

1. Introduction

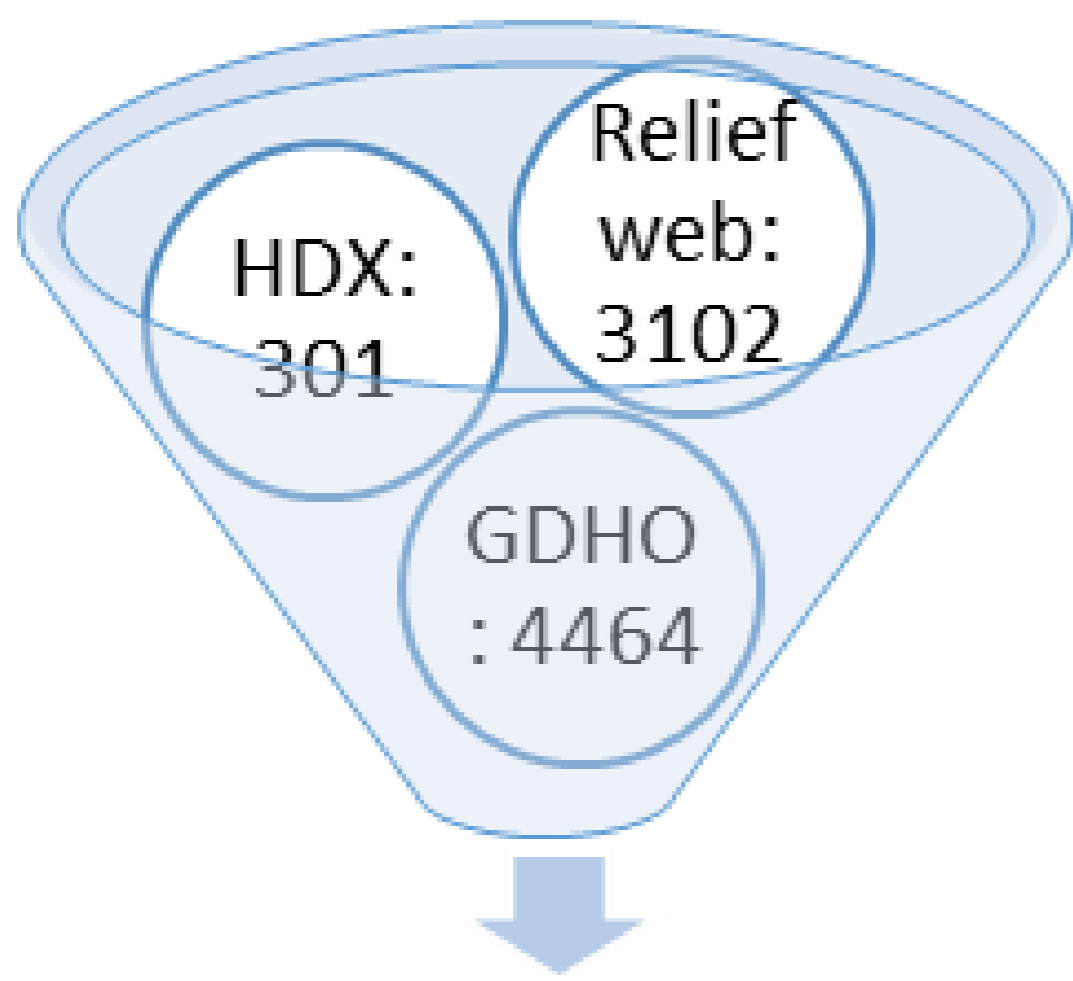
- ◆ 49% of humanitarian organisations (HOs) consider the sector is still ineffective. 60-80% of relief spending is on logistics, and 40% of logistical expenses are being wasted owing to a lack of analysis and duplication of efforts.
- ◆ To combat this, HOs are embracing digital innovations ranging from crisis maps to digital cash transfers and artificial intelligence to 3D printing, all of which rely on data and analytics.

2. Objective

- ◆ The purpose of this research is to better understand BDA adoption in HOs, what capabilities they require, how the adoption might operate and what impacts it will have.

3. Methodology

- ◆ Qualitative -> Purposive sampling



Shortlisted **198** organisations

LinkedIn profiles:
411, 456

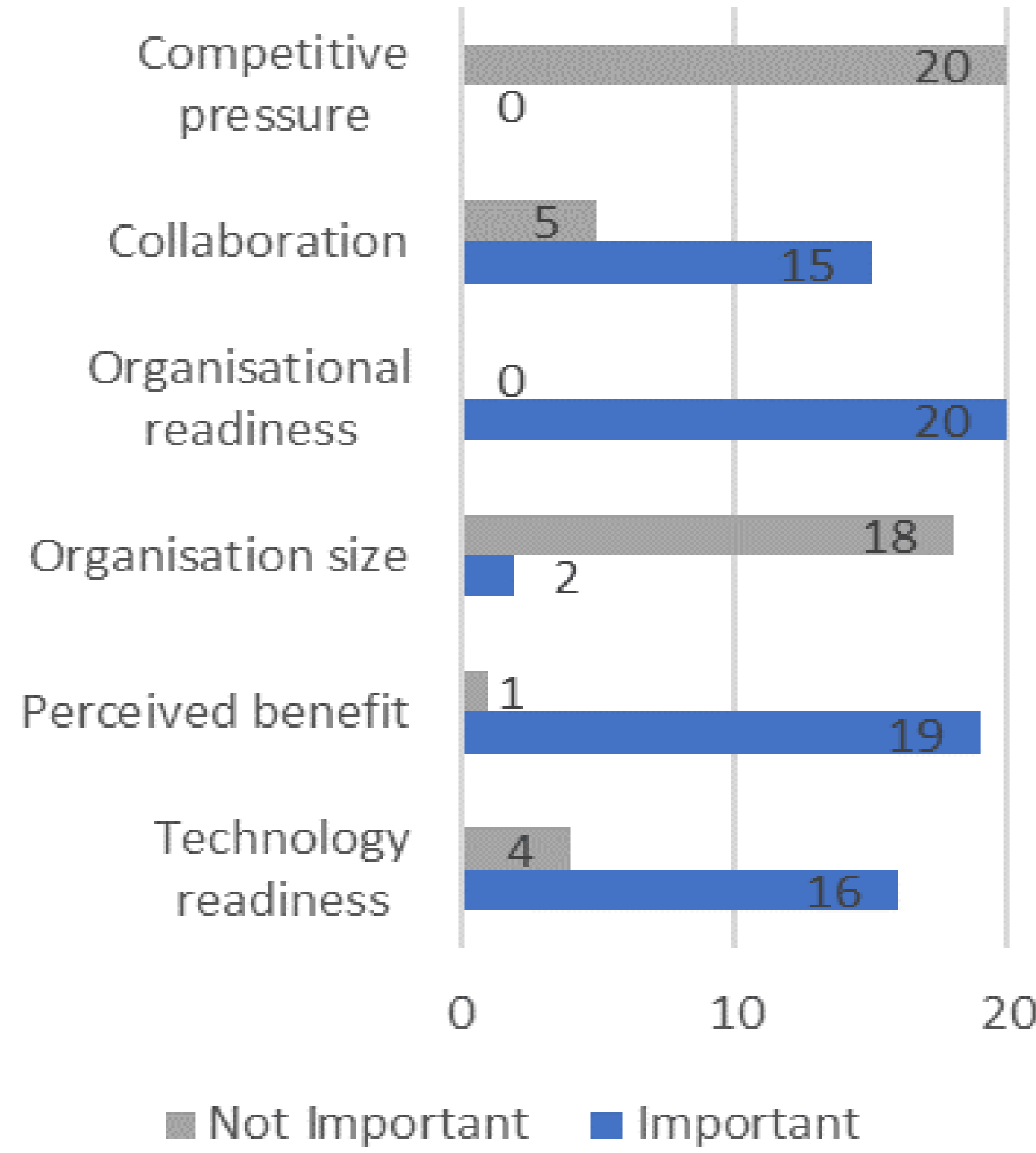
Scanned profiles:
106, 654

Approached **283** professionals

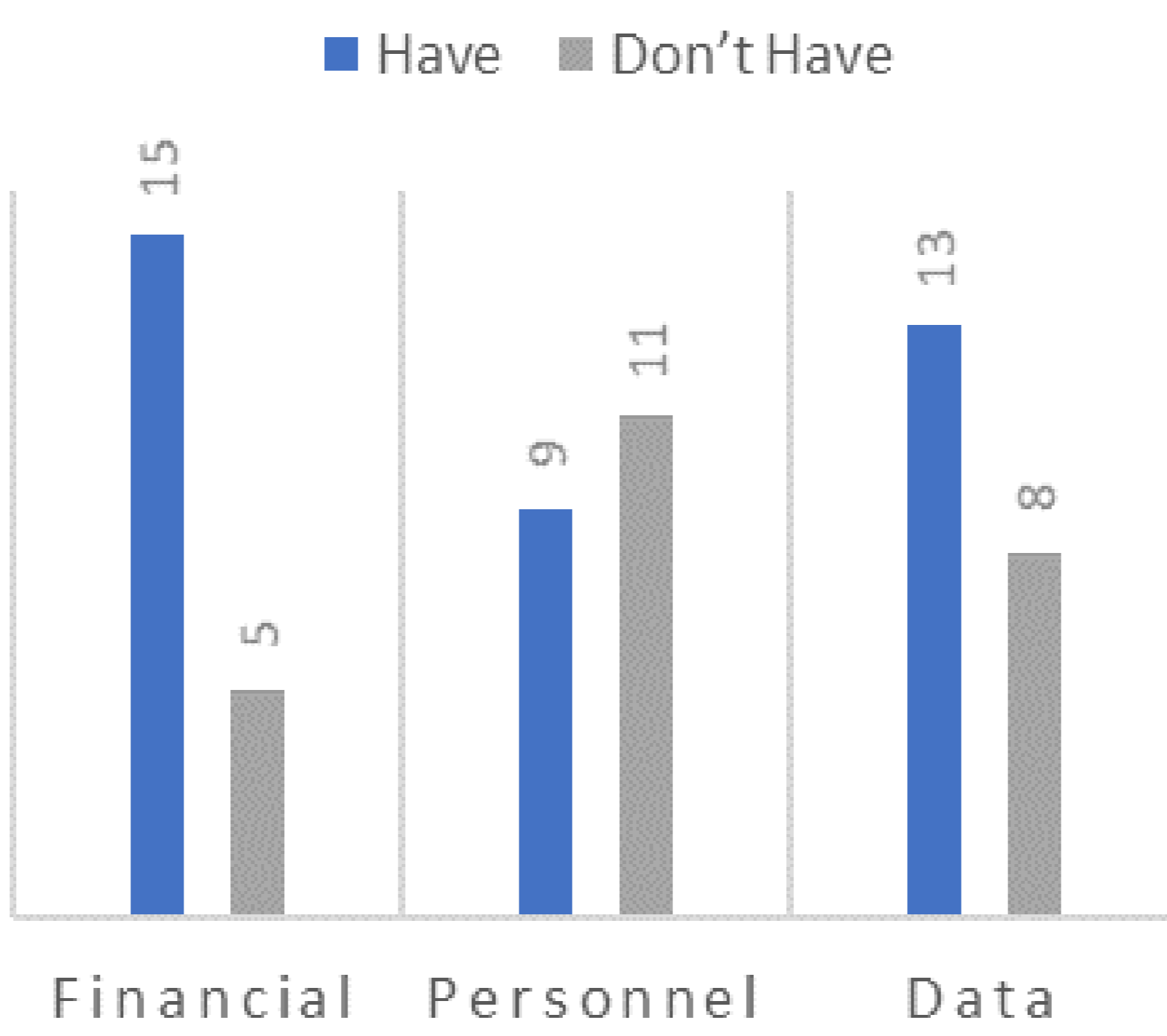
- ◆ Interviewed 20 people from 17 different HOs in 15 countries across 6 continents, with a combined total of 161 years of work experience in technology in the humanitarian field.
- ◆ The only criterion we used to choose the participants was that they either work in a technology-related role within the organisation or have a clear knowledge (based on their profile) of how technology is used in their organisation.
- ◆ The qualitative data analysis tool NVivo was used to analyse the interview data.

4. Findings

A. Contingencies



B. Capabilities



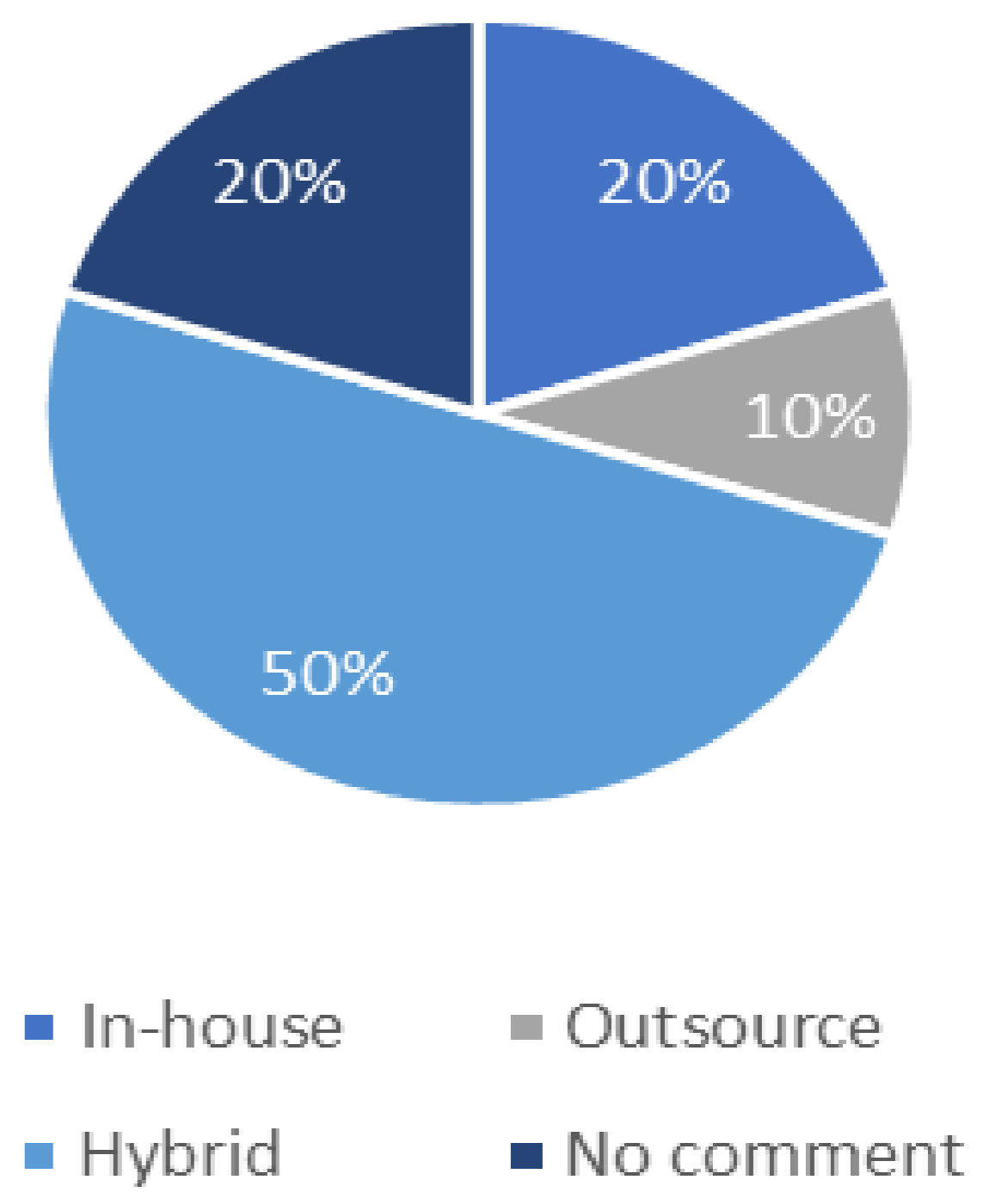
C. Consequences

- ◆ While 65% of organisations see both positive and negative consequences, negative impacts outnumber positive ones by a ratio of 1.5 to 1. The top five are as follows:

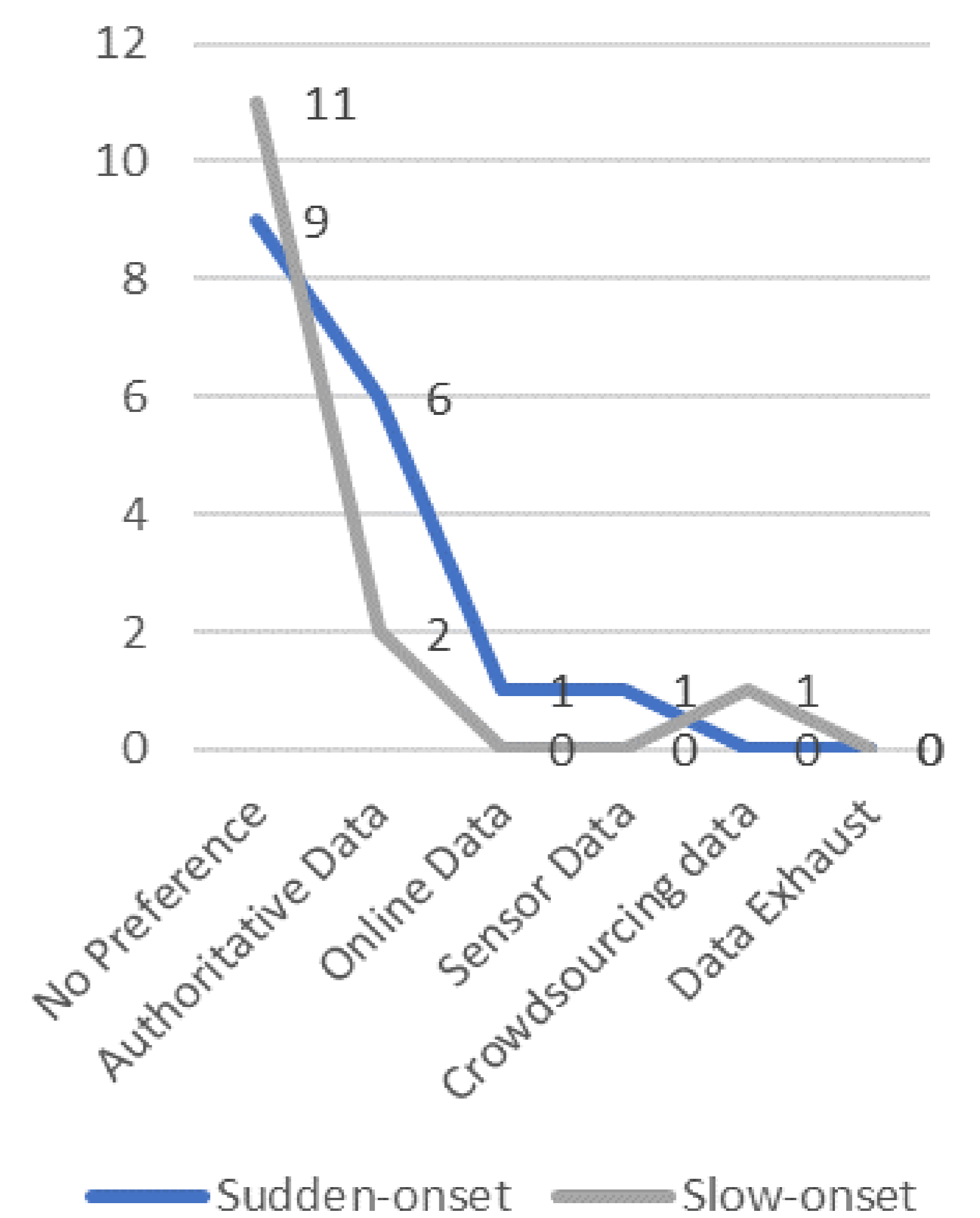
- ◆ Strategic decision making
- ◆ Provides objective approach
- ◆ Wider assistance base
- ◆ Better resource allocation
- ◆ Drives anticipatory action: dignity of the response
- ◆ Data privacy and security
- ◆ Interpersonal bias & judgement
- ◆ Difficult to knowledge transfer
- ◆ Inability to scale
- ◆ Lack of validation protocols

D. Elements of BDA:

BDA Capacity



Data preference



5. Managerial Implications

- ⇒ We advise technology managers in HOs to design data acquisition plans even before the disaster and maintain them as a continuous operation process, and scale up BDA.
- ⇒ We urge managers from Monitoring and Evaluation teams, or equivalents, to quantify the operational efficiency gained via BDA, which can propel the humanitarian sector towards higher data drivenness.
- ⇒ We ask that all non-technology teams in HOs explore BDA in their operations rather than being reluctant to utilise it, and that HOs be transparent about how they use data and models.

