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Reuse Metrics and Reuse and Governance Strategy



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About Keith & Sari

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KEEP CALM HERE'S THE AGENDA

Agenda

- DITA production metrics and why consistency matters
- IXIASOFT's child-intersection metrics gathering process, and results
- Rationale for Ericsson's approach to gathering consistent production metrics with Reuse KPI
- Reuse and Governance strategy
- Questions, anyone??

About Ericsson

- Leading transformation through mobility
- A world leader in the rapidly changing environment of communications technology – providing equipment, software and services to enable transformation through mobility

ERICSSON 

Why Measure Documentation Production?

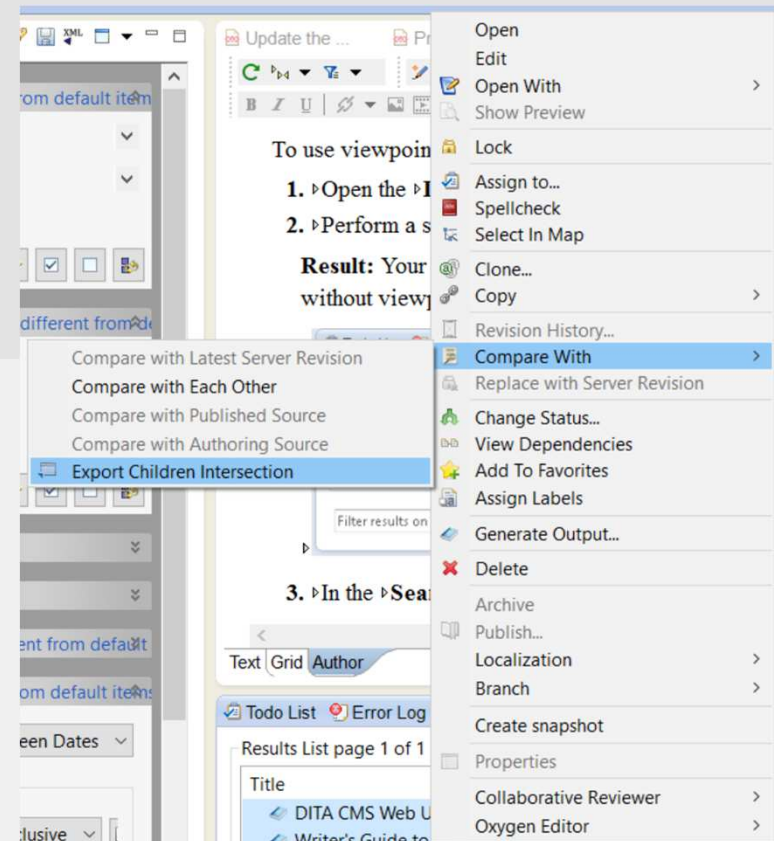
Provides the ability to:

1. Set more accurate project estimates
2. Justify need for more resources (tools/people)
3. Understand quality of production
4. An opportunity to measure value
5. DITA metrics can be used to guide managers, information architects, and writers on how to improve content



Comparing Content Reuse Across Maps

- One possible method: compare two or more maps and see what they have in terms of child elements, such as the topics and images
- IXIASOFT CCMS has a feature that automates this process: select two maps you want to compare, right-click and select Compare With > Export Children Intersection
- This outputs a file that shows all matching and non-matching objects in those two maps



What Export Children Intersection Does

A process is launched that checks the unique filenames of the topics within the primary map against any that also appear in the secondary map(s). Results can then be exported for use within Excel.

It contains:

- Titles and IDs of topics, images, and conrefs contained within the original source map, as well as those that exist in the secondary maps that are not contained within the original source map
- Topic type or object type identified
- Authoring revision of a topic/object from the source map and its equivalent in the target map (where it exists)
- An indicator that there is a match for the topic or object

Comparing Reuse Rates for IXIASOFT Docs 2015-2016

	A	B	C	D	E	F	G
	Title [ID]	Type	2016 Published Topics	2015 Published Topics	Object Count for First Map ("Yes" + "No")	Object Count for Second Map ("Yes" Only)	Percentage Object Reuse Between Maps
2	Upgrade the CMS Application Server [lar1405970975018]	task	Yes	Yes	1525	1041	68.26%
3	Exporting the system folder and Index Definition document [ljq1450454375247]	task	Yes	No			
4	Restarting the Web Author components [lar1398872488481]	task	Yes	Yes			
5	Add new index definitions for roles in the DITA CMS [per1389986393438]	task	Yes	Yes			
6	Configuring roles: <role> element [per1389986412640]	concept	Yes	No			
7	Determine the platform of the browser [per1389986399791]	task	Yes	Yes			
8	Allowing users to change the status of their topics [lar1406575952295]	concept	Yes	No			
9	Enable the Insert image option in the web.author.roles.xml file [chi1438702071049]	task	Yes	No			
10	Upgrade the online help [lar1406040586942]	task	Yes	Yes			
11	Configure the Create Topic command [lar1398781609749]	task	Yes	No			
12	Configuring the Web Author startup page [chi1441310744932]	concept	Yes	No			
13	Copyright notice [per1389985728738]	reference	Yes	No			
14	Typical Web Author scenarios [per1389986412864]	concept	Yes	No			
15	Overview of the web.author.roles.xml file [per1389986413410]	concept	Yes	No			
16	Download and extract the Web Author package [per1389986382707]	task	Yes	Yes			
17	Add a new role [per1389986414361]	task	Yes	No			
18	Allowing users to create new topics [lar1398193600296]	concept	Yes	No			
19	Create and configure a user [per1389986343622]	task	Yes	Yes			
20	Set up Web Author user assignments [per1389986409852]	concept	Yes	No			
21	Adding your specializations to the Web Author [per1389986398319]	concept	Yes	Yes			
22	Managing and troubleshooting the Web Author [lar1398872392625]	concept	Yes	Yes			
23	Change status [per1389986116670]	task	Yes	Yes			
24	Overview of the statusChangeConfig.xml file [lar1406649484819]	concept	Yes	No			
25	Assign roles to a user [per1389986345294]	task	Yes	Yes			
26	Delete existing logs and capture new ones for troubleshooting [per1389986400332]	task	Yes	Yes			
27	Troubleshooting: The TEXTML Server crashed and the CMS Application Server cannot be restarted [lar1398873347426]	reference	Yes	Yes			
28	New in this documentation release [lar1445365288258]	concept	Yes	No			
29	About this document [per1389986409606]	concept	Yes	No			
30	Configuring contextual menus: <context> element [per1389986411413]	concept	Yes	No			

Take raw data, process it, then compare matches between 2015 and 2016 content
 Reuse rate % = (Matching 2015 topics)/(Total 2016 topics) x 100

The Results

All objects (including images) = 73.51%

All topics (no images) = 68.20%

Concepts = 58.05%

Tasks = 78.29%

References = 69.70%

Relative Reuse Rates for Topics/Objects for 2015-2016



Are Images Skewing Reuse Rates?

✓ Yes.

While this is not necessarily a bad thing, you have to ask yourself: how important is it to know how many images are reused in your publications?

Background - Ericsson

- Many customer product information groups at Ericsson
- They deliver customer product information continuously

There is also:

- A legacy base of information content
- New products
- Many products are fully in DITA or migrations ongoing
- Most content is in DITA format

A person is standing on a tall, dark ladder that extends from the bottom left towards the center of the frame. The person is seen from behind, wearing a light-colored t-shirt and shorts, with their right arm raised towards the sky. The background is a vast, blue sky filled with soft, white clouds. In the top left corner, there is an orange rectangular bar. A white rectangular box containing a bulleted list and a question is positioned on the right side of the image. The IXIASOFT logo is located in the bottom right corner.

Reuse Expectations

- Large potential for reuse
- Continuous deliveries
- Higher content quality
- Save time and money

Where do we stand today?

Measure Reuse

Potential reuse

- Measures the reuse potential in defined output or publication content by finding similarities in the content

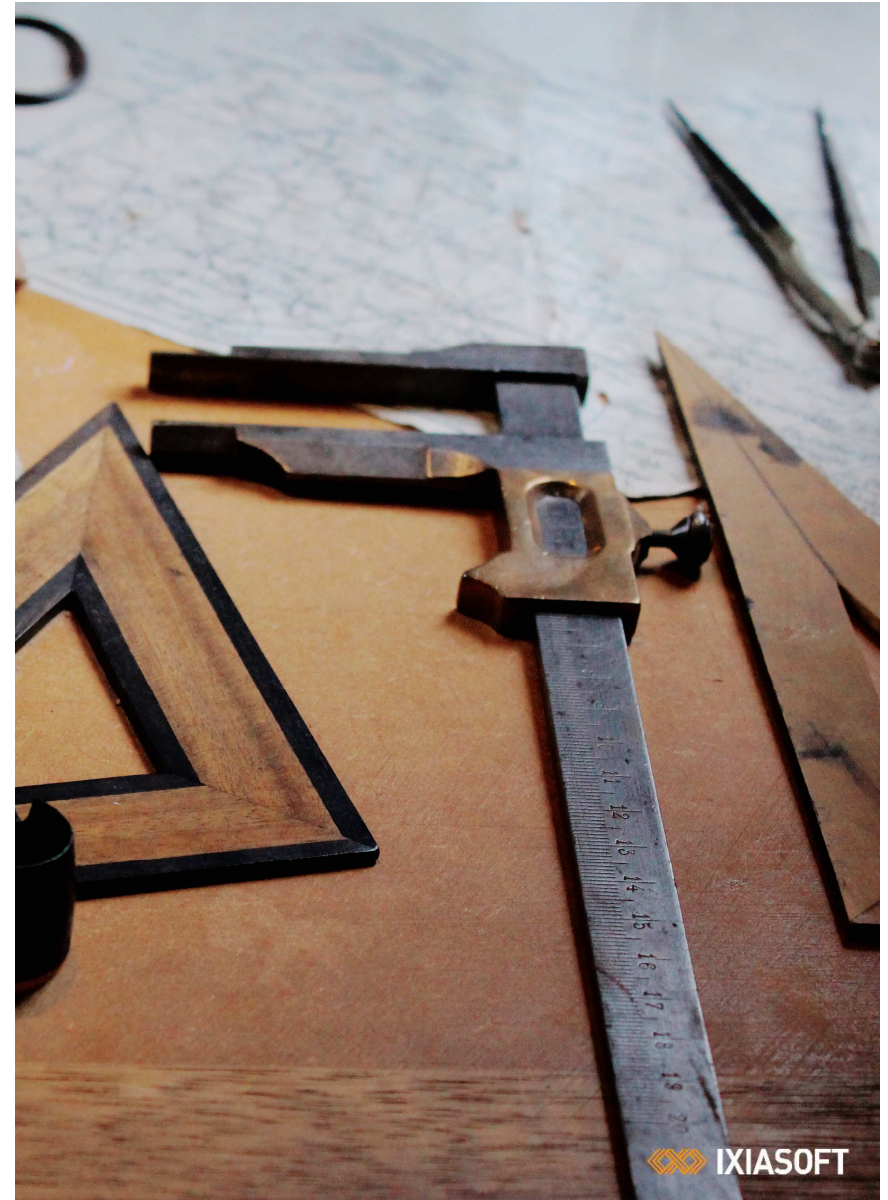
Existing reuse

- Source compared to outputs
- References-based reuse KPI in CCMS



Measuring Created Content – Reuse KPI

- Measured directly in the editing environment in content in the CCMS tool
- The report is generated from the CCMS tool
- Selection of content to be measured is done in the CCMS
- KPI measures reuse on all bookmaps, topics, images, conrefs



Reuse KPI in IXIASOFT CCMS – From DRM

In the **DRM view** in the IXIASOFT CCMS, the DRM product or library is selected for generating the reuse KPI report.

The screenshot shows the IXIASOFT CCMS interface in the DRM view. A context menu is open over a list of products and libraries. The menu includes options such as 'Reuse KPI Report', 'Tag', 'Clone Version', 'Rename Version', 'Library', 'Locate Containers', 'Synchronize With...', 'Open', 'Edit', 'Open With', 'Lock', 'Copy', 'Revision History...', 'Replace with Server Revision', 'Change Status...', 'View Dependencies', 'Assign Labels', 'Properties', 'Watch', 'Compare With', 'Import from Repository...', 'Plug-in Tools', and 'Configure'. The list below the menu shows various products and libraries with their 'Last Mod Date' and 'Authoring' status.

Title	Last Mod Date	Authoring
BDGS_ERS Product	2018-07-31 10:20:19	
DUIP Common Platform Product	2017-12-06 11:32:40	
DUIP Methods Product	2016-09-23 20:25:31	
DWAXE-Test	2016-01-05 08:52:25	
DWAXE-Test-2	2019-01-07 09:57:39	
ENM Product	2018-11-21 08:15:21	
Ericsson Composition Engine	2018-12-18 08:27:54	
ERS 3G Product	2018-02-26 08:34:25	
ERS 4G Product	2018-02-07 10:29:20	
ERS HW	2017-12-20 11:23:53	
ERS Pico	2017-11-29 21:48:06	
ERS RDS Product	2018-01-10 18:31:35	
SE-VP-NGIN	2018-11-01 07:16:40	
SE-APIProxy	2018-11-28 03:42:54	
SE-APIManager	2018-11-28 07:40:18	
ERS 5G Library	2018-12-20 11:08:38	
ERS Baseband	2018-12-21 11:12:55	
ERS 4G Library	2018-12-21 11:26:48	
17A	2017-05-29 14:34:35	
2018	2018-12-20 15:34:31	
Main Track	2018-12-20 12:19:24	
MTR DEV - 4G5G Library	2018-09-13 08:05:54	Authoring:development
MTR DEL - 4G5G Library	2018-11-10 15:34:24	Authoring:open
NR LA Release	2018-12-21 11:27:07	

The screenshot shows the IXIASOFT CCMS interface in the DRM view. A table displays a list of products and libraries with their 'Title' and 'Status'.

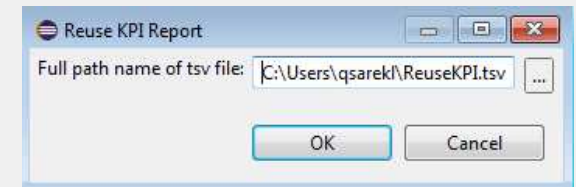
Title	Status
BDGS_ERS Product	Authoring:open
DUIP Common Platform Product	Authoring:open
DUIP Methods Product	Authoring:open
DWAXE-Test	Authoring:open
DWAXE-Test-2	Authoring:open
ENM Product	Authoring:open
Ericsson Composition Engine	Authoring:open
ERS 3G Product	Authoring:open
ERS 4G Product	Authoring:closed
ERS HW	Authoring:open
ERS Pico	Authoring:open
ERS RDS Product	Authoring:open
SE-VP-NGIN	Authoring:open
SE-APIProxy	Authoring:open
SE-APIManager	Authoring:open
ERS 5G Library	Authoring:open
ERS Baseband	Authoring:open
ERS 4G Library	Authoring:open
17A	Authoring:closed
2018	Authoring:open
Main Track	Authoring:open
MTR DEV - 4G5G Library	Authoring:development
MTR DEL - 4G5G Library	Authoring:development

Reuse KPI in IXIASOFT CCMS – From Search Result

The screenshot displays the IXIASOFT CCMS interface. The top pane shows a tree view of products and libraries. The bottom pane shows search results for 'Multi-Target RRC Connection Re-Establishment'. A context menu is open over the search results, with 'Reuse KPI Report' highlighted.

Title	Status	Last Mod Date
BDGS_ERS Product	Authoring:open	2018-07-31 10:20:19
DUIP Common Platform Product	Authoring:open	2017-12-06 11:32:40
DUIP Methods Product	Authoring:open	2016-09-23 20:25:31
DWAXE-Test	Authoring:open	2016-01-05 08:52:25
DWAXE-Test-2	Authoring:open	2019-01-07 09:57:39
ENM Product	Authoring:open	2018-11-21 08:15:21
Ericsson Composition Engine	Authoring:open	2018-12-18 08:27:54
ERS 3G Product	Authoring:open	2018-02-26 08:34:25
ERS 4G Product	Authoring:closed	2018-02-07 10:29:20
ERS HW	Authoring:open	2017-12-20 11:23:53
ERS Pico	Authoring:open	2017-11-29 21:48:06
ERS RDS Product	Authoring:open	

Title	Status	Book Number	Edition	Primary Version	Mod Date	User Comment
Multi-Target RRC Connection Re-Establishment	Authoring:approved	43/221 04-LZA 701 6014/2	AC	MTR DEV - 4G5G Librar	1-22 11:14:02	[No Comment]
Supported Capacity and Configurations LTE	Authoring:work	38/1551-LZA 701 6014/2	PNL	MTR DEV - 4G5G Librar	1-22 11:06:17	[No Comment]
Cross-DU Carrier Aggregation Support	Authoring:work			MTR DEV - 4G5G Librar	1-22 10:18:03	[No Comment]
Migrate Baseband 5216 to Baseband 6630	Authoring:work		PAL	BB MTR DEV	1-28 09:21:06	[No Comment]
Basic Intelligent Connectivity	Authoring:approved	369/221 04-LZA 701 6014/2	E	BB MTR DEV	1-25 15:39:12	[No Comment]
Manage IPsec	Authoring:work	42/1553-LZA 701 6014/2 -V1 -V2	PAC1	BB MTR DEV	2019-01-25 11:41:59	multiple IPsec certificates p
Manage Equipment Configuration Tool	Authoring:approved	49/1553-LZA 701 6014/2	AC	BB MTR DEV	2019-01-25 10:24:08	[No Comment]
PSU Output Power Failure	Authoring:approved	156/1543-LZA 701 6014/2	B	BB MTR DEV	2019-01-24 12:26:40	[No Comment]
Key Performance Indicators	Authoring:work		PAL	BB MTR DEV	2019-01-24 11:44:49	
Site Diagnostics Guideline	Authoring:work		PAL	BB MTR DEV	2019-01-24 11:11:15	[No Comment]
Manage Configuration Files for Radio Node Procedures	Authoring:work		BB	MTR DEV	2019-01-23 14:03:12	Added new topic
Node Description vTIF	Authoring:work	53/1551-LZA 701 6014/2	PAL	BB MTR DEV	2019-01-23 13:28:22	Removed Traffic Security tc
Expand Hardware	Authoring:work		PAL	BB MTR DEV	2019-01-22 10:40:49	[No Comment]
Manage Integration	Authoring:work	45/1553-LZA 701 6014/2 -V1 -V2	N	BB MTR DEV	2019-01-22 10:10:28	[No Comment]



- Search for a specific amount of content from **Search**.
- Choose a selection of content from the **Search Result View**.
- Generate reuse KPI report, and save it to your computer (as .tsv)

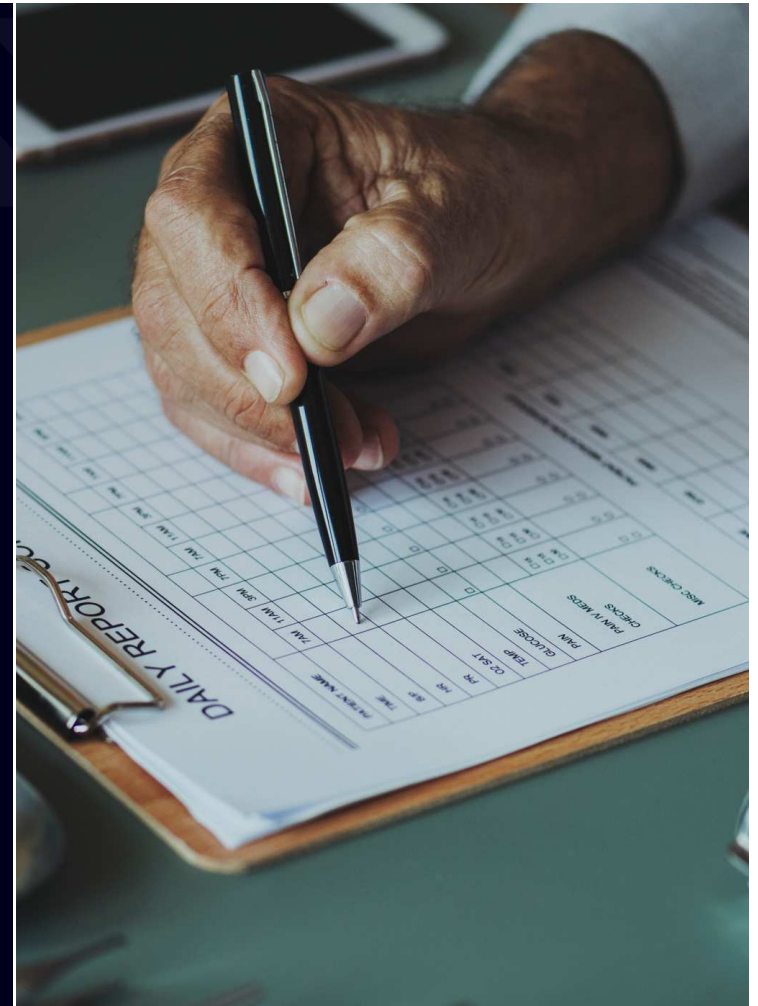
Output: Reuse Report

Reuse Reports can be created for:

- One bookmap
- Selection of bookmaps
- All bookmaps for a product

The report contains information for the selected bookmaps:

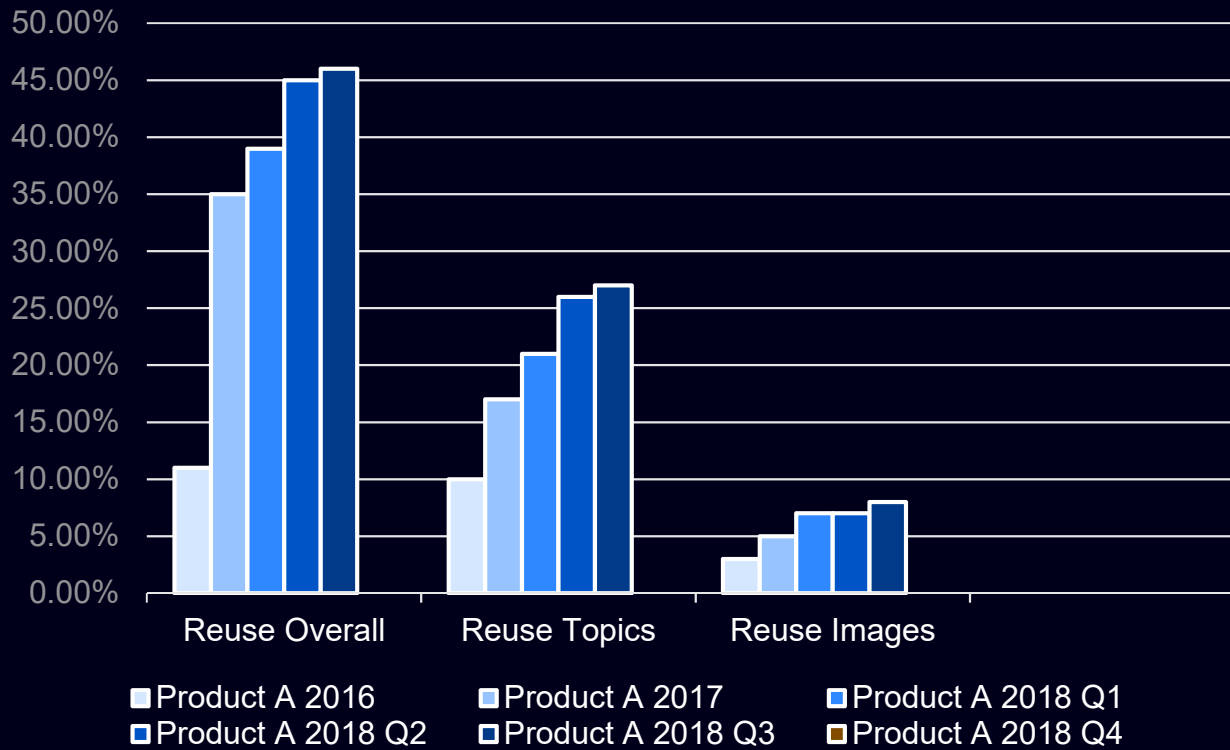
- Reuse % overall
- Reuse % of topics
- Reuse % of images
- Reuse % of conref



	A	B	C	D	E	F	G
1	Timestamp	Product/Version	Full Path	Reuse % Overall	Reuse % Topics	Reuse % Images	Reuse % Conrefs
2	2018-02-12 14:15	ERS 4G Library/18.Q1 - 4G5	/content/releases/jkf15	41.1%	22.7%	6.5%	991.6%

Results from Reuse Measurement

Product A SW – Reuse % over time



Reuse Strategy

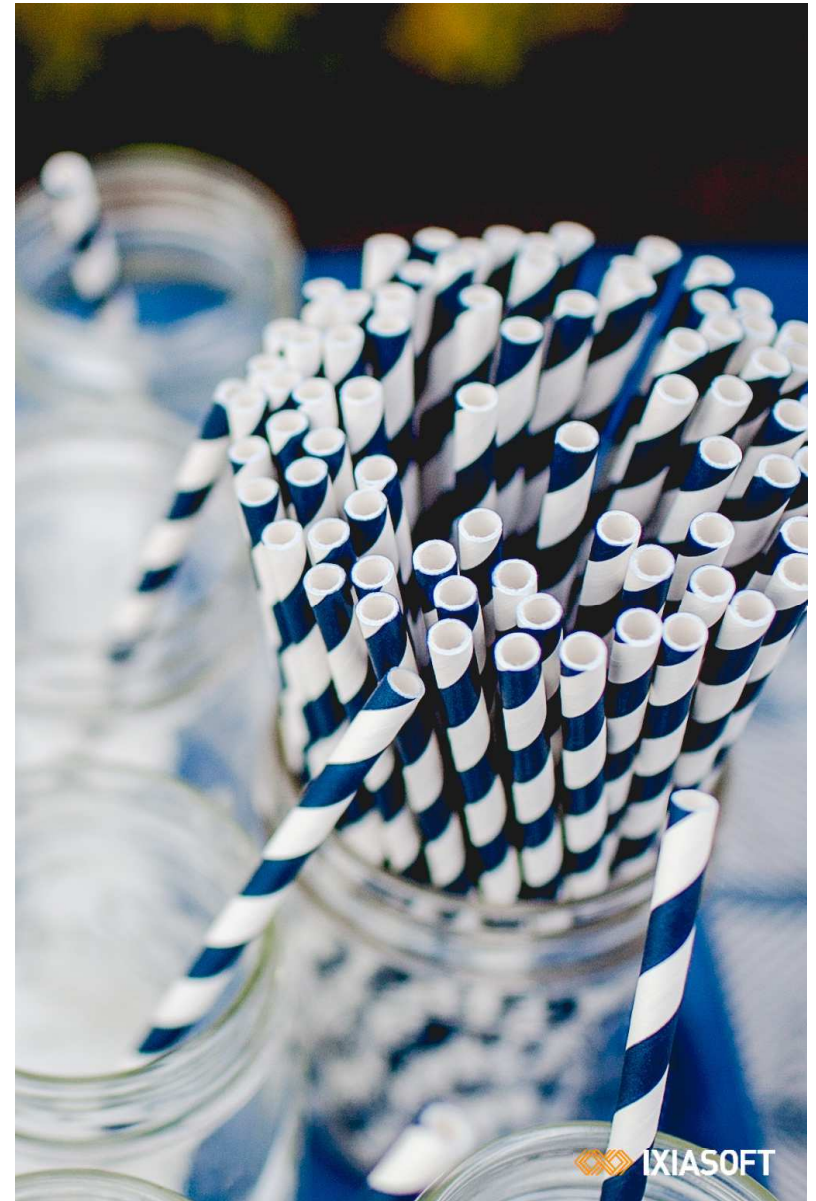
The reality for the documentation teams:

- Increasing complexity in the products
- Single or several products used across systems and solutions
- Many documentations teams
- Increasing demand on continuous deliverables

A reuse strategy provides good guidance in all these factors that the documentation teams needs to consider.

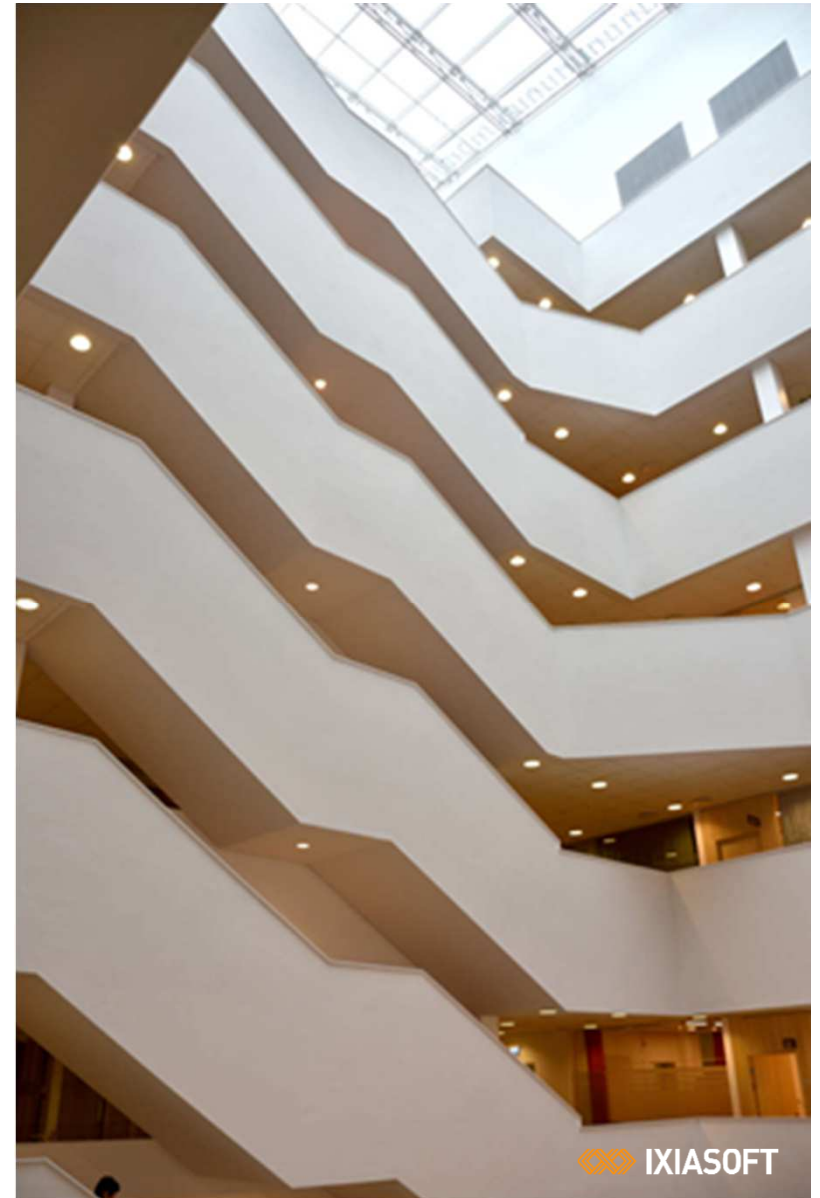
For example. a reuse strategy could consist of:

- Reuse and Governance Models
- Business Rules for Reuse



Why a Reuse and Governance model

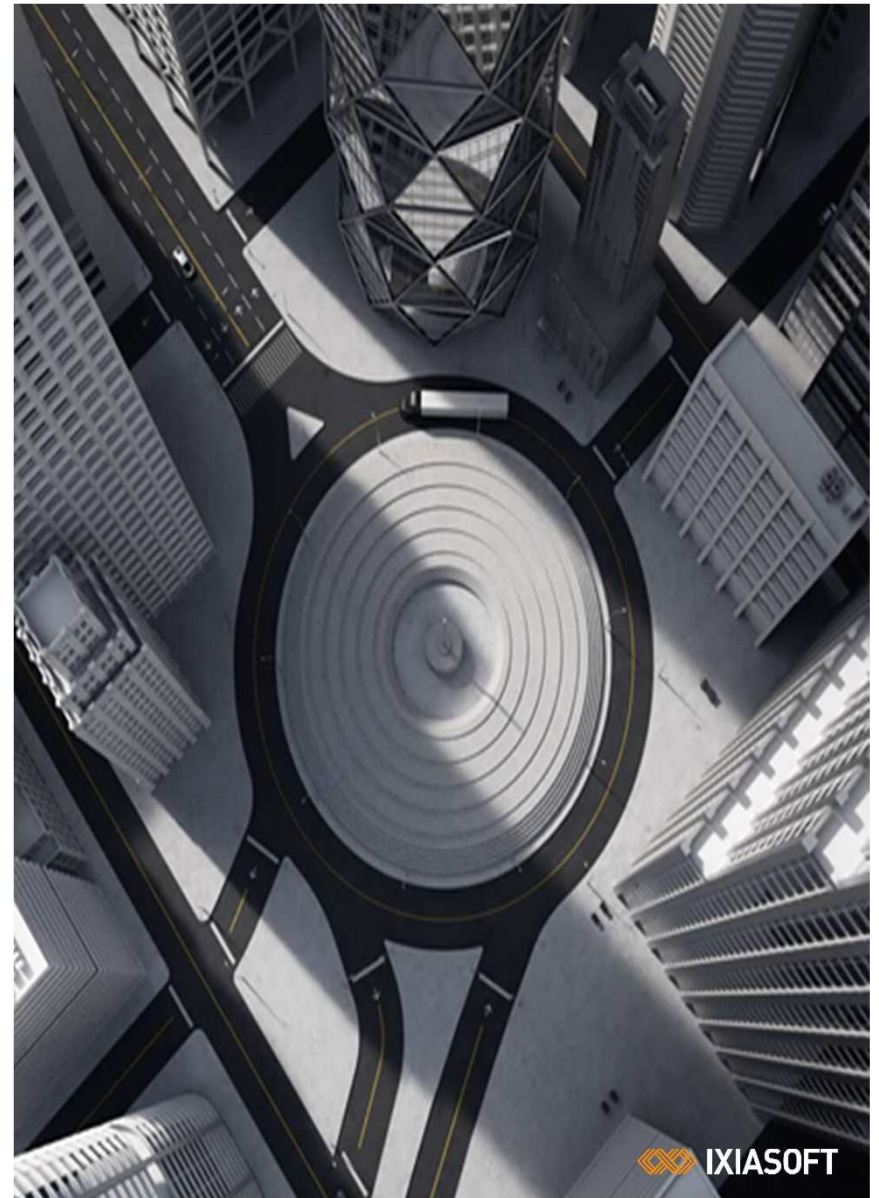
- Governance models are a help for managing changes in reused content.
- Different governance models can be applied for different products and organizations.
- Whether a governance model is needed or not depends on the type of content, extent of reuse, or if the content needs input from different organizations.



Reuse and Governance model

Factors that can impact choosing a reuse and governance model:

- IXIASOFT CCMS Roles
- Identifying specific competencies
- Product Structure and dependencies
- Structure of the product information
- Understanding the geographic spread and organization of writers
- Relative experience of writers and contributors



Examples of Reuse and Governance models

Some examples of different reuse and governance models:

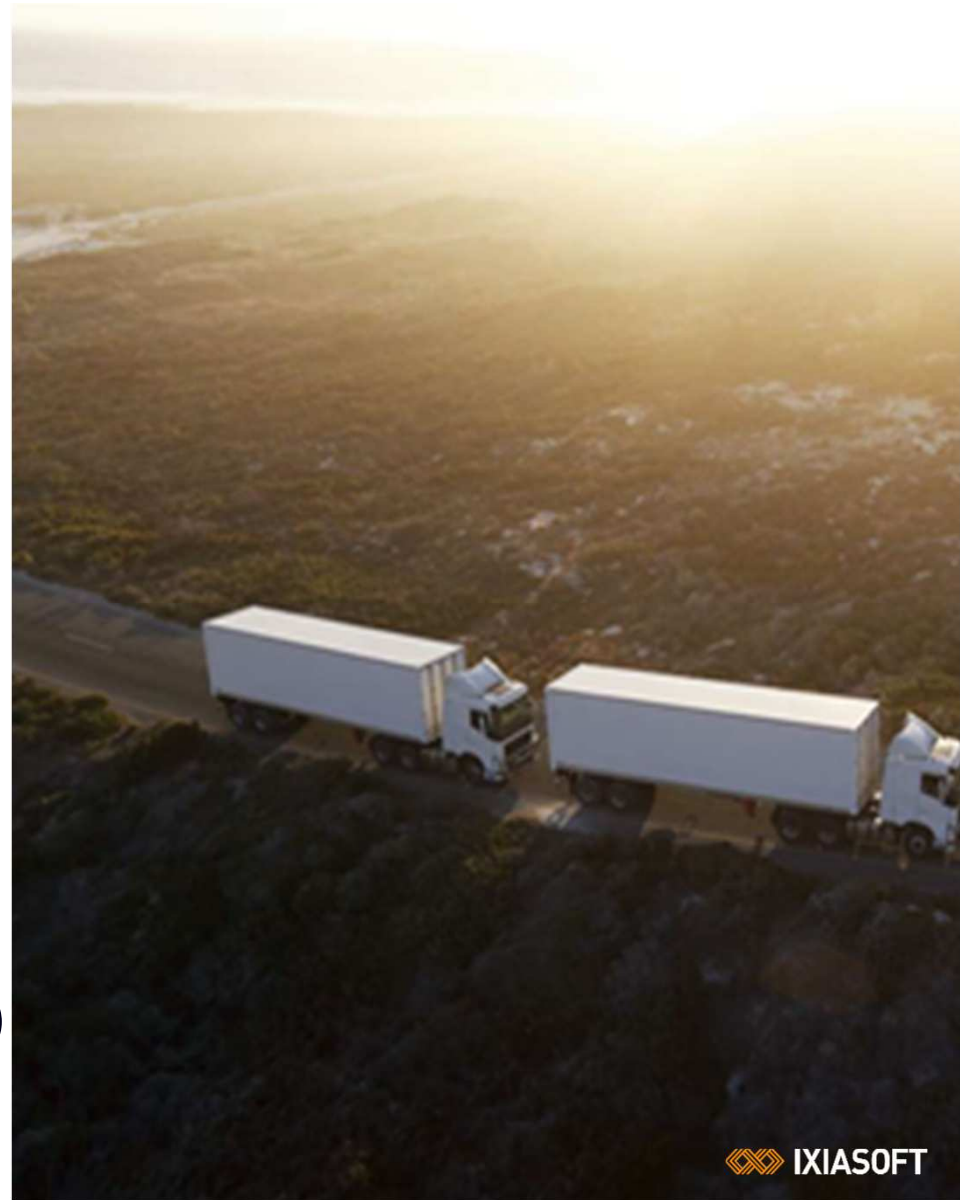
- Governance models that are locally-defined processes
- An agreement of ownership
- Collaborative editing-review
- Committee



Business Rules for Reuse

- Rules for writing for reuse:
 - Titles, Search for reusable content, Adding metadata, Standalone topics, avoiding copy/pasting etc.
- Corporate Reuse:
 - Safety admonitions, other corporate topics
- Reuse methods used in CCMS
 - Topics, referable content, variables, conditional processing
- Dynamic Release Management (DRM*)
 - Structure that enables efficient reuse and delivery in several tracks

* DRM is a feature provided in IXIASOFT CCMS



Write for Reuse

Some guidance when writing for reuse:

- Establish a "single point of truth"
- When details are not important, leave them out.
- Use generic terms whenever possible and variable keys when you must be specific.



Key Takeaways

- Know what you are measuring and why
- Realize that it may take a couple of years before you have reliable information
- Measuring reuse in short term can be helpful in determining the usefulness of training
- Always analyze the reuse results carefully and understand what impacts the measurements before changing anything
- Find a balance between the reuse of your content and its maintainability
- A Reuse and Governance Strategy to help manage the reused content

Questions?



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