Digital in MedTech: Opportunities and challenges

September 2022

MEDTECH MEETS DIGITAL

Six key building blocks of digital

BUSINESS STRATEGY DRIVEN BY DIGITAL

DIGITIZE THE CORE

- Customer offer & Go-to-Market
- Operations
- Support functions

NEW DIGITAL GROWTH

CHANGING WAYS OF WORKING

LEVERAGING THE POWER OF DATA & TECHNOLOGY

INTEGRATING ECOSYSTEMS

Source: BCG Digital Acceleration Index (DAI)

"Digital" covers 6 building blocks with 36 dimensions

BUSINESS STRATEGY DRIVEN BY DIGITAL

- Vision
- Ambition
- Priorities & alignment
- Roadmap

DIGITIZE THE CORE

Customer offer & Go-to-market

- Research & product development
- Digital marketing
- Personalization
- Next-generation sales
- Digitally driven pricing

Operations

- E2E customer journeys
- Manufacturing (I4.0/ICO)[1]
- Smart hospital[2]
- Digital supply chain
- Procurement
- Service operations

Support functions

- Corporate center
- Shared services & centers of excellence
- Customer services

NEW DIGITAL GROWTH

- New digital services/products
- Degree of digital disruption
- Lighthouses & prototyping
- Start-up incubation, VC, M&A

CHANGING WAYS OF WORKING

- Leadership & culture
- Organization & governance
- Skills & people
- Agile@Scale
- Digital transformation accelerator

LEVERAGING THE POWER OF DATA & TECHNOLOGY

- Data strategy
- Data governance
- Artificial intelligence
- Digital & data platforms
- World Class Tech Function
- Digital delivery (DevOps)
- Internet of things
- Cybersecurity

INTEGRATING ECOSYSTEMS

- Digital ecosystem go to market
- Digital ecosystem operating model

1. Only applicable to Pharma & MedTech; 2. Only applicable to Provider
Note: I4.0 = Industry 4.0; ICO = BCG's Innovation Center for Operations; VC = venture capital; M&A = mergers and acquisitions; E2E = end to end
Source: DAI@HC Study 2019

Digitization with double digit EBITDA uplift potential in MedTech

Positive impact of digital lever (exemplary case experience)

Digital lever	Topline	Bottom line (margin improvement)
Digitize the core		
R&D, e.g., trial endpoint selection	Faster time to market and better product fit	~ 5-7 pp reduced R&D cost
OPS, e.g., logistics cost & inventory optimization	Better match supply and demand, faster order fullfillment	~ 2-4 pp; add. upside procurement cost savings
Commercial, e.g., next generation sales, digital marketing	~ 2-3 pp additional growth	~ 3-5 pp due to higher productivity/cost savings
Support functions	Higher customer loyalty; NPS improvements of 10-15%	~ 1-2 pp cost savings (20-30% of support functions cost)
New digital growth	New digital business	Digital business models with attractive margins, but initial invest required

Also increasing external pressure to digitize MedTech

Increasing demand form regulatory agencies for data, traceability, supply chain certainty, sustainability,...

Case in point MDR

MDD	MDR
20 articles	123 articles
60 pages	175 pages
12 annexes	17 annexes
Directive	Regulation
Primarily product based	Entire lifetime and lifecycle of the product

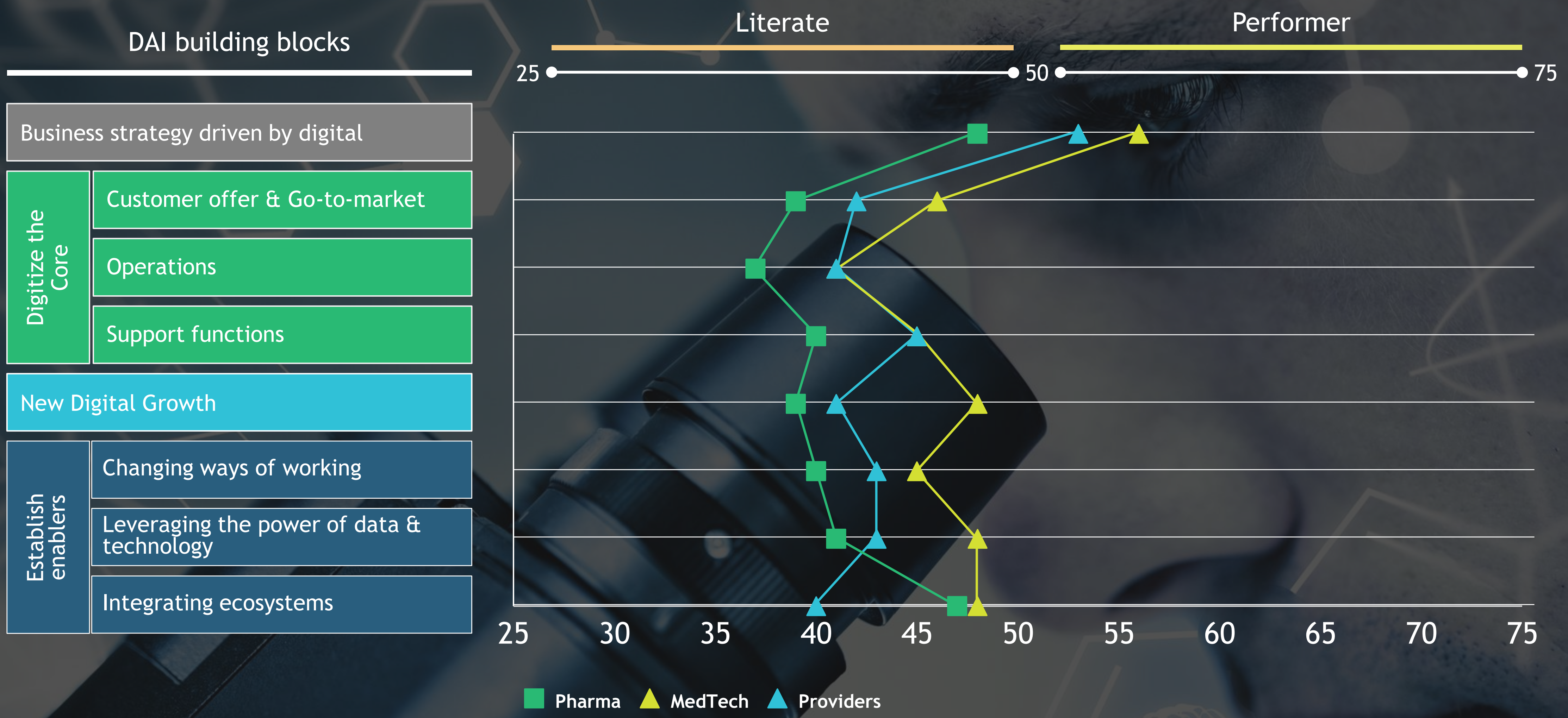
Yet, Healthcare shows overall at most medium Digital maturity

Industries/Sectors

CG	Consumer & Retail	HC	Health care	PS	Public sector
EN	Energy	IG	Industrial goods	TC	Technology
FI	Financial Institutions	IN	Insurance	TE	Telecommunication

Source: BCG Digital Acceleration Index (DAI) - Global Study 2022

Within Healthcare MedTech clearly leading the pack



Source: DAI@HC Study 2019

COVID accelerated digitalization but still huge difference between industries, amongst which Healthcare shows largest boost

Global sample

DAI score		2019	2020	2021	2022	Δ
Asia		53	55	59	62	+9
Europe		50	51	54	56	+6
US		50	49	54	55	+5

Asia increases advantage vs EU/US

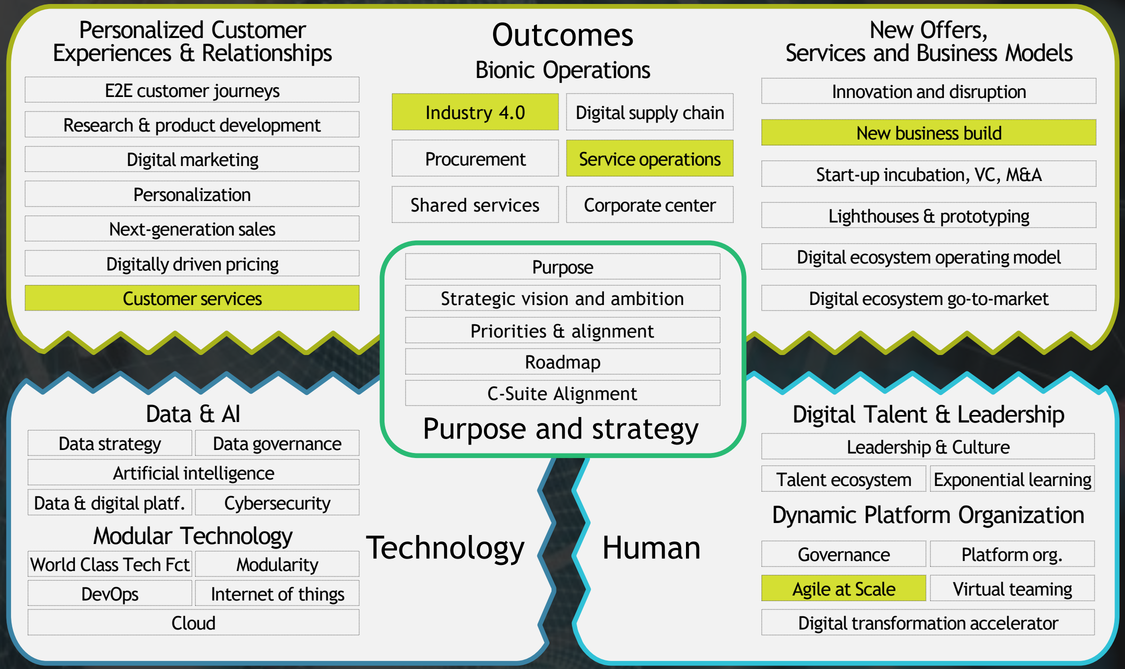
DAI score	2019	2022	Δ
Consumer	47	60	+13
Healthcare	45	57	+12
Technology	55	64	+9
Energy	47	54	+7
Insurance	48	55	+7
Telecommunication	55	61	+6
Public sector & NGO	45	50	+5
Industrial Goods	53	58	+5
Financial Institutions	57	61	+4

Consumer with largest boost since 2019

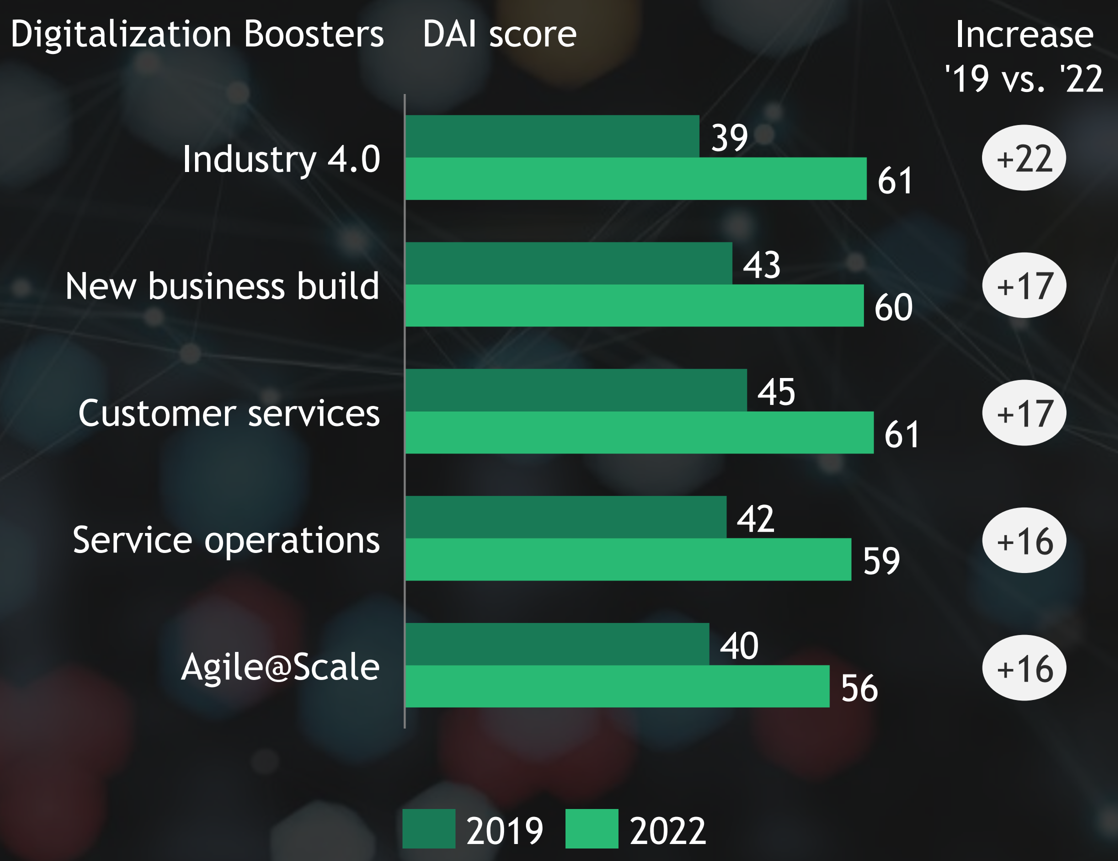
Digitalization in Healthcare industry mainly driven by boosting Outcomes

Healthcare sample

42 DAI dimensions

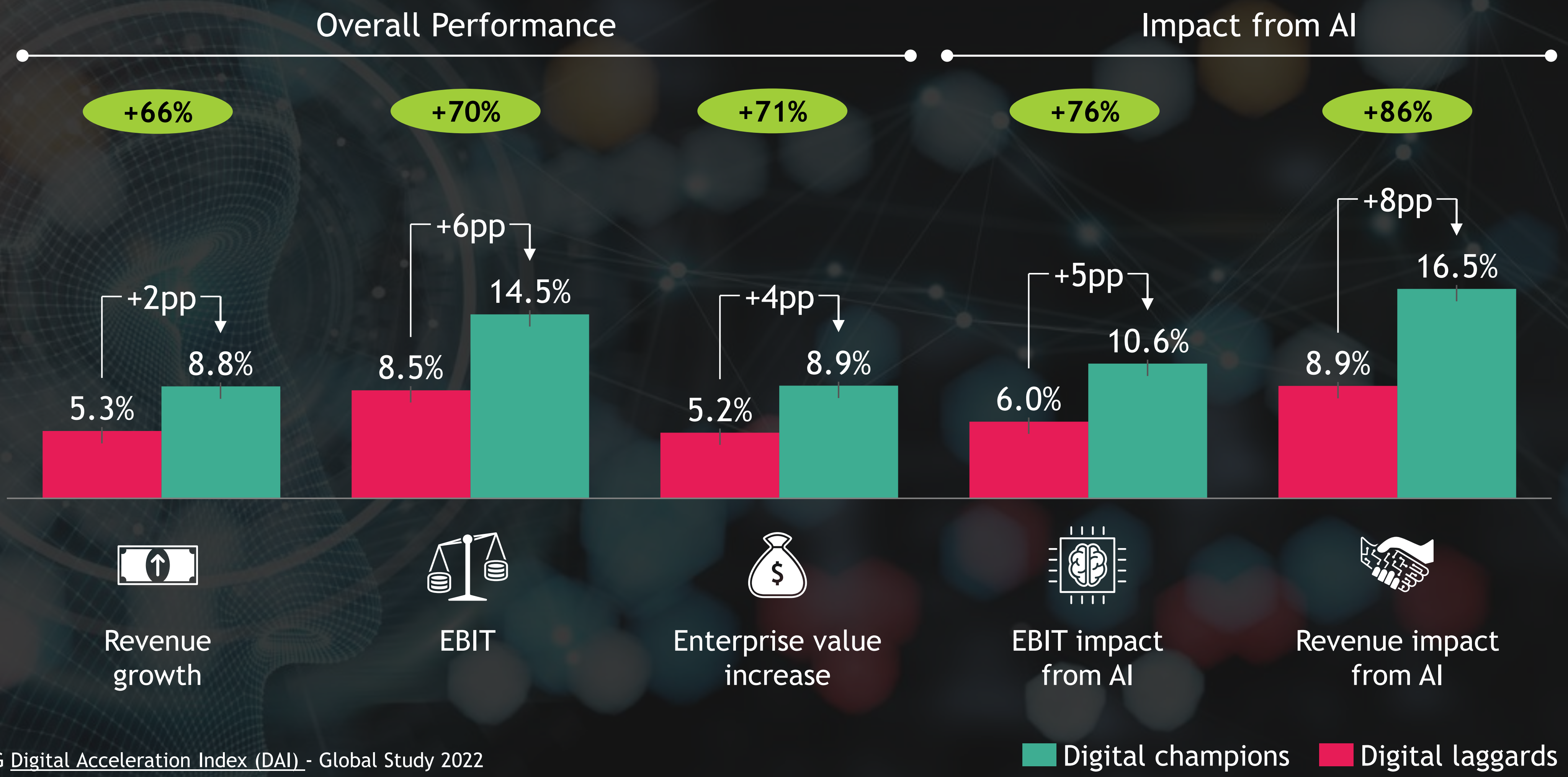


Top 5 dimensions driving digitalization in Healthcare



In Healthcare, Digital champions outperform laggards along common KPIs

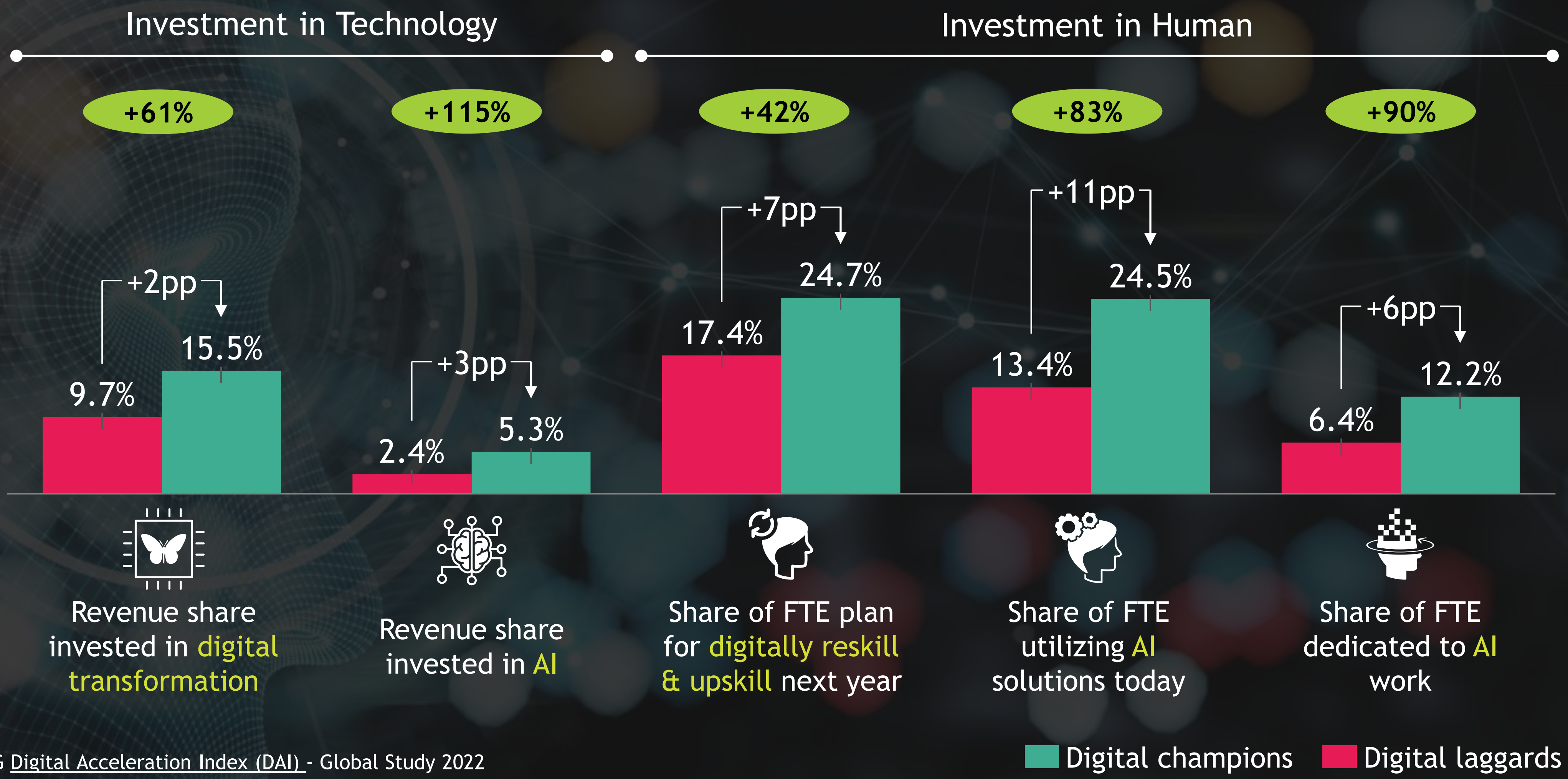
Healthcare sample



Source: BCG Digital Acceleration Index (DAI) - Global Study 2022

In Healthcare, Digital champions invest more significantly in tech and human than laggards

Healthcare sample



Source: BCG Digital Acceleration Index (DAI) - Global Study 2022

In past years, four company archetypes emerged

Global sample

Digital Maturity

Laggards — (Bottom 25% of sample)

Digital Champions — (Top 25% of sample)

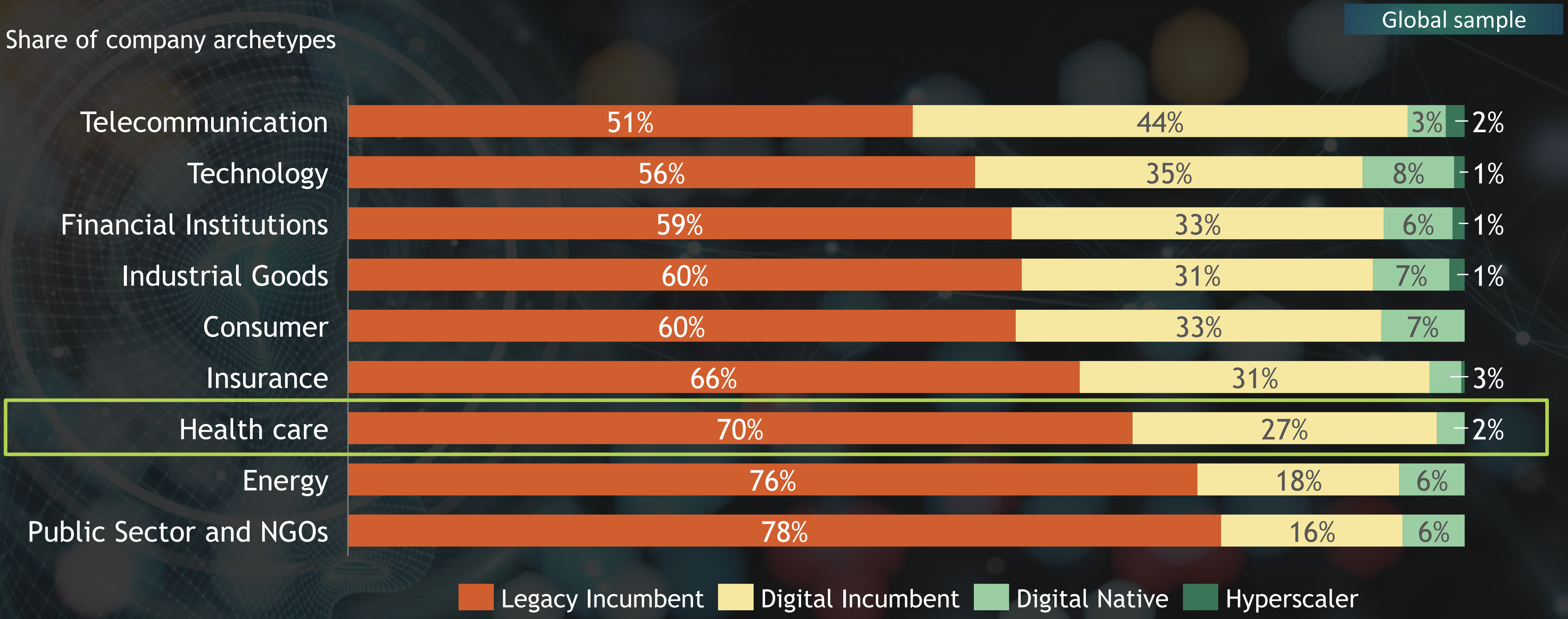
Company Archetypes

	Legacy incumbents	Digital incumbents	Digital Natives	Hyperscalers
Company Archetypes	Traditional companies that did not yet digitally transform	Traditional companies that successfully digitally transformed	Companies "born digital"	Few, very large digital natives
Share of sample	64%	30%	5,6%	0,7%

Source: BCG Digital Acceleration Index (DAI) - Global Study 2022; in alignment with DSR research on company archetypes

Healthcare falling behind; more than 2/3 of companies not yet went through successful digital transformation (legacy incumbents)

Share of company archetypes



Source: BCG Digital Acceleration Index (DAI)-Global Study 2022

Common pitfalls in digital transformations

Value proof

- Limited view on value
- Insufficient ExCo sponsor support
- “POC machines”: too many isolated initiatives; not industrialized
- Lack of e2e vision vs. use case focused based on problem of today, e.g., regulatory changes

Data governance

- Lack of visibility on data (what & where)
- Difficulty to collect sufficient data
- Limited business ownership of data
- Under-investment in data quality and standardization

Digital Platforms

- Multiplication of tech. POCs
- High reliance on IT vendors
- Fear of impact on legacy systems
- Limited deployment of agile project management
- Lack of human-centered design and customer acquisition

People

- Skills fragmented across organization
- Unclear ops model (how many, where in the org, etc.)
- Difficulties to attract and retain critical talents (e.g., no clear career path)
- No methodology for multi-disciplinary work

Change management

- Limited level of understanding across org
- Impacts on process & ways of working not anticipated
- Limited efforts on trainings and adoption
- Lack of platform for new business growth

Outcomes (Value proof)

Technology (Data governance, Digital Platforms)

Human (People, Change management)

Top performers apply four boosters in their digital transformation

1. Revenue focus

New digital offerings generate >10% of revenue

61% 33%

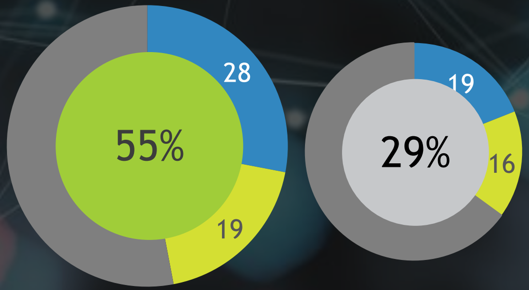
2. Scaling up digital

Scaling from digital pilots to E2E digital solutions

33% 7%

3. Technology investment

Investment of >15% OPEX mainly in tech in digital



4. Dedication to people

>15% of staff have digital profiles and work in digital

44% 23%

Outcomes **Technology** **Human**

% applying booster Top performers Laggards

% of digital spend Tech Data Others²

Source: Global DAI study 2019/2020

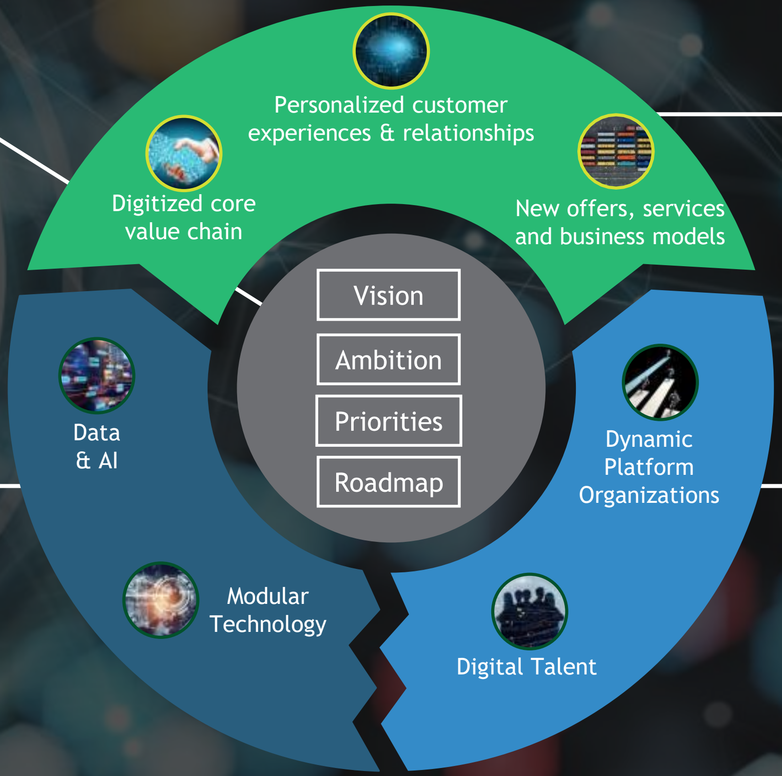
The company of the future is bionic – focusing on outcomes and closely integrating technology & human aspects

Strategy

Define a vision and overall business strategy

Technology

Build foundational data, digital and analytical platforms and ecosystems



Outcomes

Prototype, incubate and scale digital use cases to realize value

Human

Address gaps in talent, capabilities and business processes

Source: AI@Scale

Roadmap to digital transformation

1 day | ~ 8-12 weeks | Typically, 18-24 months

Day 0
Introduce and align on key elements of trans-formation

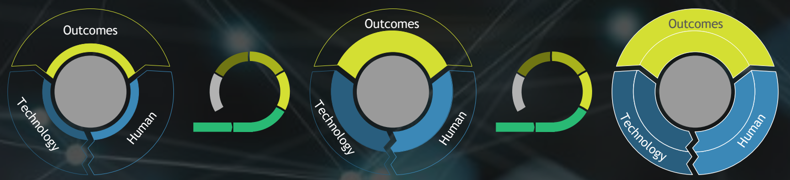
Set the vision

- Align on overall strategy & aspiration
- Assess technology and human starting point
- Ideate and prioritize use cases (Value / Speed)
- Define holistic roadmap

Sprint to value generation

Build and deploy solutions

Prototype | Incubate | Scale



Build the foundation

Tech
- Data platform & architecture
- Digital ecosystem

Human
- Talent & capabilities
- Organization & operating model

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