Service Excellence by Design

Tom Floodeen
Vice President & General Manager
Customer Support Division
Mentor Graphics Corporation
A Culture of Service

"A business absolutely devoted to service will have only one worry about profits. They will be embarrassingly high."

--Henry Ford
A Culture of Service

- Show up with passion – without passion, it’s just another job.

- Involve everyone in the organization in your vision, their contribution, and how you will measure results.
Vision: Which Way is North?

Which Way Is North? Why would I ask such a question? If we were all out in the middle of a forest and I told everyone to go north, only those that knew which way was north would reach the correct destination.

In our real lives, the goals and objectives of CSD represent the direction north. If each of you has a different idea as to what our goals and objectives are, then it is very likely that many of you are working to accomplish the wrong things. For CSD to be successful every employee needs to know what our goals and objectives are. We all then would be working toward the same goal. In other words, we would all be headed north.

The vision of CSD is to eliminate barriers between our customers and their success. In support of this goal we want to do it in the fastest possible way. We know from experience that even during our best months we only respond to 50% of the customers within 1 hour and 90% in about 2 hours. We also know that if the web knows the answer to the question, the customer can have access to that answer in just a few seconds. Not all of our customers know this. Many of them are still calling us because they are not aware of how good our SupportNet self-help has become.

So which way is north?
Getting to Award-Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
Getting to Award Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
"Customers are part of the conversation. Users have changed from consumers to participants."

--Mike Moran, IBM
Listen

- Annual Customer Satisfaction Survey
- Service Request Incident Survey
- SupportNet Transaction Survey
- Formal Usability Labs
- Web-site Beta Programs
- User Groups / Communities
- Ad-hoc Feedback
Annual Satisfaction Survey

- Most comprehensive worldwide customer research in company

- 2007 was seventh year

- Measures importance/satisfaction across 47 attributes

- Response rates: 12% - 15%

- 4 languages

- Resulted in Corporate Quality Award
Service Request Incident Survey

- Importance & satisfaction for CAE* interaction
- Oldest feedback vehicle
- Response rates: 20% to 29%
- 4 languages

*CAE = Customer Applications Engineer
SupportNet Transaction Survey

- Since Jan 2005
- For visits within last 24 hours
- Daily invitations that expire in 7 days
- 2 languages
- Email alerts for low ratings

Mentor Graphics SupportNet Survey

Within the last 24 hours, you visited SupportNet, the Mentor Graphics customer support website. To continue to provide our customers with best all around support in the industry, we would appreciate it if you would take a few minutes to answer a few questions about your experience.

Thanks for your help.

1. What was your primary reason for visiting SupportNet?
   - Search SupportNet to troubleshoot a technical problem
   - Access user manuals/documentation
   - Open a Service Request
   - Review the status of previous Service Requests or defects
   - Look up specific product information (i.e., platform requirements, product features, training)
   - Download a product update/patch/service pack
   - Find Authorization Code (License file) information
   - SupportPQ newsletter link
   - Other (please specify)

2. Please rate your overall satisfaction with your recent visit to SupportNet.
   - [ ] Click here →

3. Were you able to accomplish the goals that prompted your visit?
   - [ ] Yes
   - [ ] No

[Continue]
Usability Labs

- Scripted interaction
- Record voice, face, hand movements
- Practical, real-time feedback on support, product & docs
Ad-Hoc Feedback

- *Every* email from the feedback form to CSD Executive Team
- My cell phone is published on SupportNet
Getting to Award Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
"Your most unhappy customers are your greatest source of learning."

-- Bill Gates
Service Request Incident Survey

Satisfaction

Gaps

Reach Ease
- 0.34
- 0.32
- 0.29
- 0.35
- 0.35

Product Knowl.
- 0.4
- 0.43
- 0.39
- 0.42
- 0.51

CAE's Concern
- 0.15
- 0.19
- 0.14
- 0.2
- 0.09

CAE's Underst.
- 0.05
- 0.03
- 0.02
- 0.01
- 0.02

CAE Updates
- 0.04
- 0.09
- 0
- 0.03
- 0.2

Solution Time.
- 0.41
- 0.43
- 0.51
- 0.37
- 0.49

Solution Effect.
- 0.66
- 0.65
- 0.65
- 0.57
- 0.32
## Service Request Gaps by Year

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach Ease</td>
<td>0.73</td>
<td>0.76</td>
<td>0.72</td>
</tr>
<tr>
<td>CAE Product Know.</td>
<td>0.92</td>
<td>0.93</td>
<td>0.93</td>
</tr>
<tr>
<td>CAE Underst.</td>
<td>0.57</td>
<td>0.56</td>
<td>0.65</td>
</tr>
<tr>
<td>Solution Time</td>
<td>1.25</td>
<td>1.18</td>
<td>1.18</td>
</tr>
<tr>
<td>Solution Effect.</td>
<td>1.25</td>
<td>1.26</td>
<td>1.19</td>
</tr>
</tbody>
</table>

### Annual Satisfaction Survey

- Solution time
- Solution effectiveness

**Service Request Gaps:**

- Reach Ease
- CAE Product Know.
- CAE Underst.
- Solution Time
- Solution Effect.
### Annual Satisfaction Survey

#### SupportNet Gaps:
- Search results
- Product info

### SupportNet Gaps by Year

<table>
<thead>
<tr>
<th>Category</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td>SN Receive Assistance</td>
<td>0.34</td>
<td>0.38</td>
<td>0.62</td>
</tr>
<tr>
<td>SN Ease of Locating</td>
<td></td>
<td>0.63</td>
<td>0.65</td>
</tr>
<tr>
<td>SN Download File Size</td>
<td>-0.01</td>
<td>-0.72</td>
<td></td>
</tr>
<tr>
<td>SN Search Results</td>
<td>1.19</td>
<td>1.25</td>
<td>1.2</td>
</tr>
<tr>
<td>SN Product Info</td>
<td>1.07</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>SN Discussion Forums</td>
<td>-0.11</td>
<td>-0.06</td>
<td>-0.17</td>
</tr>
<tr>
<td>SN SupportPro</td>
<td>-0.2</td>
<td>-0.19</td>
<td>-0.34</td>
</tr>
</tbody>
</table>
SupportNet Transaction Survey

What area could Mentor improve?

Downloads

- No improvement necessary: 39.76%
- Download page organization: 19.12%
- Other (please specify): 14.99%
- Smaller file size: 12.86%
- Download instructions: 5.84%
- Fewer products per download: 4.34%
- Help with downloads: 3.1%

Search

- No improvement necessary: 20.42%
- Searchable documentation/manuals: 15.7%
- Relevancy of the first page of search results: 15.48%
- Other (please specify): 11.54%
- Page load speed: 3.53%
- Ability to save content locally: 2.54%
- Ability to print content: 0.44%

Service Requests

- No improvement necessary: 46.55%
- Other (please specify): 16.66%
- Simpler Service Request form: 13.02%
- Better file attachment(s) process: 10.92%
- Faster response from a CAE: 10.88%
Getting to Award Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
Take Action

"You will never plough a field if you only turn it over in your mind."

--Irish Proverb
Recent Action
Support Model Shift

From:
phone-centric support

To:
web-centric support
Vehicle for Changing Support: The New SupportNet

- Delivers product specific content
- Makes important tasks easy

Service Excellence by Design - November 2007
Gaps for Search Results & Product Info

- Choose primary product
- Search your specific products
Gap for Solution Time

- Streamlined troubleshooting
- Targeted searches
Improve Download Page Organization

- Prominent display of current release
- Easy access to related downloads
Gap for Knowledge Effectiveness

- Knowledge Lifecycle
  - Right content at the right time

- Knowledge Centered Support
  - Solve a problem once, reuse many times
  - Capture solutions in the daily workflow
  - Emphasize quality of content over quantity
Gap for Knowledge Effectiveness

Customer/CAE Interactions

Service Request Tracking

Capture

Service Requests

Service Requests

WW Product Teams

SR Solutions

Reuse

Publish Popular Solutions

SupportNet

TechNote

AppNote

Movie

Doc

Knowledge Management
Benefits of Support Shift

- Increase customer satisfaction with better, faster answers 24 x 7
- Deliver world-class support to an expanding base without growing CSD headcount
- Improve employee efficiency by sharing knowledge internally and externally
- Create capacity to pursue revenue opportunities
Learnings

- Our employees are our most valuable asset
  - They are still the source of most knowledge
  - SupportNet does not replace our people (or personalized high-touch support)
  - SupportNet is a different way to access our people and their expertise

- Although the vision works for all products, regions, and customer segments, not all geographies are at the same level of maturity
Learnings

- Cost containment may result, but that is not the driver
  - Faster answers, increased satisfaction, growing revenue are drivers
  - Web support isn’t free: it takes a large investment in resources to establish a quality web site—and that investment results in value customers should be willing to pay for
Getting to Award Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
Measure

“If you don't measure something, you can't change it.”

--Mitt Romney
Support: Key Metrics

- Overall customer satisfaction* (SR Incident Surveys) – remained high during a period of significant change

- Response time for web-opened Service Requests

- Customer reported web troubleshooting success

- Unique visitors viewing web-based content

*From Service Request Incident Survey
World Class Customer Satisfaction

Overall Satisfaction by Quarter

All N=2,634 2007-10-01 08:57

<table>
<thead>
<tr>
<th>Quarter</th>
<th>7 Extremely Satisfied</th>
<th>6 Satisfied</th>
<th>5 Somewhat Satisfied</th>
<th>3 Somewhat Dissatisfied</th>
<th>2 Dissatisfied</th>
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<tbody>
<tr>
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<tr>
<td>Q1 07</td>
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<td>93.99%</td>
<td>2.36%</td>
<td>0.84%</td>
<td>1.01%</td>
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<tr>
<td>Q2 07</td>
<td>4.12%</td>
<td>93.55%</td>
<td>2.33%</td>
<td>0.72%</td>
<td>1.11%</td>
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<tr>
<td>Q3 07</td>
<td>2.56%</td>
<td>94.06%</td>
<td>3.38%</td>
<td>0.65%</td>
<td>1.01%</td>
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Top Box by Quarter

All N=2,634 2007-10-01 08:57

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Response Time

North America 90th Percentile Response Times

Hours

Web
Phone
Trend
SupportNet Survey: Success Rates

SupportNet Success Rates
(Survey Received Date)

<table>
<thead>
<tr>
<th>Month</th>
<th>Success Overall</th>
<th>Troubleshoot Success</th>
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<tbody>
<tr>
<td>Aug-06</td>
<td>73%</td>
<td>56%</td>
</tr>
<tr>
<td>Sep-06</td>
<td>76%</td>
<td>61%</td>
</tr>
<tr>
<td>Oct-06</td>
<td>74%</td>
<td>69%</td>
</tr>
<tr>
<td>Nov-06</td>
<td>76%</td>
<td>68%</td>
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<tr>
<td>Dec-06</td>
<td>76%</td>
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<tr>
<td>Jan-07</td>
<td>74%</td>
<td>67%</td>
</tr>
<tr>
<td>Feb-07</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>Mar-07</td>
<td>75%</td>
<td>71%</td>
</tr>
<tr>
<td>Apr-07</td>
<td>78%</td>
<td>66%</td>
</tr>
<tr>
<td>May-07</td>
<td>74%</td>
<td>67%</td>
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<tr>
<td>Jun-07</td>
<td>74%</td>
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<td>Jul-07</td>
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<tr>
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<td>69%</td>
</tr>
<tr>
<td>Sep-07</td>
<td>75%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Unique Visitors / Sessions

SupportNet Unique Visitors/Month

WW Unique Visitors

SupportNet Sessions/Month

Known Users Only

WW Sessions/Month

% Growth Over Jan '06

% Growth Mth/Mth

Service Excellence by Design - November 2007
Service Request Open Method

% of SRs Opened via SupportNet

Sept '07 58.53%
Sent: Thursday, July 19, 2007 1:40 PM
Subject: Wow! supportnet is super!

I'm amazed. I go to file an SR and it asked me to search for answers. I type

Please describe a flow whereby for a path delay tests we can mask all scan cells except the capturing scan cell for the particular path.

which is probably not the first time this question has been asked (sort of). It vectors me to the perfect tech note.

Really cool!
Grady G.
DFT Architect
Getting to Award Winning Support

- Listen
- Learn
- Take Action
- Measure
- Repeat
“Excellence is the gradual result of always striving to do better.”

--Pat Riley
1999

- **October**: WV, SJ SCP Certification
- **December**: Siebel worldwide call tracking system
- **December**: Newbury SCP certification

1999

**April**: First Annual Customer Satisfaction Survey

**July**: E-Base WW Entitlement, Quote & Licensing System

**November**: Dedicated Global Accounts Support Team.

**September**: 5th STAR Award for Complex Support

2000

**October**: WV, SJ SCP Certification

**December**: Siebel worldwide call tracking system

**December**: Newbury SCP certification

2000

**January**: SupportNet "BiggestBrain" promotion

**June**: First Global Tracking System (GTS) enables “Support from Anywhere to Anywhere”

**October**: "SupportNet 1st" initiative to get customers to use web self-service

2001

**November**: Dedicated Global Accounts Support Team.

2002

**June**: First Global Tracking System (GTS) enables “Support from Anywhere to Anywhere”

**October**: "SupportNet 1st" initiative to get customers to use web self-service

2003

**January**: SupportNet "BiggestBrain" promotion

**June**: ASP award as one of ten best support web sites

**2003**
Constant Evolution

2004

January: Dedicated support teams in Japan and India
April: InQuira Search on SupportNet
April: CSD hosts first annual User2User
May: SupportNet Japan in Kanji
July: First worldwide support sales team
November: Education Services and Tech Pubs join CSD

2005

January: SupportNet reliability monitoring system
February: InfoHub ships in products
March: 30,000+ TechNotes on SupportNet
May: Worldwide SCP certification
July: SupportNet Survey

2006

January: Knowledge Management team to drive customer content
January: SupportNet Survey
July: China Support Center

2007

January: Over 50% of worldwide service requests opened on SupportNet
May: Totally redesigned SupportNet that is product-centric and task-oriented
May: 2nd ASP Award for one of the world's ten best support web sites

The Only 5-STAR Support in EDA
Support Evolution

- In the beginning, it was easy
  - We built a web site & asked customers to come
  - Technology was king

- Now low-hanging fruit is gone
  - Technology is table stakes
  - Content is king

- Difficult to pick the best investments
SCP Standards

- Comprehensive annual audits measure Mentor against the standard
- Initial certification in 1999
- Worldwide certification in 2006 & 2007
SCP Benefits

- Consistent reliable implementation of key processes worldwide
- Better trained staff
- Focus on results
- Certified, repeatable process aids integration of frequent acquisitions
Investment Areas

- Requests for proactive assistance
  - Training
  - On-site Support
  - Strategic Accounts
  - Customer Communities
  - Knowledge Creation

- Non-SupportNet Service Requests are complex
Investment Areas

- Help drive success at large accounts
- Continued improvement of SupportNet infrastructure
  - Siebel Call Center 7 Upgrade
  - InQuira IM
  - ER Management web
  - Global training administration system
- Strategically improve our ability to train customers on new, advanced technology.
It Never Ends…

“The road to success is always under construction.”

--Lily Tomlin
Thank You!