

NOCA People Analytics Day
June 13, 2024



KING'S
BUSINESS
SCHOOL

Workforce Analytics for Impact

Overcoming challenges in building HR analytics functions and harnessing the true power of your workforce data.

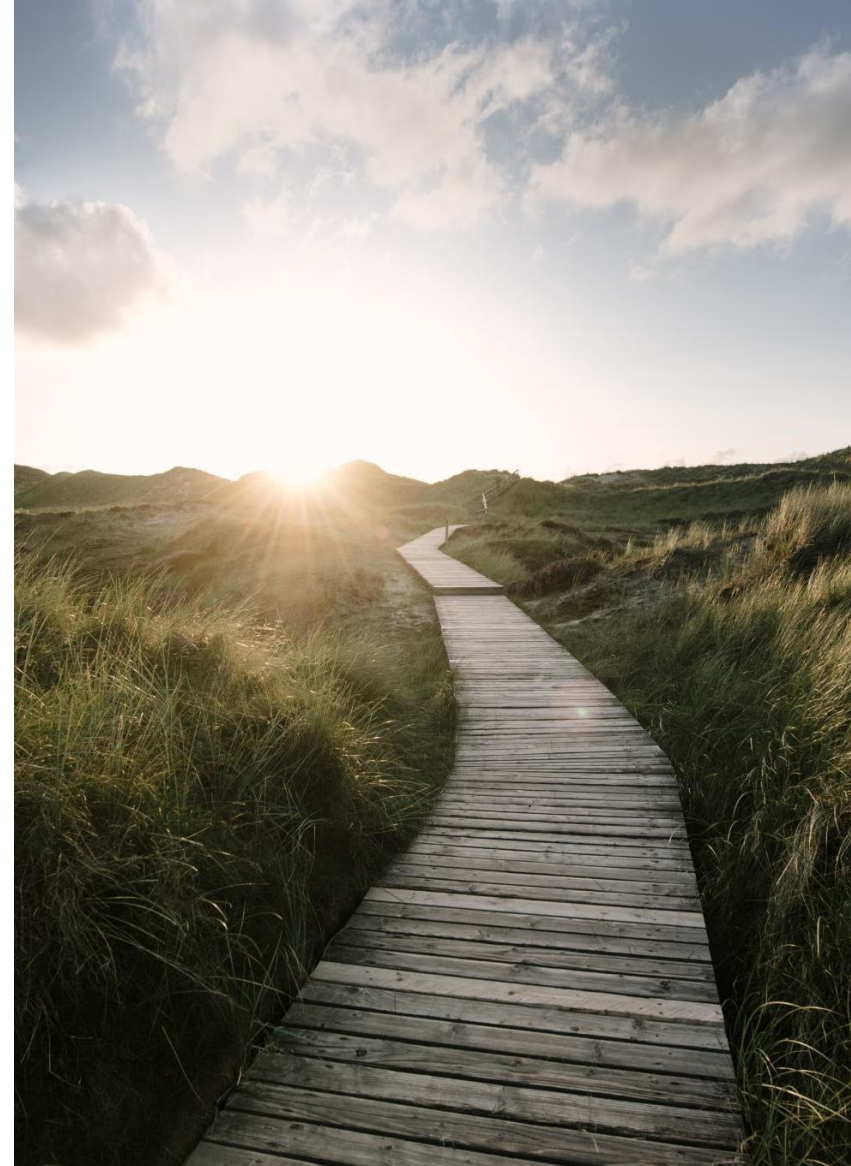
Dana Minbaeva, Professor of Strategic Human Capital



Nordic
Human Capital
Advisory

Evidence-based management

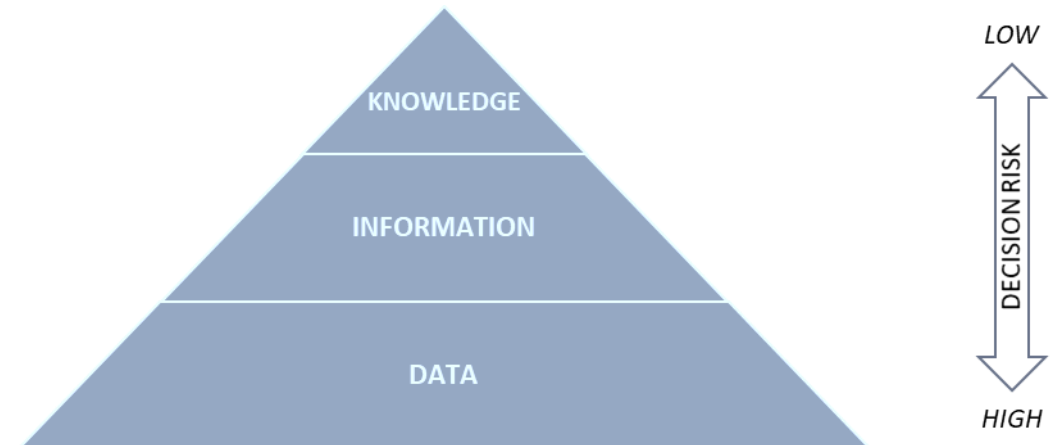
<https://nhca.dk/>



Definitions

- Workforce Analytics (WA) involves quantitative **and** qualitative analyses of data or information concerning the individuals employed by an organization, their tasks, roles, relationships, and contributions to organizational outcomes.
- It explores how individuals **collectively** engage in their work, the impact their work has on them, and **their contributions** to job, team, unit and organizational performance

Data-Information-Knowledge Hierarchy



Source: Nygaard and Minbaeva (2020)



ACAI

Phase 1: **A**sk the right questions

Phase 2: **C**ollect the right data

Phase 3: Conduct the right **A**nalyses

Phase 3: **I**nfluence the right decisions



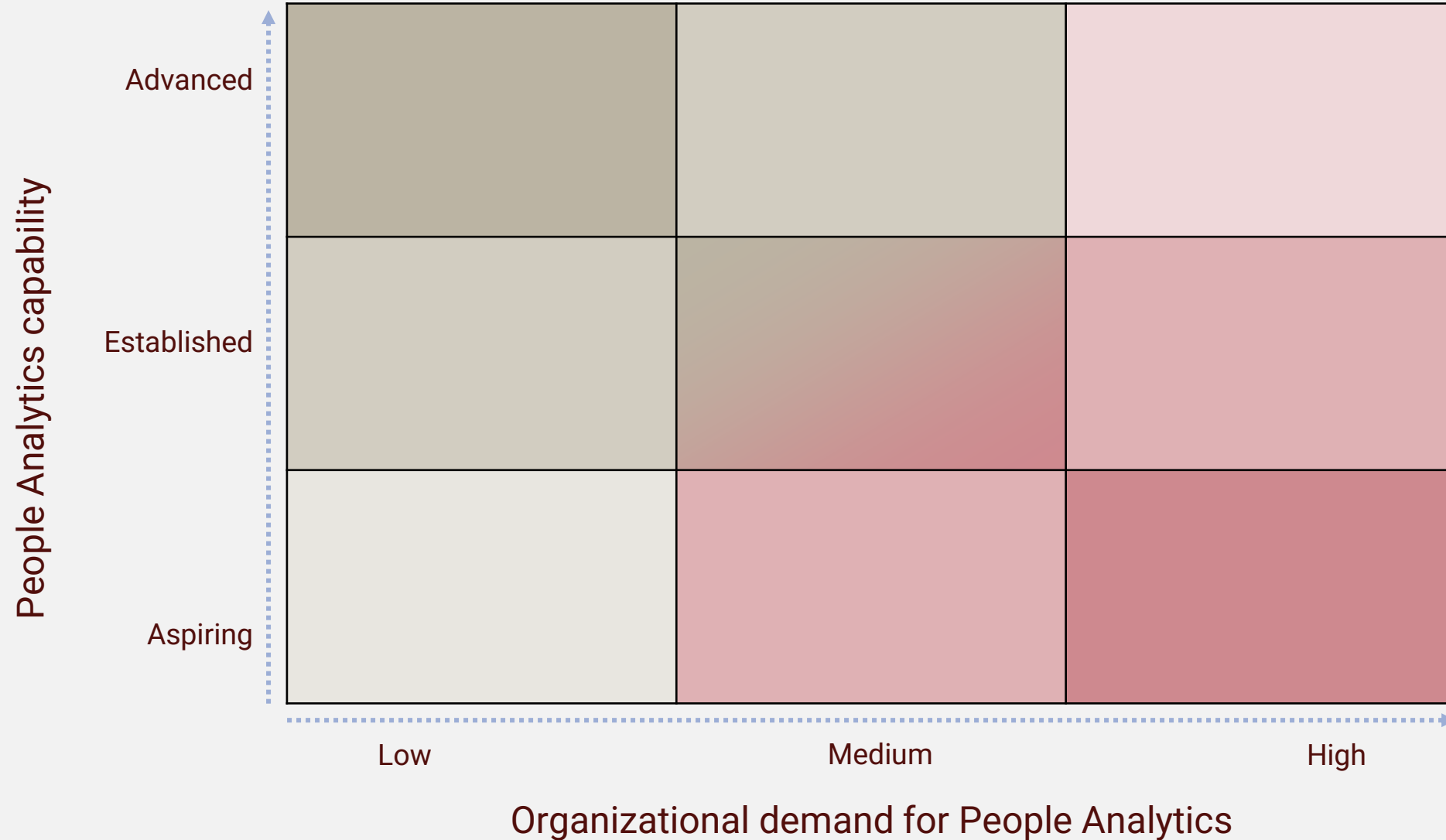
Push & Pull

Push factors

- Relevant proper knowledge, skills, abilities, and other characteristics (KSAOs)
- Data quality procedures and processes in place
- Ability to partner with the business.

Pull factors

- Analytical Requests Derived From the Digitalization of Business Processes
- Analytical and Data-Driven Culture

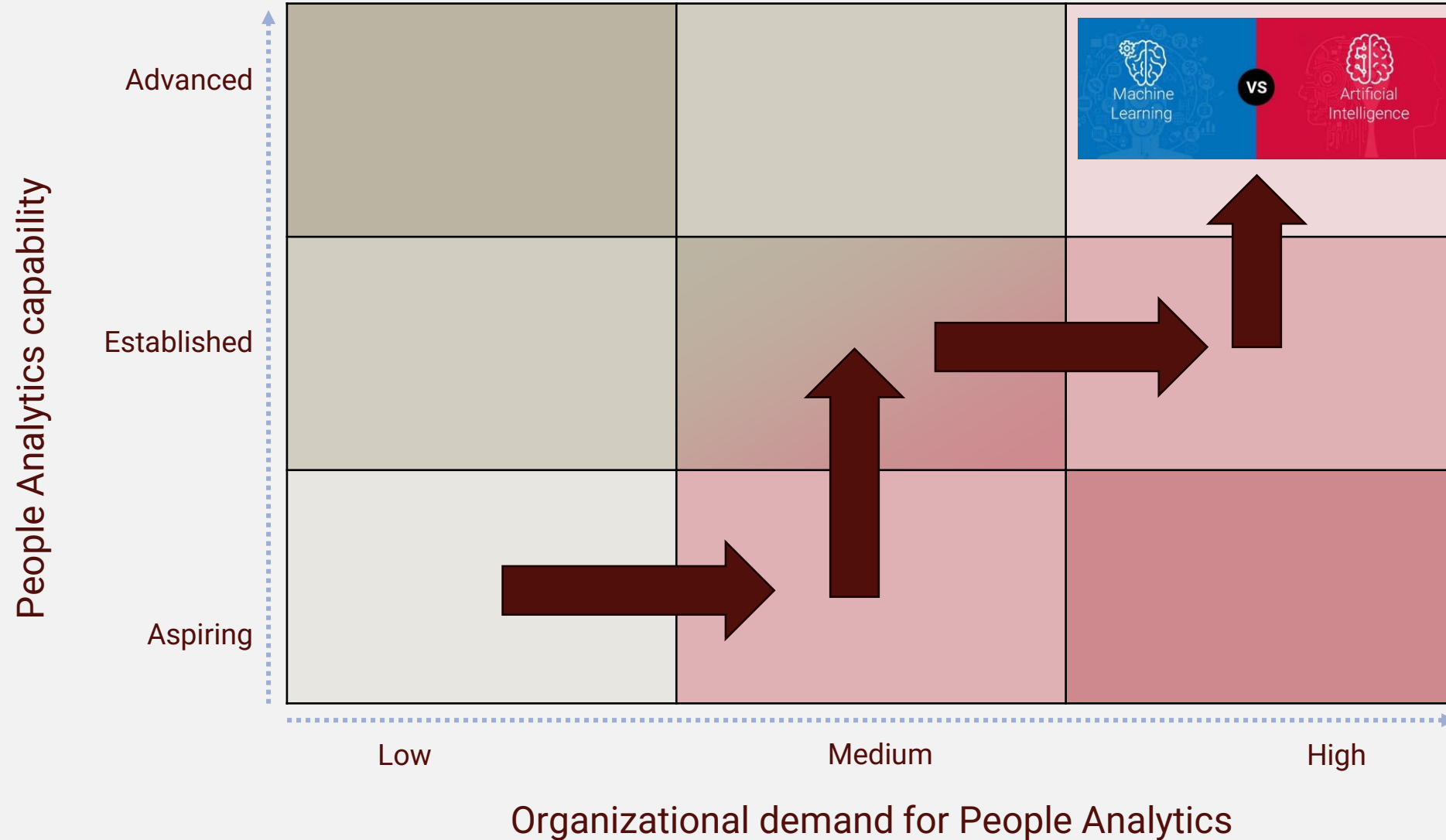


Levels of WA Capabilities

	Aspiring	Established	Advanced
Analytical Competencies:	Uses reporting tools via HCM interface, basic visualization skills. is an Excel superuser.	Enables trusted diagnostic reporting and delivers insights via dynamic BI tools.	Bespoke predictive analytics, produced with SPSS, Stata, R, Python, or similar software; open to experimentation with AI and ML.
Data Quality and Processes:	At best, uses clean and reliable data, typically from just a single source (e.g., HCM system).	Uses data from multiple sources, which are organized and transformed within a single environment, e.g., DW/SQL.	Uses structured and unstructured data from across business functions, with high-volume data processing tools.
Business Partnering Ability:	Delivers basic HR reporting leading to increased understanding. Limited decision-making impact.	Offers advanced insights to leaders and HRBPs that may guide some operational and tactical decision-making.	Influences business planning or HR strategy. Offers tactical sparring and hypothesizing about foreseen HRM issues.

Organizational Demand for WA

	Low	Medium	High
Analytical Requests Derived from the Digitalization of Business Processes:	Reporting figures (e.g., head count trends, hires, promotions, and exits), internal comparisons. Teams or functions review HR data	Linking HC KPIs to organizational priorities (e.g., time to hire). Linking HC practices to costs using external benchmarks, insights into employee experiences. Functions or BUs apply insights.	Knowledge about internal collaboration patterns and networks. Linking the root causes of HC issues to business outcomes. Forecasting, simulating HC impacts of business scenarios. BUs or enterprise adapt significant changes.
Analytical and Data-Driven Culture	Limited implementation of data and analytics for decision-making. Decisions based on personal experience rather than evidence. Reactional decision-making processes.	Functional or BU decisions based on data and analytics. Analytics focus on answering functional or unit challenges. Analytical and data-driven culture enacted by functional or BU leader.	Strategic business decisions encompass data from all facets of the organization. AI and ML outputs highly influence strategic decision-making and change management activities.



“BEING DIGITAL”

Digitalization is about the creation of *information-enriched customer solutions delivered as seamless, personalized customer experiences*



**Automation
&
Augmentation**



“DOING DIGITAL”

Digitization is about achieving operational excellence using the advances offered by digital technologies.

Workforce Analytics

HR and technology

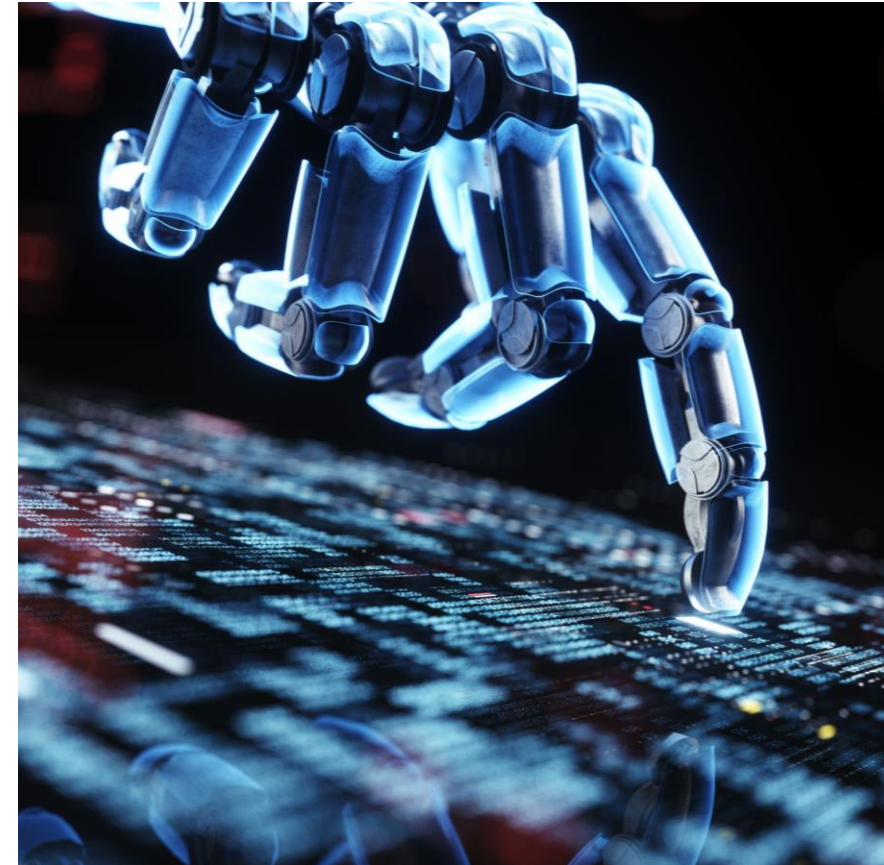
Automation vs augmentation





- AI-based automation is a choice driven by arguments regarding rationality and efficiency.
- Augmentation, on the other hand, is a co-evolutionary process during which humans learn from machines and machines learn from humans

There are paradoxical tensions between augmentation and automation

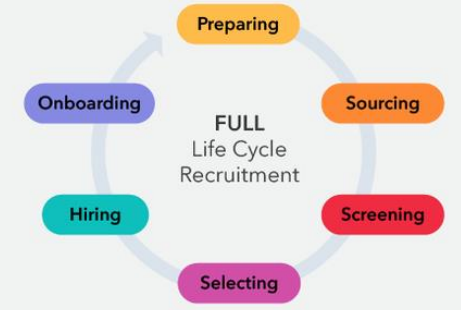
Overemphasizing one of the two will have negative organizational and societal outcomes.

With the arrival of digital technologies, focusing on individuals alone may be too limited.

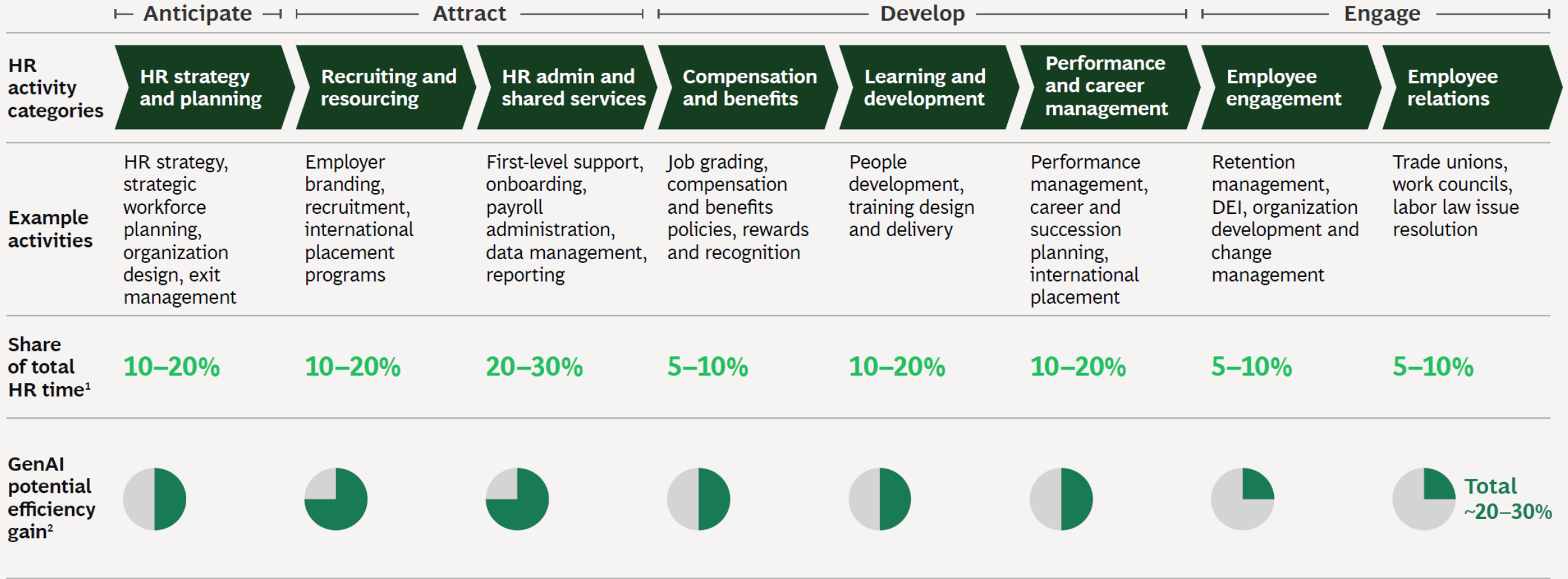


		“Content” (protocol development)	
		<i>Human</i>	<i>Technology</i>
“Decision” (action selection)	<i>Human</i>	“Business as usual” 	Augmentation (with augmenting technologies) 
	<i>Technology</i>	Augmentation (with arresting technologies) 	Pure automation 

Full Cycle Recruiting Process



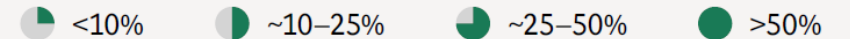
HR transformation | GenAI has the potential to drive about 30% increased productivity across the HR value chain in the near term



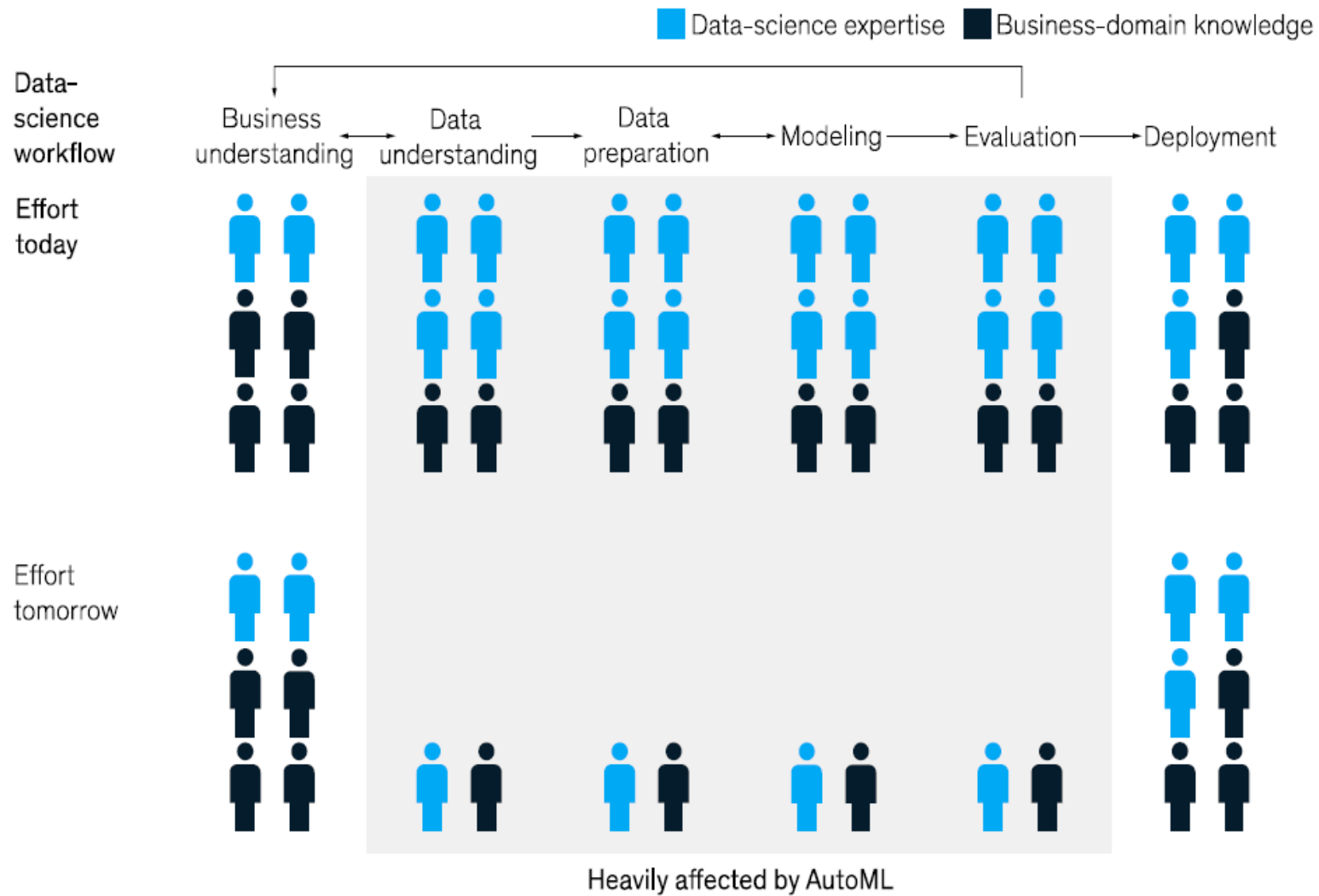
Source: BCG analysis.

Note: DEI = diversity, equity, and inclusion.

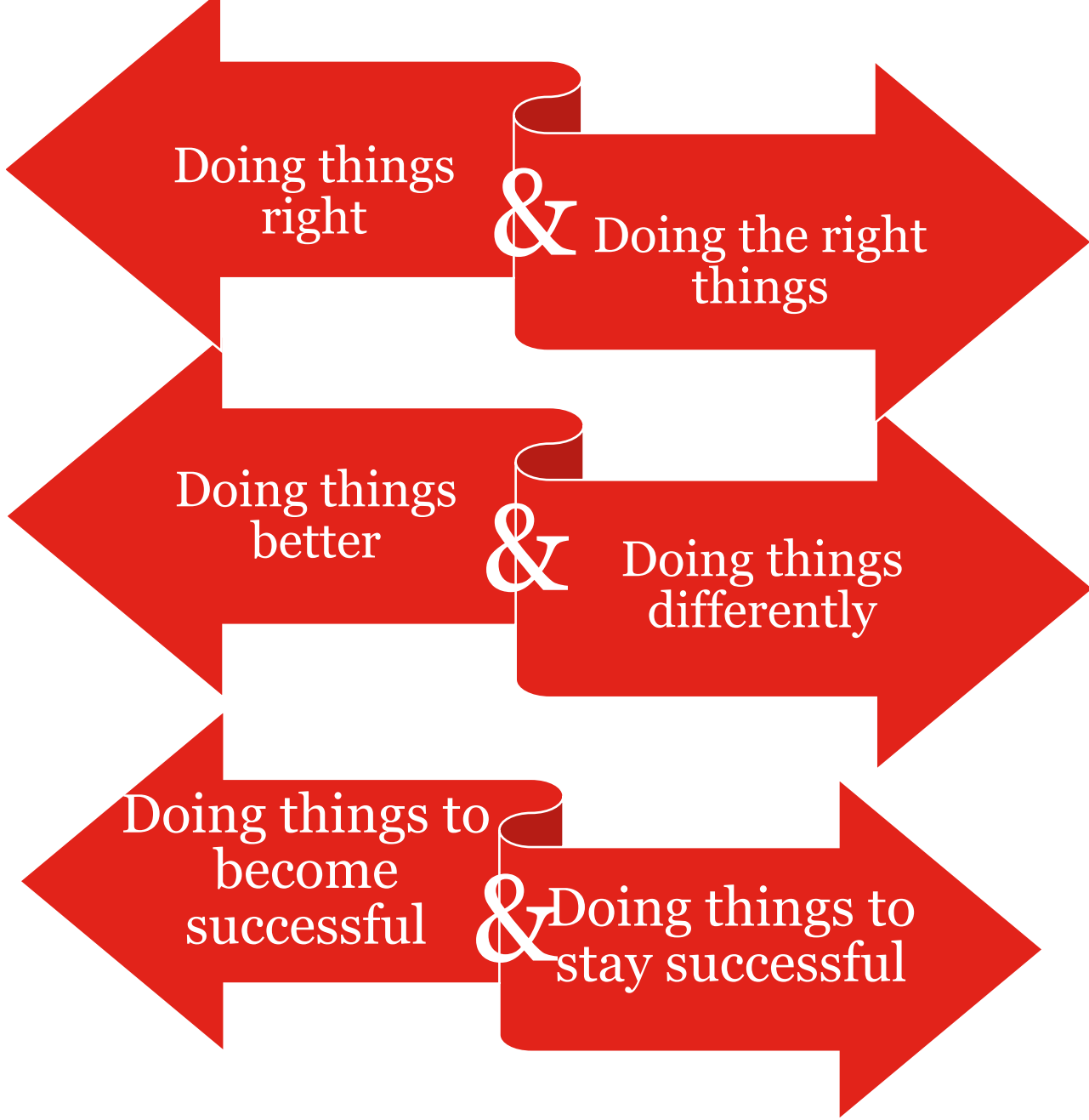
¹Estimates based on BCG’s support function benchmarking data for the past five years (June 2023). ²Estimates based on potential efficiency gains from automation of processes addressed by GenAI tools, on the basis of the anticipated maturity of GenAI tools in the next 6 to 12 months; average figures, subject to variation depending on industry and company specifics including degree of current digitization and where activities occur today.



AutoML changes the mix of talent needed.



Value capture
Decreasing the cost of human capital



Value creation
Increase human capital value in use

Disrupted HR?

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ABSTRACT

In this paper, I discuss possible avenues for future research aimed at bridging the research-practice gap on the topic of disruptions in human resources (HR). I focus on three global mega-trends—the flexible workforce, the digitalization of business models, and artificial intelligence and machine learning—and examine their influence on the field of human resource management (HRM) in general and in the context of the COVID-19 pandemic. I discuss why HRM research has overlooked potential paradigm-shifting possibilities that could ultimately equip HR practitioners with the knowledge needed to respond to disruptions caused by these mega-trends.

1. Introduction

"Disruption"—the *Cambridge Dictionary* defines it as "an interruption in the usual way that a system, process, or event works," and as something that prevents the system, process, or event, from "continuing as usual or as expected" (*Cambridge Dictionary, 2020*). Numerous consultancy reports warn human resources (HR) professionals about the need to deal with disruptions, such as the digital revolution, automation, artificial intelligence (AI), and the like. In fact, the term "future of work" entered the HR vocabulary to capture the uncertainty and ambiguity surrounding changes in work, the workforce, and the workplace that must take place to close the gaps between technological advancements and employees' current skills. Within organizations, leaders are preoccupied with business transformations and demand support from HR in making those transformations happen. In 2017, Deloitte's *Global Human Capital Trends* report provided the results of a survey of more than 10,000 HR and business leaders, which confirmed that these demands are viewed as reasonable and that HR has a unique role to play in closing the gaps among technology, individuals, businesses, society, and governments (Deloitte, 2017; see Fig. 2 in the report). The report argues that all HR needs to do is rewrite its own rules. Three years and thousands of failed business transformations later, HR professionals still do not know which rules should be rewritten and why. What are the disrupters? What is being disrupted? Why should HR professionals pay attention and rewrite the rules?

In their search for answers to these questions, HR professionals turn to researchers in the field of human resource management (HRM)—researchers who study the processes of "developing, applying and evaluating policies, procedures, methods and programs relating to the individual in the organization" (Miner & Crane, 1996: 5). Unfortunately, as a research field, HRM has more questions than answers, as demonstrated by the numerous calls for special issues on the topics of disruption, transformation, and "future of work" in the leading HR-related journals (see, e.g., the calls for papers for *Human Resource Management* special issues on "Strategic Human Resource Management in the Era of Environmental Disruptions" and "The Ecosystem of Work and Organization: Theoretical Frameworks and Future Directions"). The research-practice gap on the topic of disruptions in HR is wide and broadening (Deardrick & Gibson, 2009; DeNisi, Wilson, & Bltman, 2014).

This paper aims to identify possible avenues for future research with the aim of bridging the research-practice gap on the topic of disruptions in HR. In contrast to previous attempts (Deardrick & Gibson, 2007), my starting point lies in the practice space. Specifically,

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This is a chapter from the forthcoming book
"WORKFORCE ANALYTICS: A GLOBAL PERSPECTIVE"
 edited by Martin Edwards, Mark Huselid, Alec Levenson and Dana Minbaeva.

Chapter 7

Building the Workforce Analytics Function

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