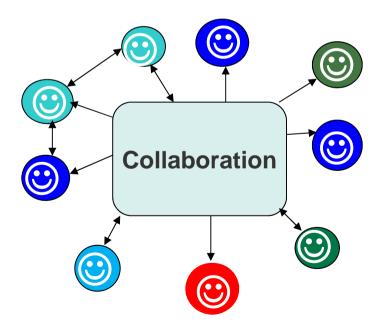
# Information and Change Management How organizations meet the challenges

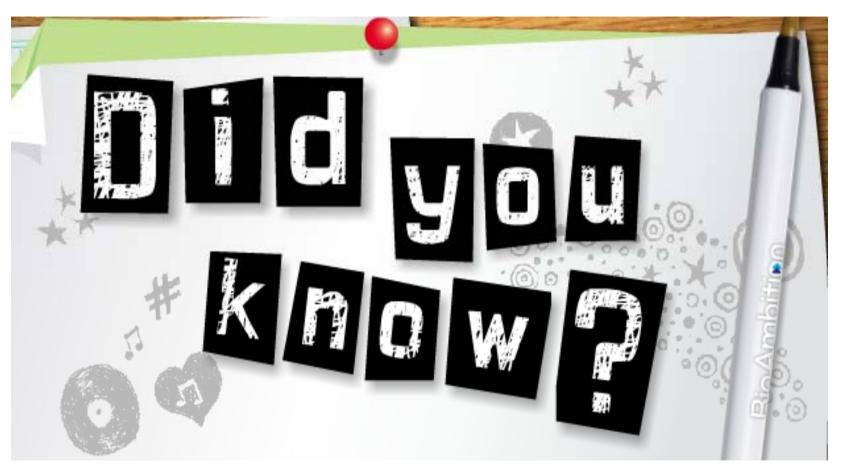




# Sissi Closs

- > In the technical communication field since 25+ years
- Professor at Karlsruhe university
- Course Director Communication and Media Management (MSc)
- CEO of C-Topic Consulting





Shift happens, Video von Karl Fisch and Scott McLeod



# Conventional (book-oriented) content management



- High degree of redundancy
- High error rate
- Inconsistency
- Large volumes
- High maintenance costs



# **Common Issues**



- Information spread over many places (books, articles, knowledge bases, ...)
- Status of information differs:
  What is current and what is correct?
- Level of information difffers: Where to find the missing details?
- Information and knowledge are not accessible:
  How to get fast access to the relevant pieces?
  Where to find the competent people?



# ...result in enormous costs

- > A wealth of expert knowledge is not used because of:
  - Geographical distance
  - Isolated information islands
  - Busy schedules
- Resources are wasted resolving problems that someone else had already solved.



# Solution: Topic-based information networks





# Preparation on different levels:

- Methodical
- > Technical
- Cultural



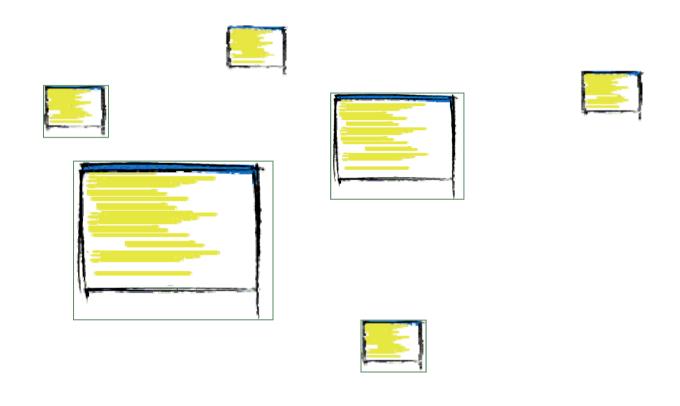
# **Method: Topic-based structuring**

- Class concept method<sup>®</sup> (Prof. Sissi Closs)
- Tool approach: Online help tools, CMS, Wikis, ...
- Tool-neutral approach: XML standards, especially DITA



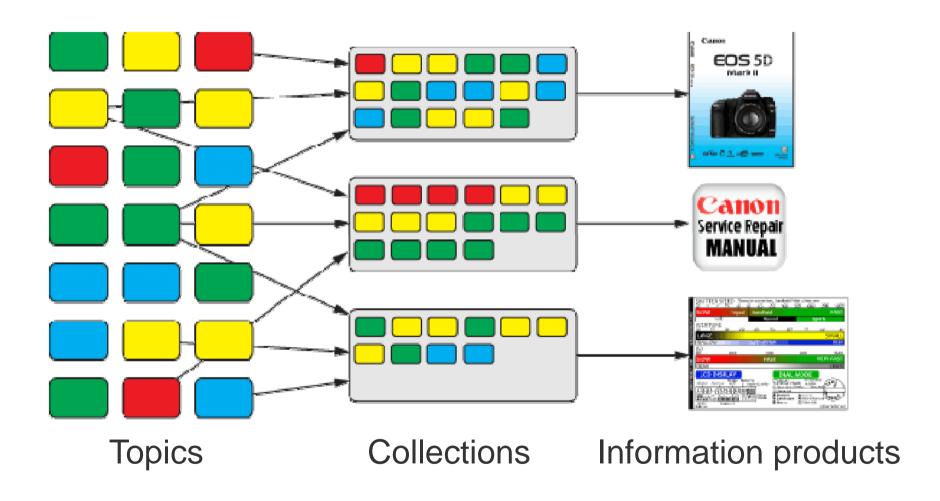
# Topic-based strukturing - Principle 1: Divide content into smaller pieces





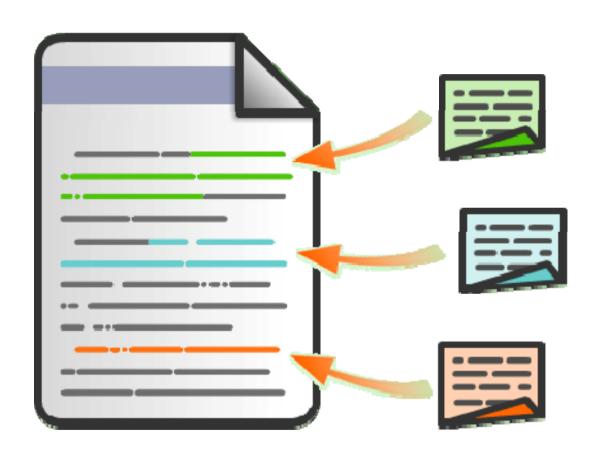


# Flexibly combine topics to documents





# **Re-using topics**





# **Basic topic rules**

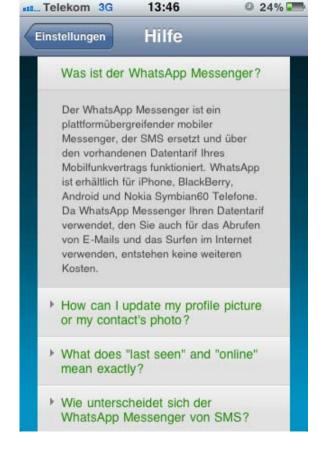


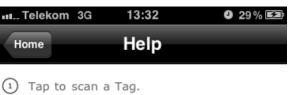
- 1 Keep it short and simple.
- 2 Describe only one subject per topic.
- Be concise (Minimalism: Don't mention unnecessary things).
- Be precise.
- 5 Describe the same thing only once (Single point of truth).
- Make use of technical possiblities (layers).
- 7 Describe the same kind of things in the same way.



# Good topics fit well with modern way of presenting information







- Access all of the Tags that you've viewed and flagged.
- (3) View up to 15 thumbnails of your most recently viewed Tags. Tap and hold a Tag to view additional options.
- (4) Tap to access your list of flagged Tags.
- Explore new Tags with content that you might find interesting.





# Benefits of a topic-based world



- Individual topics are easier to create, reuse, and update than an entire document.
- Many different experts can contribute knowledge at the same time.
- > Faster time to market:
  - Topics can be reviewed by experts in the specific subject as soon as they are updated.
  - Individual topics can be published as soon as they are ready.
  - Topics can be translated before entire deliverables are complete.

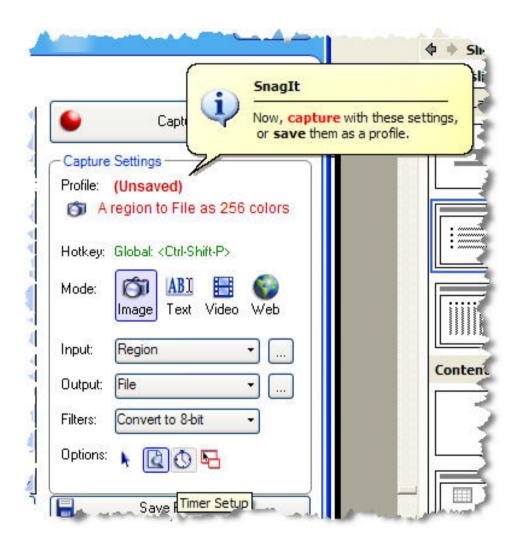


# Topic-based structure is useful everywhere





# Sample: Proactive help





# Problem: Hundreds and thousands of topics

	_	_	_	_	_		_
	🖺 1207.xml	🖺 1452.xml	🖆 1697.xml	≌ 1942.xml	🖺 2194.xml	🖺 2446.xml	🖺 2691.xml
ī	🖺 1214.xml	🖭 1459.xml	🖆 1704.xml	🖭 1949.xml	🖺 2201.xml	🖺 2453.xml	🖺 2698.xml
9	望 1221.xml	🖺 1466.xml	🖭 1711.xml	🖺 1956.xml	🖺 2208.xml	🖺 2460.xml	🖺 2705.xml
11	🖆 1228.xml	🖭 1473.xml	🚅 1718.xml	🖭 1963.xml	2215.xml	🖺 2467.xml	2712.xml
	🖆 1235.xml	🖭 1480.xml	🚅 1725.xml	🖭 1970.xml	2222.xml	2474.xml	2719.xml
	🖭 1242.xml	🖭 1487.xml	🖭 1732.xml	🖭 1977.xml	🖭 2229.xml	🖺 2481.xml	避 2726.xml
	🖆 1249.xml	🖭 1494.xml	🖭 1739.xml	🖭 1984.xml	🖭 2236.xml	🖺 2488.xml	🖭 2733.xml
	🖆 1256.xml	🖭 1501.xml	🖭 1746.xml	🖭 1991.xml	🖭 2243.xml	🖺 2495.xml	🖭 2740.xml
	🖺 1263.xml	🖭 1508.xml	🖭 1753.xml	🖭 1998.xml	🖭 2250.xml	🖺 2502.xml	🖭 2747.xml
	🖆 1270.xml	🖺 1515.xml	🖭 1760.xml	🖭 2005.xml	🖺 2257.xml	🖺 2509.xml	🖺 2754.xml
	望 1277.xml	🖭 1522.xml	🖭 1767.xml	🖭 2012.xml	🖭 2264.xml	🖺 2516.xml	🖺 2761.xml
	🖺 1284.xml	🖭 1529.xml	🖭 1774.xml	🖭 2019.xml	🖺 2271.xml	🖺 2523.xml	🖺 2768.xml
	🖆 1291.xml	🖺 1536.xml	🖭 1781.xml	🖭 2033.xml	🖭 2278.xml	🖺 2530.xml	🖭 2775.xml
	望 1298.xml	🖭 1543.xml	🚅 1788.xml	🖭 2040.xml	🖭 2285.xml	🖺 2537.xml	🖭 2782.xml
	🚅 1305.×ml	🖭 1550.×ml	🖭 1795.×ml	🖭 2047.×ml	🖭 2292.×ml	🖭 2544.×ml	🥶 2789.×ml
	🖺 1312.xml	🖺 1557.xml	\min 1802.xml	🖭 2054.xml	🖺 2299.xml	🖺 2551.xml	🖺 2796.xml
	🖺 1319.xml	🖺 1564.xml	\min 1809.xml	🚅 2061.xml	🖺 2306.xml	🖺 2558.xml	🖺 2803.xml
	🖺 1326.xml	≌ 1571.xml	🖭 1816.xml	🖭 2068.xml	2313.xml	🖺 2565.xml	2810.xml
	🖺 1333.xml	≌ 1578.xml	\min 1823.xml	🖭 2075.xml	🖺 2320.xml	🖺 2572.xml	🖺 2817.xml
	🖺 1340.xml	≌ 1585.xml	🖆 1830.xml	當 2082.xml	🖺 2327.xml	🖺 2579.xml	² 2824.xml
	🖺 1347.xml	🖭 1592.xml	🖭 1837.xml	🖭 2089.xml	2334.xml	🖺 2586.xml	2831.xml
	🖺 1354.xml	≌ 1599.xml	≌ 1844.xml	避 2096.xml	2341.xml	🖺 2593.xml	🖺 2838.xml
	🖺 1361.xml	🖺 1606.xml	🖆 1851.xml	避 2103.xml	🖺 2348.xml	🖺 2600.xml	² 2845.xml
	🖺 1368.xml	🖺 1613.xml	🖭 1858.xml	≌ 2110.xml	🖺 2355.xml	🖺 2607.xml	🖺 2852.xml
	🖺 1375.xml	≌ 1620.xml	≌ 1865.xml	≌ 2117.xml	🖺 2362.xml	🖺 2614.xml	² 2859.xml
	🖺 1382.xml	🖺 1627.xml	≌ 1872.xml	≌ 2124.xml	🖺 2369.xml	🖺 2621.xml	🖺 2866.xml
	🖆 1389.xml	🖺 1634.xml	🖆 1879.xml	2131.xml	2383.xml	🖺 2628.xml	🖺 2873.xml
	🖺 1396.xml	≌ 1641.xml	≌ 1886.xml	≌ 2138.xml	≌ 2390.xml	🖺 2635.xml	² 2880.xml
	🖆 1403.xml	🖆 1648.xml	🖆 1893.xml	🖆 2145.xml	2397.xml	🖺 2642.xml	² 2887.xml
	🖆 1410.xml	🖆 1655.xml	🖆 1900.xml	2152.xml	2404.xml	🖺 2649.xml	2894.xml
	🖆 1417.×ml	🖺 1662.xml	🖆 1907.xml	╩ 2159.xml	2411.xml	🖺 2656.xml	2901.xml 🖺
	🖺 1424.xml	🖆 1669.xml	🖆 1914.xml	2166.xml	2418.xml	2663.xml	2908.xml
	🖺 1431.xml	🖆 1676.xml	🖆 1921.xml	2173.xml	2425.xml	2670.xml	2915.xml
	🖺 1438.xml	🖭 1683.xml	🖆 1928.×ml	2180.xml	2432.xml	2677.xml	2922.xml
	🖺 1445.xml	🖆 1690.xml	🖆 1935.xml	🖆 2187.xml	壁 2439.xml	🖺 2684.xml	🖺 2929.xml

# Principle 2: Define categories (Topic Types)



- 1. Use proven types
- 2. Use proven methods to define new ones: Class Concept Method<sup>©</sup> (Prof. Sissi Closs)



# Sample: Topic types



Task

We character the driveway and attach the water hose car.

Use a sponge to apply the soapy water to the car and scrub off the dirt. You should have a bucket with soapy water.

Definition

by spraying clean water from the hose.

water hose is useful for cleaning and gardening projects

After the washing you should dry the car using a dampened chamois.



# **Result: Better information**



Changing the oil in your car

### Washing the car

Keep your car looking great by washing it regularly.

- 1. Move the car onto the driveway.
- 2. Attach the water hose to a spout and pull the free end over to the car.
- 3. Fill a bucket with soapy water.
- 4. Use a sponge to apply the soapy water to the car and scrub off the dirt.
- Rinse the car by spraying clean water from the hose.
- 6. Dry the car using a dampened chamois.

# Water hose

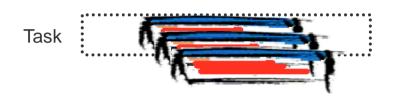
A water hose is useful for cleaning and gardening projects around the yard. Keep the hose coiled on a large hook near a water spout.





# **Principle 3:Unify through standardization**

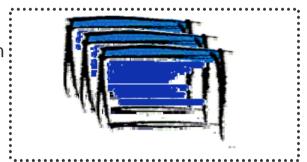












Anleitung						
>>> Weg ins Fenster						
Kurzbes	chreibung, wozu Aufgabe <b>ohne</b> Jumps. Nur <mark>Popups</mark> auf Begriffsdefinitionen sind erlaubt.					
Vorauss	etzung (optional)					
	etzungen, die zur Ausführung der Aufgabe erfüllt sein müssen, zum Beispiel erforderliche Rechte ibung <b>ohne</b> Jumps. Nur <mark>Popups</mark> auf Begriffsdefinitionen sind erlaubt.					
✓ Start	der Schritte					
1.	Schritt 1 ohne Links					
2.	Schritt 2 ohne Links					
3.						
Kurze Ai	ngabe des Ergebnisses					
Verwan	dte Aufgaben (optional)					
Aufg	gabe 1					
Aufg	gabe 2					



# **Technology**

- Tool-neutral Standards such as DITA
- Topic-supporting tools



# **Tools**

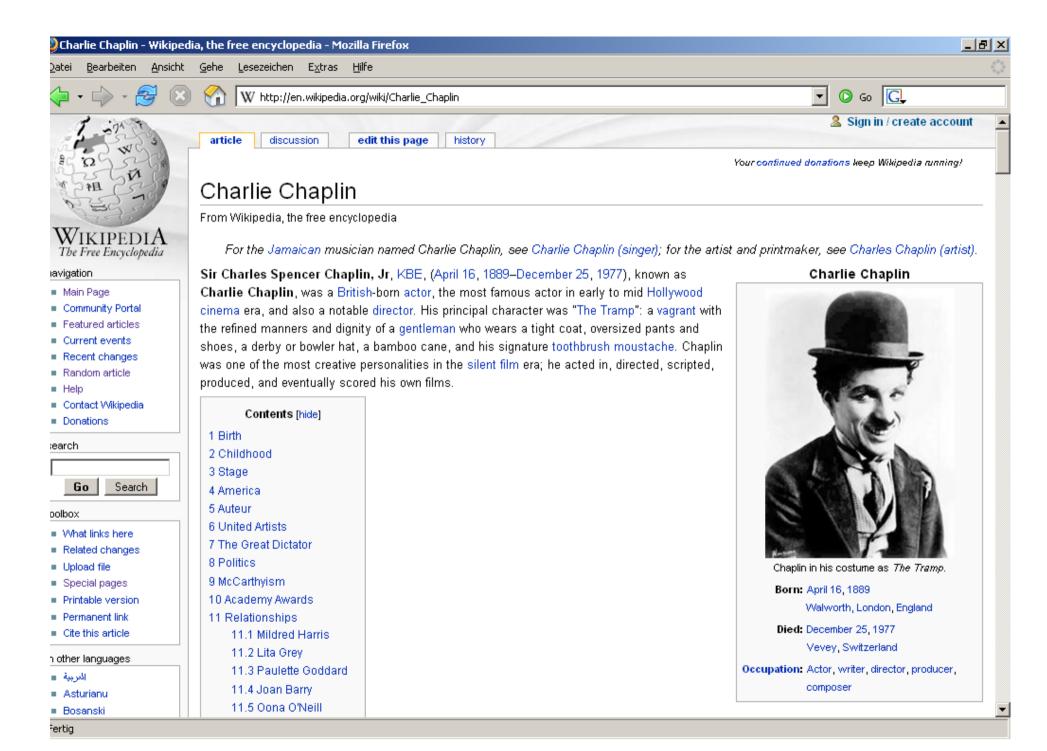
- Classic Online help authoring software
  - Flare, RoboHelp
  - •
- Authoring Software supporting DITA
  - FrameMaker + DITA-OT, Oxygen Editor
  - ...
- Content Management Systems
  - Xdocs, Author-it, ixiaSoft DITA CMS, DITAworks...
  - ...
- Wikis
  - MediaWiki, Confluence, ...
- Authoring Software for mobile Apps
  - 4M, AppMakr, ...



# What is a Wiki?

- (Open source) platform for exchanging information easily
- Invented by Ward Cunningham (1994)
- Type of groupware software
- > Read, edit, and link information
- Many key management functions included, especially categorization, templates, link management, ...
- Semantic MediaWiki with possibility to add metadata and access and evaluate content semantically





### IPv6

From Wikipedia, the free encyclopedia

Internet Protocol version 6 (IPv6) is the latest revision of the Internet Protocol (IP), the communications protocol that routes traffic across the Internet. It is intended to replace IPv4, which still carries the vast majority of Internet traffic as of 2013.<sup>[1]</sup> IPv6 was developed by the Internet Engineering Task Force (IETF) to deal with the long-anticipated problem of IPv4 address exhaustion.

Every device on the Internet, such as a computer or mobile telephone, must be assigned an IP address for identification and location addressing in order to communicate with other devices. With the ever-increasing number of new devices being connected to the Internet, the need arose for more addresses than IPv4 is able to accommodate. IPv6 uses a 128-bit address, allowing for  $2^{128}$ , or approximately  $3.4 \times 10^{38}$  addresses, or more than  $7.9 \times 10^{28}$  times as many as IPv4, which uses 32-bit addresses. IPv4 allows for only approximately 4.3 billion addresses. The two protocols are not designed to be interoperable, complicating the transition to IPv6

IPv6 addresses consist of eight groups of four hexadecimal digits separated by colons, for example 2001:0db8:85a3:0042:1000:8a2e:0370:7334.

Deployment of IPv6 is accelerating, and a symbolic marketing event, World IPv6 Launch, was organized by major Internet service providers and users on 6 June 2012, for which they deployed IPv6 addresses to some of their users, especially in countries that had been lagging in IPv6 adoption. [2] Data from Arbor Networks showed a peak of 0.2% of Internet traffic on IPv6 during the launch. [3] As of late November 2012, IPv6 traffic share was reported to be approaching 1%. [4]

### Contents [hide]

1 Technical definition

2 Motivation and origin

### Internet protocol suite

### Application layer

DHCP · DHCPv6 · DNS · FTP · HTTP · IMAP · IRC · LDAP · MGCP · NNTP · BGP · NTP · POP · RPC · RTP · RTSP · RIP · SIP · SMTP · SNMP · SOCKS · SSH · Telnet · TLS/SSL · XMPP · (more)

### Transport layer

TCP · UDP · DCCP · SCTP · RSVP · (more)

### Internet laver

IP(IPv4 · IPv6) · ICMP · ICMPv6 · ECN · IGMP · IPsec · (more)

### Link layer

ARP/InARP • NDP • OSPF •
Tunnels(L2TP) • PPP •
Media access control(Ethernet • DSL • ISDN •
FDDI) • (more)

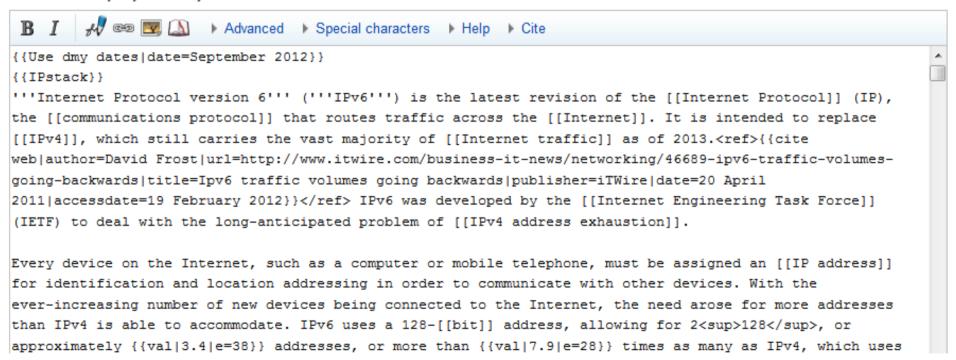
V • T • E

Article Talk Read Edit View history Search Q

### Editing IPv6

You are not logged in. Your IP address will be publicly visible if you make any edits. Please log in or sign up to have your edits associated with a user name, among other benefits.

Content that violates any copyrights will be deleted. Encyclopedic content must be verifiable. Work submitted to Wikipedia can be edited, used, and redistributed—by anyone—subject to certain terms and conditions.



### IPv6: Difference between revisions

From Wikipedia, the free encyclopedia

### Revision as of 01:11, 28 February 2013 (edit)

Glrx (talk | contribs)

(→Exhaustion of the unallocated IPv4 address pool: fix cite broken by previous edit)

← Previous edit

Latest revision as of 13:50, 8 March 2013 (edit) (undo) 130.208.69.54 (talk)

(IPv6 mandated for LTE only(?) in 2009 (not 2010))

(2 intermediate revisions by one user not shown)

### Line 142:

An IPv6 address may be abbreviated by using one or more of the following rules:

- # Remove one or more leading zeroes from one or more groups of hexadecimal digits; this is usually done to either all or none of the leading zeroes. (For example, convert the group <code>0042</code> to <code>42</code>.)
- # Omit one or more consecutive sections of zeroes, using a double colon (::) to denote the omitted sections. The double colon may only be used once in any given address, as the address would be indeterminate if the double colon was used multiple times. (For example, <code>2001:db8::1:2</code> is valid, but <code>2001:db8::1::2</code> is not permitted.)

### Line 142:

An IPv6 address may be abbreviated by using one or more of the following rules:

- # Remove one or more leading zeroes from one or more groups of hexadecimal digits; this is usually done to either all or none of the leading zeroes. (For example, convert the group <code>0042</code> to <code>42</code>.)
- # Omit consecutive sections of zeroes, using a double colon (::) to denote the omitted sections. The double colon may only be used once in any given address, as the address would be indeterminate if the double colon was used multiple times. A double colon may not be used to denote an omitted single section of zeroes.</ri>
  ref name=rfc5952sec422>RFC 5952, "A Recommendation for IPv6 Address Text Representation", S. Kawamura (August 2010), section 4.2.2: <a href="http://tools.ietf.org/html/rfc5952#section-4.2.2</a>/ref> (For example, <code>2001:db8::1:2</code> or

<code>2001:db8::1:1:1:1</code> are not permitted.)



Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia

- ▼ Interaction Help About Wikipedia Community portal Recent changes Contact Wikipedia
- ▼ Toolbox Upload file Special pages

Special page

Search

Q

### Special pages

This page cor suggest a cha talk page of the

### Maintena

- Broken re
- Dead-end
- Dormant
- Double reLong pag
- Orphaned
- Pages with
- Pages wit
- ProtectedProtected
- Short pag

### Login / cr

- . Log in / cr
- · Login unifi

### Users and

- Active use
- · Blocked u
- Change e-
- Getting st
- Global gro
- Global use
- Global use

### Data and tools

- API sandbox
- · Edit filter configuration
- · Expand templates
- Gadgets
- Statistics
- · System messages

- · Template sandbox
- . Try hieroglyph markup
- Version
- View interwiki data
- Wiki sets
- Wikimedia wikis

### Redirecting special pages

- . External links search
- · Random article

- · Random redirect
- Search

### Lists of p

- All pages
- All pages

### Recent ch

- Edit filter I
- · Gallery of
- Logs
- New page:
- New page:

### High use pages

- · Most linked-to categories
- · Most linked-to files
- · Most linked-to pages
- Most linked-to templates

- Pages with the most categories
- · Pages with the most interwikis
- · Pages with the most revisions

### Page tools

- Media rep
- File list
- · File path
- Book
- Cite
- · Compare pages

- Export pages
- · What links here



# **Use Cases**

How can your organization use a Wiki successfully.



Wikis can be used everywhere

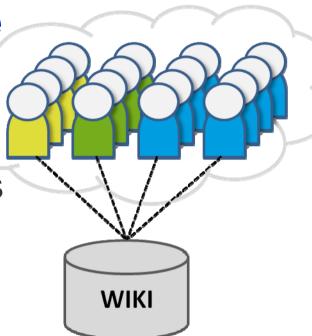
Develop content together

Connect existing content sources

Exchange ideas

- Distribute information fast
- > Share experiences
- Keep everybody informed
- Involve people and get them connected
- **>** ...





# **Best Practice**

Don't use a wiki like a file system and a wiki page like a Word document.

Typical pitfals can be avoided using proven best practices.



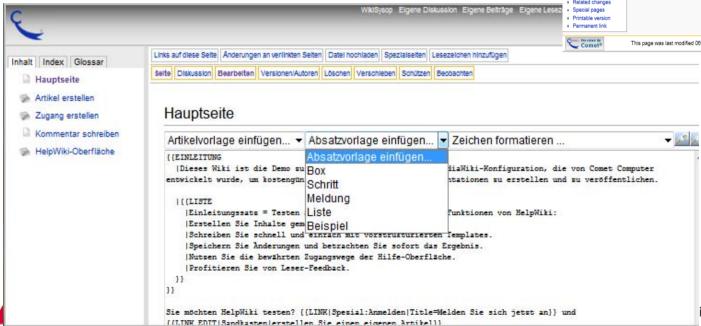
# **Typical caveats**

- Unknown environment for authors and organization
- Nothing happens
- Fear of getting lost
- > Fear of chaos



# **New and different? Solution:**

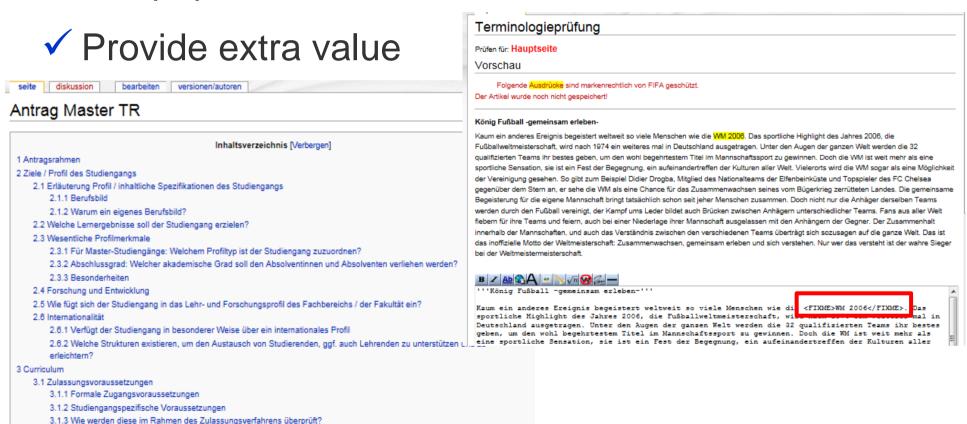
- ✓ Make it easy
- ✓ Use templates
- ✓ Provide Training
- ✓ Provide editorial services



Allianz (II) Main Page Prodofined tacks Main Page Recent change <New term> Create Glossary term <New abbreviation> Create abbreviation Project:Status\_20130311 Terms Abbreviations Project:Minutes\_20130311 Create Meeting report project organisation · Minutes Status Reports Go Search Related changes This page was last modified 06:15, 11 March 2013. This page has been accessed 303 times. i Closs, C-Topic Consulting GmbH

# Not seen as being useful? Solution:

✓ Pre-populate with useful content





3.2 Struktur des Studiengangs 3.3 Qualifikationsrahmen

3.3.1 Vertiefung des vorhandenen Wissens

3.3.2 Vermittlung instrumentaler, systemischer und kommunikativer Kompetenzen

# Fear of getting lost? Solution:

#### Use

- ✓ Special functions
- ✓ Status info

#### Recent changes and logs

- · Edit filter log
- · Gallery of new files
- Logs
- · New pages
- · New pages feed

- · Recent changes
- · Related changes
- · Valid change tags
- Watchlist



ist Diplom-Informatiker und seit 1999 Geschäftsführer und IT-Leiter \_\_\_Er entwickelt-studierte Informatik an der Universität Erlangen-Nürnberg. Nach dem Studium betreute er am Regionalen Rechenzentrum der Universität Erlangen unterschiedliche Forschungsprojekte im Netzwerk- und Multimediabereich.

Online anzeigen · Gefällt mir · Änderungen anzeigen · Kommentar hinzufügen

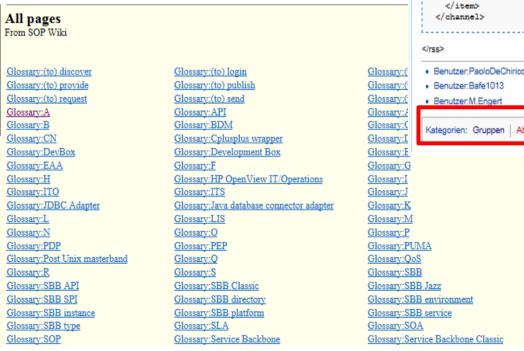
Überwachung der Seite beenden

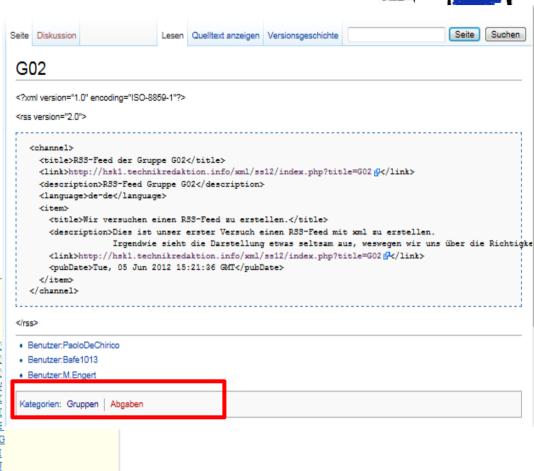


# Fear of chaos? Solution:

#### Use

- ✓ Classification
- ✓ Naming conventions





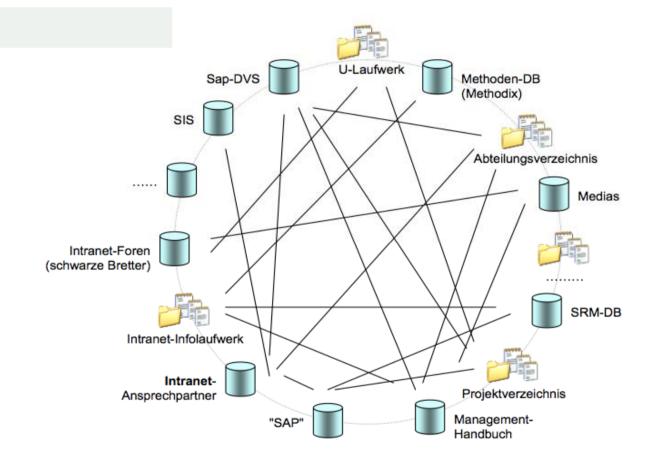


### **Benefits**

Wikis empower users to collaborate.



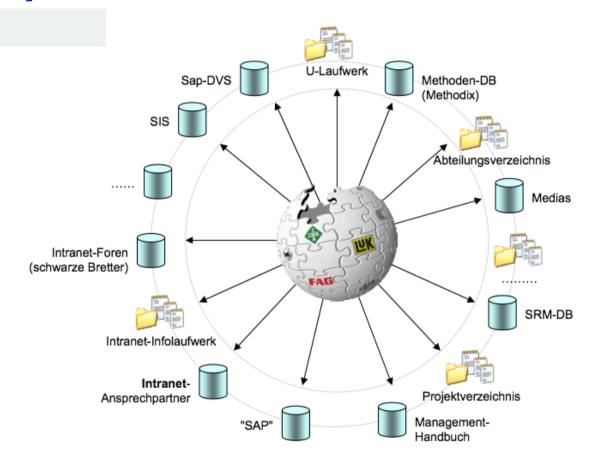
### Typical example: Separate data islands ...



Source: Schaeffler Group, 2009



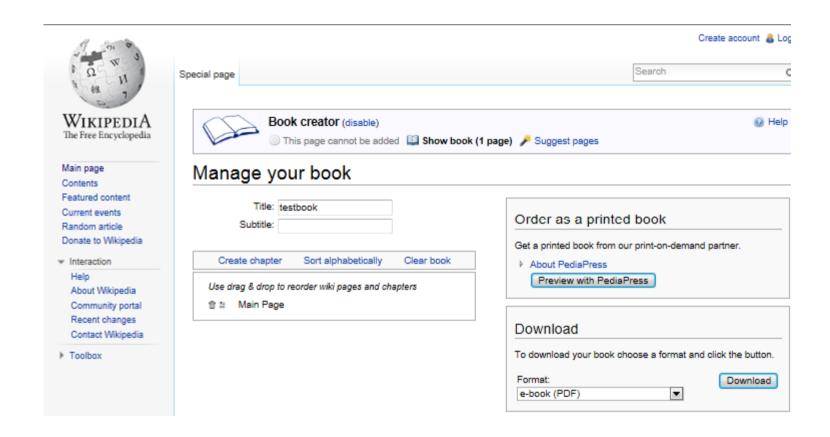
# ... now connected with a Wiki as a central access point



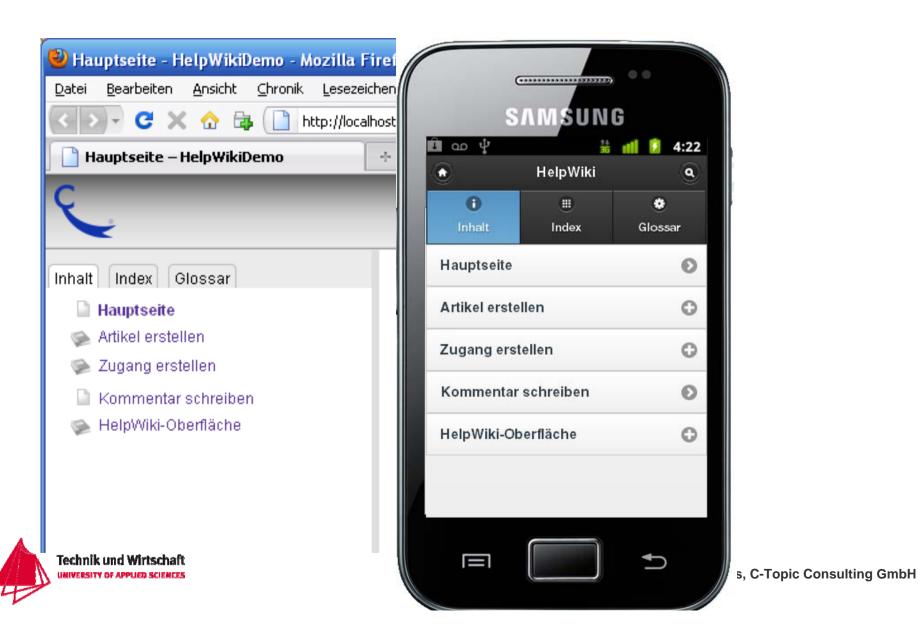
Source: Schaeffler Group, 2009



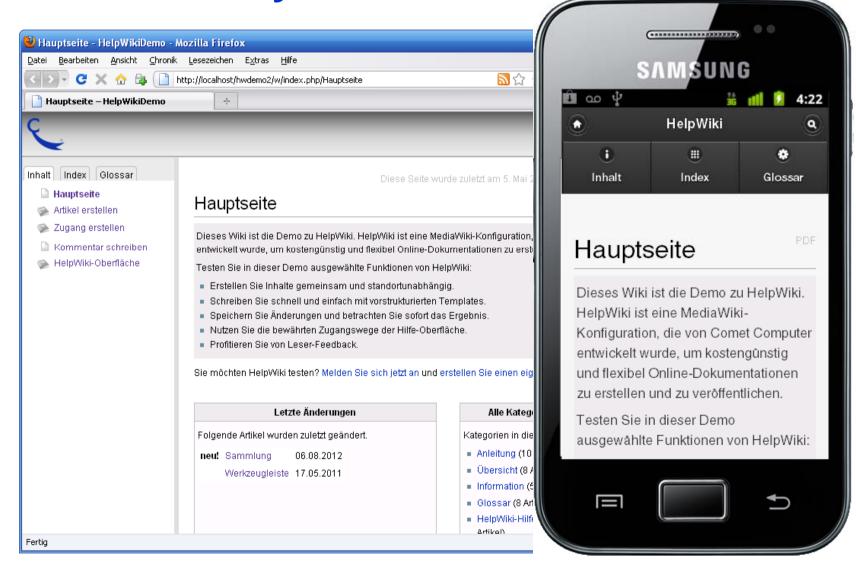
### One source many deliverables



### One source many deliverables



One source many deliverables



### The Wiki Way



- Flexible information network with a single and central point of access.
- Can change and grow as needed.
- All kind of contribution (stable, temporarily) can be involved.
- > Accessible from everywhere.
- Information sources and stakeholders are connected.



### **Cultural Change**

- Collaboration
- Contribution
- Sharing
- Re-using
- Gardening

Special roles and people are needed to maintain the knowledge base. These are knowledge manager, content gardeners, information architects, ...



### **Social Media in Big Organizations Today**

Domain	Use Case
Communication (internal, external)	News, direct management information
Project and process management	Team spaces, project organization, reporting, problem solving,
Finding the right contact persons	Search for experts using profiles
Community management	Communities for special subjects, communities for special staff groups (newbies, women, ,,,), communities for special interests (sport, Afrika,)
MOOCs (Massive open online courses)	With Wiki, blog, social media aggregates to train orgaization- wide subjects like "innovative Management of the modern Knowledge society"



### **Questions?**

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