

# OTRS Help Desk Study City of Pittsburgh

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UNIVERSITY OF PITTSBURGH

SCHOOL OF INFORMATION SCIENCES

# Project Team

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- City of Pittsburgh - Department of Innovation and Performance
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# Agenda

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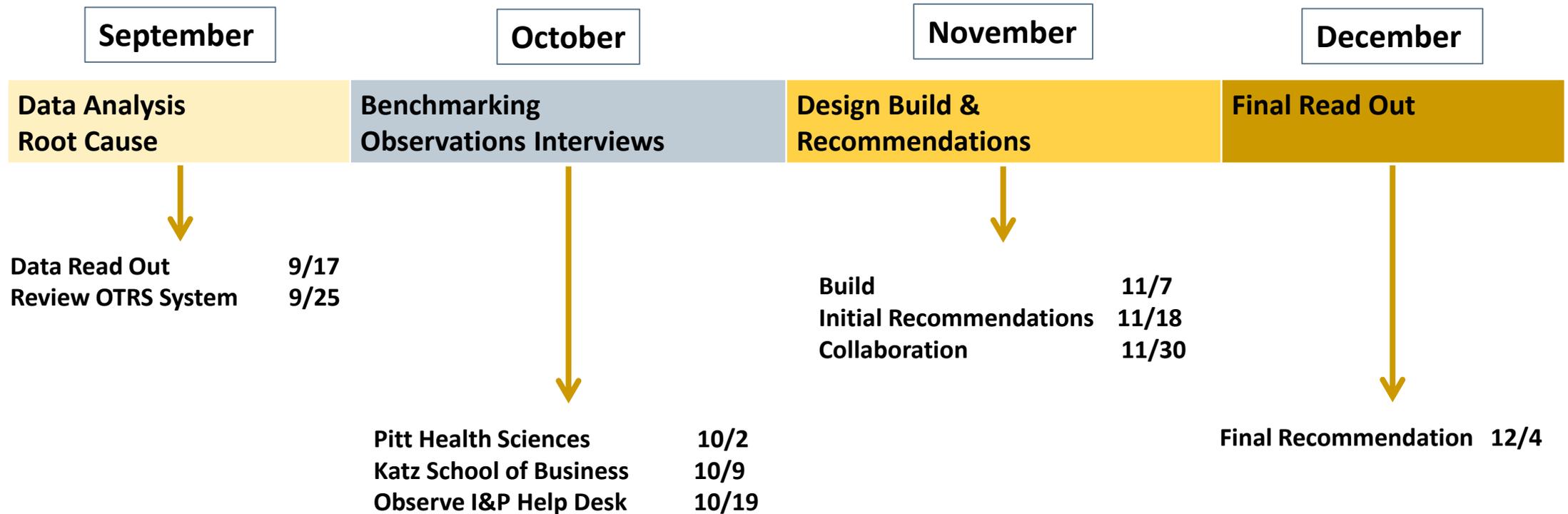
- Objectives and Scope
- Project Plan
- Observations
- Recommendations
  - *Operations*
  - *Process*
  - *Training*
  - *24x7*
- Closing Comments
  - *Question and Answer*

# Objectives

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- Assessment of the I&P Help Desk resulting in a set of recommendations to improve:
  - *Quality and Service*
  - *Performance levels*
  - *Education requirements*
  - *Actions to increase operations to 24 x 7*
- Analysis of existing help desk procedures
- Benchmarking best of practice help desks
  - *Katz School of Business*
  - *Pitt Health Services*
  - *Help Desk International*

# Project Plan



# Observations

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- Same day close of problems is in line with industry average and benchmarks
  - *76% closed same day*
- Call volume is around 475 call per month
  - *9,960 calls in 21 months (Jan. 2014 – Sept. 2015)*
  - *Industry average is about 2,250 calls per month*
- Password problems are the largest portion of problems
  - *72% of all calls are about passwords*
- Potential to move to 24 X 7 without incremental investments

# Operations

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## OBSERVATIONS

- Passwords are different between the network and Google Services
- Some users write passwords down on sticky notes, producing a security problem.
  - *Industry best practice is to use a password vault*

## RECOMMENDATIONS

- Use Google's ability to synchronize passwords between Active Directory (AD) and Google
- Support a password vault where users store their passwords and is linked to their AD account (LastPass)

# Operations

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## OBSERVATIONS

- A user must contact the help desk to update software.

## RECOMMENDATIONS

- Utilize Active Directory Group Policy software installation policy to deploy common software.
  - *Examples: Google Chrome, Adobe Flash, Oracle Java*
  - *Process:*
    - *Help desk searches for new updates once a week and downloads the package if it is updated*
    - *Help desk sends the package to level 3 who then tests it with the applications to ensure compatibility and stability*
    - *If there are no issues, level 3 then implements the policy in AD*

# Operations

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## OBSERVATIONS

- No published Service Level Agreement, no way to measure customer satisfaction

## RECOMMENDATIONS

- Formalize and publish SLAs
- Issue a Customer Satisfaction Survey every month to random users who opened a ticket

# Process

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## OBSERVATIONS

- Excessive ticket moves are impacting perceived service level performance
- 51 tickets moved more than 7 times for tickets open longer than two days
- One ticket moved 13 times in a single day

## RECOMMENDATIONS

- Publish a clear set of guidelines documenting what tier handles what problems
- All moves back to the help desk must document the reason for the move
- Approvals required before the ticket is accepted back

# Training

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## OBSERVATIONS

- When on a call, there is no way to efficiently search the knowledge base to find a solution
- Knowledge base is out of date and not helpful to help desk personnel
  - *Microsoft SharePoint*
  - *Google Drive*

## RECOMMENDATIONS

- Create a Wiki that is easily searchable so a technician can quickly find information and walkthroughs to solve problems quicker and more efficiently
- Implement the use of weekly “Did You Know” emails
  - *Highlights simple solutions to common problems that the help desk receives tickets about*
  - *Katz Business School uses this system*

# Training

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## OBSERVATIONS

- New employees have no training plan and no set training time

## RECOMMENDATIONS

- Develop a regimented training program:
  - New Employees:
    - *48 hours reading past tickets and “Did You Know” pages*
    - *48 hours mentorship and shadowing*
    - *Employee does not work alone until the mentor believes that they are ready*
  - Current Employees:
    - *Set mandatory training 2-5 days annually on current supported systems and software*

# Operations

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## OBSERVATIONS

- Help Desk operates from 6 AM – 6 PM

## RECOMMENDED OPTIONS

1. Spread current employees out on three shifts and hire additional employees to work weekends as to avoid overtime pay
  - *7AM – 3PM – 2 employees*
  - *3PM – 11PM – 1 employee*
  - *11PM – 7AM – 1 employee*
2. Keep shifts the same from 6 A.M. – 6 P.M. and have a rotating on-call schedule for current employees to VPN from home if they need to work overnight

Thank you!

# Final Remarks

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- I&P help desk will be able to reach its goal of going 24/7 with minimum incremental investments
- With the addition of password vaults and group policies through Active Directory, the overall number of tickets will decrease and the amount of tickets closing in the first day will increase
- Implementing the new training procedure will improve the current staff knowledge base to more effectively respond to tickets
- Given specific written guidelines on which level covers what topics will decrease the number of ticket moves, decrease the average open ticket time and improve efficiency of ticket closing

# Questions?

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