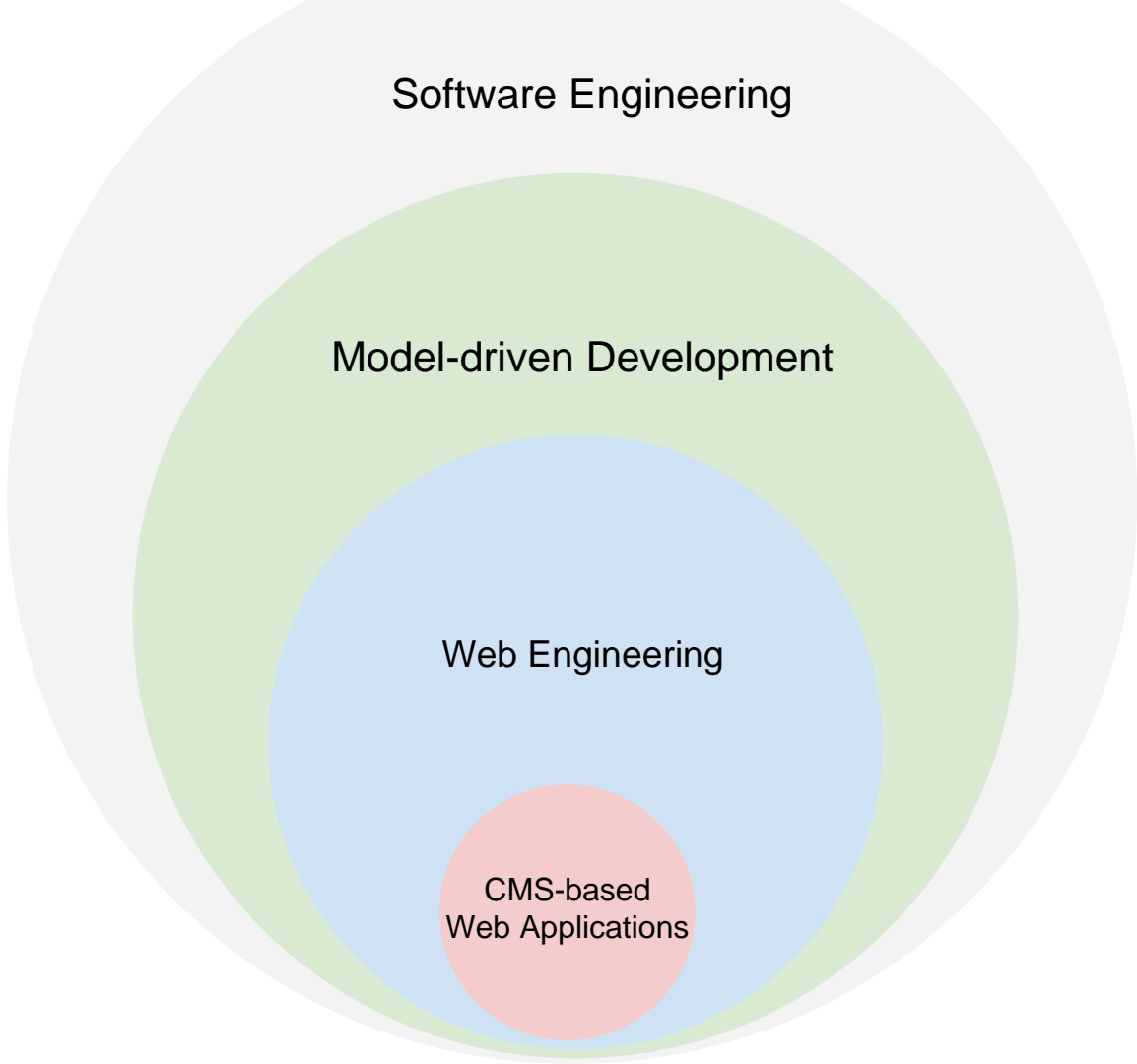


# Semiautomated Generation of Content-based Web Applications

Xhevi Qafmolla



Software Engineering

Model-driven Development

Web Engineering

CMS-based  
Web Applications

# ~67 M

~5,6% of all online websites in the world



~12,7 M



~2,9 M



~0,7 M

Long-tail CMS  
~ 40 M

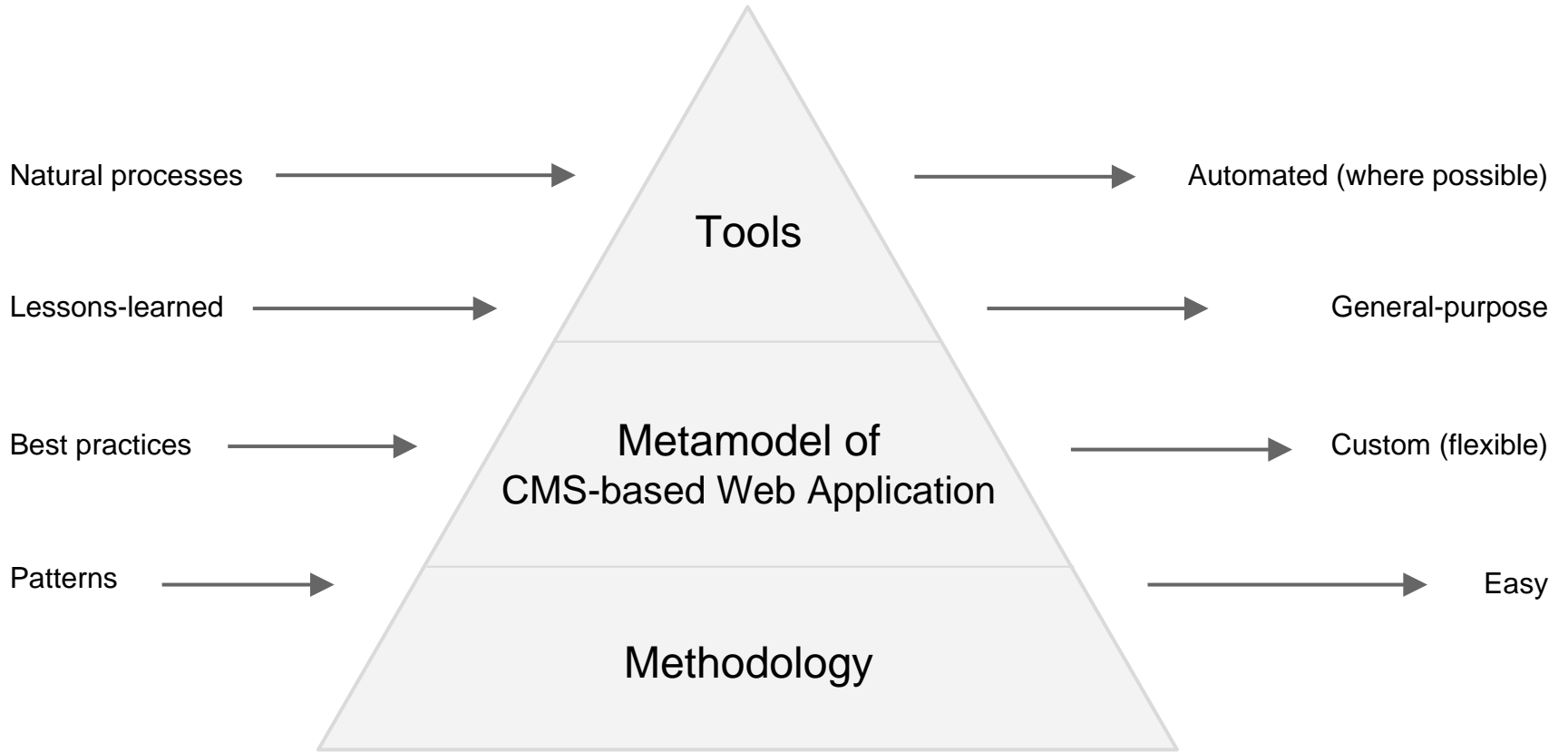
Hosted CMS  
~ 3.4 M

Other content-based platforms  
~ 5-7 M

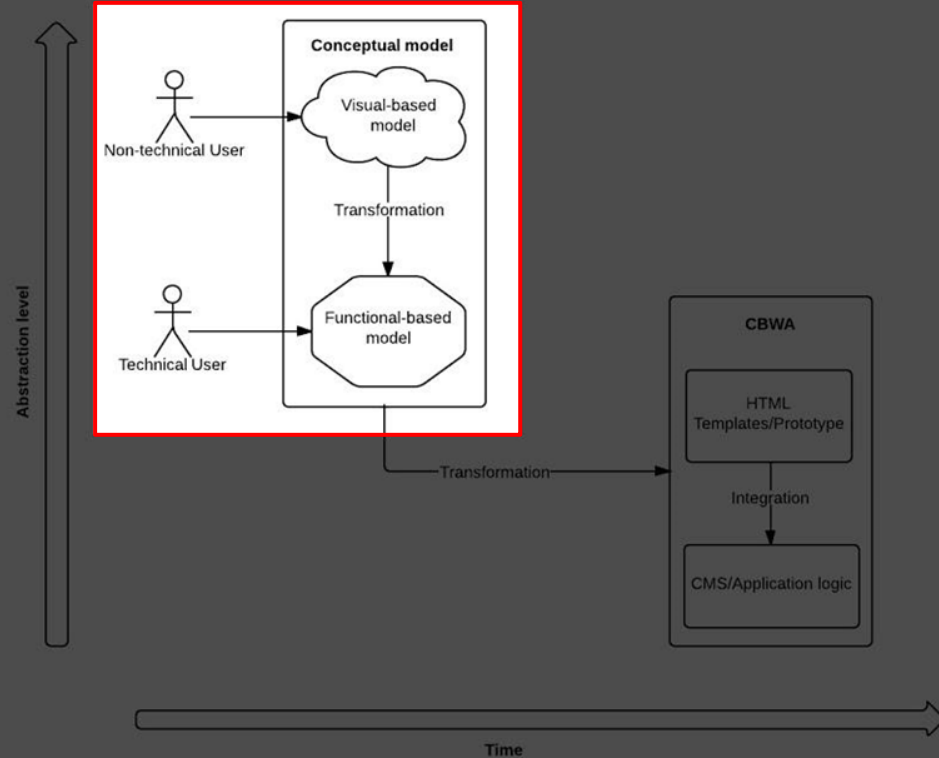
**Fragmentation**



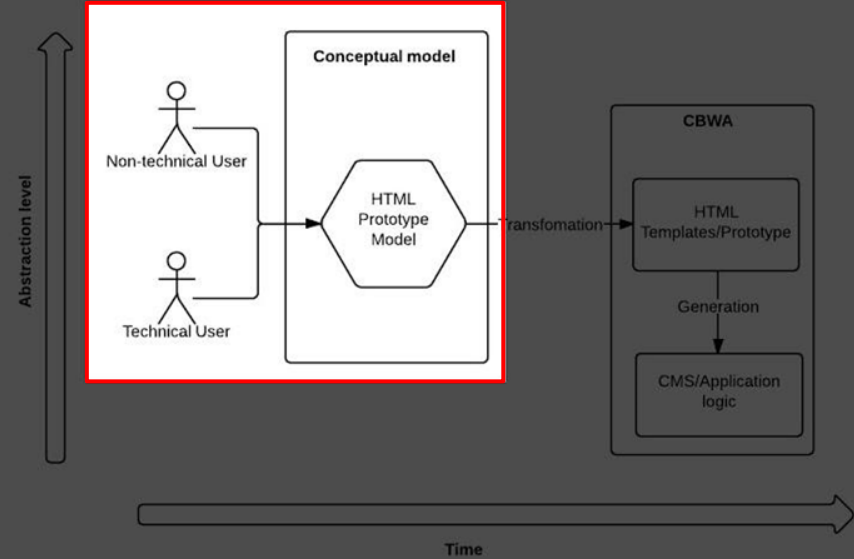
**Cost overhead**



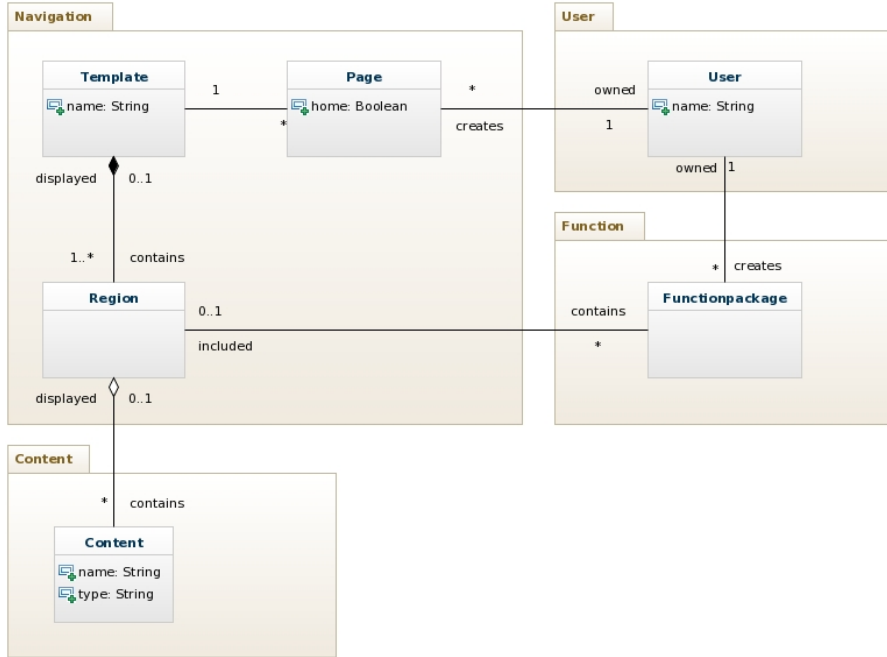
## Typical methodology



## Our proposed methodology



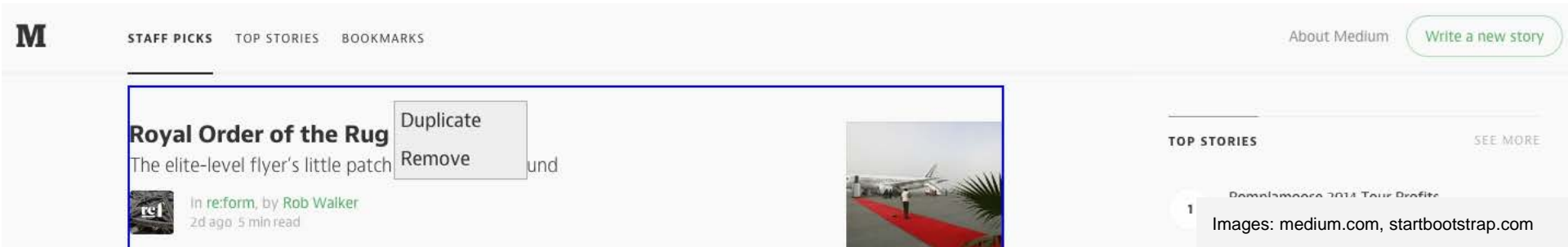
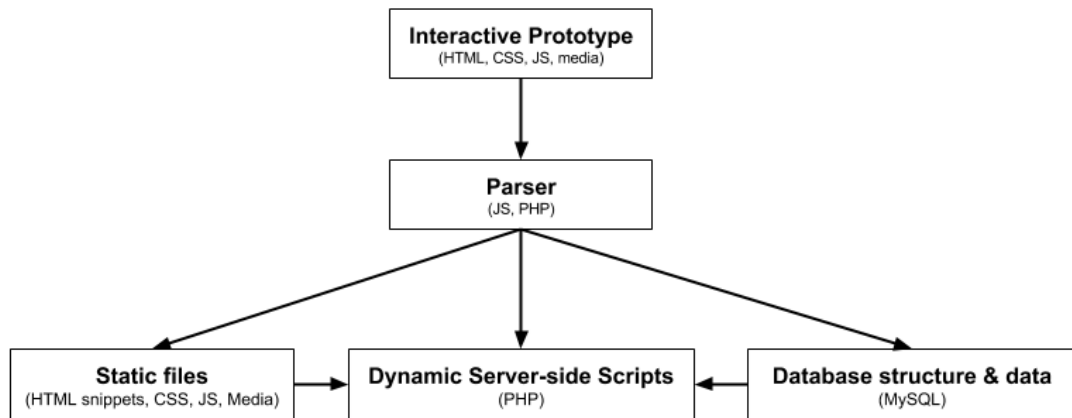
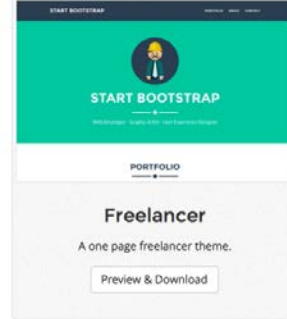
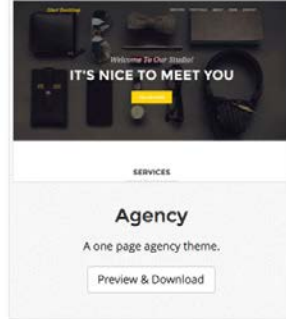
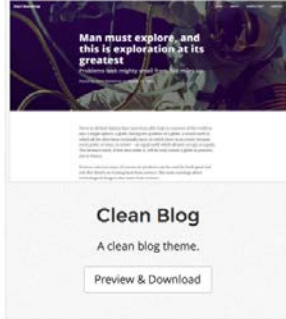
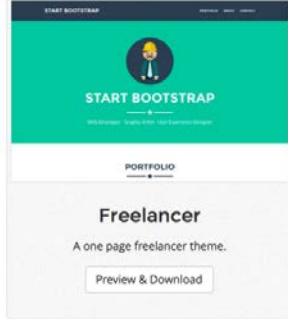
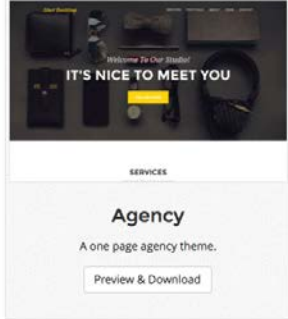
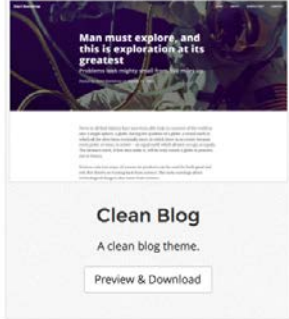
Technical and non-technical user work together with the same artefacts. No by-products are created.



WORDPRESS



Joint model of most common CMS platforms, transformed into one generic metamodel. Consists of main concepts needed to build and run a CMS-based website.





Evaluation of the methodology and tools is on-going.

Qualitative evaluation: 3 real-world projects of small to medium scale successfully completed.

Quantitative evaluation: 100 open source templates processed and controlled for errors. Methodology and scripts modified accordingly.

Proof of concept tools deployed in practice with several freelancers.

On-going development of tools for the Chrome browser as extensions.



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# Thank you!