Usability/Sentiment for the Enterprise and the *ENTERPRISE*

AGENDA:

- Introduction
- Problem, Perspective & Roadblocks
- User-center Intranet
- KM for IT
- Dialogue with the End-user
- Enterprise Search and Usability
- System Usability Scale (SUS)
- Sample Size
- JSC Search System Usability Scores
- Future Work
- Take Away
- To Be Avoided

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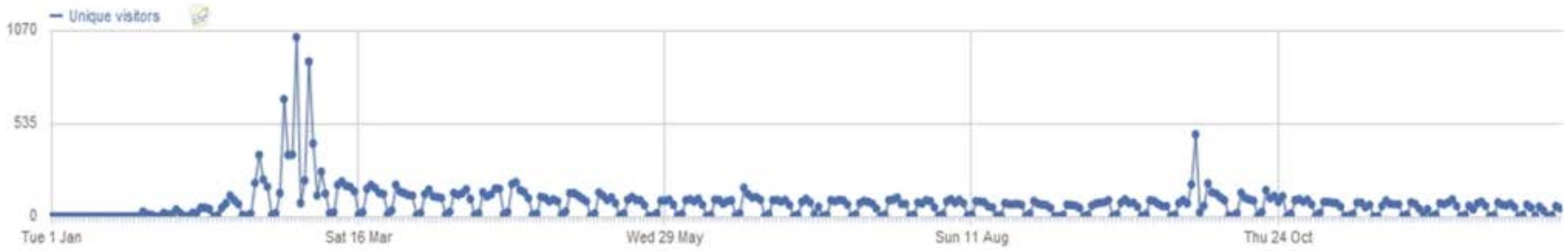
Too busy chopping wood
to buy a chainsaw

http://2.bp.blogspot.com/-asPWEnjre5o/Tf6eCPnB3AI/AAAAAAAAACx0/8SWnAdeDDXU/s1600/1196709978_8827.jpg

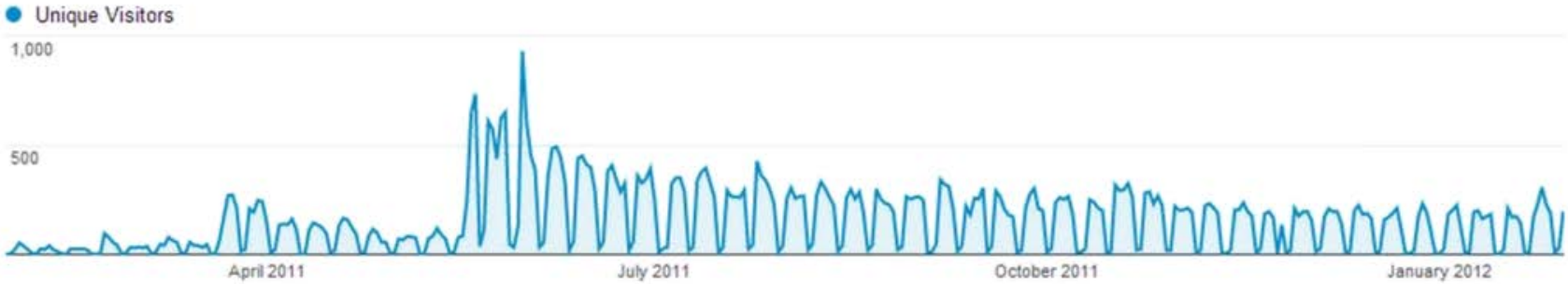
Application Use: U.S. Department of State



Relatively New Program

- On average >70 viewers a week
- Spikes correlate to heavy outreach efforts

Top-down, Waterfall Dev.



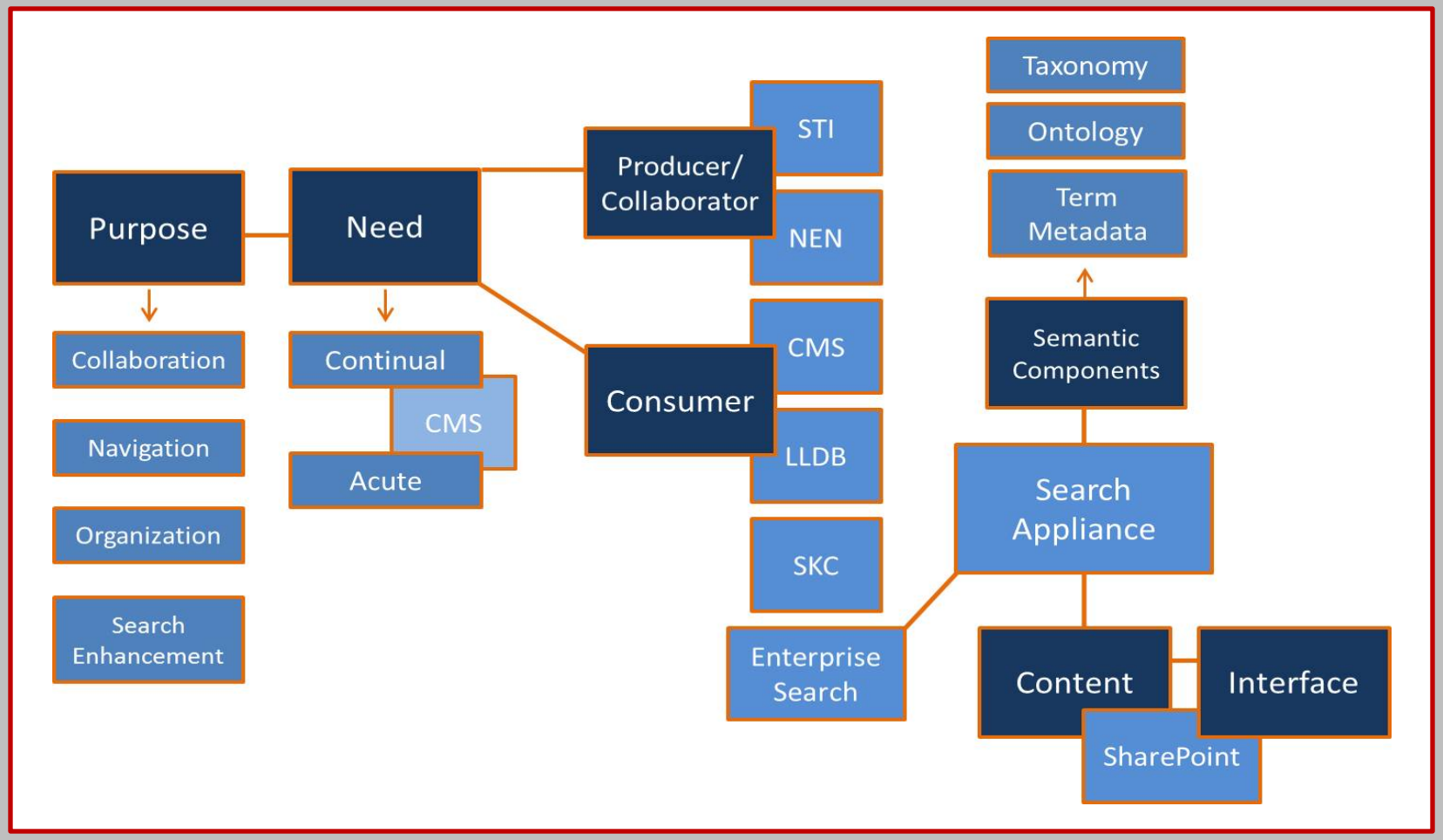
Corridor (Launch)

- On average 300 viewers a week
- Spikes correlate to outreach efforts

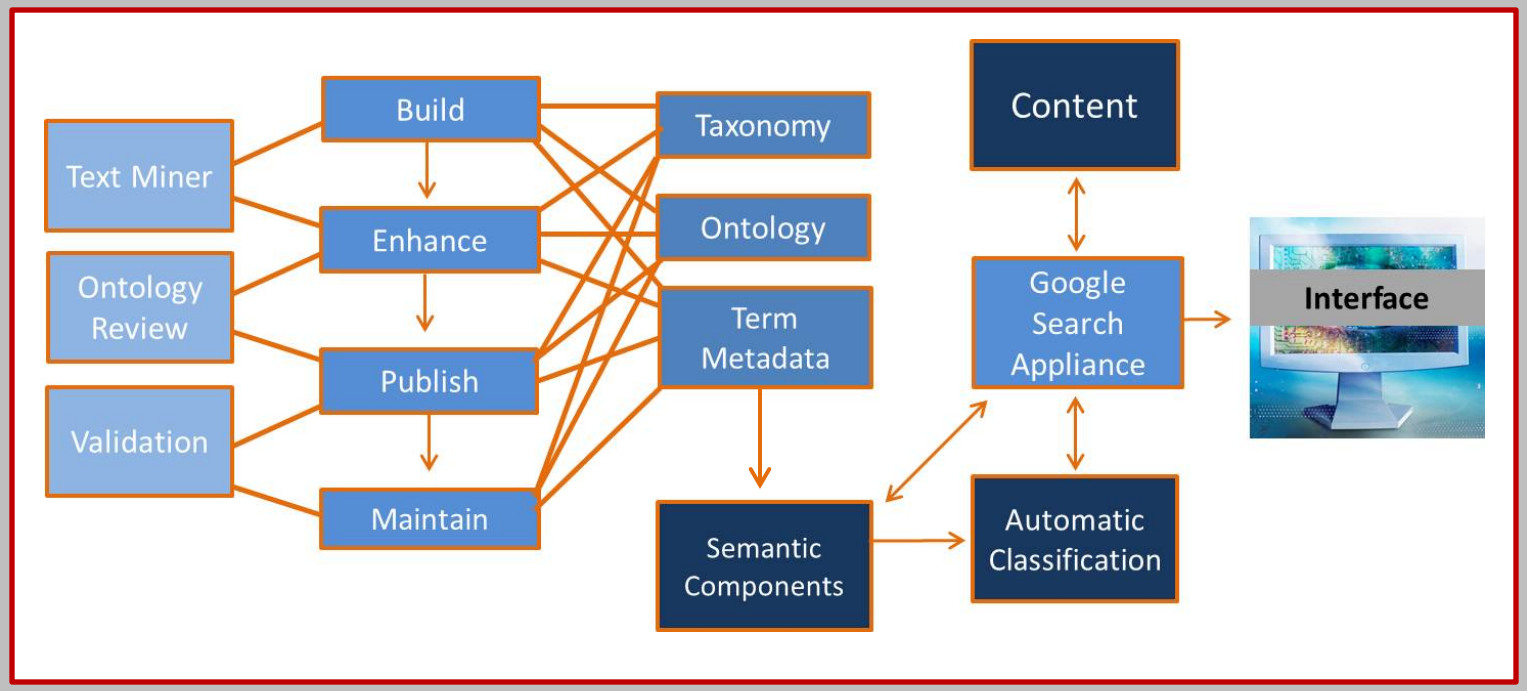
Organic, Responsive Dev.

http://www2.apqc.org/i/4922/2014-01-10/cnrh7

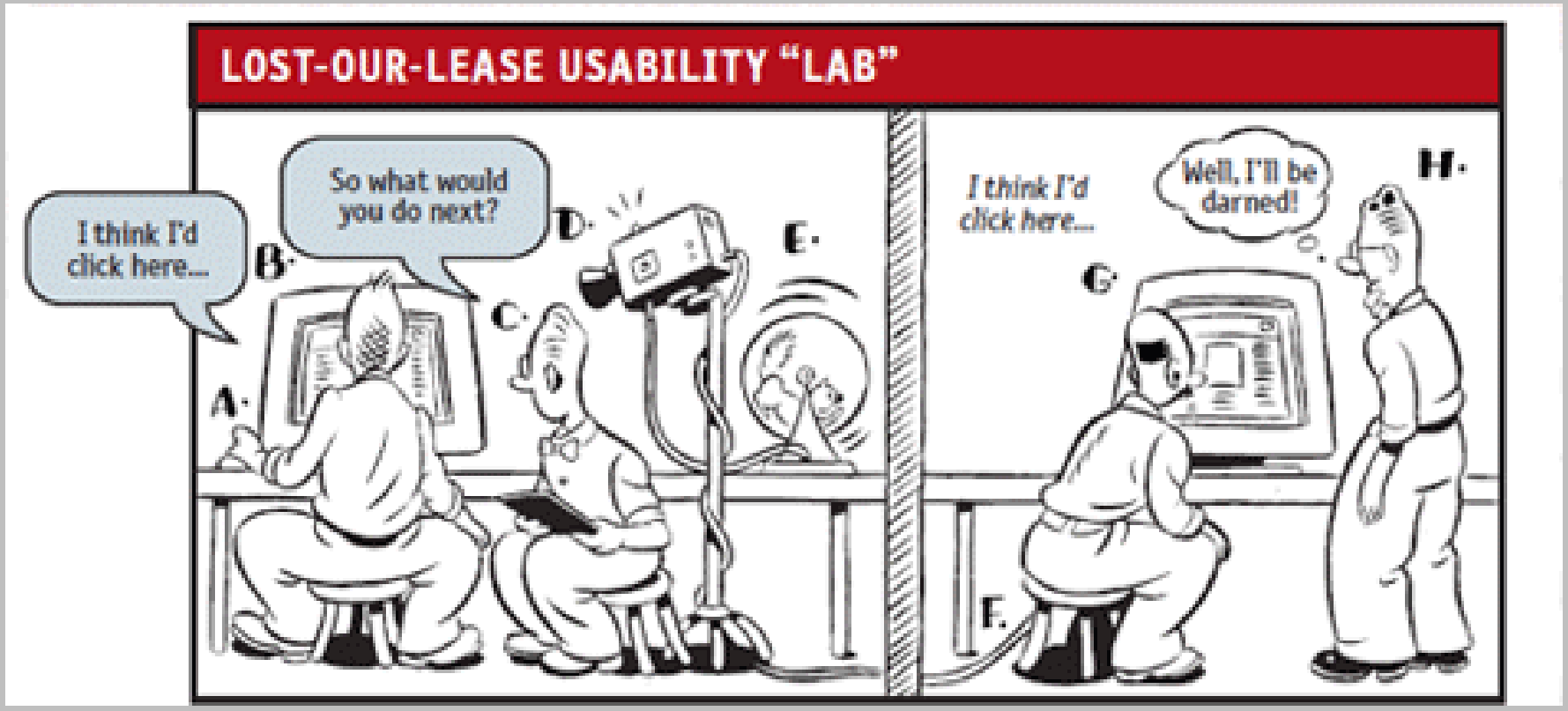
KM for IT: Semantic System Tier I



KM for IT: Semantic System Tier II



Dialogue with the End-user



Test subject (A) sits in front of computer monitor (B), while facilitator (C) tells him what to do and asks questions. Camcorder (D) powered by squirrel (E) is pointed at the monitor to record what the subject sees.

Meanwhile, cable (F) carries signal from camcorder to TV (G) in a nearby room where interested team members (H) can observe.

Krug, S. (2006). *Don't Make Me Think*

From Usability.gov…

System Usability Scale (SUS)

The System Usability Scale (SUS) provides a "quick and dirty", reliable tool for measuring the usability. It consists of a 10 item questionnaire with five response options for respondents; from Strongly agree to Strongly disagree. Originally created by John Brooke in 1986, it allows you to evaluate a wide variety of products and services, including hardware, software, mobile devices, websites and applications.

Benefits of using a SUS

SUS has become an industry standard, with references in over 1300 articles and publications. The noted benefits of using SUS include that it:

- Is a very easy scale to administer to participants
- Can be used on small sample sizes with reliable results
- Is valid – it can effectively differentiate between usable and unusable systems

Considerations when using a SUS

If you are considering using a SUS, keep the following in mind:

- The scoring system is somewhat complex
- There is a temptation, when you look at the scores, since they are on a scale of 0-100, to interpret them as percentages, they are not
- The best way to interpret your results involves "normalizing" the scores to produce a percentile ranking
- SUS is not diagnostic - its use is in classifying the ease of use of the site, application or environment being tested

Related Content

First Fridays Usability Testing Program

HHS Usability Lab

Traditional Clearance Process for Information Collection

Fast-Track Clearance Process for Information Collection

Information Collection and Paperwork Reduction Act (PRA) Overview

Related Resources

Receipt Form: Usability Test Compensation Receipt Form (Adult)

Receipt Form: Usability Test Compensation (Minor)

Introduction to Testing with Moderator Interaction

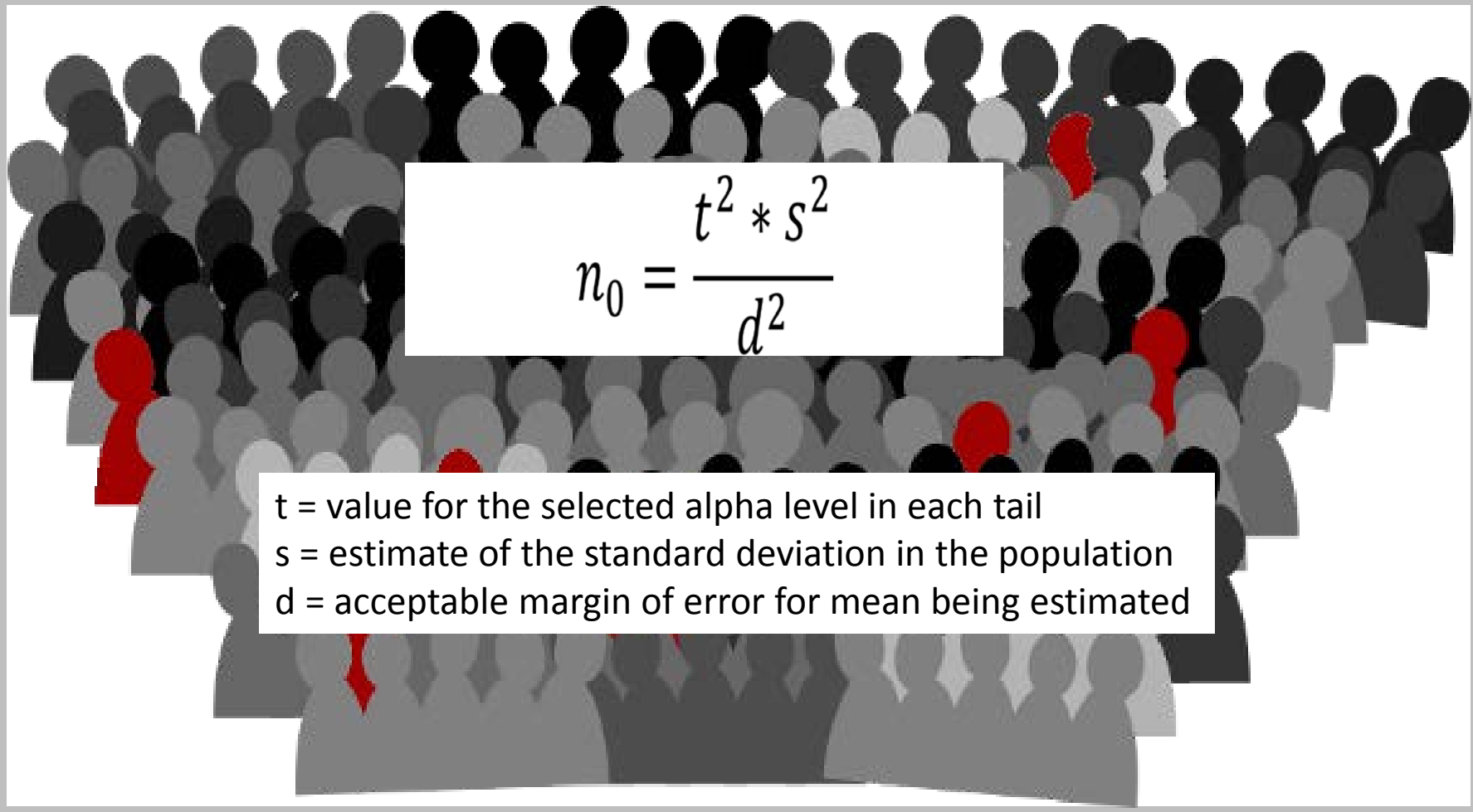
Digital Recording Release Form (Minor)

Related Categories

Test Participants | Testing | Usability Evaluation

http://www.usability.gov/how-to-and-tools/methods/system-usability-scale.html

Sample Size for Continuous Data

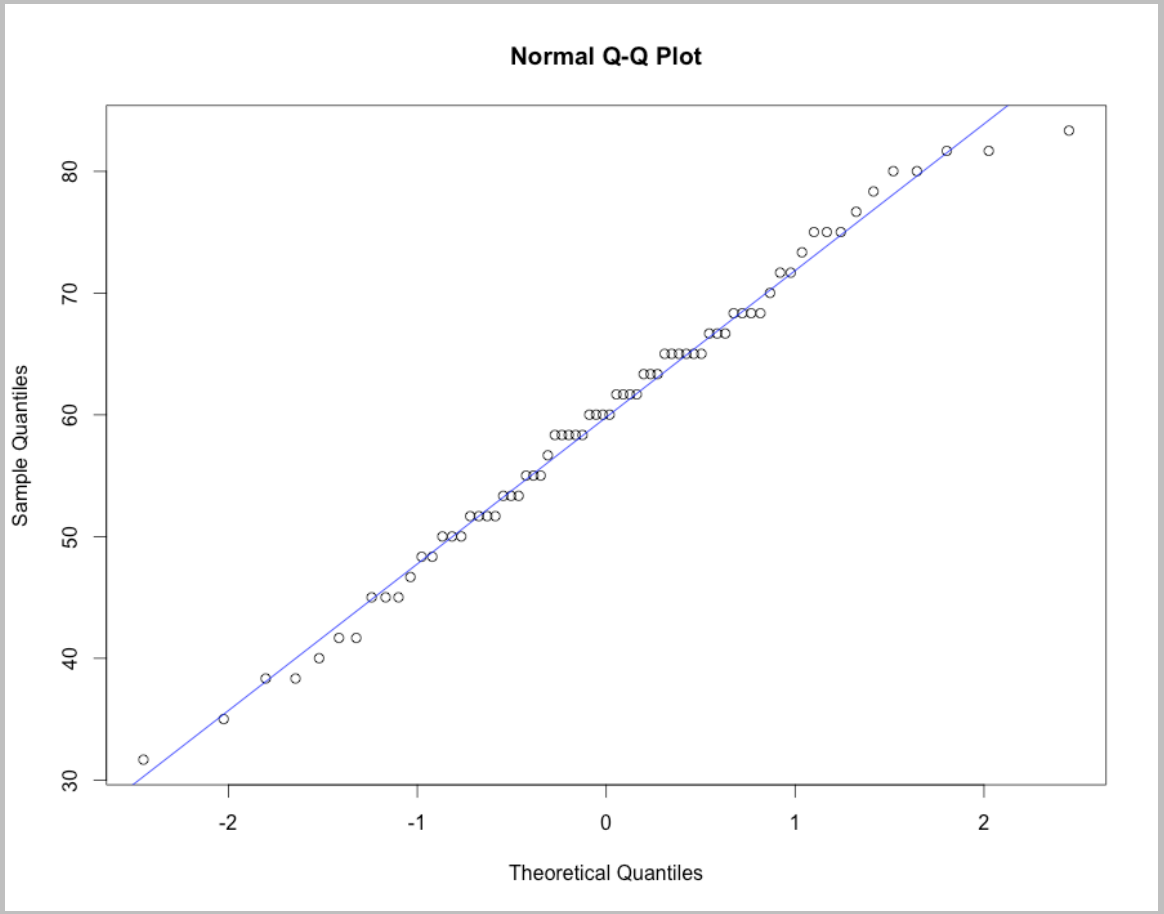


$$n_0 = \frac{t^2 * s^2}{d^2}$$

t = value for the selected alpha level in each tail
s = estimate of the standard deviation in the population
d = acceptable margin of error for mean being estimated

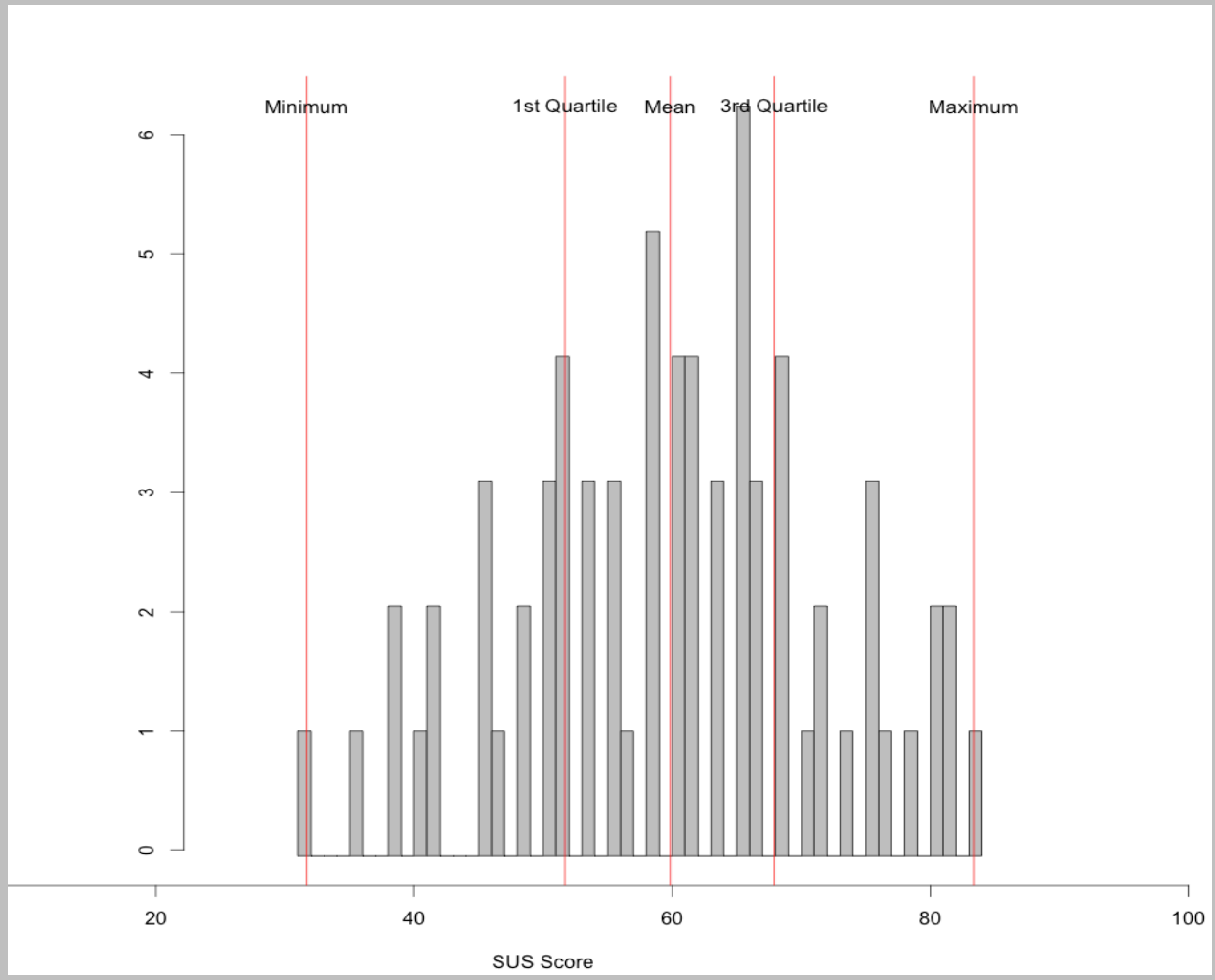
Test for Normality

- **Qualitatively assessing the fit of data to a theoretical distribution**
- **Pearson Chi Square test for normality. P-value = 0.9569**
- **Q-Q Plot Correlation = 0.9951**



JSC Search System Usability Scores

- **Small range of an approximate 50 point range between of 83.35 and a minimum of 31.67.**
- **Half of the scores were within 51.68 and 67.93 with the median score of 61.01.**
- **Users have a fairly common perception of the system usability.**

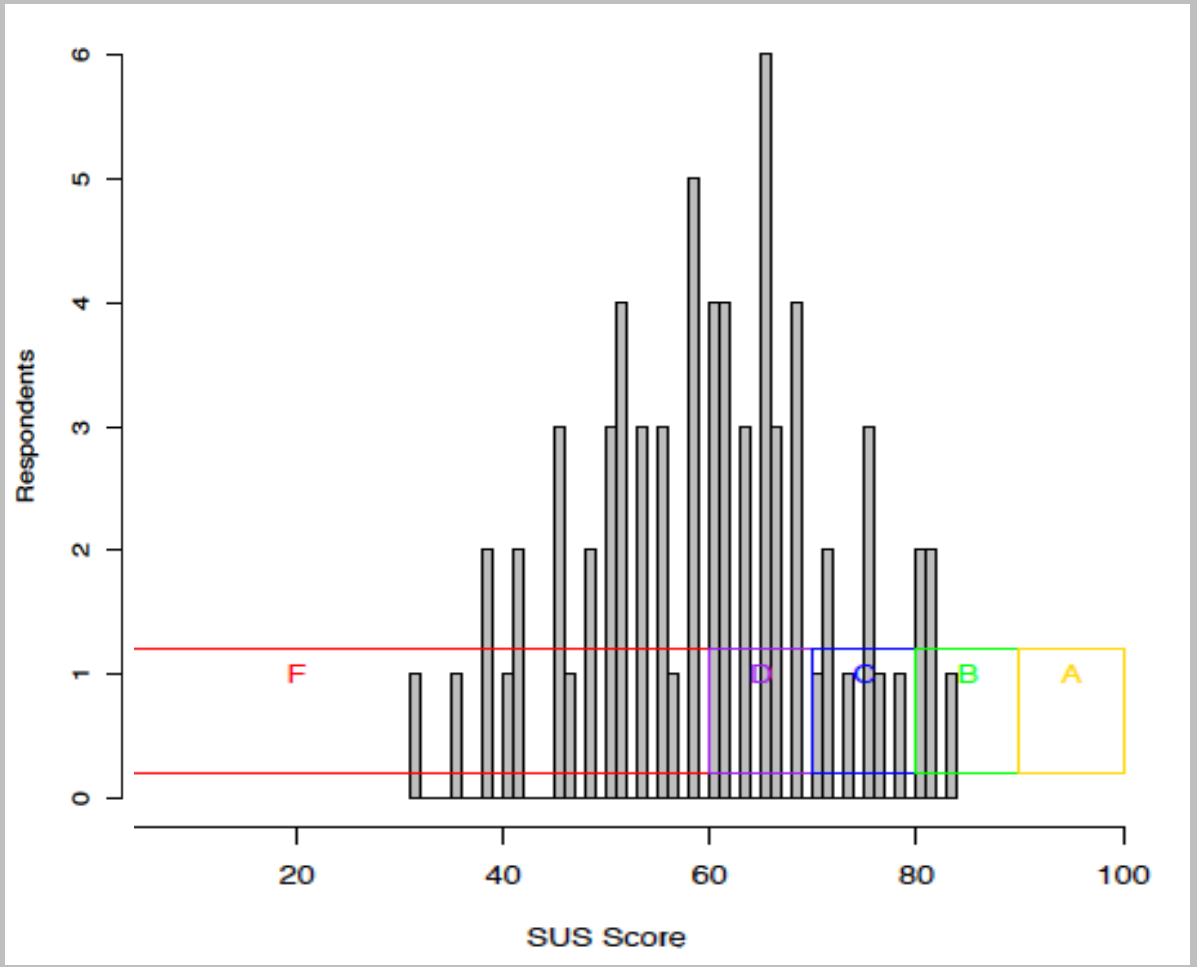


JSC Usability Scores: Grade Scale

- **Vetted methodology for communicating usability scores.**

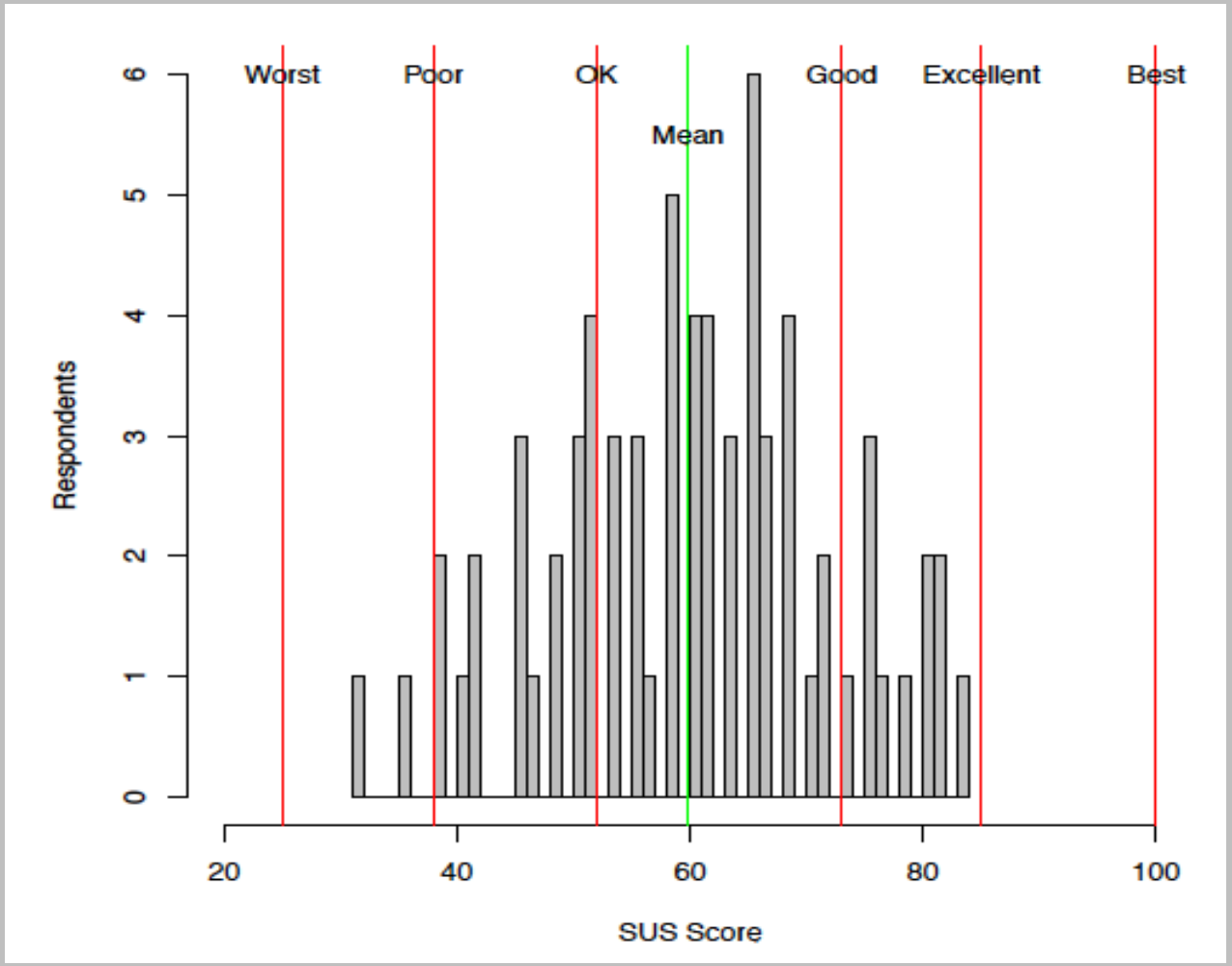
- **90s= exceptional**
- **80s= good**
- **70s= acceptable**
- **<70= cause for concern**

- **Half of the scores were within 51.68 and 67.93 with the median score of 61.01.**



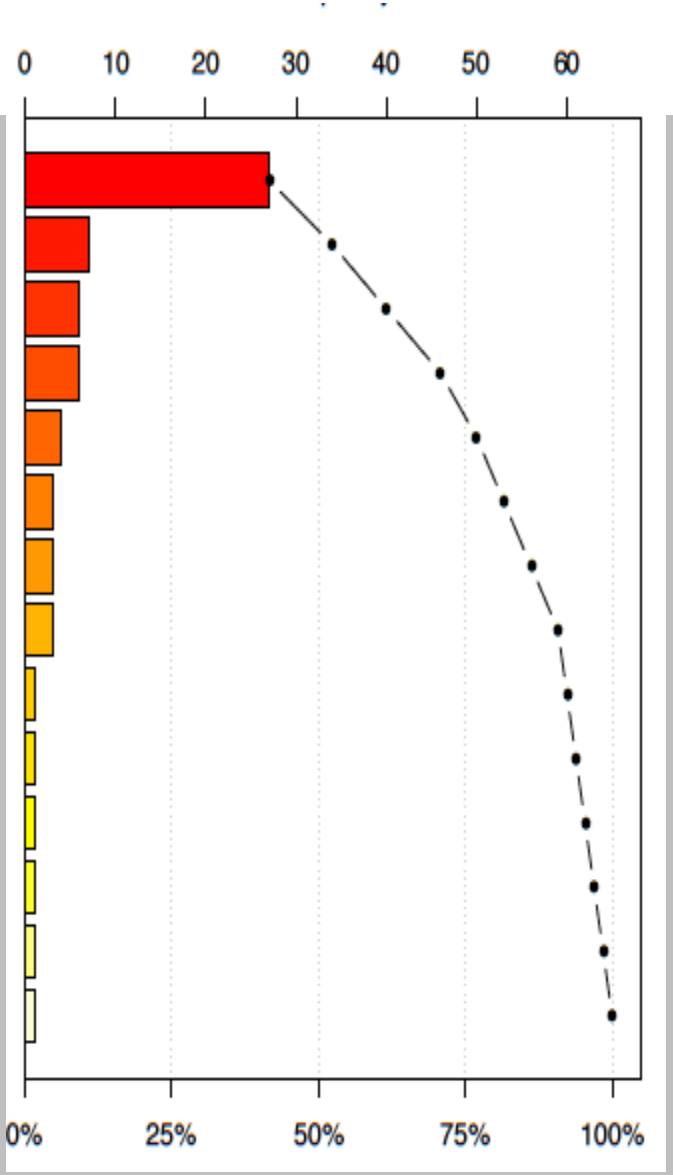
JSC Usability Scores: Adjective Scale

- **67% of responses between ‘Good’ and ‘OK’.**
- **75% of responses below ‘Good’**
- **33% of responses below ‘OK’**



Future work

Poor search results.....
Unintuitive interface.....
Unfamiliar with features.....
Web vs document search.....
Wrong file type returned.....
No issue.....
No authoritative source for information.....
Training.....
Case sensitive search.....
Customer support.....
Need Center specific search.....
Search interface too complex.....
Search of multiple Share Point sites.....
Secure vs non-secure search.....



Take Away…

Considerations

- Criticality of usability testing for the intranet and search applications
- Scalability and validity of the System Usability Score to identify areas of concern
- Customization of the SUS, to not only allow examination of the systems usability, but also provide information on user-rated performance of search results.

Resources

- Bangor, A., Kortum, P. T., & Miller, J. T. (2008). An empirical evaluation of the system usability scale. *Intl. Journal of Human–Computer Interaction*, *24*(6), 574-594.
- Brooke, J. (1996). SUS-A quick and dirty usability scale. *Usability evaluation in industry, 189,* 194.
- Brooke, J. (2013). SUS: A Restrospective. *Journal of Usability Studies, 8(2),* 29-40. http://www.upassoc.org/upa_publications/jus/2013february/JUS_Brooke_February_2013.pdf
- White, Martin. (2013). *Enterprise Search.* Sebastopol, CA: Oreilly.

To Be Avoided…