

A3

Theme
 Helpdesk wait time is often very long (average of 17 minutes) and the percentage of first call problem resolution is low (27%) causing lost productivity, user frustration, and occasionally harmful system workarounds.

Boundaries
In: Employee helpdesk calls from North America, desktop systems
Out: First round of improvement excludes international calls, trading partner calls, server and telecommunications issues, application integration and DBA services

Voice of the Customer
 Customers want stable systems that don't need support in the first place, meaning better prevention and look-ahead to problems that might occur when system changes are made. Many customers want to solve their own problems by searching the knowledgebase, while others want a friendly voice to help them with the more technical issues. When a call to helpdesk is needed, customers want wait times to be short, quick routing to the proper technician, and swift diagnosis of the problem and help with a solution when the problem has been encountered before.

Current State

Ave calls per day	4800
Peak calls per day	14200
Ave queue wait time	17 min
Call abandonment	38%
First call resolution	27%
> Three retests required	38%
Ave Knowledgebase Search Times	2.8 min
Searches that do not yield results	32%
Searches yield conflicting/incorrect results	54%
# of Documents in Knowledgebase	8754
# Directories in Knowledgebase	289
Unresolved cases	14%
Call due to nonstandard configuration	18%
Call due to login or password trouble/reset	11%
Helpdesk staff turnover	42%
User satisfaction survey	14%

Current State Value Stream Map

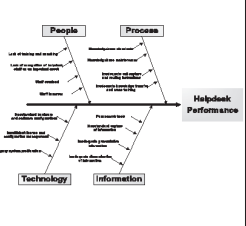
Annual User Satisfaction Survey

Year	Satisfaction %
2006	25%
2007	20%
2008	15%
2009	10%

Management is evaluating a \$5M investment in a new call center system.

Problem Analysis (Root Cause)
 Value Stream Mapping and brainstorming resulted in over 100 issues identified, which team explored and charted on a cause and effect (fishbone) diagram, then prioritized using Impact/Ease and Pareto analysis. Several of the key causes are listed below.

- Lack of knowledgebase standard documentation protocol and keyword
- Lack of knowledgebase maintenance allowing for obsolete information
- Insufficient helpdesk employee orientation, training or mentoring
- Lack of crosstraining and support creates pockets of technical specialization
- Underenforcement of purchasing and configuration standards
- Unclear initial call information capture and qualification
- Inability to anticipate load and match with staffing levels
- Overload on staff causes insufficient knowledge capture before taking next call
- Insufficient training and first line assistance at department level
- Insufficient tracking of user configurations and licenses



Date:	dd/mm/yy
Sponsor:	Tracey Brown
Coach:	Ron Johnson
Team Lead:	Lori Jenkins
Team:	Paul Richie, Julie Turnbull, Ben Franks, Andre Morey, Lisa Mendelson, Bill Miller



Future State and Target Measures		
Six Month Targets		
Ave calls per day (reduce by 50%)	2400	
Ave queue wait time (reduce by 50%)	8 min	
First call resolution (improve by 100%)	50%	
Conflicting/incorrect search (reduce by 60%)	20%	
# of Documents in Knowledgebase (reduce by 70%)	2600	
Call due to nonstd config (reduce by 30%)	13%	
Call due to login or password trouble/reset	11%	
Helpdesk staff turnover (reduce by 50%)	20%	
User satisfaction survey (improve by 100%)	25%	
<p style="text-align: center;">Future State Value Stream Map</p>		
Kaizen (PDCA Test Cycles)	Target Outcome	Team Lead
Hotline for Login and Password issues	Reduce helpdesk load by 11%	PaulR
Investigate non-standard config with dept heads	Reduce by 50%	BenF
SS Knowledgebase	Organize and maintain	LisaM
Standardize Knowledgebase usage	Reduce info errors by 70%	LisaM
Helpdesk staff mentoring and coaching program	Reduce turnover by 50%	LoriJ
Implementation Plan - What	Who	Due Date
Non-standard Configurations	BenF	dd/mm/yy
Communications Plan	Team	dd/mm/yy
Hotline improvements	PaulR, TracyB	dd/mm/yy
Knowledgebase 5s and standardization event	LisaM + Team	dd/mm/yy
Staff mentoring and coaching	LoriJ + Team	dd/mm/yy
Based on testing results: standardize, implement and sustain countermeasures as we validate our understanding (through PDCA test cycles) of what changes are needed to achieve the target state.		
Value Realized		
Standards team will use in value calculations once outcomes are measured:		
One hour user call wait time = \$100/hr in labor cost		
Each hour that a problem isn't resolved = \$250/hr company productivity loss		
Cost avoidance: added capacity of existing helpdesk staff = \$40K/yr per prevented new hire		
Cost avoidance: reduced employee turnover = \$15K/event in hiring, training, and lost productivity		