant interviews. A reflection (by the Head of Data & Analytics for the AME region) on the impact of these 'black boxes' on the execution of the D&A strategy is also presented. The paper concludes with a sense of the practical implications linked to this applied research approach.

Keywords: Business Analytics, Strategy Execution, Capability, Traditional Organisation, Transformation, Reflective Practice

1 Introduction

In recent years there has been growing interest in Business Analytics (BA) amongst the researcher and practitioner communities (Delen & Ram, 2018; Hindle et al., 2020; Mikalef et al., 2020). Defined by Stubbs (2013) as the use of data-driven insight to generate value, BA has been associated with superior organisational performance (Cao & Duan, 2017) and recognised as a competitive differentiator for organisations across most industries (Akhtar et al., 2019; Bumblauskas et al., 2017; Davenport, 2006). It is no surprise therefore that senior executives are increasingly focused on transforming their organisations to become data-driven (Delen & Ram, 2018; LaValle et al., 2011).

However, there remains much work to do, as organisations are struggling to become data driven (Davenport & Redman, 2020; Klee et al., 2021; Smith et al., 2019), with the New Vantage Partners (2023) Data and AI Executive Survey highlighting that less than 25% of organisations consider themselves to have already become data-driven. Traditional organisations, which were established in the pre-digital era and whose success has been achieved through non-digital business models, organisational structures and culture, face additional challenges, as their data-driven transformation can be impeded by those traditional structures and processes which had worked for them in the past (Gust et al., 2017).

HEINEKEN has a clearly defined Data & Analytics strategy to become a data-driven organisation. However, bringing strategies to life is a significant challenge for organisations, as they struggle to close the gap between strategy and execution, often as a result of differences in thinking between those who create the strategy and those tasked with implementation (Bonchek, 2017; Kenny, 2019; Wiita & Leonard, 2017). Teams which are more successful in closing the *strategy-execution gap* are more likely to spend additional time engaging in dialogue and involving the people responsible for the implementation (Bonchek, 2017; Wiita & Leonard, 2017). Therefore, the objective of this paper is ***to explore the strategy-execution gap of a regional unit within a global multinational organisation which is implementing a Data and Analytics strategy***. In particular, the study aims to assess the level of shared understanding and identify the enablers and inhibitors to the execution of the strategy, as key determinants of the strategy-execution gap. The study is based on the "experiential stories" of ten D&A team members from the HEINEKEN AME region. Their respective *individual* stories are told through the lens of the Data Value Map (a discursive template to guide data/analytics conversations). These individual maps are then analysed (following an inductive open coding approach) to produce a *collective* story of the D&A strategy execution in the HEINEKEN AME region.

The remainder of this paper is structured as follows. In the next section we present the background to the case followed by an overview of the three-stage research design being pursued. This is followed by a presentation of our observations (eight 'black boxes') gained through coding the "experiential stories" of the ten HEINEKEN AME

region key informants (members of the D&A team) in Stage Two of the research design. Furthermore, the reflections of the Head of D&A for the AME region, in response to this analysis, are then captured as part of Stage Three of the research design. Finally, the paper concludes with a reflection on the implications for practice.

2 Background to the Case

HEINEKEN is a leading developer and marketer of premium beer & cider, with a portfolio of more than 300 international, regional, local and speciality brands. It has grown from the small family-owned business established by Gerard Adriaan Heineken in Amsterdam in 1864 to being the largest brewer in Europe and the number 2 in the world. It employs over 80,000 people and operates production facilities in more than 70 countries. Since 2021 the lead author has been Head of Data & Analytics (D&A) for the Africa, Middle East (AME) region with responsibility for leading an organisational data-driven transformation and maturing the D&A capability.

2.1 HEINEKEN AME Data & Analytics Strategy

The HEINEKEN AME region comprises sixteen Operating Companies (OpCos) of various sizes ranging from large OpCos such as Nigeria, with many production sites and thousands of employees to much smaller OpCos with a single brewery and just a few hundred employees.

The Data & Analytics (D&A) strategy of the HEINEKEN AME region strives to unlock the value of data to achieve *HIGHER* impact on business performance, deliver *FASTER* time to insight, and grow a *STRONGER* organisation by holistically developing capabilities across the four pillars of the BAR (Business Analytics Recipe). The BAR outlines four pillars of business analytics capability, namely Solid Foundations (Data & Technology), People & Process (Skills, Org Structure, WoWs), Actionable Business Value (Analytics Use Cases which are actionable, feasible and deliver a positive value impact to organisational performance) and Organizational Culture (Data Driven Mindset and Literacy).

Higher calls for achieving HIGHER impact by focusing on the business outcomes of BA rather than inputs such as technology deployments or building BA solutions. Faster

is about delivering FASTER time to insights so that business decision makers have a data solution in their hands as soon as possible after an opportunity or business problem is identified. There are two elements to growing STRONGER together, namely strengthening cross functional collaboration between data and business teams and also strengthening the data foundations of data availability and data quality, along with robust technology platforms.

The strategy is brought to life through a series of initiatives linked to the BAR. For example, under the People & Process pillar an initiative was to establish above-OpCo capabilities in the form of Regional Data Management and Analytics Hubs to provide OpCos with the specialised D&A skills such as Data Engineers, Data Scientists, etc. The Data Management Hub (located in Egypt) and the Analytics Hub (located in South Africa) were both established in the second half of 2021. Other examples of initiatives include implementing a Governance process for Analytics Use Cases under the Actionable Business Value pillar and deploying a cloud data platform under the Solid Foundations pillar.

In 2023, two years after the launch of the AME D&A Strategy, significant progress had been made. AME had taken a leading role as the first of the four HEINEKEN regions to appoint a Head of D&A, develop a D&A Strategy, build Regional D&A Hubs, etc, and was outperforming in terms of realising value from data. In 2022, despite accounting for 13% of global revenue, the AME region delivered 60% of global value from analytics use cases. However, by mid-2023 the lead author as Head of D&A had formed the view that some elements of the strategy were at that time not being realised as well as others. This was in contravention of the Holistic principle of the BAR which states that all elements of the BAR are essential for success and need to be developed holistically to prevent a gap emerging between the organisations ability to produce and consume analytics. Areas of concern included the speed of deployment of analytics use cases was not accelerating as anticipated, value delivery while continuing to grow was starting to drift behind the ambitious targets, and embedding analytics solutions in long established business processes was proving challenging. To assess if the strategy was as well understood by the D&A Team (responsible for the strategy implementation) as had been perceived by the Head of D&A (lead author), it was decided to engage the

teams by conducting a Data Value Map (DVM) analysis as outlined in the following sections. The outputs would then be used to inform future actions such as amending / recommunicating the strategy or course corrections in the implementation.

3 Methodology

This section presents the Data Value Map (DVM) and the use of the DVM discursive template as part of a three-stage research design.

3.1 Data Value Map

The mindset to transform information into a *"critical business asset"* (Laney, 2018, p. 10) does not always dominate the ways business manage their information assets. Therefore, weaponising information as opposed to just using it (c.f. Laney, 2018) can be a significant business challenge. In fact, Laney (2018, p. 12) comments that *"myths create cognitive roadblocks that hinder business leaders from realising anything near the full promise of information"*. It is necessary therefore to be able to see through the *"cerebral fog of these myths"* (Laney, 2018, p. 12) and take advantage of ways of seeing what we say (a concept popularised by Karl Weick in his work on organisational sense-making). Once such device that offers this visibility is the Data Value Map (DVM).

The Data Value Map (see Figure 1) is a structured discursive template (c.f. Sammon & Nagle, 2017) that positions the key components of the often referred to *information supply chain* (c.f. Laney, 2018) or *information chain*. (c.f. Redman, 2008) The four components of the information supply chain (ISC) are *acquisition*, *integration*, *analysis* and *delivery*. Each of the components serves a specific purpose, where *acquisition* details the gathering of data from business activities; *integration* describes the combining of datasets from numerous sources; *analysis* describes the processing of analytics on subsets of data; and finally, *delivery* focuses on supplying analytical insights in a suitable format. These four components are book ended by two human actors, namely: the *data creator* and the *data user*. The data that flows from the data creator to the data user must be (i) of high quality and (ii) put to use. This demands that a shared understanding of data behaviours and business value exists (between the data creators and the data users) in order to frame the four components of the information supply chain. To do so goes a long way to protecting against the much-bemoaned

concept of GIGO (garbage in, garbage out), where the quality of the output is determined by the quality of the input.

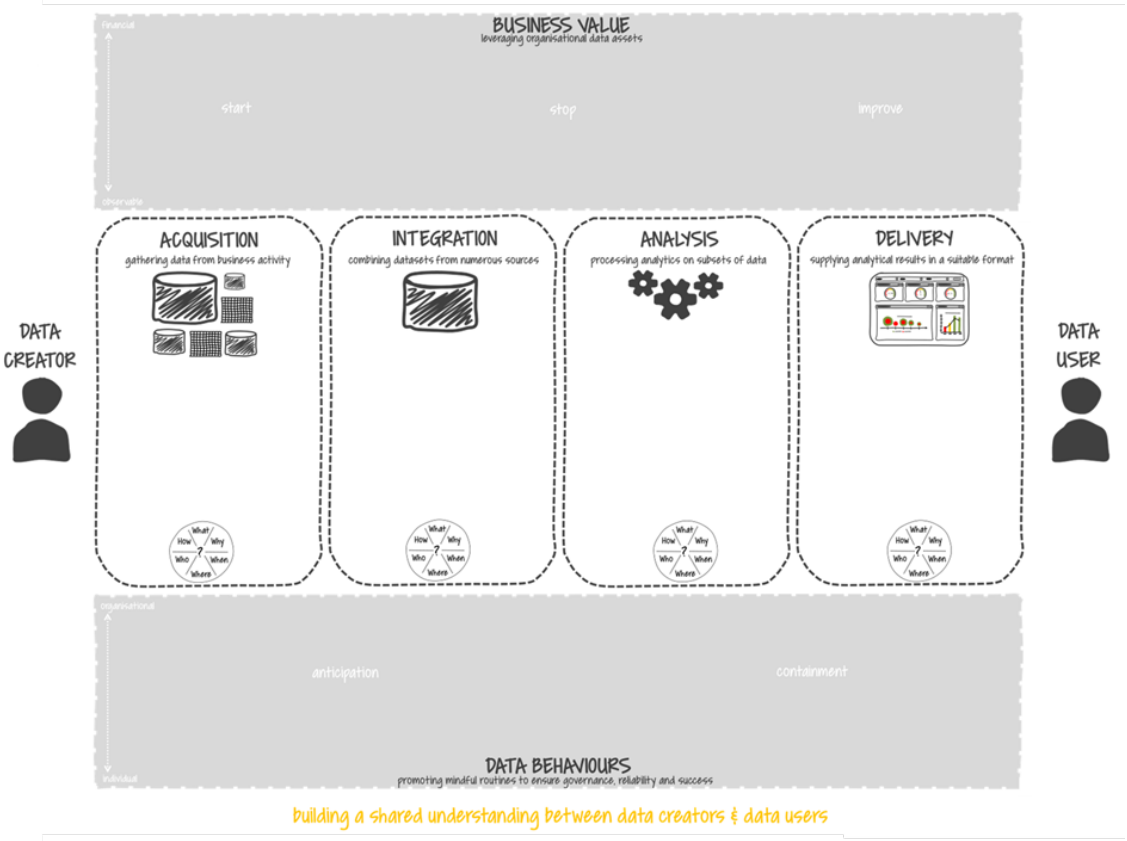

Figure 1: The Data Value Map (DVM) Discursive Template

The Data Value Map (DVM) enables a visual sense-making process of unfold where all too often competing multi-stakeholder conversations are taking place between business and technology. Therefore, through answering a series of simple probing questions along the four components of the ISC, all stakeholders are in a better position to see what they say. The alignment of *people*, *process*, and *technology* with the capability to organize, govern and share data to achieve business ends is fundamental to promoting data-driven conversations using the DVM (c.f. Sammon & Nagle, 2017). To aid these conversations, six very simple questions (*why*, *what*, *when*, *who*, *where* and *how*) ensure all underlying assumptions are at least questioned if not fully examined. Therefore, answers to questions can be placed on the DVM to create an elaborate visual to effectively communicate the sense that stakeholders make of the data. The very act of going through this rigorous process of questioning ensures that every implicit

assumption is questioned, therefore challenging the status quo, in the pursuit of unlocking a value driven data conversation.

3.2 The Three-Stage Research Design

Stage One of the research design involved gathering data from ten key informants. These data were gathered using semi-structured interviews. The questions invited the key informants to share their role in the analytics production lifecycle and their sense of 'what works'/'does not work' in the execution of the D&A strategy. Those interviewed across the AME region share their "experiential stories" from various perspectives (local/region/global) and positions (e.g. Data Management Hub, Data Analytics Hub, OpCo) within HEINEKEN (AME region). These key informants were selected not for their *"representativeness"* alone, but for their *"informedness and ability to communicate"* (Campbell, 1955, p. 339). Therefore, using the informant technique typically means that the researcher gathers data from a person who performs an organisational role and is well informed and well able to speak the language of the researcher.

This approach affords us the opportunity to "*capture the meaning"* from those practitioners *"living the experience"* (leading a D&A initiative in a traditional organisation) and *"theorize about that experience"* (Gioia et al., 2013, p. 17). Being inspired by features of the Gioia Methodology (as a *"systematic inductive approach to concept development"* and assumes that *"the organisational world is socially constructed"* (Gioia et al., 2013, p. 17)), we had an ambition to conceptualise the practitioner voice and to not *"substitute practitioners' understandings for theory"* (Markus et al., 2021, p. 273). As a result, in our data collection we give *"extraordinary voice to informants"* where we view them as *"knowledgeable agents"*. As illustrated in Figure 2, these stories provide great coverage of the D&A strategy and reveal interesting observations right across the DVM (*acquisition*, *integration*, *analysis delivery*, *business value,* and *data behaviours*). All interviews took place between February and April 2023, and lasted between 45 and 90 minutes. The interviews were conducted by two members of the research team (excluding the lead author who is the Head of D&A for the AME region and was also interviewed as part of this research stage).

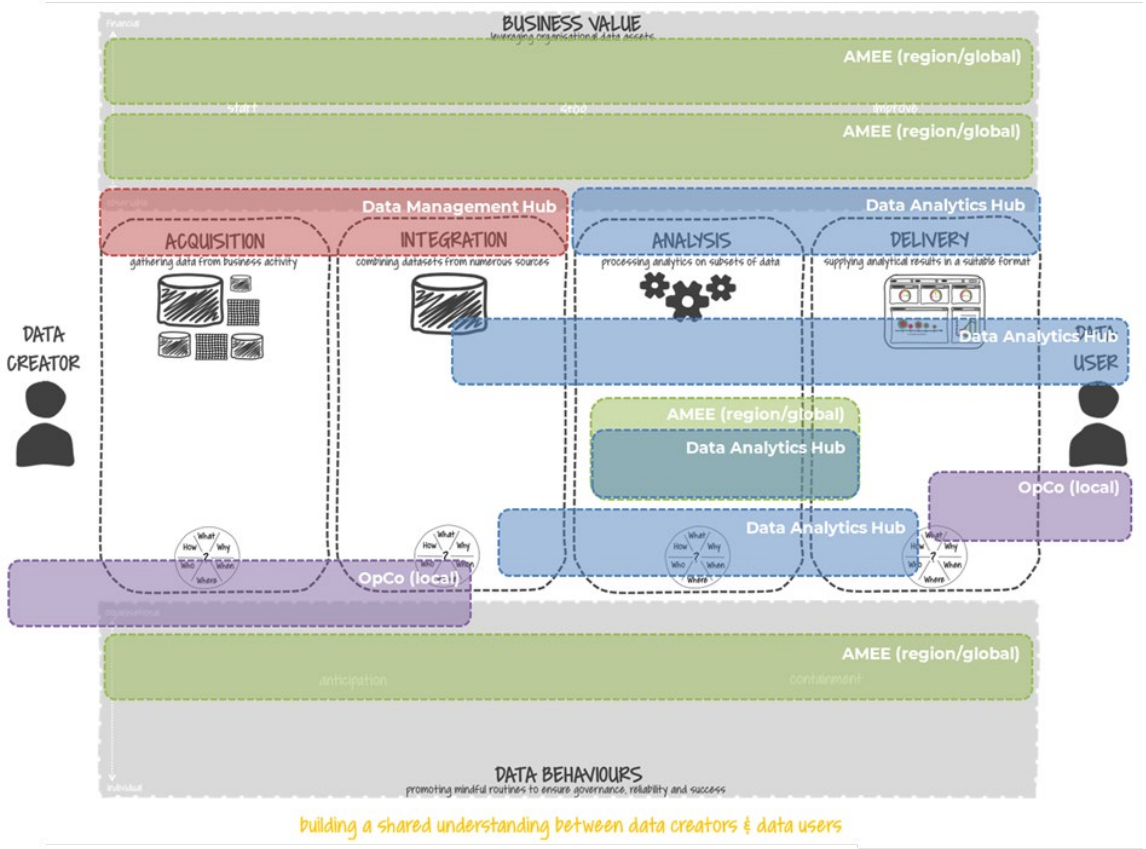

Figure 2: Distribution of Key Informants

Once all interview data was gathered, both team members also coded the data using an inductive open coding approach. Initially, we maintained *"the integrity of 1st order (informant-centric) terms"* when coding the ten interview transcripts during data analysis (Gioia et al., 2013, p. 26). Thereafter, as we progressed in our analysis of the data, we further organize the *"1st-order codes into 2nd-order (theory-centric) themes"* (Gioia et al., 2013, p. 26) using the Data Value Map as an analytical frame. This approach also afforded the opportunity to place an emerging theme (raised by a key informant) on the DVM (placing it where it is most relevant). Therefore, over the course of several rounds of coding, a rich picture of the analysis emerged (see Figure 3). This DVM rich picture showcases eight 'black boxes' that emerge as requiring further discussion. These eight DVM analysis 'black boxes' include the following: (i) *ERP System (data quality)*; (ii) *Commerce Systems (data quality)*; (iii) *Data Prime (Azure DB)*; (iv) *Harmonised Data Pipelines*; (v) *AVC Use Cases*; (vi) *Common Business Language*; (vii) *Translators (local, region, global)*; (viii) *POC Driven (faster, stronger, higher)*. This visualization of the eight 'black boxes' positioned on the DVM now

provided an opportunity to build a shared understanding amongst the D&A team members (which was the focus of Stage Two).

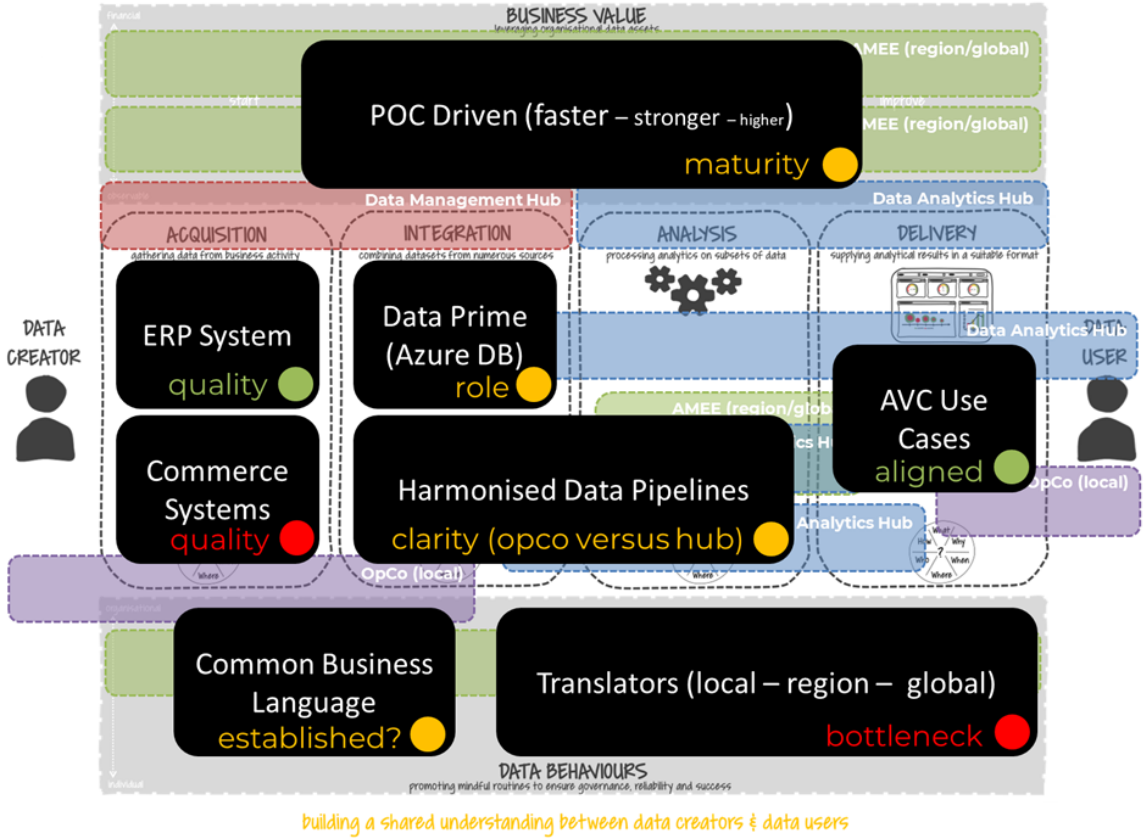

Figure 3: The Eight 'Black Boxes' of the DVM Analysis

For Stage Two, the two research team members (excluding the lead author) presented their analysis to the D&A cohort (within the AME region). This presentation took place on June 14th, 2023, and lasted for 90 minutes. This was viewed as a further opportunity to build a shared understanding within the D&A cohort. As part of this feedback presentation, each of the eight 'black boxes' were unpacked and the reason for the RAG (red/amber/green) status was explained. Finally, in Stage Three of the research design, the Head of D&A for the AME region (the lead author) reflected on the learnings from the DVM analysis. Specifically, they focused on the impact of the eight 'black boxes' on the execution of the D&A strategy within the AME region.

The outputs of Stage Two and Stage Three are now presented in the next section.

4 Findings & Discussion

4.1 DVM Analysis (unpacking the 'black boxes')

This section presents the work associated with Stage Two of the research design.

4.1.1 Data Quality in the ERP System & Commerce Systems

Both these systems contain data of interest to the analytics ambitions within the AME region. However, while key informants suggest that the data in the ERP System was of good quality, it was the data in the Commerce Systems that was of greater value (to analytics), but of lesser quality. There were several reasons for this reality within the region, however, historically, it seems that more effort has been focused on data quality within the ERP system (e.g. where data standards have been well defined over the past decade). It was also revealed that executing the analytics use cases has triggered the surfacing of data quality issues in the Commerce Systems, specifically. Therefore, as part of the presentation, the researchers concluded that the Commerce Systems data are just as important as the ERP System data for strategic success (e.g. data-driven insights to become the best-connected brewer). As a result, they also questioned if a plan was in place to rectify these data quality issues? Data quality was viewed by several key informants as the biggest barrier to speed, therefore, the suggestion is that better data quality will make them faster (as per their D&A strategy).

4.1.2 Data Prime

Data Prime was mentioned by all key informants, however, their descriptions of what it is (and its role) vary considerably, with Data Prime being described as a data warehouse solution, a data lake, a cloud-based system, an ETL process to harmonise data, and so forth. Notwithstanding this, it is revealed throughout the course of the interviews that Data Prime is in fact a programme of work to create a platform (an Azure Database) to ingest data from different sources (e.g. move OpCo data to the cloud) in order to build analytics solutions. This would ensure that the required data is always available (to access) for faster use case deployment. Therefore, the ambition is that all AME region data (required for analytics) will reside on this platform, and one key informant revealed that 75% of data are currently on Data Prime. Therefore, as part

of the presentation, the researchers concluded that there is a lot of uncertainty amongst the key informant voices as to (i) what Data Prime actually is, and (ii) its role in delivering analytics use cases (e.g. does it deliver value).

4.1.3 Harmonised Data Pipelines

The Harmonised Data Pipelines (HDP) was mentioned by several key informants and is described as a stepping-stone to the adoption of Data Prime (a global initiative) throughout the AME region. Therefore, it appears as if local OpCo data is loaded onto HDP, which is viewed as an AME region solution, that is architecturally similar to Data Prime. HDP is a solution to a Data Prime 'bottleneck' problem, where some analytics use cases demand more data than Data Prime might currently have available. Therefore, as part of the presentation, the researchers concluded that HDP connects integration and analysis (two components on the DVM) where HDP might be more like a 'data mart' (region solution) and Data Prime more like a 'data warehouse' (global solution). However, there is also a lack of clarity amongst the key informant voices as to the relationship between HDP and Data Prime in delivering analytics use cases (e.g. does it deliver value), and a lack of a shared understanding from a local to region level. As a result, the researchers also questioned if cleaning the "same" data (80% of time) is a never-ending prospect to deliver data-driven insights (20% of the time) as the best-connected brewer (given the co-existence of HDP and Data Prime)?

4.1.4 Common Business Language

A small number of key informants suggested that while Data Prime can make access to data faster, there is a pressing need for a common business language to make things stronger. One key informant suggests that people speak a different language, even within the same function (e.g. sales) across the region, and sometimes to describe the same things! Therefore, as part of the presentation, the researchers concluded that there is a need for a 'shared' common business language to support the delivery of analytics use cases (e.g. to deliver value). As a result, they also questioned if the AME region is structured appropriately to align with the data-driven ambitions? For example, when/where does the transformation of data (from source system to target system take place, and is the global/region/local legacy (processes, systems, data, people) costing

more than it should (to align with the strategic data vision: data-driven insights to become the best-connected brewer)?

4.1.5 Translators and AVC (Analytics Value Council) Use Cases

The approach to proposing, evaluating, and prioritising use cases appears very robust (with an obvious alignment to the D&A strategy) within the AME region. In fact, key informants suggest it is an exemplar for other regions. Notwithstanding this, a point of difference did exist as to whether analytics use cases were 'bottom-up' versus 'top-down'. The ongoing desire to deliver use cases faster also exists, and several reasons are provided as 'bottlenecks' to speed, from the quality of the data to the availability of the data, on Data Prime. However, a further reason is highlighted by some key informants and centres on a lack of *'Analytics Translators'* within the region. As commented by a key informant, the translator (the region level – Analytics Hub) is viewed as the bridge between local (the daily reality – the practice) and global (the strategic ambition – the theory). A further appreciation of the role of the *'Analytics Translators'* is provided by another key informant who suggests that they translate from local (OpCo) to region (Hub) and it is this relationship (between local and region) that generates value, in essence, relationship building makes things faster! Therefore, being *"close to the action"* and *"building domain knowledge"* enables *"assumptions about the reality to be challenged"* and a *"better sense of the data to be made"*. However, other key informants suggest that communication around the data landscape is the biggest challenge and clarifying the shape of this landscape is enabled by the translators, although there is a shortage of these resources. Therefore, the current small number of *'Analytics Translators'* is a bottleneck to faster and higher, as they are the analytics use case owners. Therefore, as part of the presentation, the researchers concluded that a lack of *'Analytics Translators'* is the biggest barrier to speed (e.g. data-driven insights to become the best-connected brewer). As a result, they also questioned if a plan was in place to rectify this issue, suggesting that more translators will make the region faster (as per their D&A strategy).

4.1.6 POC Driven

The execution of the D&A strategy was conceptualised by several key informants as a journey. For example, the impact of a *"history of a decentralised data landscape"* is being exposed as part of the execution of the D&A strategy, and in many instances *"the analytics use cases triggered the surfacing of data quality issues"* (in Commerce Systems specifically). Therefore, as part of the presentation, the researchers concluded that the maturity of what is being done is aligned with a *Proof-of-Concept* approach. As a result, they also questioned the plan to move from shorter-term "POC driven" practices to longer-term delivery of sustainable value (as the best-connected brewer) for stakeholders? In essence, the 'value to feasibility' trade-off (as regards the criteria used to accept/reject a use case) needs to be appreciated in the context of a 'path to value' approach for the next step in the journey of the D&A strategy execution.

4.2 Head of D&A (Practitioner) Reflection on the eight 'black boxes'

This section presents the work associated with Stage Three of the research design. Despite having commissioned the DVM analysis, the Head of D&A for the AME region (lead author) was not provided with the outcomes in advance of the results sharing workshop (delivered by the two-member research team in June). This was intentional to ensure that the results shared with the wider D&A team represented the views of the teams implementing the D&A strategy as objectively captured by the external researchers, and unbiased by the views of the Head of D&A. Following the workshop, the identified key concepts (eight 'black boxes') along with the status of each was reflected upon by the Head of D&A (lead author) as outlined in Figure 4.

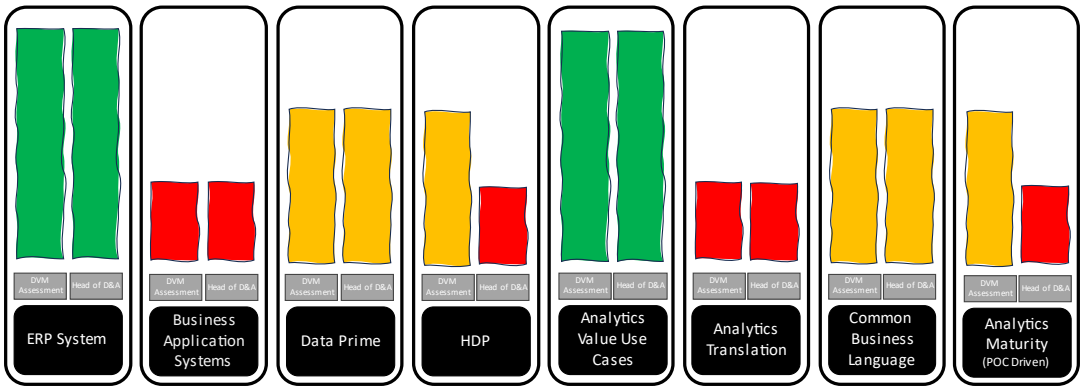

Figure 4: Comparing the Eight 'Black Boxes' from the DVM Analysis

4.2.1 ERP System

Head of D&A RAG: Green

Most of the data currently used for BA is data from the ERP systems of the OpCos and is predominately transactional data such as sales invoices. The acquisition of data from ERP systems was assessed as Green by the DVM analysis and as Head of D&A, I would concur with the finding of the research team. In general, this data is of relatively good quality and can be relied upon with confidence to make decisions. There are several reasons for this, firstly the ERP systems are used to enable the business to operate, so any errors are highlighted in the course of daily operations. For example, a customer will not pay an invoice for goods which were not received, so if there are errors, they are quickly corrected. Financial reporting is also based on ERP data so historically there have been robust controls put in place to ensure the accuracy for business control purposes. Furthermore, in recent years a programme was completed in which all the small and medium OpCos in the region standardised on a common ERP which has led to greater standards, consistency across OpCos and improved processes, with a data quality score in excess of 99%. Notwithstanding that there are certainly issues of data quality, particularly in some less mature OpCos, the standard of data quality is generally high.

4.2.2 Business Application Systems (Commerce Systems)

Head of D&A RAG: Red

As HEINEKEN continues to digitise its business operations, several business application systems have been introduced in recent years. As we focus on digitising our

route to consumer, many of these applications are in the commerce area such as e-commerce B2B systems, call centre systems, distributor systems, but also include other areas such as warehouse management systems. In contrast to ERP data, the quality of data acquired from Business Application systems was rated as Red by the research team. As Head of D&A this was not unexpected as Business Application data quality is recognised as a challenge impeding business analytics and there are initiatives in place to address. It was the case in the past that some of these applications were deployed on a piecemeal basis in response to operational requirements and priorities in particular OpCos. Individually, these Business Applications were successfully implemented and met the needs they were initially designed to meet. For example, the distributor management system works as designed and allows distributors to place orders with HEINEKEN, manage their own stocks, plan their routing, report their sales, and so on. However, when it comes to using this data for data driven decision making, challenges soon occur. Different distributors utilise the application in different ways with some fully utilising and others continuing to manage their business on paper and just using the system to place orders with HEINEKEN. Another example is distributors might set up a new customer on the system even though the same customer might be already recorded in the HEINEKEN ERP and even the distributor system as other distributors might also be delivering to the same customer. These non-ERP applications contain a rich source of data which is essential for impactful analytics beyond traditional reporting and BI, so addressing the data quality and consistency issues across the business applications has been prioritised, with several initiatives across technology, process re-engineering, quality measurement, etc. initiated in the past 18 months.

4.2.3 Data Prime

Head of D&A RAG: Amber

Data Prime is a programme with several components including deploying an Azure Cloud database along with a suite of data management tools for data governance, data lineage and data quality. It also includes some basic training on the tools. In the area of data integration, the Data Prime initiative is assessed by the research team as amber, which is an assessment which I as the Head of D&A concur with, but for different reasons. The perception of Data Prime in some areas of the business was that it would deliver data driven decision making, when it actually only delivers technology solutions

which enable business analytics. There are many more elements required in a Business Analytics capability beyond just the technology. Therefore, from an OpCo perspective, stakeholders struggle to see the value of Data Prime and it is not surprising to hear it described as a solution looking for a problem. The approach in AME therefore was changed, with Data Prime in AME set up to not only deliver the technology platform and the data from ERP, but also data from the top 3 Commerce Business Application Systems along with an initial analytics use case. The project approach was also adjusted to ensure the programme was completed five times faster than the next fastest region. From the perspective of the Head of D&A, the status of Data Prime has improved from Red to Amber as it has been successfully completed and is delivering value by enabling faster deployment of use cases in line with the regional Higher Faster Stronger D&A Strategy. It is not Green, because while the data is more accessible, it remains unharmonized so is still not fully analytics ready.

4.2.4 Harmonised Data Pipelines

Head of D&A RAG: Red

As previously mentioned, Data Prime is delivering accessibility to data from the key business applications across HEINEKEN. However, the data remains unharmonized so is not ready to be used in business analytics use cases. To resolve this challenge, an initiative called Harmonised Data Pipelines has been established to build pipelines which harmonise the data required for business analytics use cases. While the data is sourced from the Data Prime cloud, it is technically possible for HDP to integrate data from applications which are not ingested to Data Prime. Given that the programme is relatively new and there have been many changes in the six months prior to the research interviews, it is understandable that the research team would rate it as Amber. However, as the Head of D&A, I rate the current status as Red, due to the slow progress to date, the challenges facing the ambitious aspirations of the programme due to the complicated data landscape across the region, and the insufficient level of the resources currently allocated by the HDP Team to deliver on the aspirations. While the challenges are recognised, they are being addressed by the Global Teams responsible for HDP, so the expectation is that status will very quickly improve.

4.2.5 Analytics Value Use Cases & AVC

Head of D&A RAG: Green

The Higher element of the AME D&A Strategy calls for a focus on impact over inputs. Strengthening the governance of analytics use cases has been one of the most impactful and transformative strategic initiatives undertaken to date. The DVM research team assessed this element as Green and as Head of D&A I concur. Prior to establishing the Analytics Value Council (AVC), the Business Analytics teams were at full capacity delivering solutions, but the utilisation and value realised was mixed. The AVC brings together the senior leaders from the Data & Analytics and the business teams to jointly prioritise use cases, track progress and remove any blockers which are escalated by the teams to the AVC. Use cases are prioritised based on the value which they are likely to create, the technical feasibility given the available data, quality of the data, technology, and the skillset of the teams and the actionability (do the business decision makers have the capability to implement the solution). This has led to cross-functional alignment, ensured the prioritisation of business analytics solutions which are delivering a significant impact on business performance and provided clarity to the BA Teams on the value and purpose of their contributions. The implementation of robust and transparent governance for BA has been recognised across the business as a significant driver of the BA success to date.

4.2.6 Analytics Translators

Head of D&A RAG: Red

The role of the Analytics Translators, or Analytics Product Managers is recognised as possibly the most crucial role in the Analytics Hub, particularly as the Analytics Hub is shifting from a provider of technical analytics solutions to a BA centre of excellence focused on impacting business performance by leveraging the power of data. As Head of D&A, I assess the status of this element as Red which is the same as the assessment of the DVM Research. The existing Translator resource is performing very well in terms of partnering with business to identify opportunities, refine business questions and partnering with the business and technical teams through the stages of data acquisition, integration, analysis, and delivery. The scope of the role is end-to-end and is playing a leading role in ensuring BA is actioned with value realised and measured. However, the

challenge is that there is not enough resource, and this constraint has created a bottleneck and is impacting on the delivery of faster time to insight as called for by the D&A Strategy. Therefore, while there is alignment that the status of this element is Red, additional resource is currently being recruited so this status is expected to be short term. Furthermore, as currently structured, most of the translation is conducted by the Analytics Portfolio Managers (Previously known as Analytics Translators) which are attached to the Regional Analytics Hub or the Global Analytics Teams, which are developing the BA Use Cases. The Regional D&A Strategy calls for this translation activity to be located closer to the business decision makers, so at the OpCo level there is a requirement to further build this capability.

4.2.7 Common Business Language

Head of D&A RAG: Amber

The Common Business Language (CBL) is a collection of data related standards, terms and rules described in clear language that everyone across the organisation can understand. The CBL is required in order to deliver a solid data foundation as per the D&A Strategy, as it allows people across the organisation to better communicate and collaborate, drives consistency in interpretations, allows shared understanding of data and eliminates disconnected static views of data. The DVM Assessment rated this element as Amber, primarily due to a lack of clarity around the status of the CBL and as Head of D&A, this is a fair assessment. The creation of the Common Business Language is recognised as a priority and is being developed by the global data management team. Good progress has been made to date with the data governance and cataloguing tool (Collibra) now delivered as part of the Data Prime programme, but it is not yet being widely utilised beyond the Data Management Teams. Furthermore, work continues to define the Data Standards, Business Terms and Business Rules, so while these are in place and available for some domains, the CBL is not yet fully developed.

4.2.8 Analytics Maturity Stage - POC Driven (Realising D&A Strategy Faster, Stronger, Higher)

Head of D&A RAG: Red

The D&A Strategy is to deliver higher impact through scalable value enhancing use cases which are actioned by decision makers. This calls for analytics solutions to be embedded in the business processes. The DVM Assessment rated this element as Amber, but as Head of D&A, this element would currently be defined as Red. It is the case that some analytics use cases have been scaled across multiple OpCos and are embedded in decision making with proven value. However, these use cases are in the minority to date, and are concentrated in just one domain. A significant number of use cases still struggle to move beyond the POC or pilot phase, even when the POCs are successful and deliver value. The reasons are many and varied and range from lack of consistent data quality and standards to a lack of capability and / or engagement amongst the business decision maker community. Moving the maturity beyond the current status is not a quick fix and requires a holistic approach with capability building across the entire D&A Ecosystem including data, technology, people competencies, ways of working, overall organisational culture and capability. It is for this reason, i.e., the complexity of the solution requiring advances across the entire DVM, that this element is currently rated red by the Head of D&A.

5 Conclusions: So What?

The DVM analysis outlined in this paper set out with the objective of providing HEINEKEN AME with an assessment of the D&A strategy-execution gap, both in terms of how well the D&A strategy had landed with the people tasked with implementation, and in identifying enablers and inhibitors. It was expected that this DVM analysis would inform any course-corrections to ensure a successful D&A strategy execution. The strategy was found to be well understood by the teams, thereby validating the strategy communication and alignment. The DVM analysis also identified, from the perspective of those implementing the strategy, the areas requiring attention and 'course correction' (see Table 1). Overall, the approach taken (undertaking a DVM analysis) also provided a framework to structure observations by mapping the key areas (black boxes) to the DVM components.

The biggest shifts in the focus areas of the AME D&A Strategy following the DVM Analysis are in terms of breaking from the POC Driven approach and building capability at the end user (decision makers in OpCos) level. The observation of the lead

author is that while a good D&A strategy was developed, the organisation moved too quickly to over focusing on developing and deploying analytics use cases and did not focus enough on building the organisational wide capability to embed analytics in a sustainable way. It was described as starting to build a house with good plans but then trying to move into and live in the house before construction was completed.

The three primary criteria for prioritising use cases had been Value (the impact of the use case on business revenue growth or cost savings), Scalability (potential to deploy use case across multiple OpCos), Actionability (end users ability to do something different resulting from the use case). Delivering Scalability in practice proved to be more difficult to achieve than had been envisioned in the strategy. Differing data foundations and levels of end user capability meant that it was not easy to deploy use cases developed in one OpCo across multiple OpCos. While a significant business transformation programme is in progress to simplify and standardise ERP, business applications and processes across all HEINEKEN OpCos, which will enable scalability in analytics use cases, this has not yet been completed. In the meantime, following the DVM analysis, the criteria for prioritising use cases have been amended with feasibility replacing scalability in the top 3 criteria. Feasibility includes accessing how feasible it is for the OpCo to implement and embed the analytics solution in the everyday business process rather than as a one-off ad hoc piece of analysis.

Table 1: Summary of 'Black Boxes' and resultant actions

Black Box	DVM Component	Strategy-Execution Reality (So What?)	Inhibitor / Enabler	Action Plan (What Now?)
ERP System (data quality)	Acquisition	Clarity and alignment on role of ERP with good level of data quality enabling analytics	Enabler	Maintain
Commerce Systems (data quality)	Acquisition	Recognised pain-point impeding strategy implementation	Inhibitor	Continued prioritisation of initiatives to address data quality
Data Prime (Azure DB)	Integration	Lack of clarity on role of Data Prime and the value delivered	Inhibitor	Reassess strategic position of Data Prime and role in overall D&A Strategy
Harmonised Data Pipelines	Integration & Analysis	Lack of clarity on role of HDP / difference to Data Prime and challenged with HDP delivery	Inhibitor	Re-establish alignment on role of HDP, and plan to accelerate development
AVC Use Cases	Delivery	Recognition that analytics value governance is working well	Enabler	Maintain
Common Business Language	Data Behaviours	Recognised that implementation of Common Business Language lagging other elements of D&A Strategy	Inhibitor	Continue to accelerate plans to implement
Translators (local, region, global)	Data Behaviours	Availability of resource recognised pain-point impeding strategy implementation	Inhibitor	Continue to accelerate plans to put resources in place at Region and OpCo level
POC Driven	Business Value	Too much focus in demonstrating feasibility of small-scale analytics use cases	Inhibitor	Shift in approach to selecting use cases with increased emphasis on impact, path to value and actionability.

In addition to amending the criteria for use case selection, the resources of the AME D&A team were also reoriented to accelerating capability building at the OpCo level. The profile of D&A roles in the OpCos was changed to move more towards transformation type activities such as Change Management and Analytics Product Management while further consolidating technical roles such as Data Scientists in the Regional Hub. Other initiatives included executive upskilling programmes, OpCo focused D&A Playbooks, training courses for technical and non-technical employees, Maturity Assessments and engagement initiatives such as newsletters and competitions.

The DVM outputs along with the resultant shifts in the D&A Strategy were reviewed by the Senior Leadership Team of the Region at a strategy off-site during which it was noted that the DVM Analysis was a useful exercise and provided reassurance that the course-corrections being implemented in the D&A Strategy were addressing the real implementation pain points to becoming a data driven organisation. In the second half of the year, progress with the implementation of the strategy was observed by the Head of D&A (lead author) to have picked up again with a renewed vigour and enthusiasm from the implementation teams playing a role.

The objective of this research was to determine if the D&A strategy was landing with the people responsible for implementing it and how implementable it was in its current format. On December 19th, 2023, the Digital & Technology Director for HEINEKEN in the AME Region addressed the year end Global Townhall being broadcast to employees across HEINEKEN. She proudly exclaimed that for the second year running the AME Region (smallest of the four regions) had successfully generated the most value from Data & Analytics, had been the first to complete Data Prime, (the company wide programme to implement a cloud based analytics platform), and the success had been achieved by realizing the holistic Business Analytics strategy focused on achieving Higher business impact, Faster time to insight and growing Stronger as a data driven collaborative organization with solid data and technology foundations. This level of success could only have been achieved by ensuring that there was no strategy-execution gap in the bringing to life of the D&A strategy.

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