

Building massive data platforms: lessons and challenges

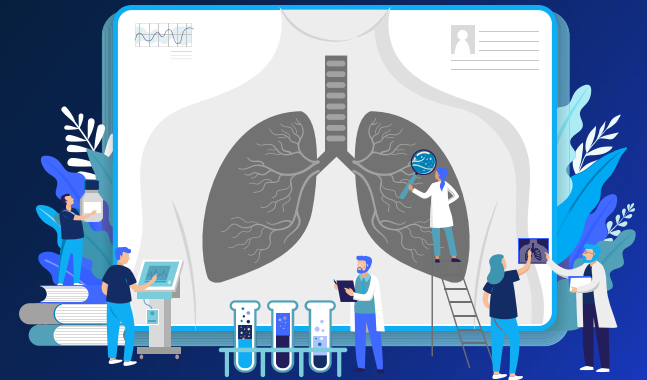
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 Healthcare Analytics
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Stepping back on 3 scenarios we typically see

1

“Tech first”

2

“Forest of pilots”

3

Advancing use cases, data and tech together

Description

Investment in flagship upgrade to data/tech capabilities with aim of later expansion of data and digital solutions

Structured approach demonstrating proof of concept in individual use cases

System-wide effort driven by at scale value capture use case by use case, synchronized with data product roadmap and underpinning tech

Pros

- No-regret move in absence of foundational capabilities
- Key unlock for future value capture

- Capture low hanging fruits to realize value quickly
- Empowerment of local units

- Long-term plan guiding future strategic development and investments
- Roadmap based on value at stake, current state, and data/tech capabilities

Challenges

- Material upfront investments with unclear future roadmap
- Requires system-wide data standardization

- Risk of “pilot inflation” without scaling
- Challenges caused by fragmented and duplicated logic and data

- Requires material inhouse expertise and capabilities
- Comprehensive view of current state needed

Creating value with data and analytics requires use cases, data and tech to progress together

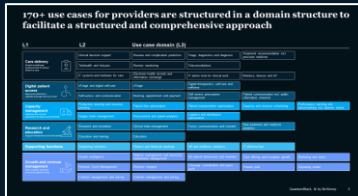
Based on scientific evidence and best practices

Tailored to individual organizations based on baseline and level of maturity

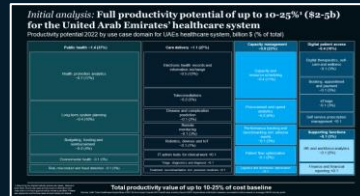
Use case



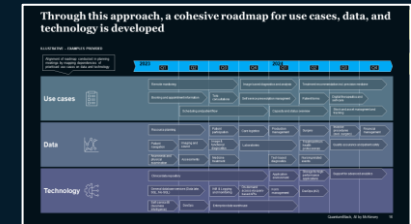
Use case library



Value at stake analysis



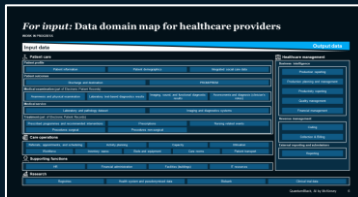
Value-based prioritization



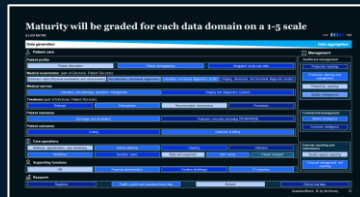
Data



Data product map



Maturity per data product



Gap analysis and prioritization of data products



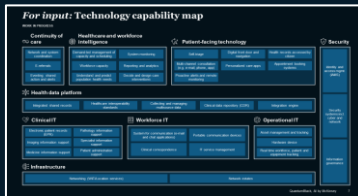
Synchronized roadmap for use cases, data, and technology

Unified taxonomy across units

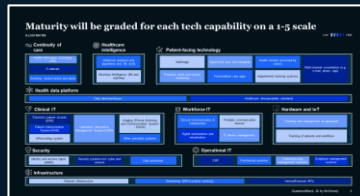
Tech



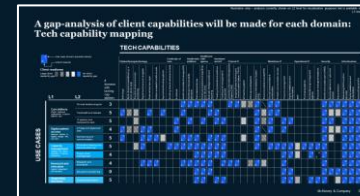
Tech capability map



Maturity per tech capability



Gap analysis and prioritization of tech capabilities



Typical process to establish synchronized roadmaps

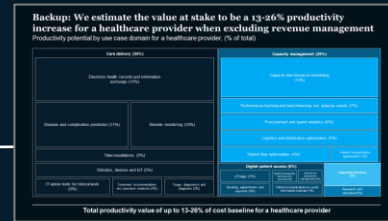
1. Agreed definition

Framework established across maps for use cases, data, and technology



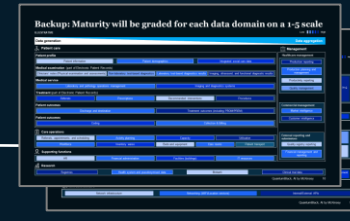
2. Value at stake calculation

Based on financial and clinical baselines and use case maturity



3. Data and tech maturity

Done in workshop and at scale surveys



6. Value-based prioritisation

Prioritisation of use cases, data products, and tech



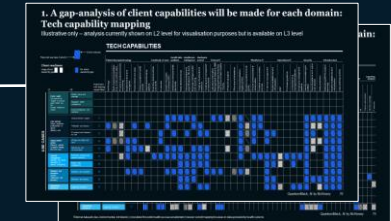
5. Establish resource constraints

Set teams/budget available to develop use cases and capabilities



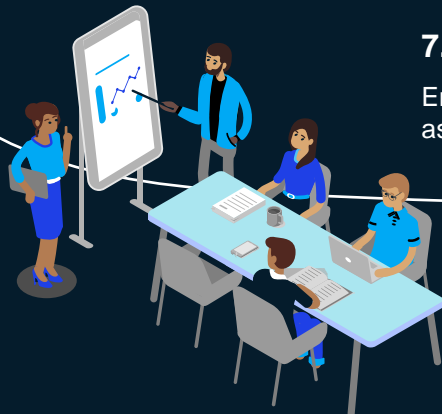
4. Capability gap in data and tech

Gap established for each intersection of use case against data and tech needs

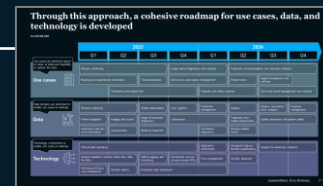


7. Agreement on the prioritization

Engaging main stakeholders on the choices and the associated trade-offs



Synchronised roadmap



Questions to consider before investing in data platforms

- 1 What use cases could be tackled? Who are the users? What does success look like? How much money and change management capital can be invested? How am I going to track success?
- 2 What tech/product/services already exist in the **broader ecosystem** to activate such use cases (e.g., augmenting existing channels to meet users where they are, or activating new use cases faster)?
- 3 What data is needed? What data products could/should be built? Where does the data exist in the ecosystem? Are there existing data products that could be used to train algorithms?
- 4 What is the plan to **govern this data ecosystem**? How could distinctive data products be created/deployed/used across different settings (e.g., clinical data for research)?
- 5 What is the tech most appropriate to enable my objectives?