# Understanding Technology Adoption Intentions in Local Government

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Introduction

The City of Melrose is located north of Boston. The government itself is fairly small, numbering under 300 employees; this allowed for a tight-knit working community. Unfortunately, the pandemic forced many to work from home and the Mayor seeks to re-establish that sense of community via a new technology, Microsoft Teams.

Our study investigates how attributes of the technology influence its adoption among government employees using **the Diffusion of Innovation Theory** and **the Technology Acceptance Model.** We used an online **survey** to measure these attributes and then analyzed the data using the Haye's mediation model #4.
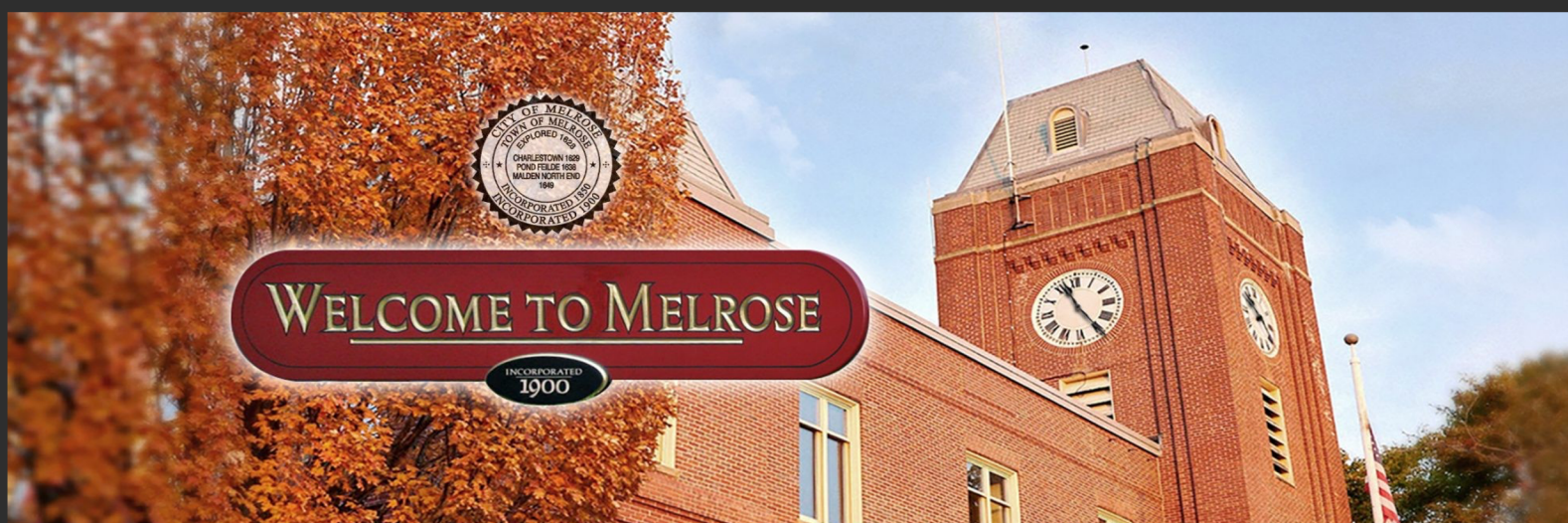
Method

70 Employees who work for **local city government** in the Northeastern United States

A brief video showcasing the benefits of M**icrosoft Teams**

Two Surveys
- Their perceptions of and intention to use Microsoft Teams
- Privacy concerns and the state of communication with the mayor

Theoretical Framework

Diffusion of Innovation (DoI)

Communication theory designed to understand how an innovation spreads throughout a population.

Variables of focus

- **Relative advantage**: the perceived advantage that the user expects to gain following adoption.

- **Complexity**: the perceived difficulty of learning to use the innovation.

- **Observability**: the extent to which the benefits of an innovation can be seen.

Technology Acceptance Model (TAM)

An information systems theory that seeks to understand how users come to accept an innovation.

Variable of focus

- **Perceived Usefulness (PU)**: the degree to which a user believes that using an innovation will improve their job performance.

Hypotheses

H1a: **Relative advantage** will have a significant positive effect on **behavioral intention.**
H1b: **Perceived usefulness** will mediate the relationship between **relative advantage** and **behavioral intention.**
H2a: **Complexity** will have a significant negative effect on **behavioral intention.**
H2b: Perceived usefulness will mediate the relationship between **complexity** and **behavioral intention.**
H3a: Observability will have a significant positive effect on **behavioral intention.**
H3b: Perceived usefulness will positively mediate the relationship between **observability** and **behavioral intention.**

Results

Model and Final Analysis

Following pre-analysis, we believed PU to be a mediating variable, dictating our use of a mediation model.
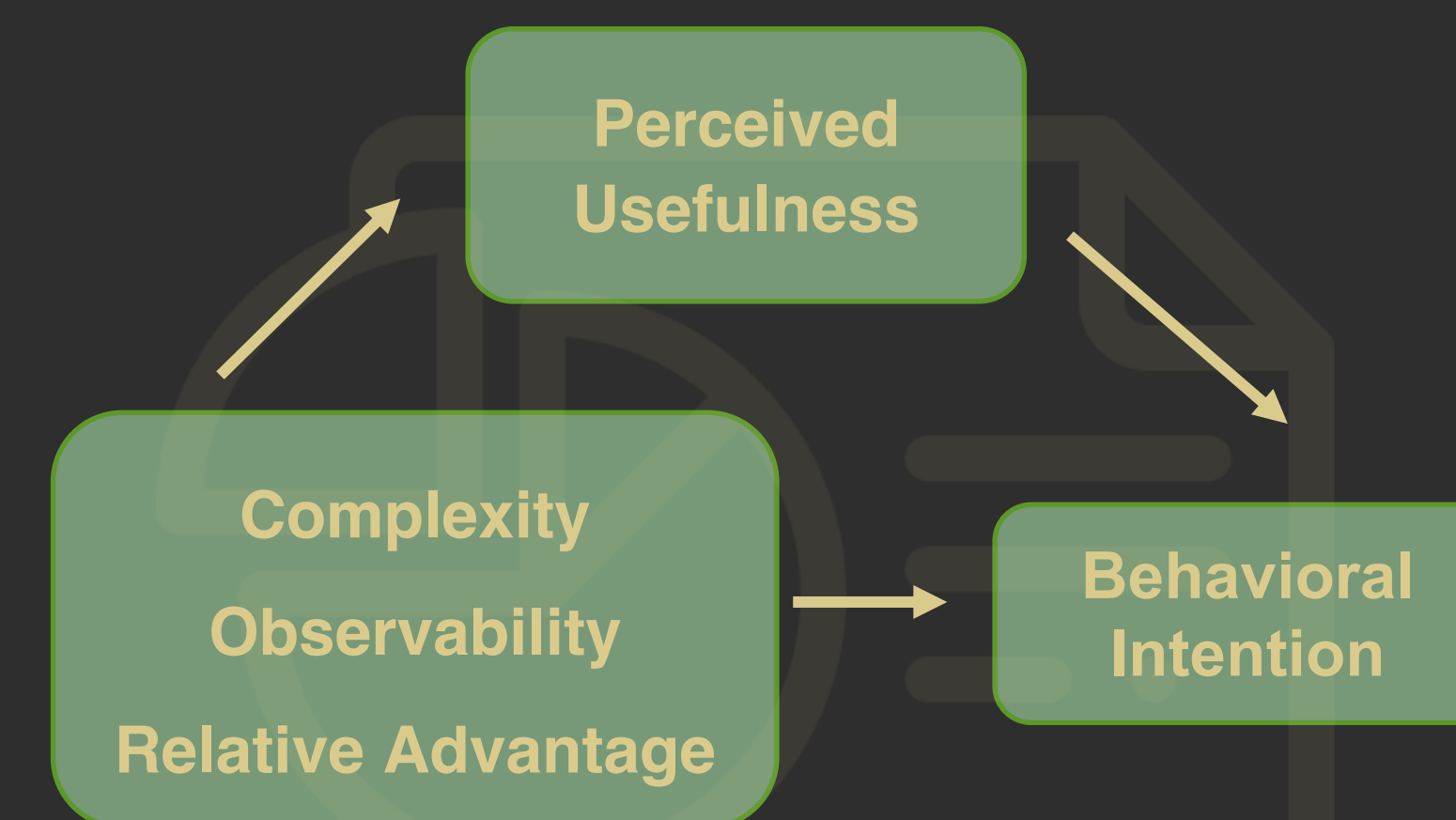
We used the PROCESS Macro Model #4, controlling for computer anxiety ($p = <.05$) and age.
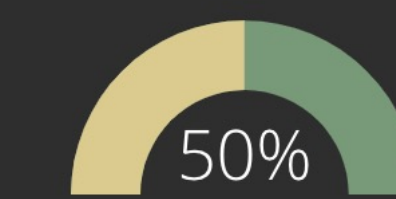
H1b ($p = .001$)   H1a ($p = .1227$)   H2b ($p = .47$)
H3a ($p = < .05$)   H2a ($p = .1005$)   H3b ($p = .12$)
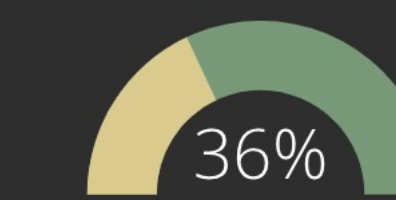
Recommendations

Survey One

**1** Focus on highlighting how Microsoft Teams will **enhance job performance.**

50% *Of participants felt that Microsoft Teams would enhance productivity.*

2 Focus on **alleviating computer anxiety** through training workshops.

36% *Of participants felt that learning Microsoft Teams would require additional technical skills.*
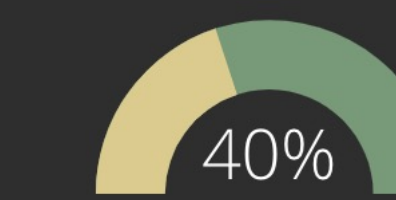
3 Focus on **leveraging the social influence** of leadership within the organization.
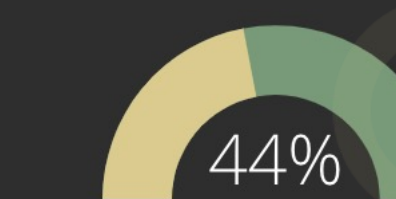
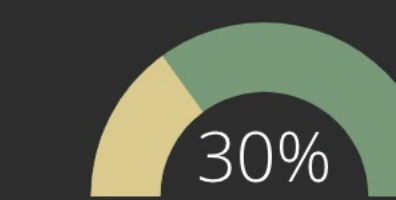44% *Of participants have seen what others can achieve with Microsoft Teams.*

Survey Two

1 We suggest **weekly e-mail updates** to employees, detailing any significant changes in the organization.

40% *Of participants prefer e-mail communication.*

2 We encourage the **Mayor to prioritize camera-on communication** during COVID, when scheduling **1:1 meetings.**

30% *Of participants prefer in-person communication to all other modes.*

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