The role of structural incentives in shaping the digital health market

Phase 1 Detailed Analysis
Overview of root causes of suboptimal market functioning in low digital health maturity contexts

1. Lack of authoritative, transparent market information leads to inaccurate budgeting, particularly relating to operating expenses, and mistrust among stakeholders.

2. Lack of equitable access to learning opportunities leads to talent gaps in governments and local organizations, resulting in long-term inability to operate systems.

3. Financing is too unreliable for global proprietary solution providers to design for low-maturity markets, nor for many global goods to achieve sustainable scale.

4. Structural incentives reward siloed, time-bound investments which frequently fail to capture the efficiencies of cross-cutting digital platforms, and can alienate end-users.
Overview of root causes of suboptimal market functioning in low digital health maturity contexts

1. Lack of authoritative, transparent market information
   “98% of colleagues still worry about cost-effectiveness and practicality… The case is still out on costs… no one knows what it costs to go to scale.”

2. Lack of equitable access to learning opportunities
   “[Global principles] are not percolating down to the people actually implementing on the ground… [Country implementer Y] was seeking purpose-built solutions and I walked her through… global goods… and the principles; [she] had never heard of them.”

3. Financing is too unreliable
   “I’m thinking of exiting global digital health.”
   -Three leaders of institutions supporting digital health tools– both global goods and proprietary- in anonymous conversations with Digital Square over the last three years

4. Structural incentives reward siloed, time-bound investments
   “A country digital health roadmap? No one has the mandate to drive this forward. [donor xx] focuses on [disease vertical yy]. ..[no one] is there to lead.”
Differing incentives create tensions between government and funder, within-funder, and within-government (I)

**Prioritize Choice or Sustainability**
- Wide variety of digital health solutions increases marketplace competition and choice
  - ...but leads to insufficient resources for individual solutions to reach scale
- Smaller number of solutions increases potential for economies of scale and financial sustainability
  - ...but results in platforms being asked to do more things than they can technically or programmatically support

**Fund One Disease Area or Many**
- Single disease program-funded solutions access larger budgets and satisfy donor program need to demonstrate impact on outcomes
  - ...but increase fragmentation and reduce interoperability and utility to broader health system
- Multi-program solutions facilitate greater national digital health coherence and interoperability
  - ...but reduce utility to specific health programs

**Go it Alone or Collaborate**
- For funders, the consequences for funding pilots that do not succeed are outweighed by the risks associated with big investments in goods requiring collaboration with multiple donors
  - ...but that leads to funding of many solutions with no path (or intention) to scale
- Being able to demonstrate co-funding may increase likelihood of gaining investment approval
  - ...but increases time for solution development and decrease individual donor ‘bragging rights’

Favors more fragmentation  Favors more consolidation
Differing incentives create tensions between government and funder, within-funder, and within-government (II)

**Prioritize Ownership or ROI**
- Country decision-makers prefer highly customized solutions, ideally from a local or internationally recognized vendor
- Technocratic decision-makers promote and push for the use of digital public goods
- ...but solutions can end up recreating what already exists, have high operating costs and struggle to exchange data with other systems
- ...but often against country preference, and by financing foreign companies to administer global goods

**Specialization or Generalist Software**
- Specialized software often meets user needs more effectively
- Generalist software can be easier to use
- ...but can increase cost (e.g. interoperability needs) and complexity
- ...but often struggles with reduced functionality and lower satisfaction

**Fund Innovation or Operation**
- Catalytic funding for solution development can jumpstart disruptive and innovative solutions
- Funding operating expenditures for solutions increases the potential for scale and sustainability of established solutions
- ...but they crowd the space with a larger number of solutions and drain resources from scaling
- ...but sometimes extends the life of outdated legacy systems

Favors more fragmentation  Favors more consolidation
So where do we go from here?

### Pragmatic next steps

- Learn from positive exemplars
- Disseminate pragmatic tools that help optimize in current context (e.g. donor checklist)
- Increase visibility on issues around sustainable financing for digital health through greater communication
- Build global alignment on the *value* of digital health
- Increase access to learning opportunities on digital health, and ensure equitable access

### Game-changing next steps

- Align on total cost, and total value, of digital transformation for health systems
- Restructure incentives for each of three long-term financers:
  - Governments and other demand aggregators (e.g. health insurance)
  - Philanthropic donors
  - Customers/out of pocket
- Establish appropriately designed financing and procurement mechanisms to scale the highest-value digital innovations
  - Through these and other mechanisms, improve transparency of and trust in digital health market information