

# Adoption of XR technologies by small architectural offices

**Adeline Stals**

From Belgium, Liège

**Architect**

3 years of Bachelor  
2 years of Master

**Doctor in Architecture**

4 years of PhD as F.N.R.S Fellow

**Postdoctoral researcher**

UCB, Departement of Architecture

# 01. Context

**Emerging digital practices  
in architectural design**  
in small offices

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Emerging digital practices  
in architectural design  
**in small offices**

**Large offices**  
European offices of  
more than 10 people

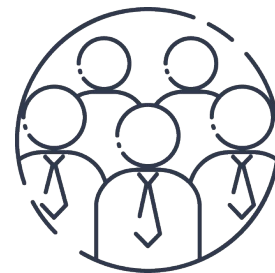
99%

1%



**SMEs**

European offices of less  
than 10 people

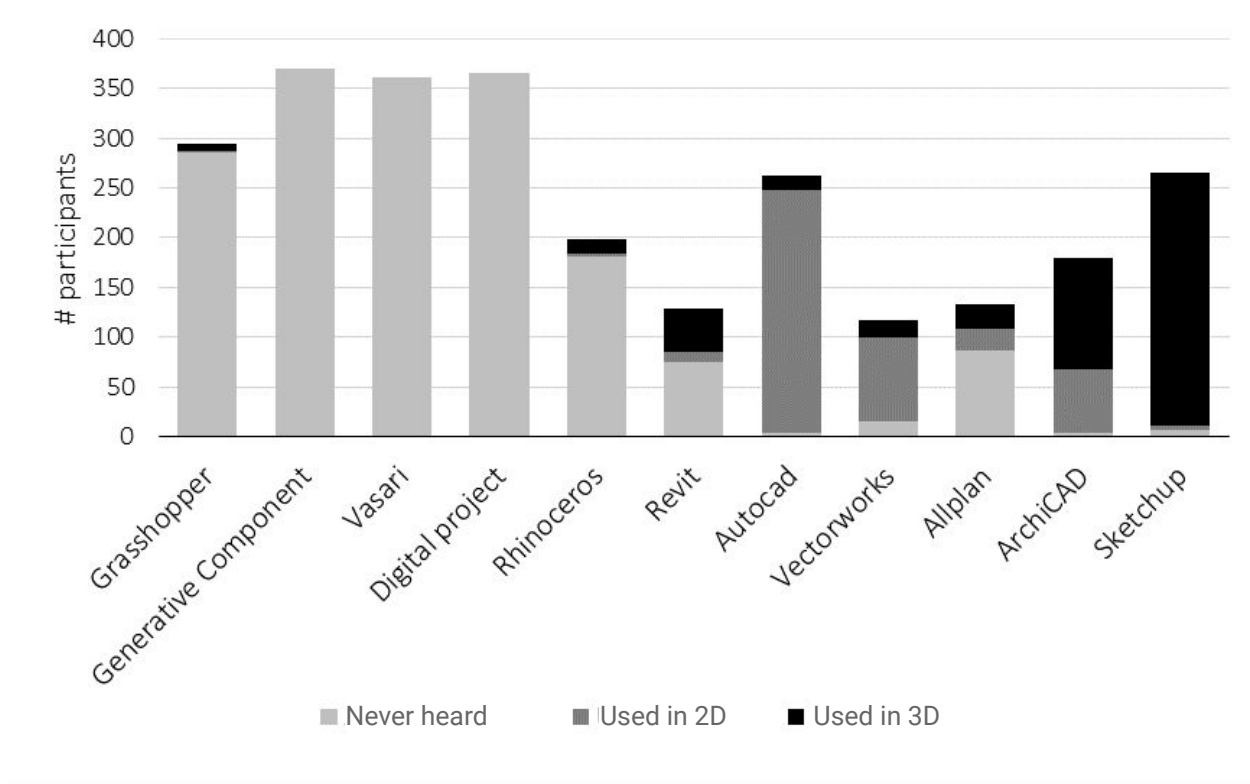


(Architects' Council of Europe, 2019)

## 02. PhD results

Distribution of the size of offices in Belgium according to our study

Office size (number of people)	1 to 2	3 to 5	6 to 10	10 to 20	20 to 50	50 to 100	No answer
Percentage	42.7%	22.6%	12.4%	11.9%	5.2%	3.7%	1.6%



Level of knowledge and use of digital tools in Belgian architectural offices

# Adoption of XR technologies by small architectural offices



Do research on XR technologies  
really focus on architects' feedback?



# 03. Postdoc research

## Systematic literature review

Researches about **VR-AR-MR in architecture**  
in regard of **research sample**



## Number of publications per database

<b>Name of database</b>	<b>Number of publications</b>
Cumincad	181
Design Studies	2
CoDesign	1
Architectural Science Review	1
Frontiers of Architectural Research	1
Archnet-IJAR	10
IJAC	5
<b>Total</b>	<b>201</b>

## Categories defined on the research sample

### Prototype

Interface/  
Method

Academic  
context

Architects

Other  
profiles  
(engineers,  
workers,  
clients...)

Undefined/  
incomplete  
protocol

### Experiment

Academic  
context

Architects

Other  
profiles  
(engineers,  
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clients...)

Undefined/  
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protocol

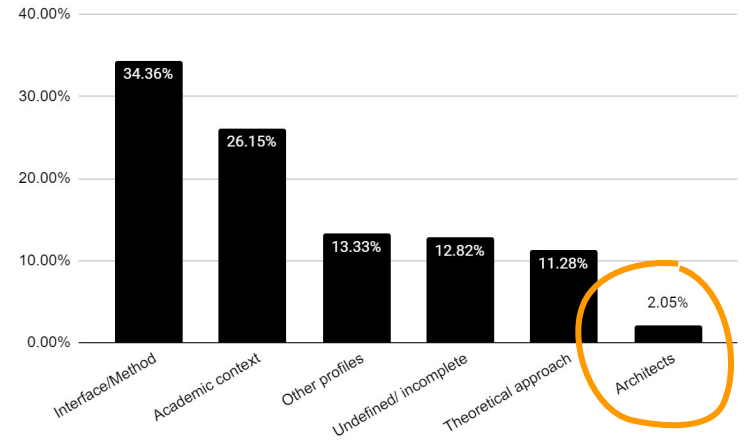
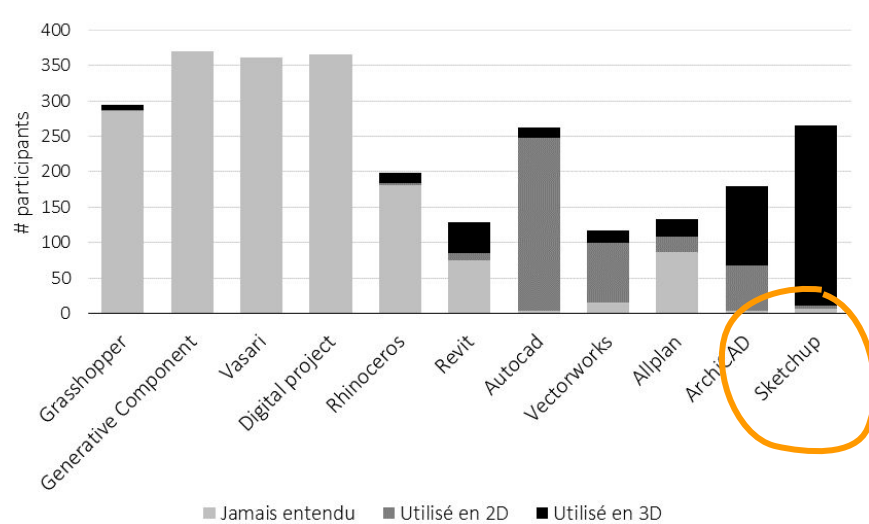
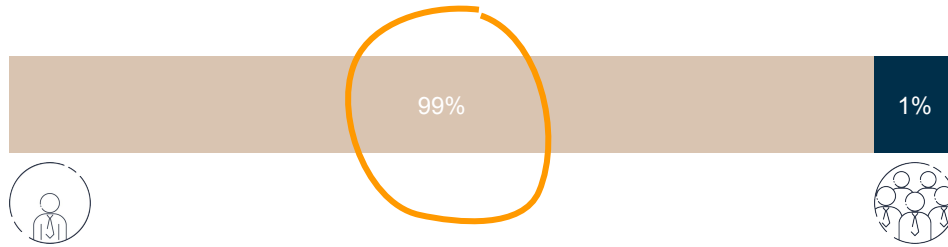
### Theoretical approach

Literature  
review

Fundamental  
reflection

Work with deep-rooted practice to help  
architects face the digital evolution

## > 3 findings



# 03. Postdoc research

## Focus groups

Architects of the  
Bay Area



# 03. Postdoc research

## Focus groups

Architects of the  
Bay Area



+



oculus

+




VR Sketch




Microsoft HoloLens


To help me settle the process



Time to handle  
VRsketch



Your opinion



Get HoloLens





Thank you for your attention