Dialog

Assessing Client Needs: Gathering and Analyzing Data

A Quantum2 Seminar

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created by
INFASE Solutions

quantum[2]

- Quantum^2 is:
  - A professional development program for information professionals
  - A combination of training, communications and tools to help information professionals develop leadership skills and demonstrate the value of their services within their organizations
  - Available free to information professionals worldwide
  - quantum.dialog.com

Quantum² Leadership Circle

Strategic Competencies

- Environmental analysis
- Knowledge culture vision
- Perception analysis
- Relationship management
- Management buy-in

Gather Data & Analyze Results
Map Information Flows

Business Competencies

- Needs assessment
- Service definition
- Marketing
- Performance
- Measurement

Agenda

- Workshop Objectives
- Warm-up Exercise
- Data Gathering Techniques
- Data Analysis & Evaluation
- Group Exercise
- Review of Key Learning
- Wrap-up and Action Planning

Workshop Objectives

- To enable participants to:
  - Enhance information professional competencies with data gathering skills
  - Understand 3 primary data gathering techniques and how they can be applied to information audits and needs assessments
  - Analyse results into meaningful information that aids decision making for service provision
- Key learning:
  - Understand the context within which information audits are best carried out, what is involved in developing the surveys and how to analyse the data received.

What is an Information Needs Assessment or Audit ?

- An information audit is the process of gaining an understanding of your clients' information use habits, preferences, and perceptions, based on their direct feedback.

- An information audit is an inventory comparing "what is" against "what should be." An opportunity to gain information about non-users as well as those currently served.

- A needs assessment uses survey methods to elicit data for analysis concerning the resources and services that people need to do their work and how they find them.

Warm Up Exercise

- Why are you here?
- Why would you want to undertake an info audit?
- Has anyone been involved in an information audit?
  - What data gathering techniques were used?
  - What were the outcomes?

Why? The Bottom Line

- To ensure that information services support organisational goals
- To identify user needs
- To evaluate or promote existing services/resources
- To identify service/resource duplication or over-provision (map information flows)
- To maintain current, or support a request for additional staff and funding
- To support the restructure of information services
- To raise the profile of information as a strategic asset

Information Audit and/or Needs Analysis Process

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Determine organisational objectives for Needs Assessment or Information Audit

Step 1: Plan the Process

- Scope/Resource Allocation
- Methodology
- Communication Strategy

Step 2: Gather Data

- Questionnaires
- Interviews
- Observation

Step 3: Analyse & Evaluate Data

- Options
- Preparation & processing
- Recording & presenting
- Evaluation

Step 4: Formulate Recommendations

- Communicating recommendations
- Implementing recommendations

Data Gathering & Data Analyzing Planning Process

- Develop clear objectives
  - Know what you want to achieve
  - Know your organisation
  - Identify your stakeholders
- Determine scope and resource allocation
  - Scoped by type of information or coverage of the organisation
  - Estimate level of human, financial, physical and technical resources
- Choose methodology
  - Data Gathering (Survey)
  - Data Analysis and Evaluation
- Develop communication strategy
  - Communication before, during and after
  - Communication of findings and recommendations
  - Communication of implementation of recommendations

Appropriate Data Gathering - Survey

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- To decide on the most appropriate method of data collection, you must know:
  - What data do you need to achieve objectives?
  - From whom do you need to collect it?
  - What is the most appropriate way of collecting data in your organisation?

Survey Delivery Mechanisms

- Web-Based
- Hard Copy
  - Mail survey
  - Drop survey
- Human
  - Door-to-door
  - Random stop
- Telephone

Web Survey Tools

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SurveyMonkey.com
because knowledge is everything

Poll Pro™
AdComplete.com, LLC
Web Poll Software

ActiveWebSoftwares.com

Cool Surveys
Free! Polling Tools and Survey Tools!

StatPac

SQ
Survey Software

researchexec

snap surveys

webSurveyor

EZSurvey

objectplanet

SurveyCrafter

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Survey Types

- Quantitative
  - Close ended questions
- Qualitative
  - Open ended questions

Whether quantitative or qualitative, can also be:

- Single form
  - Single scroll-down page, moving from one question to next
- Multi-branch
  - Answering questions differently routes to another sequence of questions further down the questionnaire

Data Gathering Elements

- User information
- Information needs
- Awareness of services
- Quality of services
- Accessibility
- Training needs
- User habits
- Demographics

Survey Methods

- Questionnaires — Quantitative
- Interviews
  - Personal
  - Focus Group
- Observation

Qualitative

Questionnaires

- Can be used to collect both qualitative and quantitative data
- Can be distributed manually or electronically
- Can reach a vast number of people regardless of physical location or geographical dispersion
- Can be distributed quickly and cheaply
- Can be used when human and financial resources are not available to conduct interviews

Questionnaires: Advantages & Limitations

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- Questionnaires work well for:
  - Measuring awareness
  - Gathering usage statistics
  - Investigating your “market share”

- Questionnaires do not work well for:
  - Evaluating value of service
  - Identifying usage barriers
  - Discovering deficiencies in your service or collection

Optimizing Questionnaires

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- "Sell" purpose and importance before distribution and provide an incentive
- Keep them short, structured and grouped according to purpose
- Let respondents know the number of questions
- Give clear instructions, appropriate time and due date for return
- Use terminology or language familiar to your users
- Use "satisfactory," "unsatisfactory" scale, rather than "1,2,3" ranking
- Allow flexibility to go back, change, "skip" or "save" responses
- Avoid surveying for information you can find another way
- Test or pilot to a sample group before distribution

Interviews

- Personal Interviews
  - Can be used for evaluating information needs
  - Can be used for evaluating staff responsiveness, attitudes and perceptions of the library and info services
  - Can be used for tracking the flow of information within the company (infomapping)
- Focus Group interviews
  - Can be used when interaction of participants will generate ideas
  - Can be used as good sounding boards for ideas of new services
  - Can be used to survey participants on the same organisational level
  - Can be used to survey departments or teams with a common goal or interest

Interviews: Advantages & Limitations

- Interviews work well for:
  - Personal contact
  - Immediate responses
  - Allowing participants to express themselves in own words
  - Allowing the collection of a large volume of rich data
  - Allowing discussion, probing and unexpected insights
  - Investigating problems
- Interviews do not work well as:
  - They are costly in terms of time and resources
  - The quality of data is reliant on the skill of the interviewer
  - Anonymity is not possible, so “frank and open” discussion is subjective
  - They can be extremely difficult to schedule without directive from management

Optimizing Interviews

- Prepare and distribute agenda, outline of topic and questions that will be asked
- Ensure that each question is open ended, unambiguous and contains only one idea
- Use skilled interviewers with good listening skills
- Ensure interviews last no longer than 30-60 minutes, depending on type
- Select a comfortable and neutral setting and ensure participation by all
- Include highest level of management available if possible
- Record interviews rather than relying on memory

Observation

- Reviews the information environment in which the information user works in order to create a view of how information fits into the users' work processes

- Watch, follow and record activities as they are performed – then interpret observations and draw conclusions.

Observation

- Observation involves
  – Selecting the representative group you will observe
  – Investigating “desktop” and physical information repositories (files, collections)
  – Silently observing work routine and following up with verbal questions

Observation: Advantages & Limitations

- Observation works well when:
  - You are more interested in "behaviour" rather than "perceptions" of the users
  - You require a qualitative view of how information fits into work processes
- Observation does not work well as:
  - Observation changes behaviour. What is observed is not normal behaviour
  - There is no way to verify observations and the inferences drawn from them
  - The observer may be biased and not completely objective

Optimizing Observation

- Segment the groups from which you want feedback
- Try to understand each constituencies goals and interests thoroughly
- Record your observations. Take careful note of all informal information gathering
- Use open-ended questions when you interview verbally
- Avoid putting your own bias on observations. Consider a neutral third party if impossible
- Allow sufficient time for observation

Potential Pitfalls in Data Collection

- Representative Sample
  - Small, good enough, wrong
- Bias
  - Outside consultant or third party
- Wrong methodology
  - Open-ended for qualitative data
  - Close-ended for quantitative data
- Timeline
  - Be realistic. Plan for at least 3 months (10-12 weeks)

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Data Analysis

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- Investigate your data analysis options
  - Manual
  - Desk top tools (spreadsheets & databases)
  - Survey software programmes
  - Statistical packages

Data Analysis

- Data processing or preparation plan
  - Transcription of interviews and observation findings
  - Editing responses
  - Coding responses
- Data entry
- Data analysis

Data Analysis

- Recording and Presenting Survey Results
  - Descriptive summary
    - Text or tabular (including cross-tabulation)
  - Descriptive statistics
    - Frequency counts, ranges, measures of central tendency
  - Graphical representation
    - Charts, graphs, histograms

Data Analysis

Descriptive summary – text or tabular

Summary of Assessment of LIS Curricula

Competency	No. LIS Progs	%	Competency	No. LIS Progs	%
Analysis/Repackaging	2	2.6%	Marketing	17	22.1%
Communication	6	7.8%	Measurement/ ROI	9	11.7%
Entrepreneurship/ Leadership	9	11.7%	Negotiation	2	2.6%
Evaluation Product	6	7.8%	Personnel Management	41	53.3%
Field Experience	23	29.8%	Presentation/ Writing Skills	3	3.9%
Fiscal/Budgeting	35	45.5%	Service Planning	31	40.3%
Flexibility	3	3.9%	Strategic Planning	25	32.5%
Interpersonal	7	9.1%	Taxonomies	1	1.3%
Knowledge Management	9	11.7%			

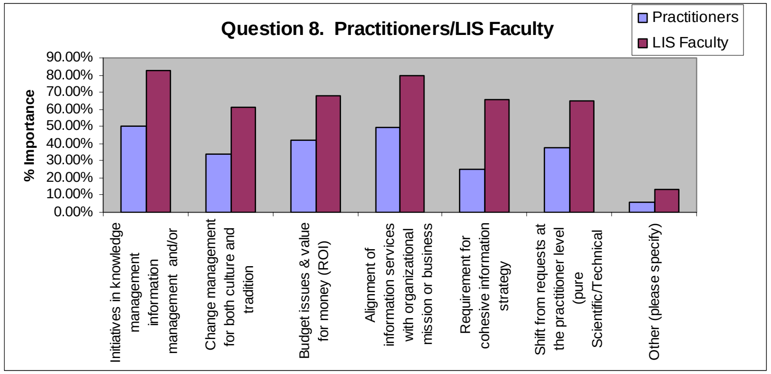
- Descriptive Statistics – frequency counts, ranges, measures of central tendency

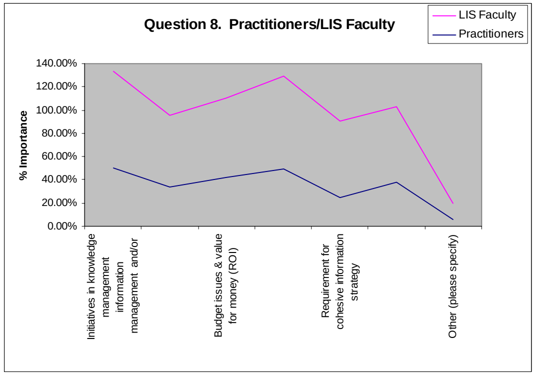
Business Competencies Skills and Preparation

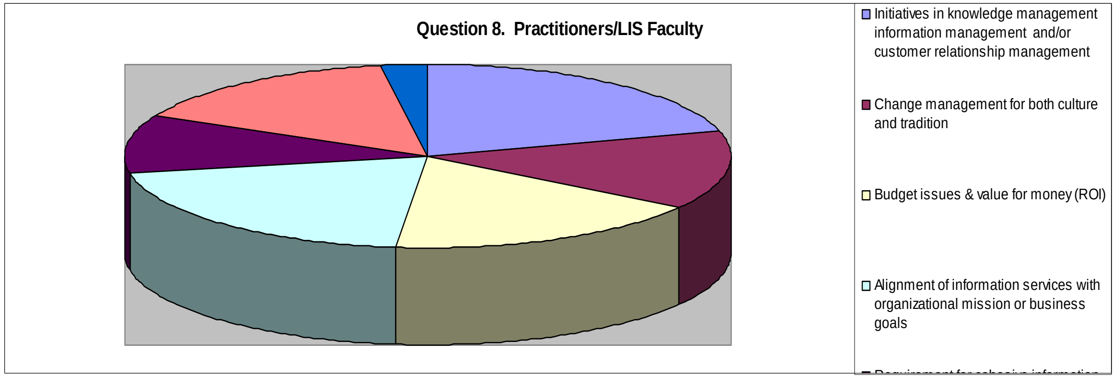
In the practitioner survey, communication skills were viewed as the single most important business competency with a 95 percent "must have" response. The other "must have" for today's entry-level candidate was the ability to analyse and synthesize information, at 75 percent importance. Marketing, budgeting, product evaluation, service planning and implementation, and performance management were judged fairly highly at "nice to have" in the 59-71 percent range.

Graphical Representation

Strategic Issues Facing Information Professionals







Potential Pitfalls in Data Analysis

- Percentage vis-à-vis size of sample
- Keep it simple if possible
- Honest and accurate conclusions
- Inaccurate or improper sampling procedures

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- Data Evaluation
  - – Evaluate problems or “pain points”
  - – Analyse gaps
    - Identify mission critical information needs
  - – Interpret the mapped information flows
  - – Develop strategies
    - What have you got that fits?
    - What “solutions” would address needs

Recommendations & Implementation

- Communicating Recommendations
  - Written report
  - Oral presentation
  - Seminars
  - Personal feedback to participants
  - Corporate intranet/web site or newsletter
- Implementing Recommendations
  - Develop an implementation programme
  - Develop an implementation plan
    - Strategic, business, marketing
  - Develop a communication strategy

Group Exercise

Learning Objective:

- Practice applying the data gathering techniques to specific situations within an organization.

Group Exercise

- Select appropriate data gathering technique(s) for **<u>one</u>** situation described below and formulate survey questions:
  - *A department of 40 people that generates large volumes of reports, papers and other documents and draws on expensive external information resources. This department has a departmental manager and 4 project managers.*
  - *1200 geographically dispersed employees whose information needs, sources and outputs are unknown. They belong to 4 business units, each headed by a group manager situated in head office.*
  - *500 offshore geologists currently using ad hoc and unknown, therefore possibly inappropriate, information resources.*

Group Exercise

- Group Feedback and Discussion

Key Learning

This module has covered:

- the context within which information audits are best carried out
- what is involved in developing the surveys
- how to analyse the data received

Wrap-Up and Action Planning

- Learning
- Next steps
- Feedback
- Support from Quantum^2

References & Additional Bibliography

- Henczel, S. The information audit: a practical guide. Saur, 2002, 272pp.
- Westbrook, L. Identifying and analyzing user needs: a complete handbook and ready-to-use assessment workbook with disk. Neal-Schuman, 2000, 250pp.
- Dobson, C. Beyond the information audit: checking the health of an organisation's information system. Searcher. Vol.10. No. 7, July/August, 2002 (available at http://www.infotoday.com/searcher/jul02/dobson.htm)
- Abell, A. Conducting an information audit. TFPL. (available at http://www.tfpl.com/assets/applets/Conducting_an_info_audit.pdf)
- Plosker, G.R. Conducting user surveys: an ongoing information imperative. Online. Vol. 26. No.5, September/October 2002 (available at http://www.infotoday.com/online/sep02/Plosker.htm)
- Dononhue, E. Survey techniques and tactics. PowerPoint Presentation, 2004 (available at http://www.nysfirm.org/documents/pdf/wmg/survey.pdf)
- Colorado State University. Writing@CSU – survey research writing guide. (available at http://writing.colostate.edu/guides/research/survey/

Web Survey Tools – URLs

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- www.surveymonkey.com
- www.polldaddy.com
- www.zoomerang.com
- www.statpac.com
- www.vovici.com
- www.researchexec.com
- www.snapsurveys.com
- www.surveycrafter.com
- www.coolsurveys.com
- www.objectplanet.com
- www.pollpro.com
- www.esurveyspro.com
- www.questionpro.com

Thank you!

Questions?

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