

World-class product documentation for a global market

Challenges and Solutions

Benjamin Mawson - February 2024

Who am I?

Ben Mawson

Technical Writer & Information Architect



Some examples from my professional experience:

1990s

Quadrant Systems (flight simulation)



- Coordinated successful bid at Quadrant Systems Ltd for 25 year flight training contract for E3D AWACS surveillance aircraft for UK Royal Air Force. 1,500 pages, 8 print copies.

London Borough of Lambeth (local government)



- Built 12,000 record database (West Norwood cemetery - burial plots!)
- Wrote 200 page report on cemetery operational procedures in preparation for court case (Southwark Consistory Court).

2016-2019

Ford Motor Co



- Writing & updating car owner manuals for 100s of model variants,
- Developing consistency database, verifying specifications with SMEs globally,
- Understanding how 1 brand has 1000s of variables.

Siemens Thameslink (rail company)

SIEMENS

ThamesLink /

- Fixing a £billion problem: 2 rail depots were built without any documentation.
- Built 100k DMS that is easily managed and continuously developed.
- ***Handed over 2018: still in use, 2024. See [DMS User Guide](#).***

Black Swan Data (airline software division)



- Introduced Release Notes, fixing issues in hours not weeks.
- Made 'Definition of Done' include technical and customer documentation for first time.
- Introduced formal review / approval for all content on 2 global software products.
- ***Standardised terminology definitions, preventing recurring financial loss.***

2020

Inmarsat (satellite communications provider)



- Replaced ‘monolithic’ MS Office docs with topic-based libraries and shared content.
- Transformed gov / mil product documentation into single source, modular library

BEFORE: 42 large docs maintained separately
(Up to 100 pp each, duplicated content)

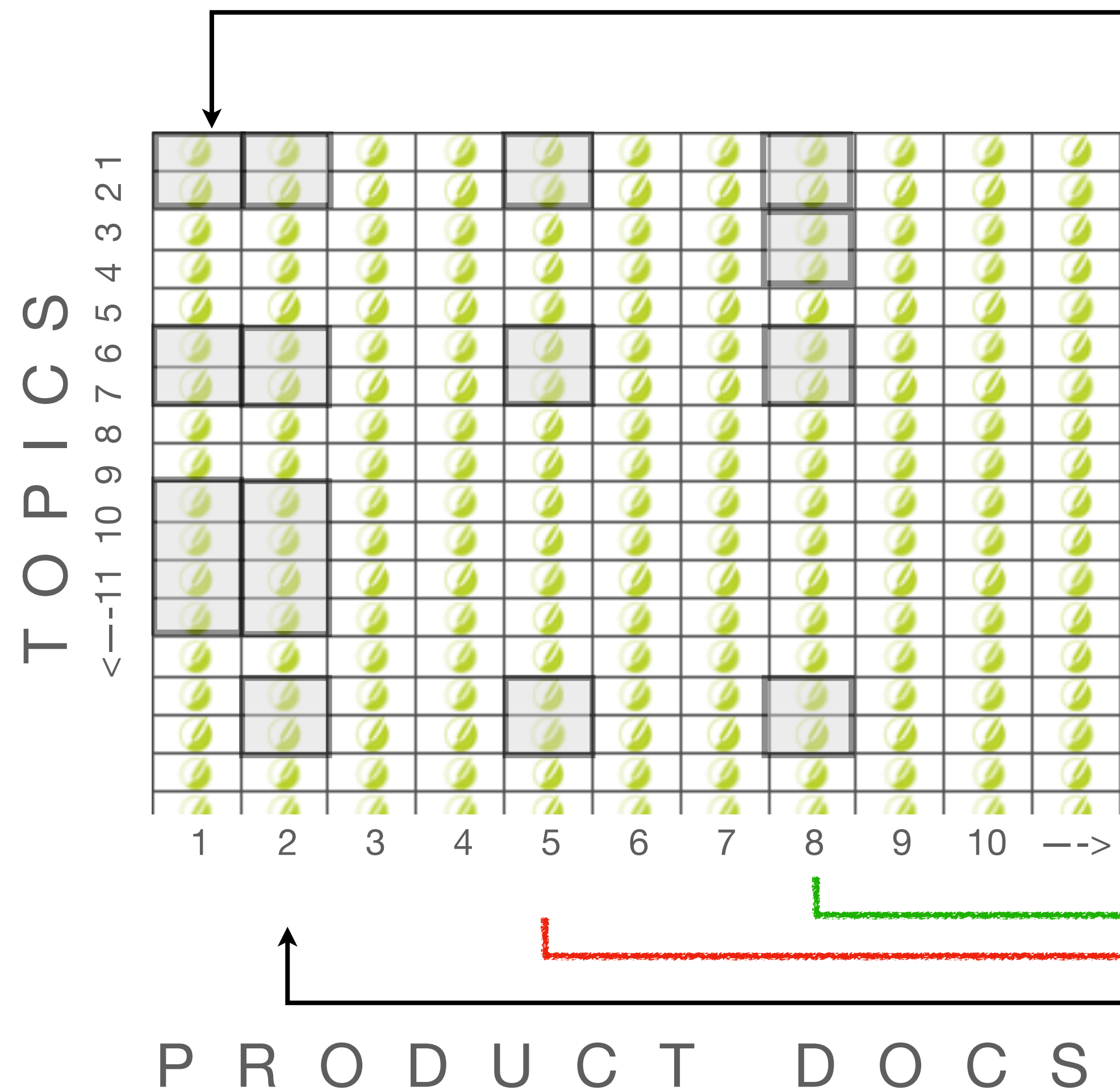
Maintenance / review / update: 100s of hours

AFTER: 1000s of topics, limitless variants
Each doc customer-focused, and unique

Update topic once, publish everywhere: 10 minutes

W 1	W 2	W 3	W 4	W 5	W 6
W 7	W 8	W 9	W 10	W 11	W 12
W 13	W 14	W 15	W 16	W 17	W 18
W 19	W 20	W 21	W 22	W 23	W 24
W 25	W 26	W 27	W 28	W 29	W 30
W 31	W 32	W 33	W 34	W 35	W 36
W 37	W 38	W 39	W 40	W 41	W 42

Write Once, Publish Everywhere



Doc 1: *Product Brief*. 7 ‘topics’ or text elements

Doc 2: *Product Brochure*. 9 ‘topics’

Doc 5: *Product Datasheet (Generic)*. 6 ‘topics’

Doc 8: *Product Datasheet for country X*.
As per 5, with 2 extra elements

2021

HSBC (global banking organisation)



- ATOM program (Agile Target Operating Model)
- Multiple duplicated, out-of-date sources — —> to single library
- Analysis matrix to maximise content reuse: Role (persona), role functions, tasks within a function

Example matrix —>

- Role 1 does Functions A&B
- Role 2: A and C, etc
- Functions split into tasks and sub-tasks
- Tasks done in 3 separate tools
- Docs built re-use verified content

PERSONA	Role 1	Role 2	Role 3	Role 4	etc
FUNCTION					
A					
B					
C					
D					
E					

- Standardised content for 90,000 bank employees across suite of 3 software tools (Clarity, Rally, Jira)
- **90% shorter update times and 100% consistency in new way of working**
- See adopted [documentation plan](#) for HSBC ATOM (initial proposal)

2021-23

Fujitsu (global IT services)



- Helping *regional* product teams standardise core documents for a *global* market
- Bringing about 1st adoption of topic-based content, single source libraries
- Cutting time to publication by 80%
- Eliminating many historic versions of the truth (e.g. RAID Log in 5 different places, not updated)
- Ready for translation
- Adaptable to all global markets, activity sectors, legislations etc

2023

Sky Identity (ID verification of 180m worldwide entertainment customers)



- Preparation for platform cloning: one copy to ComCast (US parent company) one copy for Sky UK
- Analysis, review and rebuild of ~20 Confluence / SharePoint spaces to single, verified operations library
- Worked with 200+ engineers to review, update, publish all required instructions and reference to run platform
- 180 million users require 100% 24/7/365 functionality
- New library cut down outages and filled knowledge gaps

Write once: publish everywhere

Example: Ford Transit

Variants include

Transmission	Drivetrain	Roof racks	Fuel	Body type	Engine size	Oil spec.	Elements	Published Manual
Auto (TA)	4WD	Y	Diesel	Crew Cab	2.4	3B	TA - 4WD - RR - Diesel - CC - 2.4 - 3B	Book 1
Manual (TM)	RWD	N	UL	Crew Cab	2.4	3B	TM - RWD - UL - CC - 2.4 - 3B	Book 2
Manual (TM)	RWD	N	Hybrid	Dropside	2.5	4B	TM - RWD - Hybrid - DS - 2.5 -4B	Book 3
Auto (TA)	RWD	N	UL	Dropside	2.5	4C	TA - RWD - UL - DS - 2.5 - 4C	Book 4

Topic-based solution —> consistent output for many variants:
Each manual has header-specific content for a given variant and its characteristics.

E.g.:
Auto-transmission for Transit is a single file used in many published outputs (web and print).
Oil spec 3B is a table that can be imported where applicable, or replaced with 4B, 4C etc as required

But real world global delivery is more complicated....

Ford Transit example variants

2022 W2X (LWB T350 HR CARGO AWD), White, EcoBoost, Adventure Pkg, ~~pwr sliding door~~

2023 W3U 350 Hi Roof ELWB Cargo AWD, Blue Metallic, EcoBoost, Sync 4

For a single model in 2023, 20 body types need separate documentation:

E1Z - E2C - E2D - F4U - F8X - R1C - R1Y - R2C - R2D - R2X - R2Y - R3U -
S4X - U8U - W1X - W3U - W3X - X2C - X2Y - X9C

And 20+ models in 150 countries with 1000s of variants....

Solution

Documentation reimaged as maps of content, taken from a library.

Each unique variant manual takes single approved version of a component from database [text snippets, graphics, specifications, warnings, legal, etc].

Write Once, Publish Everywhere.