Carnegie Mellon University



Project Selection, Goal Setting, and Coordination of Teams in Shortterm, Intensive Collocation

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BACKGROUND

- Hackathons or short-term, intense collaboration
 - People come together for a few days, assemble into small teams and create artifacts most commonly software prototypes
 - Variously known as data dives, codefests, hack days, sprints, edit-a-thons, etc.
- Hackathon designs vary along multiple dimensions
 - Collaborative vs. Competitive
 - Innovation vs. Community Building vs. Learning vs. Just having fun
 - Diversity in skills, expertise, familiarity, etc.

METHODS: THE SETTING

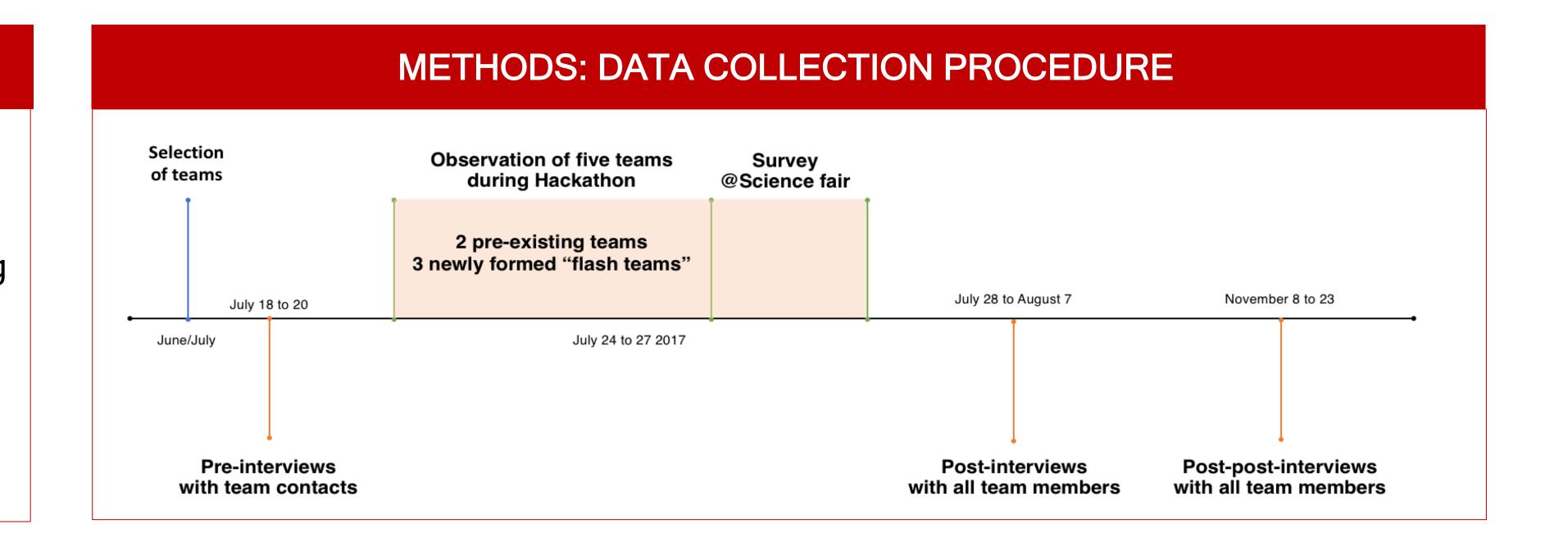
- The 2017 Microsoft OneWeek Hackathon
- At Redmond site 6,700 participants and 1,800 registered projects
- "HackBox" was used A tool for project creation, team building, and skill matching
- Team selection criteria: Team size, diversity on roles, org units, prior experience of working together, and code or non-code projects
- Empirical grounded theory procedures were used to analyze observation and post-interview data

RESEARCH GAPS AND QUESTIONS

- Collocation for extended period facilitates coordination and productivity
 - Does the hackathon yield the same benefits? What coordination activities they emphasize in the hackathon? What kinds of difficulties do they run into?

RQ: In hackathons, how do pre-existing teams (PET) and flash teams (FT):

- 1) select their projects?
- 2) set their goals?
- 3) coordinate their work?



FINDINGS AND IMPLICATIONS

Project Selection

- PET used the hackathon for regular projectrelated work
- FT used the hackathon to address a personally experienced need or a passion, collaborating with unfamiliar people
- FT's joiner's project selection criteria used Technology and topic of interest, an opportunity
 for new connections, apply existing skills in a
 new context
- PET recruited joiners mainly via proposers' existing social network while FT leveraged both proposers' network and HackBox

Goal Setting

- PET strove to have a product complete enough to serve the team's needs
- FT focused on official hackathon outcomes of demos and videos and hoped their ideas would find home somewhere in the company

Coordination

- PET fell back to regular work process with only minor modification, just being another day at the office
- FT used a form of role-based coordination where members coordinated based on roles signed up on HackBox

Implications

- Tools like HackBox that match up projects with potential participants are useful
- Role-based coordination is beneficial to FT
- Needs to manage mismatched expectation, especially with first-time participants
 - Explicit mentoring opportunities by having two roles "Expert" and "Apprentice"
 - A carefully curated selection of prior projects to help set realistic expectations
- Extends the theory of radical collocation by demonstrating how PET and FT responses to time pressure imposed by the hackathon