

Measuring End-User Satisfaction and Mission Impact

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Customs and Border Protection (CBP) Office of Information & Technology (OIT)

CBP is part of the Department of Homeland Security

- Legacy U. S. Customs
- Legacy Immigration and Naturalization Service
- Legacy Animal and Plant Health Inspection Service
- Legacy U. S. Border Patrol



OIT develops and maintains software that supports controlling the borders of the United States

- Enforcement software and tariff collection software for items and people entering the US
- Enforcement software for items leaving the US



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CBP in Action



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Objective

This presentation discusses how to use Customer Satisfaction Surveys to drive improvements

The presentation is in two parts:

- ***Why Customer Satisfaction Surveys are important***
- Our experience in administering a survey of the Customs and Border Protection Office of Information Technology



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Why do surveys?

Customer Satisfaction Surveys can be valuable in

- Establishing a performance baseline for products and services
- Identifying and validating end-user problems and needed improvements
- Communicating end-user problems to senior managers
- Initiating dialogues to guide improvement actions, including process improvements
- Showcasing the benefits of measurement at all management levels



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Management Information Need

Need expressed by senior-level management to baseline the current organizational performance

OMB's Performance Reference Model is used as a way to establish a "line of sight" from Inputs to Outcomes

Start with measuring Customer Satisfaction to provide insight into:

- What are the OIT products and services used by people on the front line?
- What are their pain points with these products or services?
- Are products and services degrading or improving?
- What is the Impact when they do not have access to an OIT product or service?

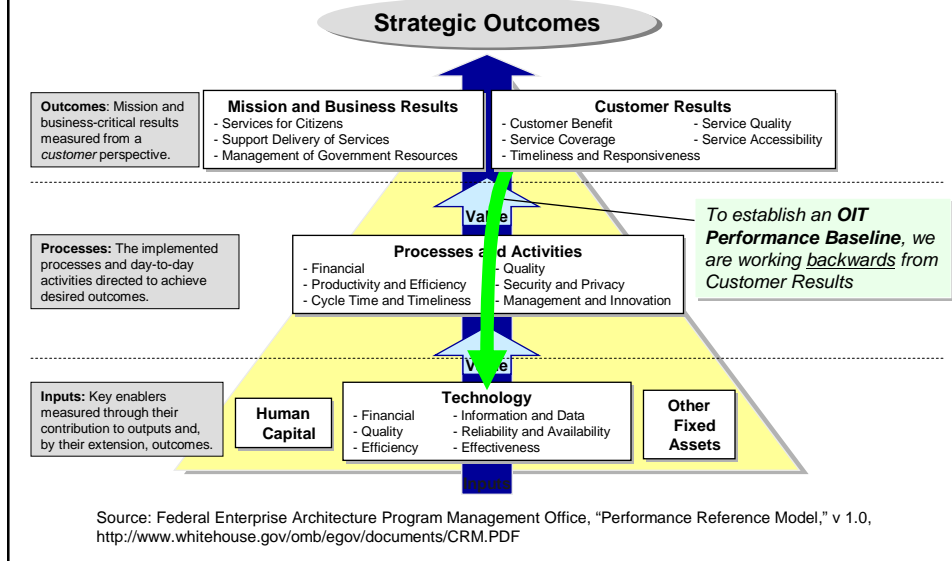
The results will provide the foundation for an OIT Performance Baseline and help identify needed improvements



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User Customer Satisfaction Surveys to Drive Improvements



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The Surveys

We developed two surveys, one for **software applications**, another for **services**

- Surveys hosted on the CBP intranet (html pages, Access database)
- Surveys announced via the CBP intranet and via email from the Assistant Commissioner (CIO)
- Survey questions focused on identifying specific problems

Captured data to determine scope & locus of problem:

- Applications used or services used
- Common problems
- Unique to one or a few locations (e.g., Container Security Initiative ports)
- Unique to one user group (e.g., Border Patrol, legacy Immigration and Naturalization Service, etc.)
- Respondent demographics
- Mostly subjective ratings, but richest information contained in text comments



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General Results - Application Baseline

The software application survey generated a large volume of data

- Applications used
 - Frequency of use (Daily, Weekly, Monthly, Seldom)
 - Importance to job (High, Medium, Low)
 - Satisfaction (Continuous scale from 1 to 7)
 - Change in Satisfaction (Better, No Change, Worse)
- Best-liked application
 - Comments on why best-liked
- Least-liked application
 - Ratings for least-liked application attributes: Availability, Response Time, Data Quality, and Ease of Use (Continuous scale from 1 to 7)
 - Comments on why least-liked
- Mission compromise comments
- Additional comments and demographics



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General Results (Applications), continued

Application Survey Period: February 15 through March 11, 2005

Audience: all border-facing CBP staff at all CBP ports worldwide

Received responses on more than 60 applications

2404 Responses from:

- 42 states & District of Columbia (Most: Texas, with 341 responses)
- 3 U.S. commonwealths/territories (Most: Puerto Rico, with 20 responses)
- 9 countries (Most: Canada, with 23 responses)
- 381 ports (Most: Blaine, WA, with 75 responses)



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Many wrote lengthy text comments

There is a ***wealth*** of data

- Specific descriptions of problems
- Details of how mission is compromised

Beyond the numbers, text comments contained ***the real value*** of the survey results

We reviewed and categorized *every* comment



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Many thanked OIT for conducting the survey

Thank you for taking the time to look into matters and being PROACTIVE!...truly impressive for federal government.

I would like to point out that the personnel in OIT are generally VERY HELPFUL. KUDOS, GLORY, AND UNDYING GRATITUDE for all of the assistance...

Thanks very much for the opportunity to comment. Basically, I think you folks are doing a pretty good job, especially given the challenges of legacy agencies, staffing, and logistics.

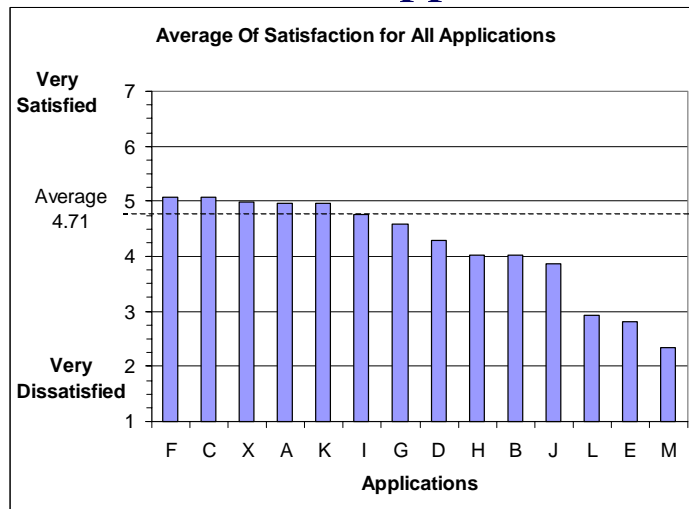
Thank you for listening to me



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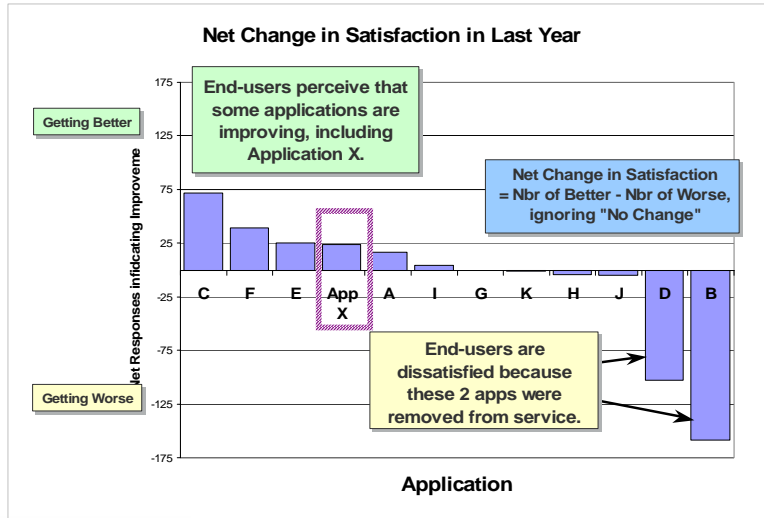
Satisfaction Across Applications



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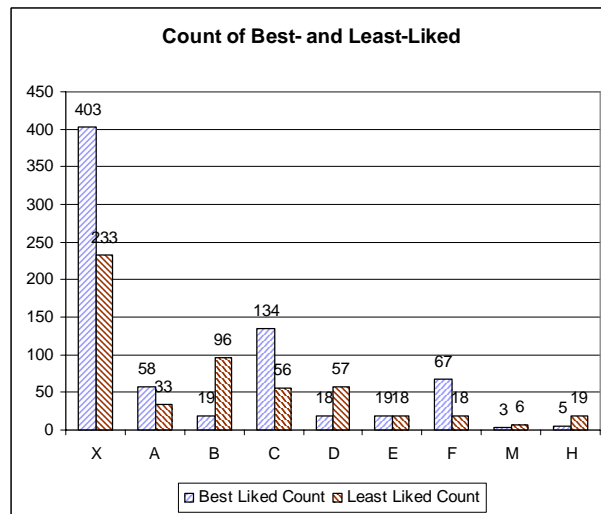
Change in Satisfaction



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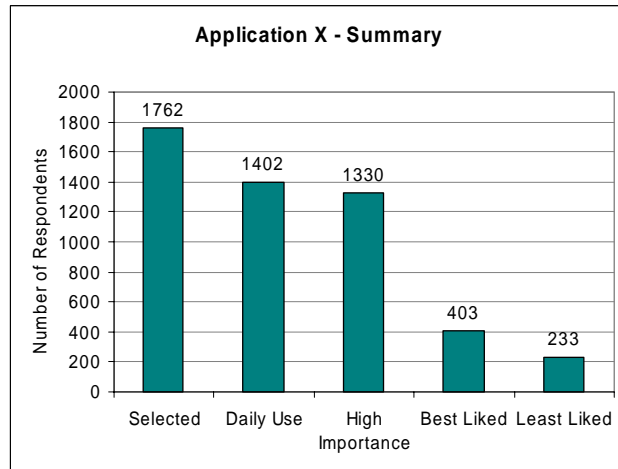
Best- and Least-Liked Applications



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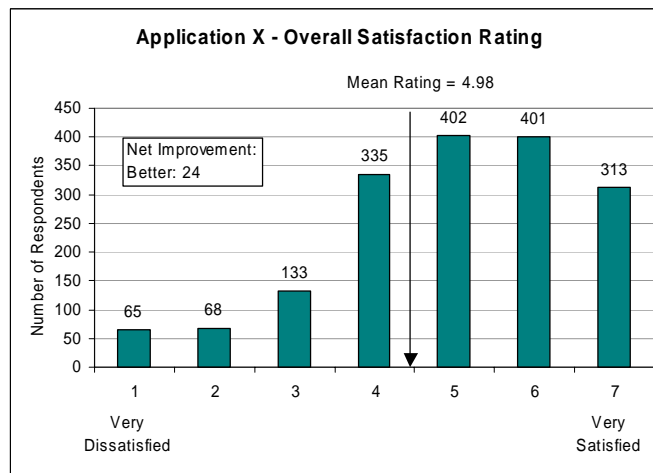
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Application X: Data Summary



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Application X Overall Satisfaction



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Demographics on Application X Satisfaction

Occupation	Overall Satisfaction							Number
	1	2	3	4	5	6	7	
CBP Officer	3%	3%	7%	17%	22%	26%	20%	940
Other	4%	3%	7%	22%	25%	20%	16%	216
Immigration Inspector	2%	6%	2%	16%	26%	27%	18%	125
Import Specialist	3%	5%	7%	23%	31%	13%	15%	113
Border Patrol Agent	12%	10%	11%	24%	21%	8%	9%	97
Agriculture Specialist	6%	3%	10%	28%	19%	17%	10%	78
Inspector	0%	8%	8%	13%	19%	29%	21%	48



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App X – Best Liked Comments

“I use it every day and it works. The #1 system of the CBP Officer.”

“It’s proved to be accurate and reliable.”

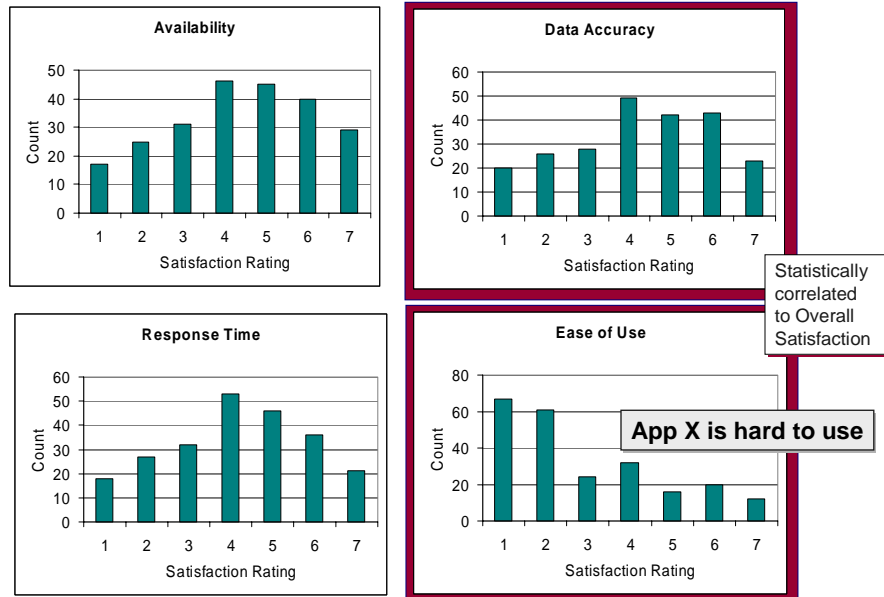
“It is very helpful to our mission; without it our job would be very difficult.”



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App X – Least Liked Attributes



App X – Least Liked Comments

Example comment:

“The concept of the system, and the actual data provided are IRREPLACEABLE, but the system needs to be updated to a simpler, windows-like, menu-driven format, that is ergonomic, intuitive, etc.”

Range of Comments:

- Ease of use
- Mission impact
- Data
- Training
- Policies, etc.



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Other Results

Some of the issues noted by respondents are not IT problems

- Organizational infrastructure problems (e.g., on-site LAN support)
- Integration of organizations into DHS (e.g., inclusion of Border Patrol and INS)
- New staff at border-facing ports needing to learn new DHS policies

CBP staff are *passionate* about protecting the borders—and inventive—despite the challenges of their jobs

Newer browser-based applications are better-liked and easier to use than legacy mainframe applications



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Actions

We briefed the CIO and his direct reports on 12 May 2005

We were directed to brief each Program Office.

- Provide detailed results
- Work with each Program Manager to analyze the data

By the end of August, each Program Manager will brief the CIO on actions they are taking to address the issues raised in the survey

Briefings outside of OIT to CBP management will follow Program Manager briefs to CIO

Repeat the surveys in 18 to 24 months to re-assess satisfaction



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Key Lessons Learned: Survey Design

Literature on customer surveys focuses on increasing market share and retaining customers – **Our focus was on satisfaction as it relates to accomplishing the CBP mission**

We agonized over what to ask and how to ask it

- 59 applications and only 10-15 minutes for taking the survey
- We missed some things anyway, but applied the lessons learned to the second survey
- Done well, surveys *aren't easy*

Important to characterize the respondents to **focus actions where needed**

Important to gather information on the positives – not just the negatives.

Need to capture enough detail to take action. Comments are important for understanding issues and the actions to take.



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Key Lessons Learned: Taking Action

Face to face briefings for Execs and Middle Managers

- The data belongs to management – they have to take ownership
- Managers are unlikely to read a detailed survey report
- Details need to be available for technical staff review

Help managers by doing initial survey analysis

- Analysis and interpretation of the survey data and comments
- Re-analysis of data and comments as more is learned
- Identify issues

Richest information contained in text comments

Repeat the surveys to assess impact of improvement actions



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