

# BIL-T CONFERENCE ARCHITECTURE OF TOMORROW

NOV 11<sup>th</sup> 2021, US Central



An Association for All IT Architects

# About Myself

- Practicing (and learning) Enterprise Architecture (EA) for over a decade
- Have worked in many industries in both Canada and Australia
- Currently work at CBH Group a WA farmers Co-Operative
- Am passionate about change and the desire to make things better
- Started my journey to improve Enterprise Architecture (EA) knowledge management back in 2011

# About the Practice of EA and Knowledge

## Architecture Knowledge Management



Scalable



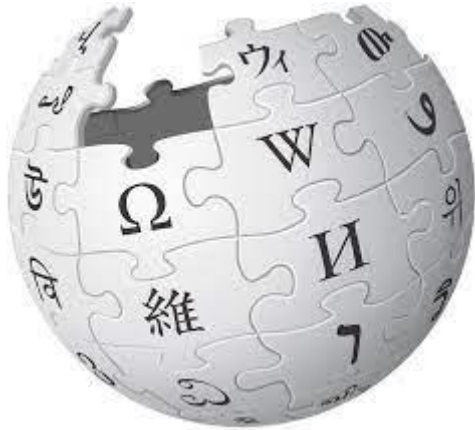
- The practice of EA synthesizes information into knowledge critical to strategic and tactical decision making.
- My experience is EA departments rise and fall, and when they fall, leave large amounts of information but little accessible knowledge behind
- Knowledge is the key asset of EA yet we struggle to retain knowledge beyond the retention of good Enterprise Architects
- Enterprise Architects take a lot of time to gain knowledge and are a finite resource, making scaling the practice of EA difficult

# Where it all started...

- In 2009 I started working for a telecommunication company in Montreal, Canada.
- By late 2011, I was frustrated for a number of reasons:
  - Having to repeat the knowledge gathering process for every initiative
  - Not being able to keep up with documenting all the project changes
  - Missing out on crucial knowledge due to non-project related changes
  - Even with all the hard work, how hard it was to answer even basic EA related questions
  - EA knowledge management (not modelling) tools were non-existent or prohibitively expensive
- A colleague of mine (Doug Beeson) and I decided to cobble together our own EA knowledge management solution

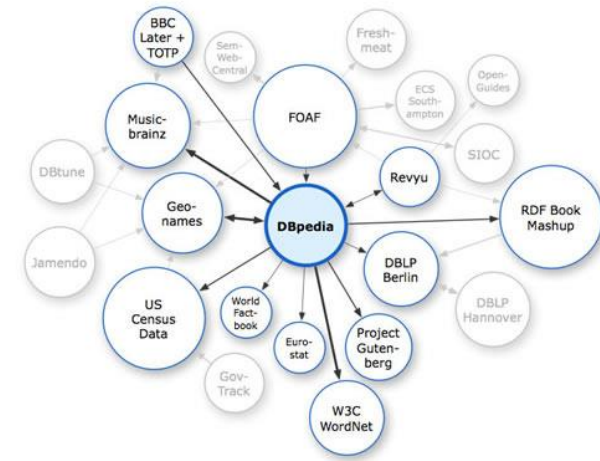
# Choosing the Technology

Wiki



- Accessible to everyone
- Capable of aggregating text, images and files
- Simple to add content and easy to search
- Low-cost or open source technology options

Semantic Web



- Can adapt to a growing and ever-changing EA meta-model
- Can be queried to answer questions
- Low-cost or open source technology options



**Semantic  
MediaWiki**

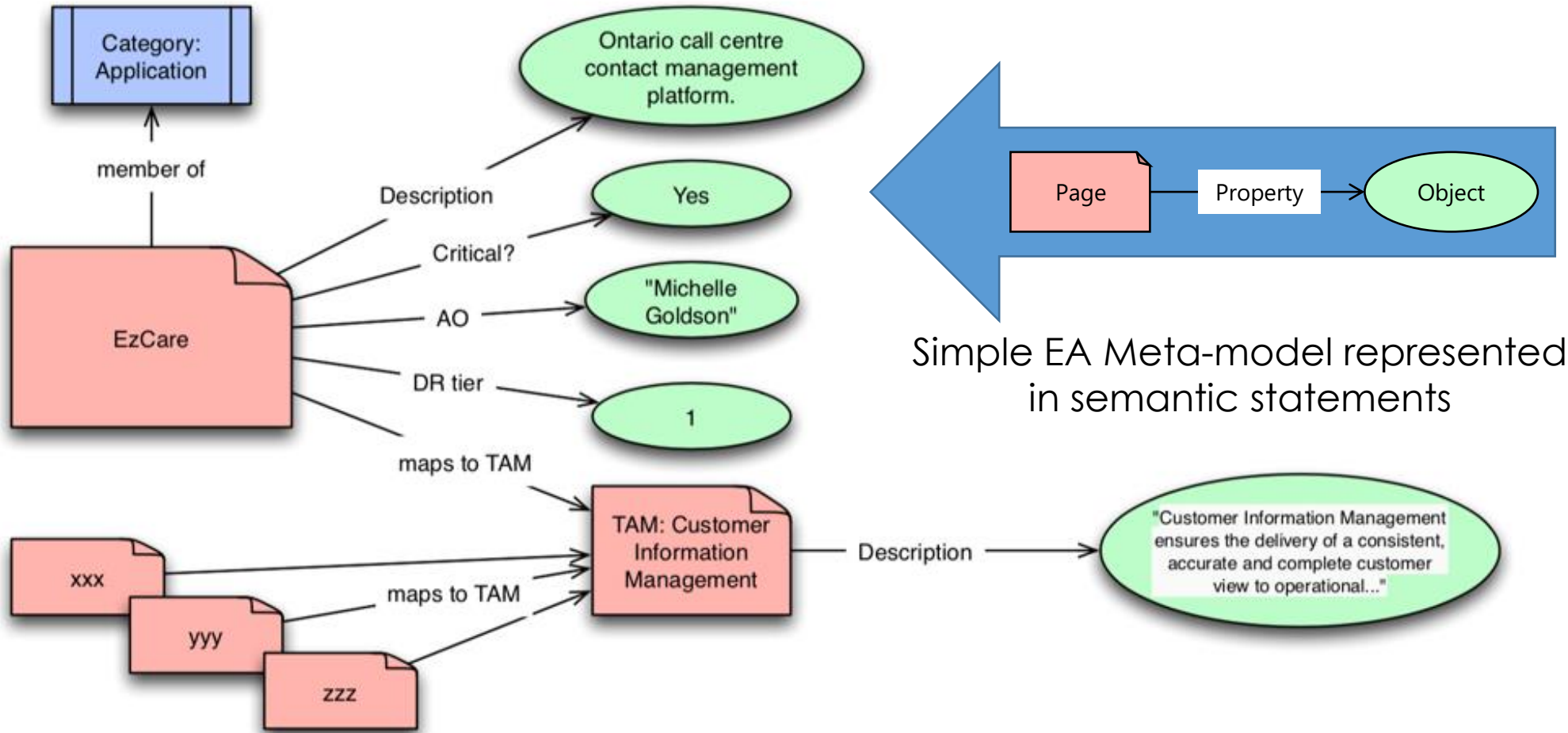
- Easy form based data entry
- Loads of extensions
- Open source solution with active development

# A bit about the technology

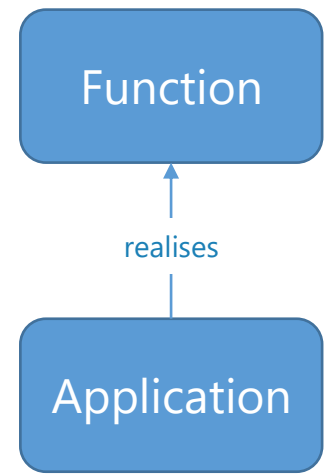
- Semantic Web
  - Statement = Subject, predicate, object  
e.g SAP is used by Finance
  - Millions of statements can be stored and queried
- Semantic MediaWiki
  - A statement = Page, property, object
  - Can be queried using the parser function #ask
  - Alternatively can store statements in an RDF triple store and use SPARQL
  - Easy form based capture of information

Statements are used to define your EA meta-model

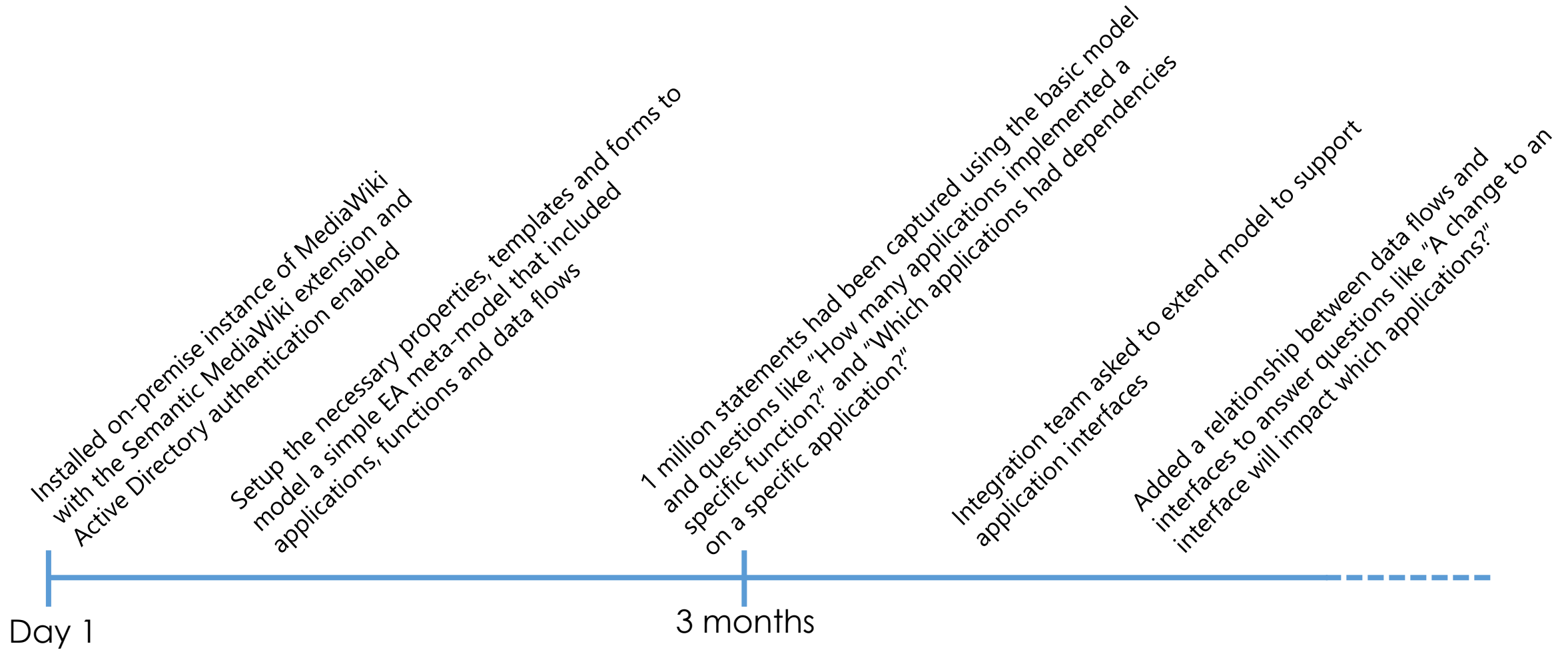
# Statement Examples



Simple EA Meta-model represented in semantic statements



# What did adoption look like?



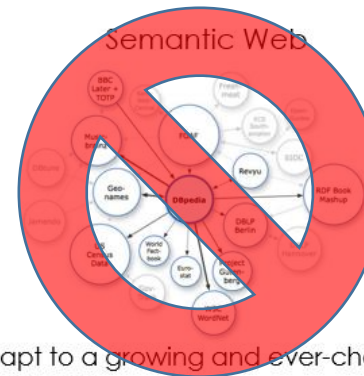


# I can't use Semantic MediaWiki

- Since 2011, I have replicated this approach in other organisations and have learnt that I can't always use Semantic MediaWiki
- In these instances I have scaled back to using only the Wiki portion for knowledge management to still help manage EA knowledge



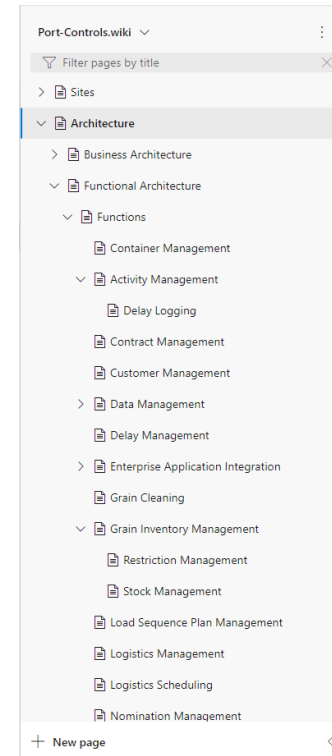
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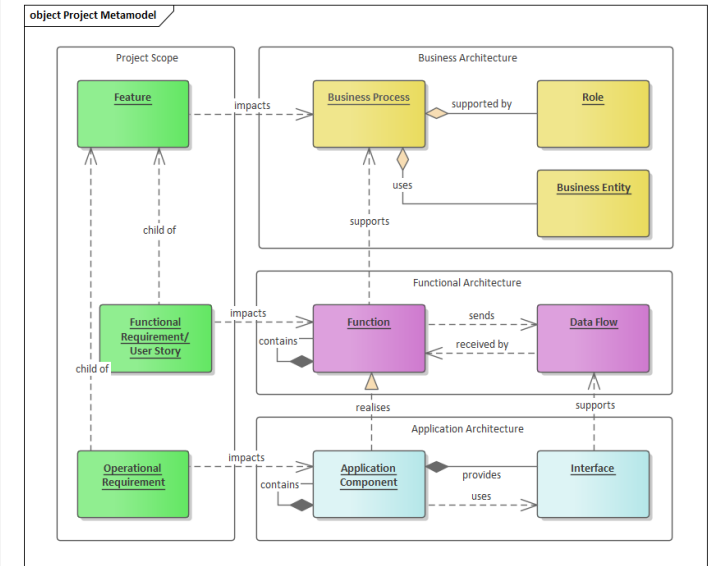
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# Something is better than nothing

- Wiki technologies are usually already accessible and supported in most organisations
- Allows the decentralisation of capturing information of interest to EA
- Although manual, allows Enterprise Architects to focus on maintaining statements using hyperlinks between pages to enforce the EA meta-model to inject meaning into information
- Its accessibility and searchability provide immediate value to users



The architecture information in this wiki has been structured around a metamodel that reflects the different architectural artifacts a



Except for the project scope, each of the boxes in the diagram above represent a specific *architectural artifact* and the lines in-between an *architectural artifact* is modelled as a wiki page and any relationships are modelled as hyperlink to another page (artifact). List of artifacts.

- Business Process
- Role
- Business Entity

# Advice

- Start with a small meta-model to prove its value
- Be prepared to put in the data entry work at the beginning
- Consult with information policies and provide guidelines on what information should be published on the wiki
- Create an eye-catching home page that explains the wiki
- Encourage use over governance and accept that incorrect information is better than no information
- Promote the follow/watch feature
- Find and encourage page stewardship
- Try to involve its use in existing processes

For further information, please [contactus@iasaglobal.org](mailto:contactus@iasaglobal.org)