Analytics and Action
How to Let Data Drive Your IT Organization
Introduction

• Mark Johnson, Vice President and Chief Information Officer, Minnesota State University, Mankato
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• J.C. Grooms, Knowledge Systems Architect, Minnesota State University, Mankato
Exercise

• How many open tickets do we currently have?
• What team has the most open tasks currently?
• What services are the majority of our current tickets assigned to?
• What other data would you like to see in this dashboard?

VIEW THE DATA AT:
https://link.mnsu.edu/supportdashboard
Challenges Faced

• Underperforming
• Expectations
• Ticket Assessment
• Statistics
• Instinctive/Primal/Classical
Addressing the Challenges and Owning Opportunity

• Three major targets
  • Budget/Financial
  • Projects
  • Support/Tickets
Using Data to Drive Solutions

1. Aggregate the data
2. Visualize the data
3. Make decisions based on the data
4. Learn more about what data we need to ask more sophisticated questions
Technical Infrastructure

1. Aggregate data
   a. Systems of record
      • Cherwell API
      • SharePoint
      • ISRS
      • Cisco/Finesse
      • Etc.
   b. Data warehouse
2. PowerBI – visualize the data
Business Intelligence and Data Science

3. Make Decisions

• Tools
• Where Are We?
• Three-phases:
  • Descriptive
  • Evaluation/Assessment
  • Predictive
Let’s See the Data!

• Budget
• Project Management
• Service Desk
## Budget

<table>
<thead>
<tr>
<th>Cost Center Number</th>
<th>Cost Center Description</th>
<th>Responsible Name</th>
<th>Current Budget Amount</th>
<th>Salary Budget</th>
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<th>Salary YTD</th>
<th>Salary Balance</th>
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<tbody>
<tr>
<td>21007</td>
<td>Information and Technology Services</td>
<td>Johnson, Mark</td>
<td>1,726,645.00</td>
<td>1,640,566.00</td>
<td>1,453,201.83</td>
<td>-187,344.22</td>
<td>-342,904.30</td>
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<tr>
<td>211014</td>
<td>Web Development</td>
<td>Johnson, Tedmund</td>
<td>611,702.76</td>
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<td>211018</td>
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Project Management

- Add Monitors for all Phone System...
- Adjunct Hiring & HLC Accreditation...
- Analytics - Balanced Scorecard P.
- Analytics Process Health Phase 2
- Change Management Process Re...
- Cherwell API
- Cherwell Knowledge Search
- Classroom and Lab Purchases an...
- Continuation of Space Camp into...
- Design & Prototype Catalog Ad...
- Episerver - GatherContent API Ph...
- Geography Server Rebuild
IT Solutions Center

Current Open Ticket Count: 122

Current Breached Ticket Count:
- Breach: Total

First Call Resolution:
- Count of Average Wait, Calls Abandoned, and Calls Handled by Day and Day of the Week

Phones Details (Weekly):
- Month: April
  - Day: 1, 2, 3, 4, 26
  - Calls Handled: 0, 4, 40, 28, 2
  - Average Wait: 0:00:00, 0:00:04, 0:00:15, 0:00:46, 0:00:05
  - Calls Abandoned: 0, 1, 2, 2, 0
  - Longest: 0:00:00, 0:00:06, 0:03:22, 0:20:43, 0:00:06

Total: 238

Phones Details (Monthly):
- Calls Abandoned: 5 (5.4%)
- Calls Handled: 72 (93.51%)

Tickets Resolved: 256

Current Open Task By Manager: 272
Balanced Scorecard (Kaplan and Norton, 1995)

Our Balanced Scorecard

General Fund

Revenue

Tech Fee

Store

First Call Resolution

Total Projects by Scope Size

Ticket Breach SLA

Projects Completed in Sprint

Service Desk Customer Satisfaction

Classroom Technology Customer Satisfaction

Training Requests

IT SOLUTIONS

MINNESOTA STATE UNIVERSITY MANKATO
Start of Semester
Start of Semester

Incident vs Service Request 2016

Tickets by Call Source 2016

Tickets by Service 2016

Total Tickets 2016

2027

Total Tickets

Incident vs Service Request 2017

Tickets by Call Source 2017

Tickets by Service 2017

Total Tickets 2017

2159

Total Tickets
Start of Semester

Number of Tickets Created by Day 2016

Number of Tickets Created by Day 2017
Start of Semester
Outcomes

• Financial/Budget Planning
• Customer Satisfaction
• Process Health
• Employee satisfaction
• Concierge and zone model
• Project Improvement
Next Steps

• Additional enterprise data integration into warehouse
• Building predictive capacity
• Building and broadening data and analytics capacity
Questions and Contact Information

- Mark.johnson@mnsu.edu
- Judehigdon@bennington.edu
- John.grooms@mnsu.edu