Raising the Bar: New Info Pro Skills for Today’s World

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Initiative Fortbildung
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Top Google Tips & Hidden Tools

The Old Google is Gone

Forget the 200-item ranking algorithm
Forget complex searches
It’s an experience, not a search…
Google’s AI priorities

Return of the search *black box*
Boolean isn’t Boolean any more
“We think you really meant this…”
Missing: word
Less emphasis on text-search features

Google’s mobile priorities

“We are the engine that drives
our present”
Mobile searches are spoken
Mobile searches are activity-focused
Mobile searches have no ads

Google’s mobile priorities

Mobile-friendly, mobile-optimised
sites ranked higher
More emphasis on surfacing
individual pages, not web sites
Impact on search pros

“Everything you know is wrong”
Forget finality, certainty, repeatability
Creativity counts

Try multiple approaches

Run every search 3 times
Change the order of search terms
Search while logged in, then logged out
Then maybe on your mobile!

Try multiple approaches

For terms you want closely related, try all these:
word1 word2
word1-word2
“word1 word2”
Search strategy matters!

Uber market strategy
18,700,000 results
What is Uber’s market strategy
23,000,000 results
Uber “market strategy”
60,000 results
“market strategy” Uber
140,000 results

Google ignores some parentheses

(A B) OR (C D) is interpreted as
A (B OR C) D

Where is Advanced Search?

Web:
google.de/advanced_search

Images:
google.de/advanced_image_search

News: pull-down from search results page
Where is Advanced Search?

Books:
books.google.de/advanced_book_search

Scholar: pull-down in search page
New indexes appear

Google search prefixes

Filetype:
Can use for any filetype

Link:
Some links to that URL

Related:
Similar pages based on link patterns

Google search prefixes

Cache:
Retrieves cached copy of page

Inanchor:
Words in the anchor text
Inexact “exact” searching

Verbatim
Search tools -> All Results -> Verbatim

Intext:
To avoid hits from anchor text links
“word”

Don’t be too clever

Too many terms = lower results
Don’t use long OR statements
Use Google’s auto-synonyming
Use inurl: or intitle: only when needed

Watch out for Missing: results

Search tips & tricks

Use * as search placeholder
“john * smith”

Use .. for a numeric range
gmo seeds 2010..2014
Search tips & tricks

Find subdomains to explore within a web site
site:tu-berlin.de –site:www.tu-berlin.de

Shows other areas of web site
www.ensys.tu-berlin.de
www.innocampus.tu-berlin.de
isis.tu-berlin.de
...

Search tips & tricks

If searching blog content, limit by year inurl:YYYY
inurl:2013 site:researchbuzz.me
wolfram

Google Autocomplete

Find alternatives to a product / service

evernote vs:
evernote vs onenote
evernote vs google drive
evernote vs dropbox
evernote vs keep
evernote vs apple notes
evernote vs trello
evernote vs google keep
evernote vs google docs
evernote vs pocket

evernote vs onenote vs keep
Google Scholar has a library

Every item has option to Save

Google Scholar's library

Add labels to items

Export to BibTeX, EndNote, RefMan or CSV

Custom Search Engine

Google still does custom search!

Favour/require/suppress specific URLs

Append search terms

Help your clients search better!

cse.google.de
Google has my search history???

Every search while signed in

Only you can see this data. Google protects your privacy and security.

Go to myactivity.google.com to view, delete

Reluctant-Entrepreneur.com

Googling while signed in

Relevance ranked by prior search activity
Advantage? Disadvantage?
Compare search results with anonymous search

Reluctant-Entrepreneur.com

Top Ten Alternatives to Google
Bing.de

Always my second choice

Good video searching tools

linkfromdomain:
  See pages linked from a URL
  linkfromdomain:lifehacker.com todo
  finds good “to-list” tools

Omnity.io

Semantic search, “meaning-based relationships”
  Finds relateddocs, even if the docs
don’t link or cite each other
  Can drag/drop a file to search related
  material!
  Can download list of results

European Media Monitor

emm.newsexplorer.eu and
emm.newsbrief.eu
  European Commission search tool
  Computerised analysis of news
trends, content
  “Events detection” for late news
  Nice visualisation of trends
Yandex.com

Based in Russia
Seems to filter spam out better
Good for web, images, video
News interface is in Russian only

DuckDuckGo.com

Non-tracking search
Yahoo, own crawler
Can limit search by country
Emphasis on instant answers

Startpage.com

Anonymised Google search
Has advanced search!
No inurl:, but most other prefix: searches work
New anonymous search players

Oscobo.co.uk
  UK-based, UK-focused
  Bing/Yahoo

Hulbee.com
  Swiss-based, semantic search focus,
  easy to limit by country
  Yahoo

Gigablast.com

Open source search engine
  Lots of info in search results page
  Metatags, links to the page, “more from this site”
  Sort by date, relevance or # of inlinks

Yippy.com

Formerly Clusty, sold to big-data firm
  “Family focused”
  Metasearch tool
  Nice tool for disambiguating
Moving clients beyond Google

Add other search engines to browser search box
Chrome: Settings -> Search
Firefox: Settings -> Options -> Search

{Other resources mentioned during workshop}
Qwant.com – privacy-oriented metasearch engine
Ecosia.org – search engine that plants trees with its ad revenue

Searching the Deep Web
Deep (not Dark) Web

What do search engines miss?
- Dynamic content
- Password or form-controlled access
- Database content
- Library catalogs
- Government records
- Your intranet

Finding deep web content

- Cast a wide net when searching
- Set your relevance-meter on “broad”
- You can’t find everything
  - You can always find something

Finding deep web content

- Know what you’re looking for
  - Nice-to-know vs must-know
- Look for leads to the next source
  - THE answer may not exist
Finding deep web content

Start with one known source
Association, NGO, non-profit, library or museum, etc.

Look for govt portals
destatis.de, data.gov, data.gov.uk, etc.

Then use Bing’s linkfromdomain:

Finding deep web content

Reverse image search
ID useful chart, person
Look for other copies of that image
Search by image URL
Google Image Search, click the
Tineye.com

Searching with images

Search Google Images for “dog food” “market share”
Searching with images

Skim results
See that petfoodindustry.com is a good source
Search "market share" (2015 OR 2016)
site:petfoodindustry.com

Maintain directory of your important resources

Open-access journals: doaj.org
Open-access books: doabooks.org
Open-access repositories:
opendoar.org

Maintain directory of your important resources

Public Library of Science: plos.org
OpenGrey (Grey Lit in Europe)
opengrey.eu
BASE – Bielefeld Academic Search Engine
base-search.net
Hiding in plain sight

Lots of sites have searchable databases:
  - Google Scholar
  - Amazon Books
  - SlideShare

Use search engines for leads

*Keywords* (database OR dataset OR archive)
(portal OR resources OR “online tool”)

Bing only

Find pages that link to a file type with contains:
  - contains:mp3
  - contains:xls
Millionshort.com

‘What haven’t you found?’
Filter by site popularity
Eliminate ‘click-bait’

Essential for people-searching, other long-tail niche searches

Zanran.com

“Google for data”
Web crawler looks for images on web pages
Algorithm IDs tables and graphs
Extracts text surrounding image

Hydraulic fracking - en.wikipedia.org

Contents [hide]
1 Geology
  1.1 Mechanics
  1.2 Minerals
  1.3 Geology
2 History
  2.1 Prehistory
  2.2 Oil and gas wells
  2.3 Geologic procedures
  2.4 Geologic features
3 Issues
  3.1 Economics
  3.2 Geologic aspects
  3.3 Geologic considerations
4 Costs
5 Safety
6 Economic impacts
7 Public controversy
  7.1 Public and political sector
  7.2 Economic impacts

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Hydraulic fracking – fr.wikipedia.org (translated)

Think creatively

Researching a company?
Track their patents. Anything new?
Look up employees in LinkedIn to find patterns. What schools did they come from? How many years of experience?

Look at employer reviews

<with a little skepticism>

Glassdoor.com
See employer’s profile
See employees’ reviews & advice
See salary ranges
Look for promotional info

Product videos, pitch decks in:
  YouTube
  SlideShare
  Pinterest, Instagram

Tap into librarians’ expertise

Find a libguide (Libguides.com or search for libguide)

Use LinkedIn Advanced Search
  Search with keywords, location
  Filter with Industry: Libraries to find librarians

LinkedIn’s Advanced People search
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22-23 September 2016

ID info pros to consult

Get leads for experts on Twitter

site:twitter.com/*/lists inurl:librarians

Gets Twitter lists about librarians

Harvesting Information From Social Media
Real-life uses of social media

- Get leads to new information
- ID/validate an expert
- Professional development
- Monitor a live event / news
- Monitor mentions of your org

Privacy concerns

Facebook
DOs
DO understand privacy settings
DO manage clients' expectations
DO understand your org's policies re: social media research

DOs
DO try several approaches
Do use Advanced Search (LinkedIn, Twitter)
DO consider premium accounts

DON'Ts
DON'T just lurk
DON'T overpromise
DON'T assume the usual 80:20 rule
Look at the 4th page of search results
Searching for individuals

Watch for name variants
LinkedIn: Katherine J. MacArthur
Facebook: Kathy MacArthur
Twitter: CatMac

Search social media on Google

Example:
site:twitter.com "John Smith"

Add location, job, etc. if needed

Watch out for name changes

Find Jeeg Salbian’s Facebook page
Searching Facebook

Syntax that usually works
- People named “name”
- Posts about “topic” by name
- Posts about “topic” in public group
- Posts about “topic” from location
- Friends of friends who like topic

“Universal” search
- Except non-public posts
- Good for unusual topics
- ID support groups
- Sort by relevance, not date 🌐
LinkedIn insights

Use Advanced Search to ID current or former employees
Have they given presentations?
Links to other resources?

Finding the next source

Look for groups of experts on LinkedIn & Facebook

Facebook search:
Librarians who like Evernote
Thai speakers who live in Denver

Searching Twitter

Use Advanced Search
twitter.com/search-advanced

Also try Google
site:twitter.com

Look for terms with and without #
iphone7 #iphone7 “iphone 7”
Twitter’s advanced search

Search by:
- AND/OR/NOT
- Phrase
- Twitter handle
- Near a location
- Date range

twitter.com/search-advanced

Default to filtered results

Searching Twitter

Limit to tweets in specific language
#iphone7 lang:de

Limit by date range

Scan for posts from an account
from:mebs
Following breaking news

#keyword NEAR:location
WITHIN:nkm
Use keywords used by locals
Skim tweets for trending hashtag
Also, use the Video tab to find videos

Finding the next source

Look for tweets with links

Twitter search: keywords filter:links

Twitter search hacks

Look for engagement

min_retweets:n

min_faves:n

Millennials (brands OR marketing) min_retweets:5
Professional development

LinkedIn
Remember privacy settings!
Develop a voice, share news
Participate in groups
Make it easy for recruiters to find you!

Professional development

Twitter
Use dashboard – HootSuite,
TweetDeck
Monitor live-tweeted conferences
Build lists of thought leaders

Evaluating Information Quality
Pre-web validation of info

- Reputation of source
- Citations by others
- Background of author, publisher
- Apparent bias, clarity
- News or opinion?

Today’s info validation

- Fact or opinion? editorial? advertising?
- Confirmation bias, echo chamber
- Distrust of “experts”, establishment
- Trust in search engine ranking

2016 info validation

- Distinction between popular, authoritative, influential, from an expert, new/late-breaking
- Search engines rank for all these
What about the wisdom of crowds?
Ants do it, bees do it!
Yes if:
- Diverse opinions
- Decentralised, local knowledge
- Independent, not influenced by others
- Aggregated opinions together

When are crowds “wise”?
- Search engines ranking algorithms?
- Group discussions?
- Wikipedia?
- Consumer review/rating sites?

Evaluating information
- Find original report, dataset, etc.
- Is this current info? Does it correlate to past info?
- Who is the intended audience?
Evaluating information

Look at the reputation, expertise of source
Determine why this was written
Self-published or vetted?
What about open-access journals?

Evaluating information

Does the author cite other sources or authority?
What do others say about this expert and this topic?
Apply the JDLR test
Just Doesn’t Look Right

Evaluating information

Stay open to new/unexpected perspectives
Experts may not look like experts
Varying perspectives are all partially right
Checklist for social media

How old is the account?

Does the person provide contact info and is that info consistent?

Is there a photo? (Run a reverse image search)

Checklist for social media

How many followers does the account have?

How often are the person’s posts forwarded or liked by peers?

How and how much does the person share, interact with others?

Checklist for social media

Watch out for links to fake news sites

Look for evidence the writer is local
Collect urban-myth busting sites
Snopes.com
TruthOrFiction.com

Information Alchemy

SLA/FT survey
Users’ top pain points:

1. Info overload
2. Filtering through retrieved info
3. Relevancy of info

[ftcorporate.ft.com/sla]
Are we creating pain?

TL;DR
Too long; didn’t read

When we just provide info, we waste our client’s time

For client happiness, know:

What
Why
Width/breadth/depth
What will it look like
What next

Getting to the real WHAT?

“I need studies on the effectiveness of mobile advertising.”
This is mobile advertising

Getting to the real WHAT
Clients only ask us what they think we can do
“So, in other words, you need to know …”
“If I can’t find that, what would be second best?”

Why ask WHY?
“I need a list of the top 100 US plastic surgeons.”
**Why?**

Client needed 5 successful cosmetic plastic surgeons in each of 20 metropolitan areas, in order to start an executive networking group.

**Width/breadth/depth**

“Get me smart”

“Confirm my choice”

Find what isn’t out there

Make a decision

... 

**What will it look like?**

What will happen to this info next?

Is it only internal? Will it be inserted into something else?

How can I make this a better-looking answer?
What will it look like?

How many new ERISA investigators will be hired this year? Why?

According to comments by DoL Secretary Hilda Solis and confirmed by EBSA personnel in the Office of Enforcement, there will be no additional hires of EBSA investigators.

Secretary Solis was asked the following question relating to the 2016 budget during an online chat with DoL leaders and others (snipr.com/****):

The Department expects to hire about 30 employees in EBSA. Are these investigator positions and will these positions be filled across the board or in certain areas (i.e. East/West Coast, Regional Offices, etc.)?

Secretary Solis: No, these are not investigator positions. Eighteen of the positions are benefit advisors to address the growing number of calls from the public and a significantly greater demand for outreach, education and assistance. Twelve of the positions will be used to undertake increased activity related to health care issues, including regulations, technical assistance, compliance assistance and interpretive guidance.

An interview with Jeffrey Monhart, head of Division of Field Operations, EBSA Office of Enforcement, confirmed that there has been no increase in the number of EBSA investigators. He commented:

What next?

Present results that make the next step easier
Don’t know? ASK!
What does other decision-ready info look like?
What next?

Recommend addl research if needed

ALWAYS ask for feedback
• Did this address your needs?
• Do you have any questions?
• What could we do to make this more useful for you?

Better writing

Use logical organisation to present ideas clearly and concisely

Tell a story with concise sentences, strong verbs and active voice

Better writing

Lead with the key info

"Enclosed is an analysis of the market for widget apps. Most experts expect this market to expand significantly in 2017."
Better writing

Then background, addl info

Include info topography

“Note that Smith does not name his current employer in any of his social media profiles.”

Better writing

Wrap-up, next steps

Then re-read

Is this clear and concise?

What questions will a reader ask next?

Better writing

Assume they won’t read 2nd page

Assume this gets passed along to others
Create insightful deliverables

Enable comparisons
Identify trends
Highlight outliers

Social Media Profile:
P&G’s Pampers brand

<table>
<thead>
<tr>
<th>Site</th>
<th>Strategy</th>
<th>Screen shot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company website:</td>
<td>- Reluctant-Entrepreneur.com</td>
<td></td>
</tr>
<tr>
<td>Facebook:</td>
<td>- Pampers</td>
<td></td>
</tr>
<tr>
<td>Twitter:</td>
<td>- Pampers</td>
<td></td>
</tr>
</tbody>
</table>

Use online services’ services

Use search results page filters
Use online services’ services

Use search results page filters

Use data analysis tools
Use online services' services

Use search results page filters

Use data analysis tools

Use “newsletter” builders
Which is easier to take in?

<table>
<thead>
<tr>
<th>Chart responsibly</th>
</tr>
</thead>
</table>

Keep it simple – no 3-D

What do you want to show?
- Change over time: columns, lines
- Ranking: columns
- Parts of a whole: columns (not pie chart)
Simple Word hyperlinks

Tables of contents
Use heading format for each ToC entry
References → Table of Contents

Navigational hyperlinks
Use Heading format for target location
Insert → Hyperlink → Place in this doc

Learning (and talking about) What You Don’t Know You Don’t Know

Yes, this is CI...

Competitive: All the competing sources for your €s and clients
Intelligence: Gleaning insight from the un-said and un-noticed
Who are your library’s competitors?
Who competes with your library for budget €
Where else do your clients go?
Who or what could make your library obsolete?

Reality-check interviews conversations
Find out what services your clients NEED, VALUE, and will BUDGET for

Why?
Get past the obvious answer to the real value
Learn how clients describe their need
Become competition-proof!
When?

Conversations, not interviews
Create opportunities to talk
Stop by their office
Chat when getting coffee
Invite yourself to staff meetings

Who? How?

Current clients and NON-clients
Ask and listen; no selling!
See the world from their eyes

Conversation prompts

What are your most challenging goals for this year?
What’s keeping you from achieving those goals?
How can the information center help you achieve those goals?
Conversation prompts

What do you do when you don’t have the info you need?

Tell me about how you get up to speed at the start of a project

Who in your group keeps you updated?

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Conversation prompts

For repeat clients:
How would you describe us to a colleague?

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Ask yourself

How is the info centre serving this client group now?

Why are they using us at this level?

What can we add, what can we drop, to provide higher-value service?
Ask yourself

What surprised me from these conversations?
What did they not know about?
What did they want that we can’t/don’t do? Why?

Talking about the library’s value

Tracking what’s valued

Do you track examples of your library’s impact?
What changed as a result of your library’s services?
What is valued?

Do you know your org’s strategic goals for 2016?
Are you visibly contributing to those goals?

Finding the dog whistle

“Libraries are great and they offer great ROI”
“We supported 75% of the key IP initiatives this year”

When you describe yourself...

Is it a WHAT or HOW?
or is it a WHY?
“We search premium databases” or
“We bring insights from the outside”
HOW or WHY?

“We provide research services” or
“We enable better decisions”
“Librarians are info experts” or
“We can show you what our
competitors don’t want you to see”

Use info companies’ tools!

ProQuest
proquest.com/libraries

Springer
springer.com/us/research-development

Taylor & Francis
tandf.co.uk/libsite

NO elevator pitches!
Elevator ping-pong

3-second hook – start a conversation
AED (defib) salesperson: I sell human jumper leads
Info pro: I find what Google can’t find
Info pro: I’m the one who squeezes the library into your smartphone

Elevator Q&A

You know how {describe problem, in one breath}?
Well, I {describe what your clients get, in one breath}

Q&A example

You know what it’s like to walk into a key donor’s office and get blindsided?
Well, I can brief you the morning of the appointment with the latest on your donor.
Q&A example

Do you wonder whether you are missing key research?

Well, we have ________________

Elevator story-telling

The situation
What you did
The result

Tell a 3-sentence story

1. Describe the situation

One of our org’s goals is to prepare youth for today’s job market
Tell a 3-sentence story

2. What you did

_Through a library workshop, 45 students learned how to build and program a communications robot for autistic kids_

3. What was the result?

_We partnered with a local company to hire the kids and build more robots_

Troubleshooting
“But they just don’t get it!”

YOU need to change...

WHO
WHAT
HOW
WHEN
WHY

YOU need to change...

WHO you are talking with
Are they potential clients?

WHAT you say
Are you talking about THEIR concerns?
YOU need to change...

HOW you say it
Are you talking where they hear you?

WHEN you say it
Are you consistently talking when they are paying attention?

YOU need to change...

WHY you say it
Are you 100% focused on your clients’ outcome?

Try new approaches

Create how-to videos on specialised research
Cheat-sheet on when & how to use the open web more effectively
Try new approaches

Embed widgets and CSEs to enable better search

Write 100-word vignettes of info centre successes & blog/post them (see Reluctant-Entrepreneur.com)

Our messages:

Info pros enable you to accomplish your goals
Info pros are strategic assets
Info pros can rock your world
Embracing ROI

It’s not just us...

Google
how to measure roi for
how to measure roi for social media
how to measure roi for marketing
how to measure roi for events
how to measure roi for training
how to measure roi for sponsorship
how to measure roi for public relations
how to measure roi for advertising
how to measure roi for international assignments
how to measure roi for trade shows

It’s not just us...

ROI for trade show booth
# of attendees → prospects → leads
→ opps → wins → revenue

ROI for social media marketing
Cost per lead, cost vs. Google
Adwords expense, conversion rate
To measure ROI, ask:

What would it cost to achieve {this goal} without {this resource/service}?

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**HOW data vs WHY data**

Operational data
- Managing the library

Outcome data
- Demonstrating the library's value
- Add stories to highlight ROI examples

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**The ROI for calculating ROI**

- Justifying budget
- Gaining support from stakeholders
- Adjusting to changing needs & priorities
- Identifying service gaps
- Identifying opps for higher value
Studies have shown...

Increased ejournal budget = larger increase in # of downloads
€1 in increased library budget = €4 in increased benefits
See libraryconnect.elsevier.com

Low-hanging fruit

Cost of material vs circulation
20% of cost * # of circulation = value
ILL = access to otherwise inaccessible info (or €40 article fee)

Impact on org’s goals

% of awarded patents supported by library research
# of regulatory approvals supported
# of articles, presentations supported
**Impact on org’s goals**

- # of strategic initiatives supported
- Key sales goals met

**Impact on research**

- Improve searchers’ UI = improve *strategic* searching
- Enable better Google searches with custom search engines
  - cse.google.de

**Impact on research**

- Move searchers beyond Google
  - Entice them to value-add online
  - One-time effort to customise = ongoing savings and increased value
Impact on org’s staff

Search time saved by users after library training
Supporting employee development, improve staff retention

Impact on org’s staff

Look at information flows
Look for friction, pain
Time spent searching (not finding)
Duplication of effort w/in team
Underutilisation of resources

Dare to Compare
Value-added vs Google

Global coverage, all languages =
Follow global discussion
ID new opportunities & issues
Monitor (lurking) competitors around the world

Timeliness & archive

Breaking news faster
Deeper archive
Functional date searching

Copyright, privacy

“Sharing economy” = low awareness of copyright
Strong licensing = risk reduction
RTBF = more gaps in web news
What’s a minute worth?

What’s a knowledge worker’s time worth?

~1,800 hours worked a year

“Burden load rate” of 45% of salary

Hourly rate =

annual salary * 1.45 \div 1800

A knowledge worker’s time

€80,000 annual salary * 1.45 =

€116,000 fully-loaded salary

\div 1800 hours in a year =

€64/hour

€1/minute
Now, start counting minutes

Time NOT spent Googling
15 minutes twice a day = €7,200/year

Time saved with custom UI or
Time saved scanning literature/news
15 minutes once a day = €3,600/year

Counting minutes

Time saved with team’s shared Homepages
1 hour/week/person = €17K savings a year for 6-member team

Info pros’ time counts too!

Time saved generating data analytics
Time NOT spent on user support
The True ROI of Digital Content

Finding ROI opportunities

Who are your stakeholders?

University:
- Faculty
- Students
- Alumni
- Administrators
- Prospective students
- Staff
- Local community
- Employers

Company:
- Clients
- Vendors
- Shareholders
- Employees
- Local community
- Regulators
ID new ROI opportunities

Program to help students find internships, learn job-hunting skills, interview skills
Grant funding workshops for staff

ID new ROI opportunities

Remind users of library resources they can't access themselves
Raise users' DISsatisfaction with their search results

Build higher usage

Look for underutilised resources
Promote in newsletter, intranet, fliers, training, etc.

F2F has impact!
Onsite awareness-raising events
Weekly drop-by sessions
Staff “ambassador” program
Use the tools

Be ubiquitous to be valuable
Install widgets at pain points
Embed content, if not librarians
Promote vendors’ mobile apps
Provide curated daily news

Use others’ ideas

Ask colleagues how they talk about ROI and value
Focus on improved outcomes