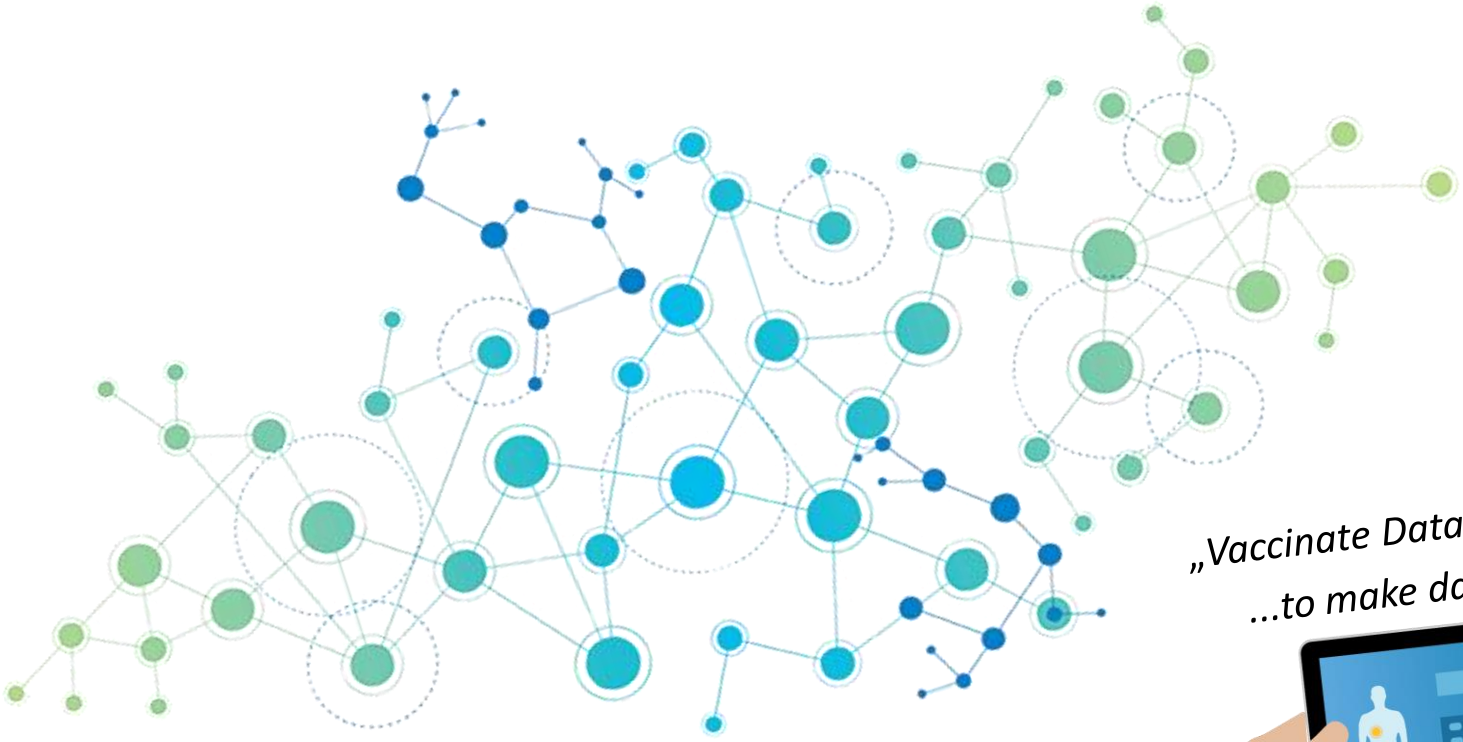
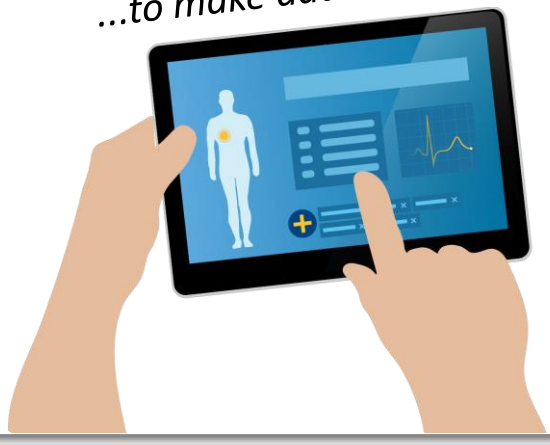
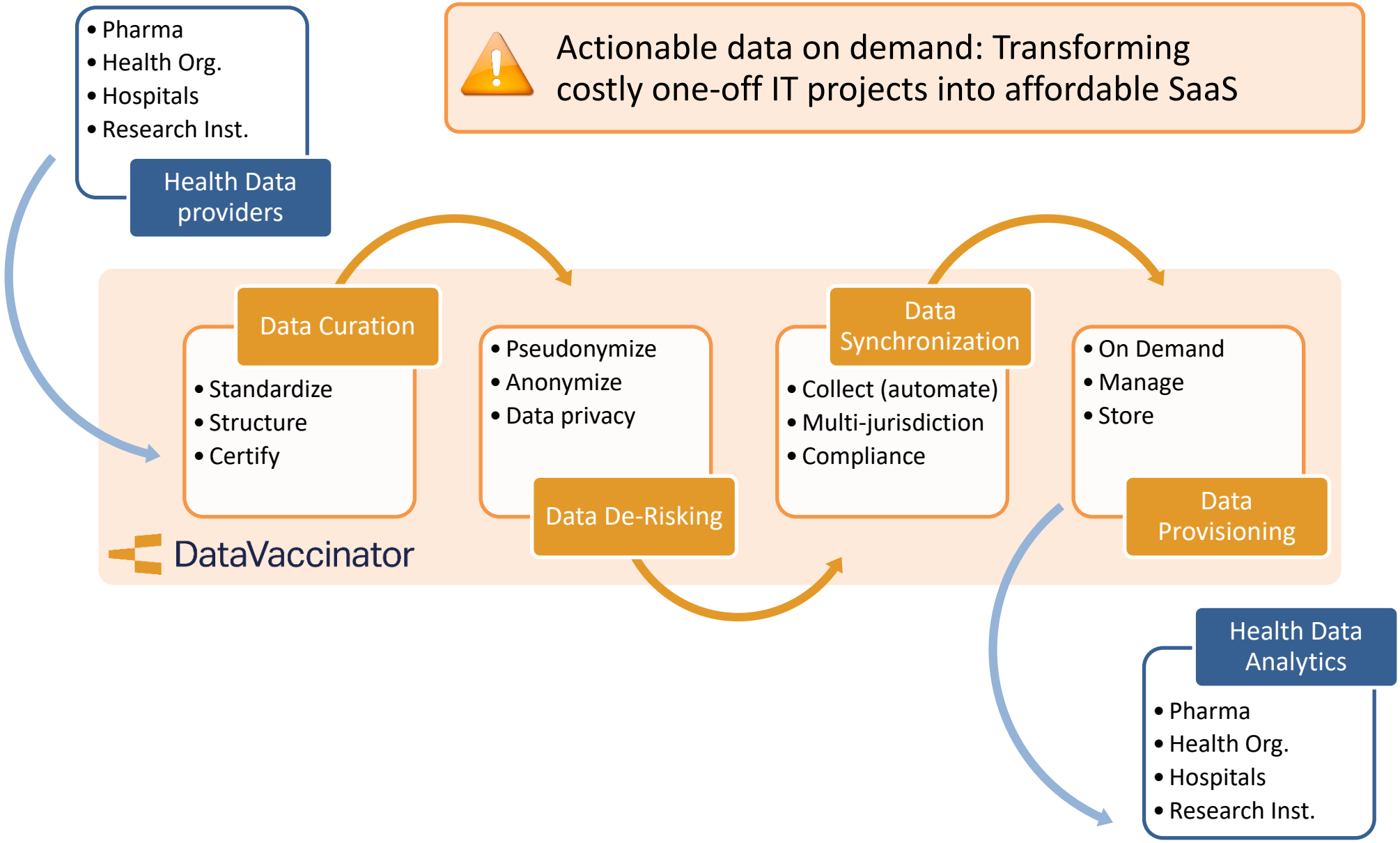
Healthcare Ecosystems Taking off Globally



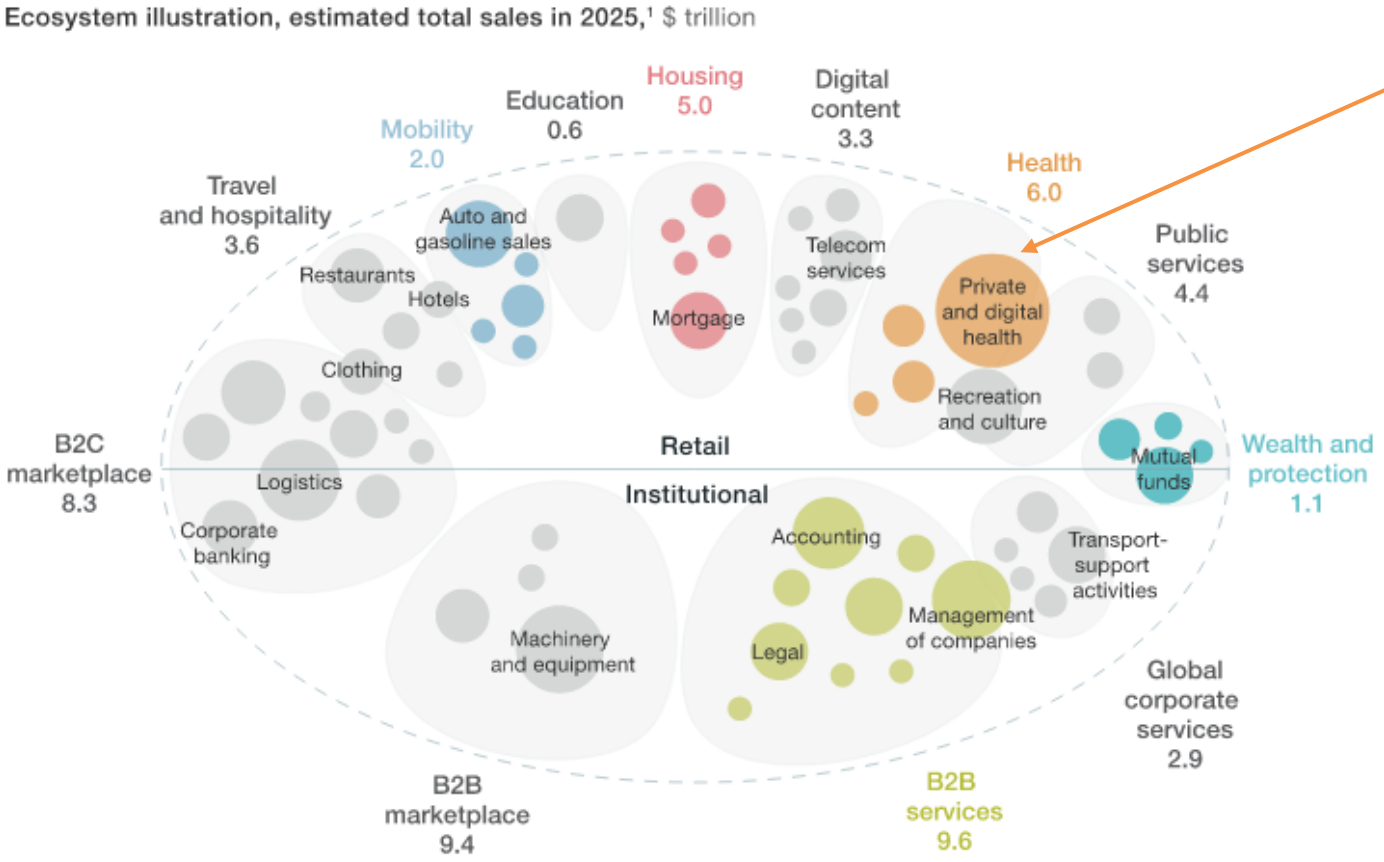
„Vaccinate Data against Abuse“
...to make data shareable



DataVaccinator - Making Healthcare Data Actionable



Healthcare Ecosystems – finally, read for take-off !



[1]Circle sizes show approximate revenue pool sizes. Additional ecosystems are expected to emerge in addition to those depicted; not all industries or subcategories are shown.

McKinsey&Company | **Source:** IHS World Industry Service; Panorama by McKinsey; McKinsey analysis

[New ecosystems, projections for 2025 (McK)]

Healthcare Ecosystems

Healthcare stakeholders interact with each other and exchange data to get better results, more efficiently.

Only through the self-controlled sharing of de-risked data, they can exploit the wealth of data (AI/ML) and collaboration opportunities.

3 trends driving „take-off“

- **Business**: risks on profitability
- **Legal**: sharing of de-risked data
- **Technology**: AI, ML, cloud tech

Healthcare Data – from Graveyard to Actionable Asset

Actionable Health Data desperately needed

- 80% of health data is not actionable, e.g. unstructured (forms, notes, images)
- Collaboration suffers from inadequate data and flows
- Higher data quality and availability on demand wanted!
    - Pharma must cut cost and time-to-market
    - Clinics need it for better care
    - All stakeholders will benefit, from insurers, CROs to individual patients

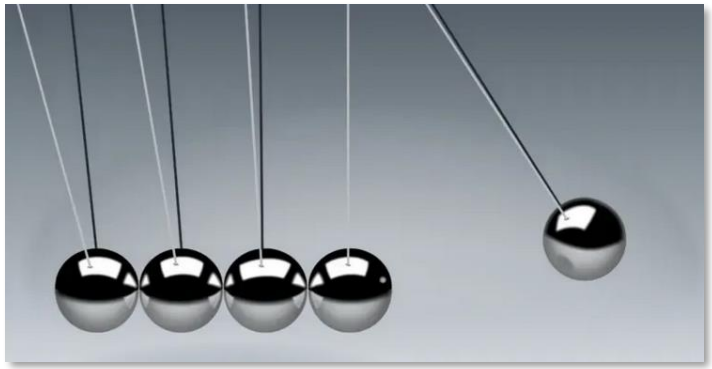


Figure: Data Graveyard (source: dataprivacymanager.net)

Why does Pharma invest so much in R&D ? …

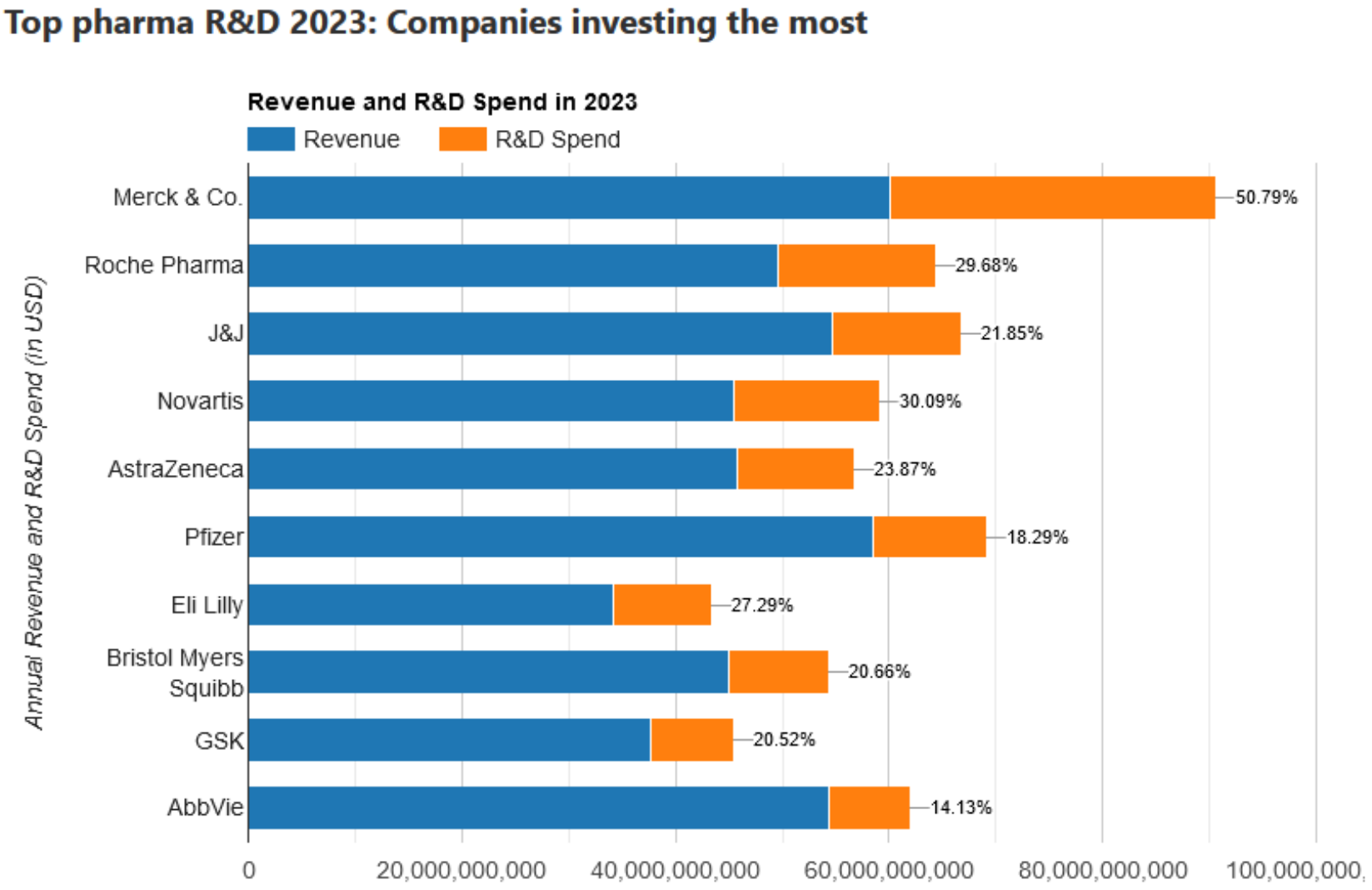
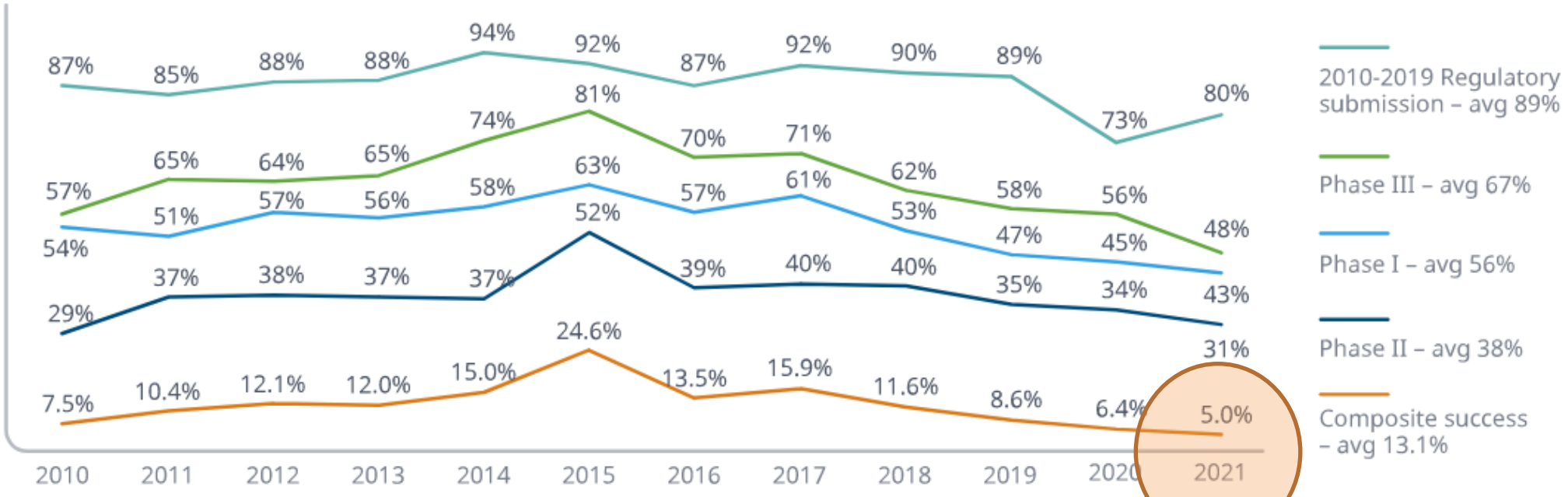


Figure: Top Pharma R&D 2023 (source: drugdiscoverytrends.com)

… and why does Pharma achieve so little ?



$$\text{Phase success \%} = \frac{\text{Success (drug reaches any higher phase)}}{\text{Total of success and failure}}$$

Composite success % = Phase I x Phase II x Phase III x Regulatory submissions

Source: IQVIA Dataset, Jan 2022.

Only 1 in 20 get approval at the end of a 7 year journey.

Pharma R&D needs “More Bang for the Buck”

The top 20 global pharma companies spent $139 billion on R&D in 2022, down 2% from 2021.

The average projected ROI from R&D fell to 1.2 per cent in 2022.

The average development time for a new drug (from starting clinical trials to approval) increased from 6.9 years in 2021 to 7.1 years.

Average cost of developing a new drug rose to $2.3 billion in 2022.

Average forecast peak sales per asset: $389m in 2022, down from $500m in 2021.

Source: Deloitte

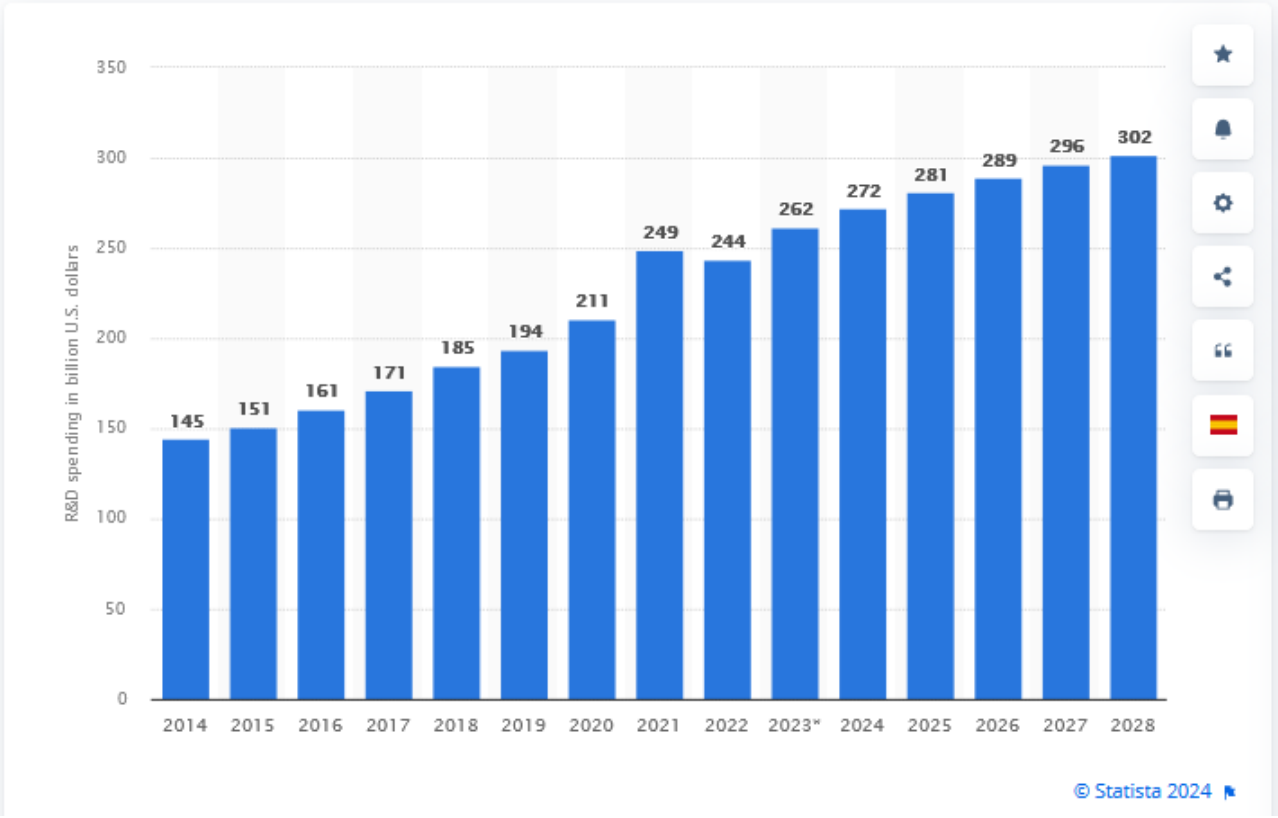
Financially stretched healthcare systems will not continue to absorb pharma’s costly R&D.

Pharma R&D will have to become more efficient and more effective.

Health Data Ecosystems – better Data, better Results

Total global spending on pharmaceutical research and development from 2014 to 2028

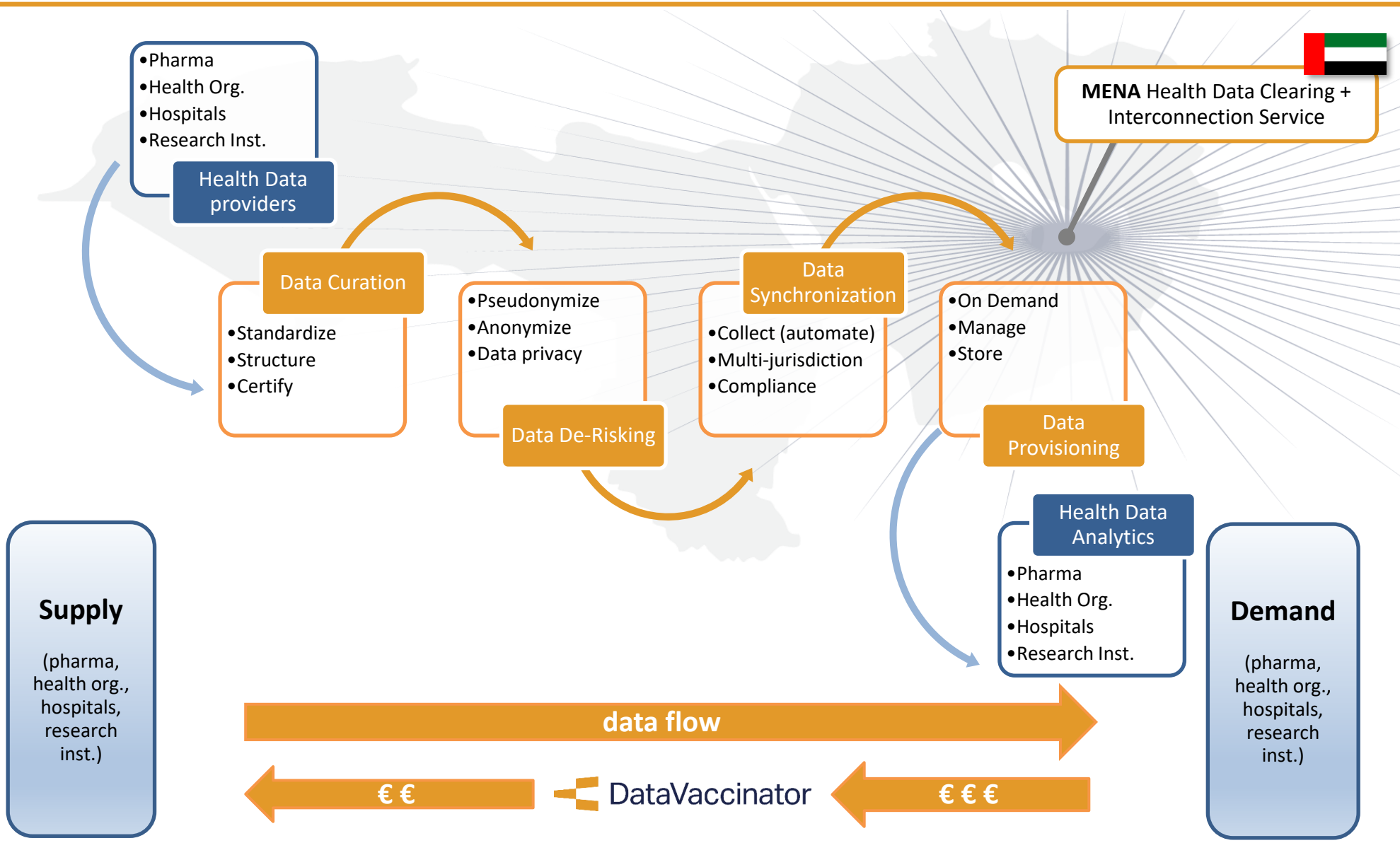
(in billion U.S. dollars)



Global Pharma R&D

- R&D spending at 16% of revenues (USD 1.6tn in 2023)
- Actionable Health Data can improve R&D effectiveness by some 20% (faster approval cycles, continuous optimization with actionable data, acceleration of drug dev.)
- **Pharma Net Benefits**
  - USD 60bn p.a. (20% of 300bn)
    - For pharma
    - For ecosystem partners, from clinics and CROs to insurers to enablers
  - Healthier patients

MENA Health Data Market with Clearing Service in UAE



Thank you.

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