# Report Impression European Contractor Monitor H2-2024 Digitalisation and BIM February 2025



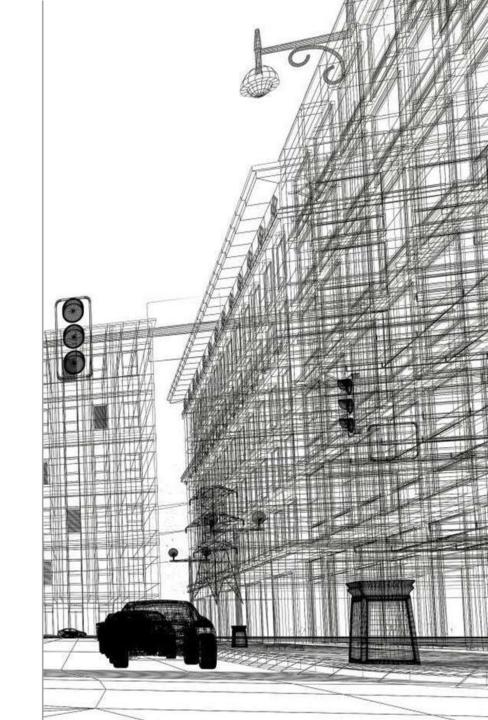
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## Background of the research

Economic developments & building contractor profile

Digitalisation and BIM

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# About European Contractor Monitor – BIM

#### **THE GOAL**

To gain a comprehensive understanding of the economic landscape in the construction market among building contractors across Europe and to uncover the most significant trends impacting these companies, USP initiated the European Contractor Monitor in 2018. This research is conducted bi-annually, involving registered building contractors from eight major European markets: the Netherlands, Germany, the UK, France, Spain, Italy, Belgium and Poland.

#### THE RESEARCH TOPICS

Recurring topic: Economic developments of building contractors in Europe (order book and turnover development)

**Biannual theme topics in 2024**: H1: Prefab H2: Digitalisation and BIM

#### **COUNTRY SCOPE** Total of 940 Phone interviews

Background characteristics of the interviewed respondents can be found in the country-specific profiling the contractor chapter.



#### THE TIMELINE



#### **PROJECT TEAM**



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Research Analyst



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#### Actual total N = 951; 5-15 FTEs N = 547 16+ FTEs N = 404

35-44

28%

45-54

35%

55-64

20%

≥65

4%

No

answer

1%

# Background characteristics

#### **Company profile**

Average age

48

≤34

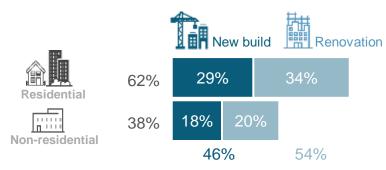
13%

How many full-time employees does your company have?



### **Project segmentation**

What percentage of your residential/ non-residential turnover do you get from new build projects?



Does your company develop and build projects themselves?

24%

40%

5-15 FTE

≥16 FTE





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**Digitalisation and BIM** 

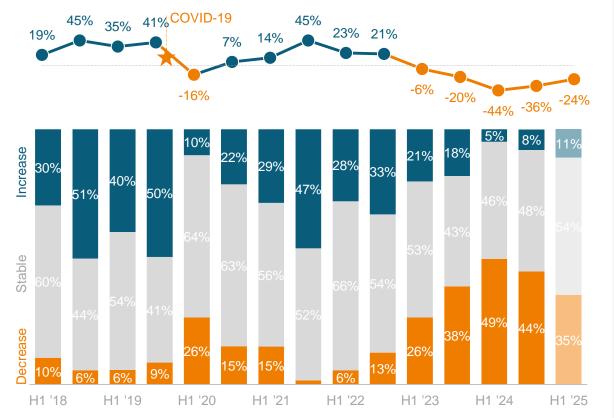
Appendix



USP Despite an upward trend, more German contractors have seen a negative turnover development. Order portfolio increased slightly in the past 6 months

## Net share of contractors' experience regarding turnover

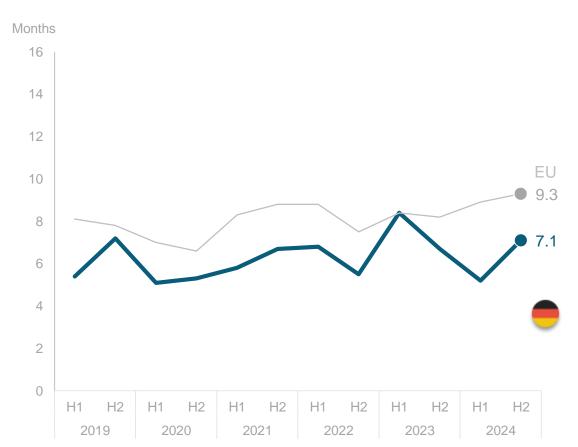
If you compare your turnover of H2-24 to H2-23, how did your turnover develop? What are your expectations for the development in H1-25 compared to H1-24?



#### Balance: Share of contractors reporting INCREASE minus the share of contractors reporting DECREASE

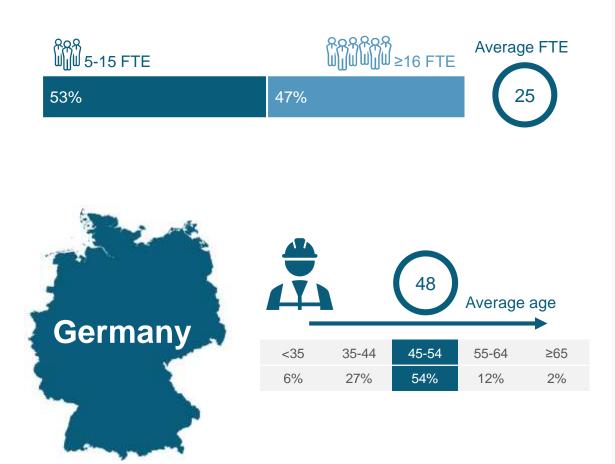
#### Order book in months

For how many months will you be able to keep your current staff working?



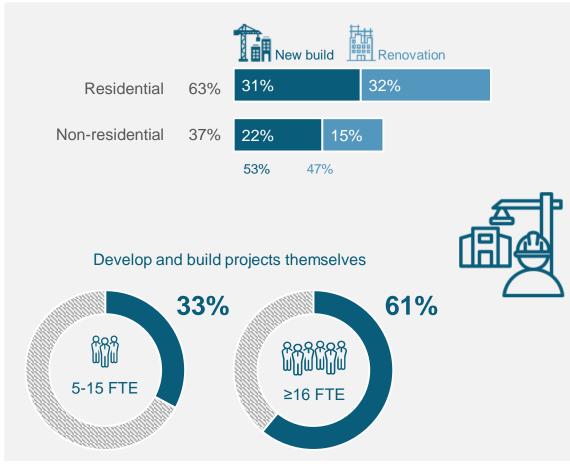
## Company and respondent profile

How many full-time employees does your company have?



#### **Project segmentation**

What percentage of your turnover do you get from new build projects?



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# Research questions TREND part of this study (BIM & Digitalisation)

### WHY BIM & DIGITALISATION AS KEY TRENDS TOPIC

The construction industry is changing. Trends like prefab, labor shortage, and new (house) builders entering the construction market with their own design and engineering capacity impact the role of the traditional building contractor. It is essential to monitor the developments of BIM & digitalization, as they significantly enhance project efficiency, collaboration, and cost-effectiveness throughout the construction lifecycle.

### THE RESEARCH QUESTIONS

#### General questions regarding BIM

- Are you familiar with the term BIM, Building Information Modeling? And do you use it?
- What is the share of projects in which BIM is used? What percentage of the turnover comes from BIM projects?
- When did your company started to work with BIM? When will your company start using BIM?
- Why did your organization start using BIM? Why is your organization not (yet) started with using BIM?
- What do you consider the greatest advantages of BIM?
- What do you consider to be the greatest limitations or pain points for BIM?
- In what type of projects (building types) is BIM used the most?

#### In-depth usage of BIM

- Which other parties do you already cooperate with using BIM processes in your projects?
- Which of the following features of BIM do you use?



## **Business development**

The general turnover development in Europe is positive, with a few exceptions. Contractors in most European countries had a better turnover in H2 this year than in H2 last year. The exceptions are the contractors in Germany (negative) and France (neutral).

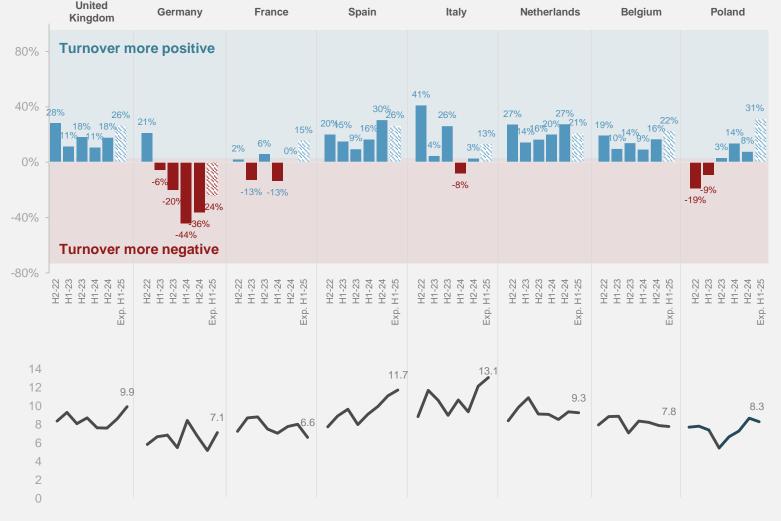
The expectations for H1 are better than last year and more positive than the realised turnover in H2. This is especially the case in Poland. Even contractors in France and Italy, who had, on average, a neutral H2 compared to last year, are now, on average, more positive about their turnover for H1.

The only difficult market seems to be Germany. For almost two years, turnover development and expectations have been negative. This is also seen in other USP Monitors, such as the European Architectural Barometer.

The positive expectations for H1-2025 can be a direct effect of the increase in the order book in many countries. Contractors have projects for many more months, so they are confident that the turnover for H1 will be positive.

A few trends that could hinder a positive development are the economic development in a country, the availability of personnel (labour shortage) or the adoption of new technologies (like prefab and BIM).

#### Net share of contractors' experience regarding turnover



Order book portfolio in months



# BIM in comparison with other stakeholders

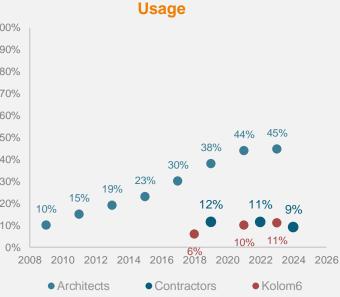
BIM is slowly becoming more common in the construction industry. Architects have known this way of working for a long time, and every architect knows the concept by now. From a contractor's perspective, almost half of them know BIM. This is similar to other stakeholders from the value chain: the electrical and mechanical (HVAC) installers.

The usage of BIM seems to stagnate a bit , a trend we see among all target groups. Among architects, half of those who know BIM also use BIM. For contractors, it is more like every fifth contractor who knows BIM also uses BIM. This means that approximately 10% of all contractors in Europe use BIM. We do see differences per country, and we will also explain the reasons for stagnation.

#### Trend in awareness and usage of BIM

Are you familiar with the term BIM, Building Information Modeling? And do you use it?







# BIM awareness and usage throughout the years

On average, 47% of the European contractors know BIM, and 10% use BIM. There are big differences throughout Europe, with the Netherlands leading in awareness (79%) and usage (42%). The awareness and usage is lowest in Poland. What is also striking is the increase in awareness in Germany from 19% in 2022 to 43% in 2024. The main reason for this is the fact that since the end of 2022, BIM has become mandatory for public building projects. This has boosted the awareness but not the usage yet; not every contractor works in the public sector.

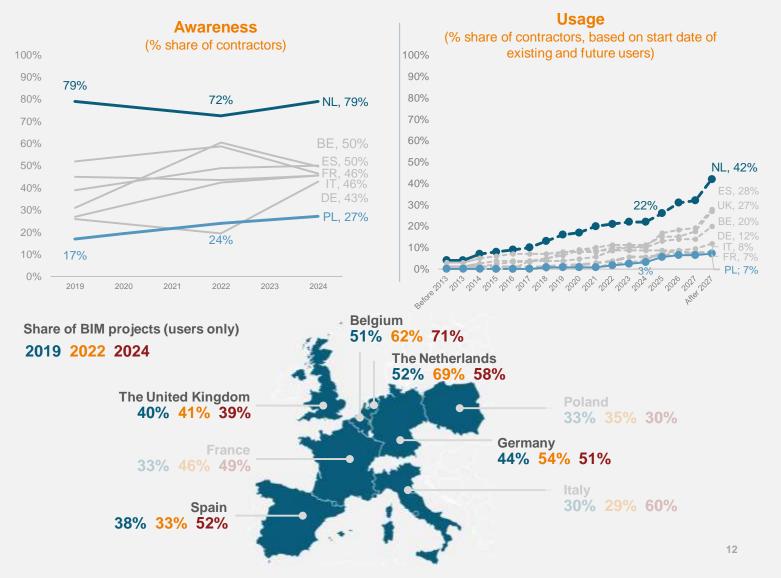
When looking at the usage of BIM amongst contractors we see that the Netherlands has been the leading country since the beginning (looking at the start date). The same pattern we saw among architects. We also see that contractors first start to follow the architects, but the expectation USP has that at some time in the future contractors will take over the leading role of architects. The main reason for this is that BIM has many more features that will benefit contractors more than architects. This will also differ per country: in Germany, the architect's role is bigger throughout a construction project than in the Netherlands.

Those contractors that use BIM, use it in most of their projects, e.g. 58% in the Netherlands.

## USP

#### Trend in awareness and usage of BIM

Are you familiar with the term BIM, Building Information Modeling? When did your company started to work with BIM? / When will your company start using BIM? What is the share of projects in which BIM is used?





## (Dis)advantages of BIM

The main reasons for contractors to start using BIM can be external, forced by (public) clients (like in Germany) or by other stakeholders, or they can be internal: to optimise their own business process or internal organisation. The main reasons not to start using BIM mainly lie in the company's size or the project's size.

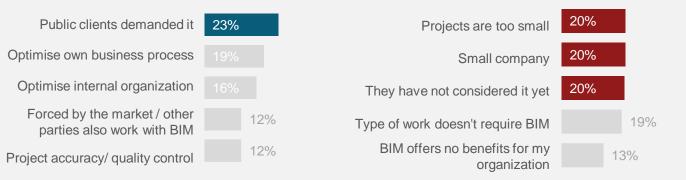
When looking at BIM's advantages and pain points, there are no big differences between the users and non-users (who do know BIM). It turns out that the experienced advantages (of BIM users) are bigger than the expected advantages (of BIM non-users). This means that BIM is more beneficial than anticipated.

Regarding the pain points, one hinders contractors the most: exchangeability. This mainly has to do with the fact that not all stakeholders in a project are working with BIM or in BIM. We saw that only 10% of main stakeholders, like contractors, electrical installers, and mechanical installers, use BIM. This makes it difficult for contractors who do work in BIM to find suitable partners: they will have to find workarounds to solve this issue.

## USP

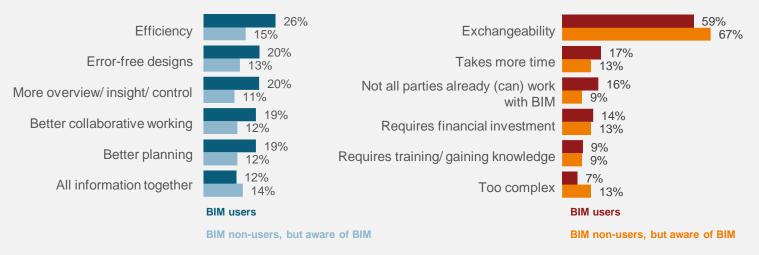
#### Reasons for (not) using BIM

Why did your organization start using BIM? Why is your organization not (yet) started with using BIM?



#### (Dis)advantages of BIM

What do you consider the greatest **advantages of BIM**? What do you consider to be the **greatest limitations or pain points for BIM**?





## **Possibilities of BIM**

The features BIM can offer that are used the most by contractors are mainly design-related: 3D visualization, generating 2D drawings, and clash detection. These features are also mostly used by architects, and the usage of these features by contractors has increased as well compared to two years ago. One other, more typical contractor feature, is also used a lot: determining quantities of materials, equipment and man hours. A feature that is less relevant to architects, since it affects contractors' activities more.

The full potential of BIM is not met yet, since the linkage with 4D (planning), 5D (costs), 6D (sustainability) and 7D (life cycle management) is not used by many contractors. Maximum a third of all contractors that use BIM, make use of these features. These features are also more relevant for contractors than architects.

One of the benefits of BIM, which is not mentioned very often as an advantage, is that the failure costs are reduced. In those projects where BIM is not used, the average failure costs are 11,3% and when BIM is used the average failure costs are 7,0%. The failure costs can be reduced even further when features like 4D, 5D, 6D and 7D are used.

#### **BIM** features

Which of the following features of BIM do you use?

Contractors			Architects		
			$\Delta$ vs. last wave		$\Delta$ vs. last wave
3D visualisation and animation		81%	+15%		Not asked
Generation of 2D drawings from the 3D model		77%	+4%		89% +7%
Determining quantities of construction materials, equipment and man hours		73%	+17%	47%	+5%
Clash detection/ clash control, early warning of design errors		76%	+26%	60%	+4%
4D, coupling/ linkage with the planning			-1%		Not asked
5D, coupling/ linkage with the costs			+10%		-1%
6D, includes sustainability and energy analysis			+4%		+6%
7D, includes life cycle and maintenance information, like manuals and warranties)			Not asked		Not asked
Exchange of structured product information via Common Data Environment	53'	%	+2%	46%	+4%

#### BIM and failure costs

Can you give a rough estimation of the failure costs in projects where ...?

Features 4D, 5D, 6D, 7D are ...

BIM is used: **7,0%** 

Used: 6,4% Not used: 7,6%

BIM is not used: 11,3%

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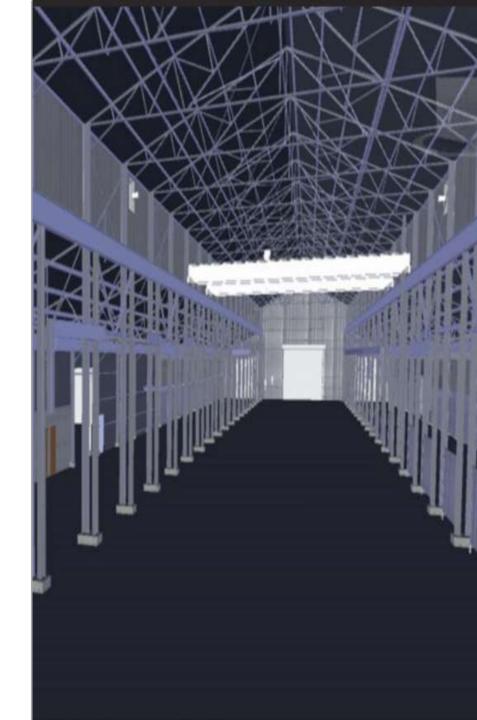
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Profiling the building contractor

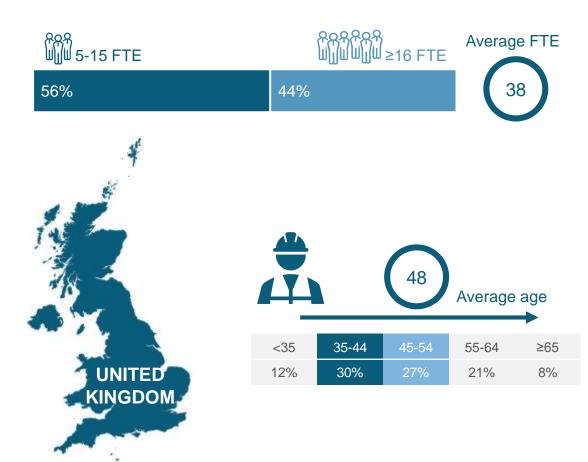
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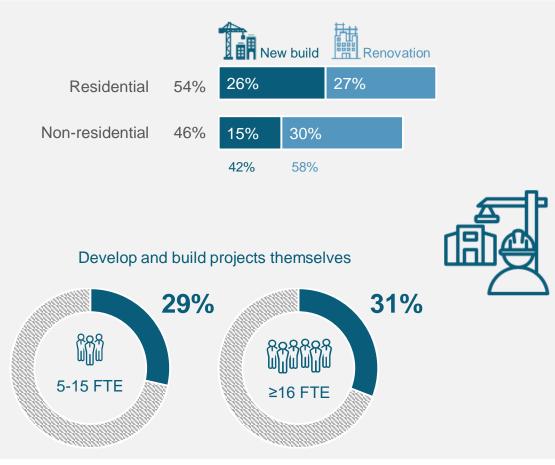
## Company and respondent profile

How many full-time employees does your company have?



#### **Project segmentation**

What percentage of your turnover do you get from new build projects?

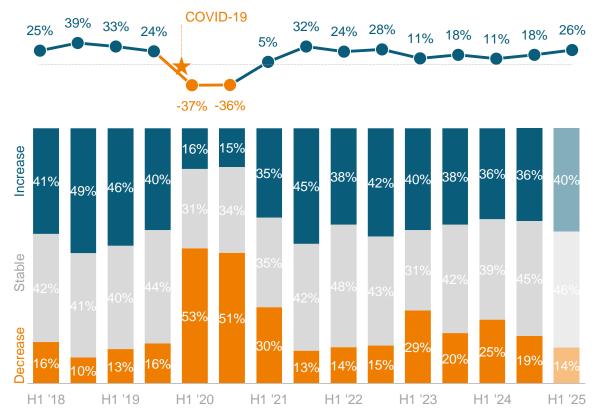


\*Results are weighted: Actual total N=125; 5 - 15 FTE N=70; 16+ FTE N=55

## USP The development of the turnover and the order book portfolio in the UK has been quite stable over the past four years

## Net share of contractors' experience regarding turnover

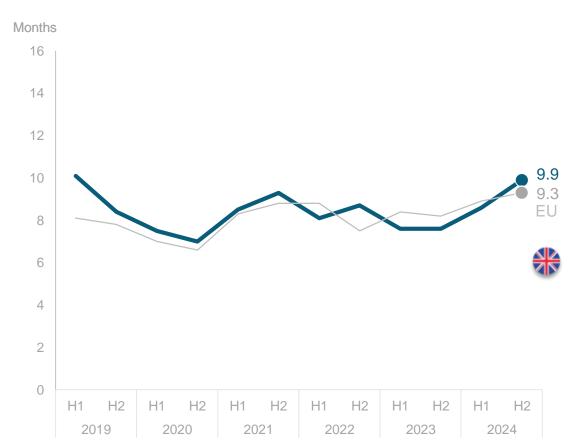
If you compare your turnover of H2-24 to H2-23, how did your turnover develop? What are your expectations for the development in H1-25 compared to H1-24?



Balance: Share of contractors reporting INCREASE minus the share of contractors reporting DECREASE

#### Order book in months

For how many months will you be able to keep your current staff working?



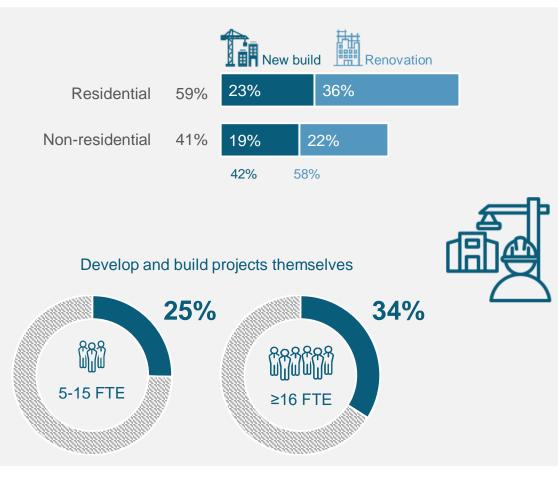
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## ໞຨຨໞຨຨ ຆ຺຺ຆຆຆຆຆ≥16 FTE 868 WW 5-15 FTE Average FTE 60% 40% 31 45 Average age FRANCE <35 35-44 45-54 55-64 ≥65 14% 30% 35% 20% 1%

#### **Project segmentation**

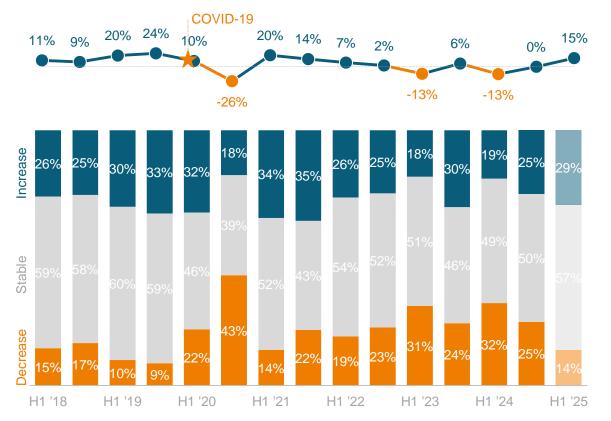
What percentage of your turnover do you get from new build projects?



# The actual turnover of French contractors showed a brief dip in H1 2024, but the positive expectations they had for H2 were proven right

## Net share of contractors' experience regarding turnover

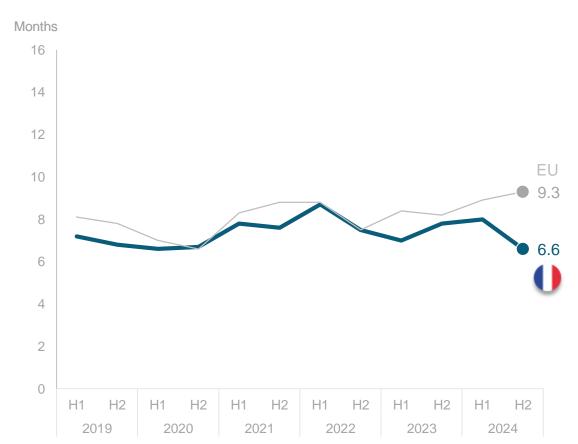
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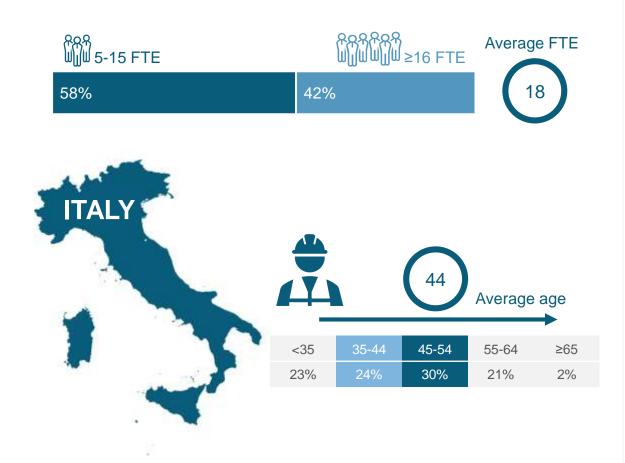
For how many months will you be able to keep your current staff working?



\*Results are weighted: Actual total N=125; 5 – 15 FTE N=75; 16+ FTE N=50.

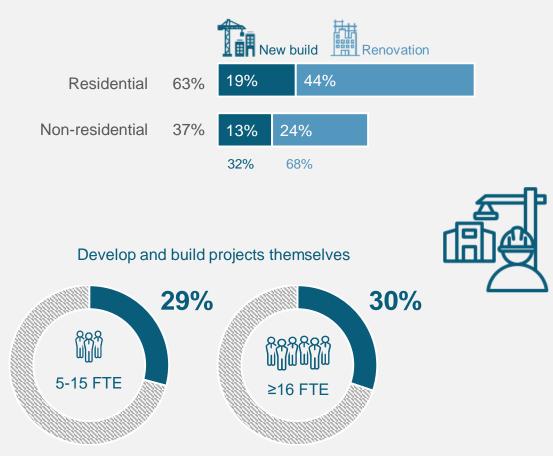
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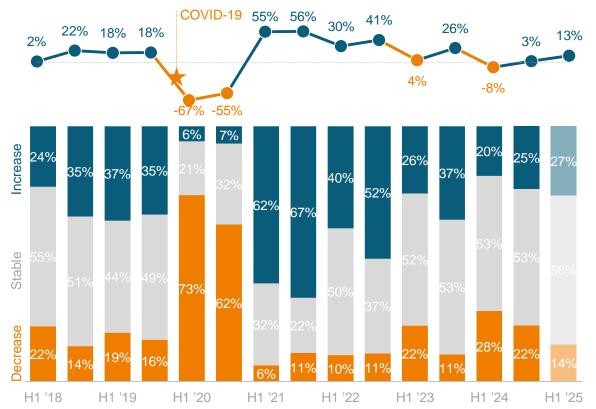
What percentage of your turnover do you get from new build projects?



# Expectations from Italian contractors for H1 are again more positive than the actual turnover in present period, which could be caused by the increased order book

## Net share of contractors' experience regarding turnover

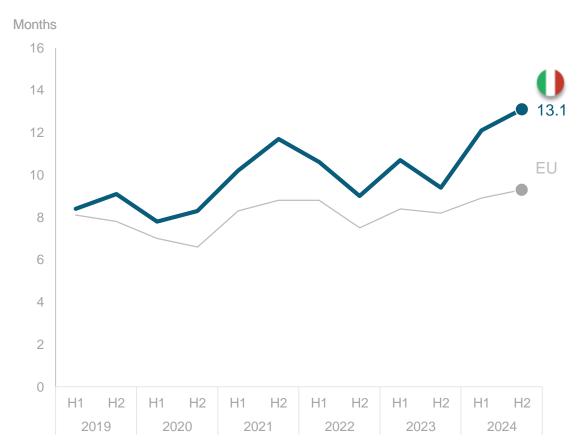
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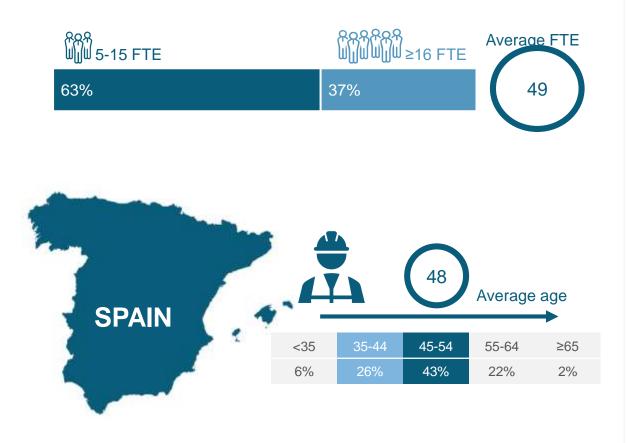
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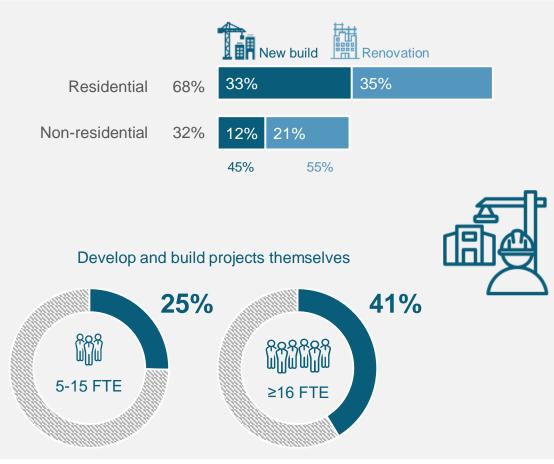
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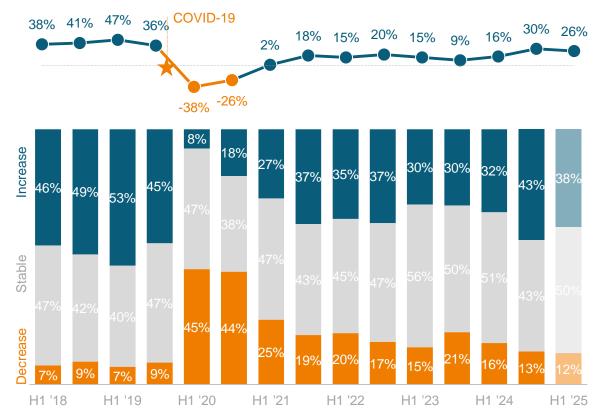
What percentage of your turnover do you get from new build projects?



# The turnover development of contractors in Spain is showing a similar upward trend as their order book

## Net share of contractors' experience regarding turnover

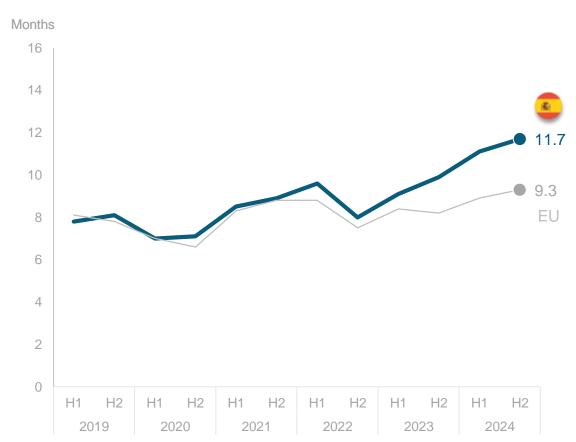
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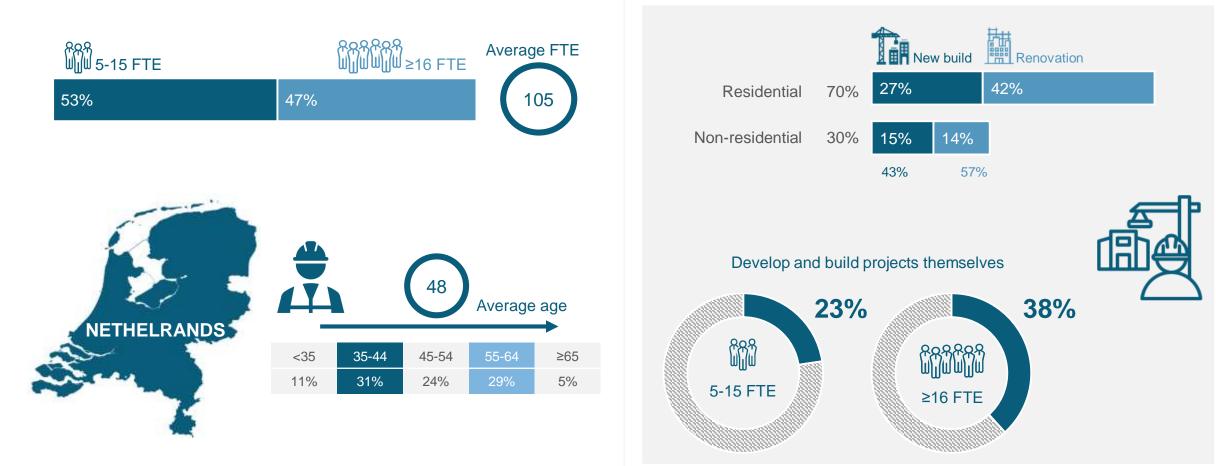


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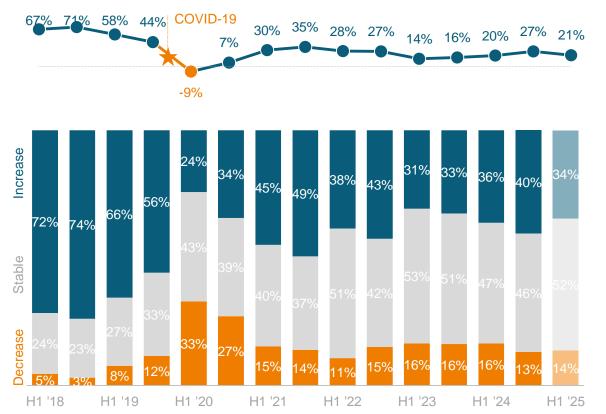
What percentage of your turnover do you get from new build projects?



# More contractors in the Netherlands see an increase of their turnover than contractors seeing a decrease, and the order book has also increased slightly

## Net share of contractors' experience regarding turnover

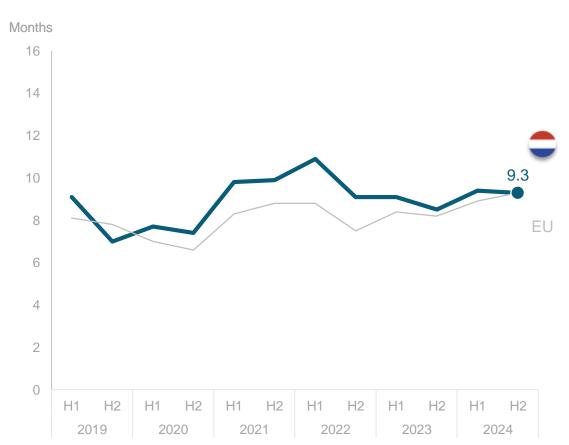
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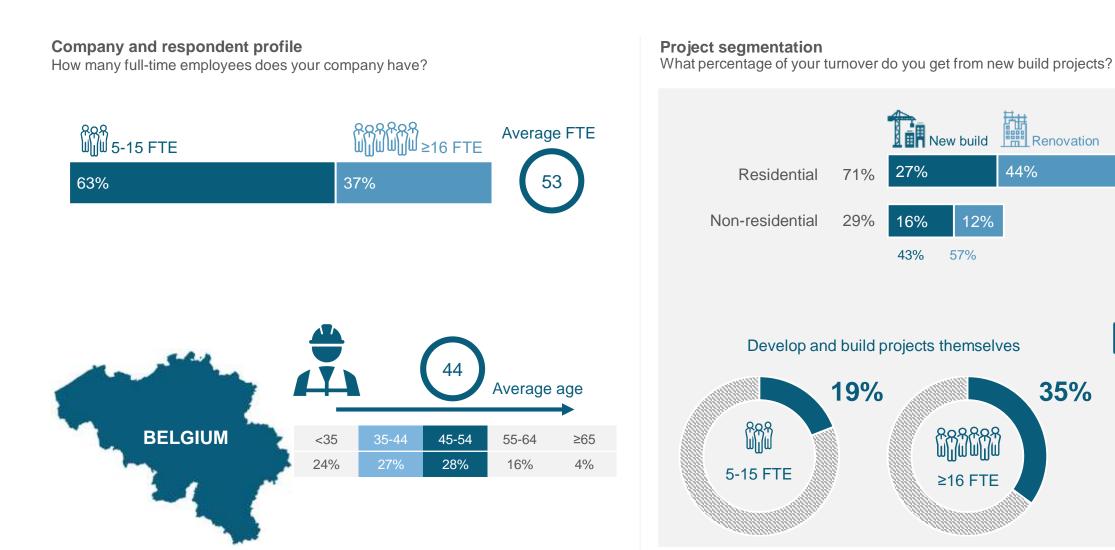


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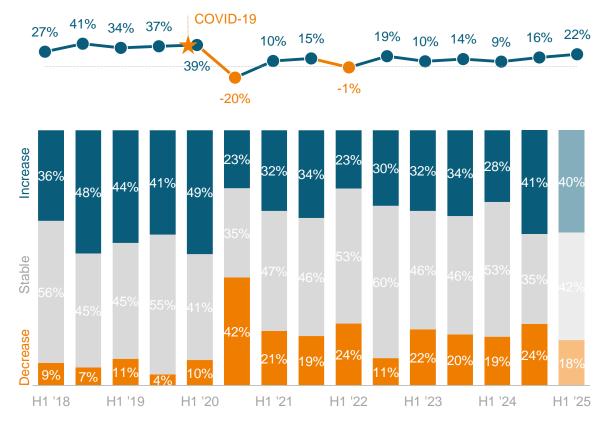




# The current turnover of H2 was better than last years' turnover in H2, and the expectations for H1 are at the same level

## Net share of contractors' experience regarding turnover

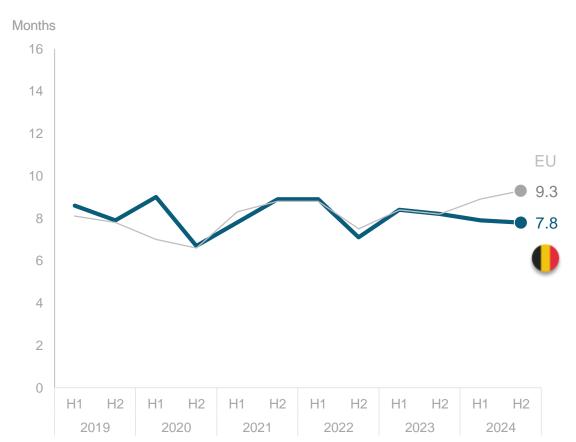
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#### Order book in months

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\*Results are weighted: Actual total N=100; 5 - 15 FTE N=63; 16+ FTE N=37.

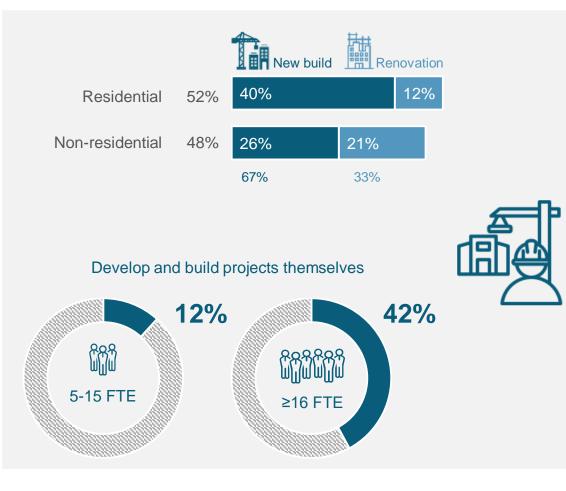
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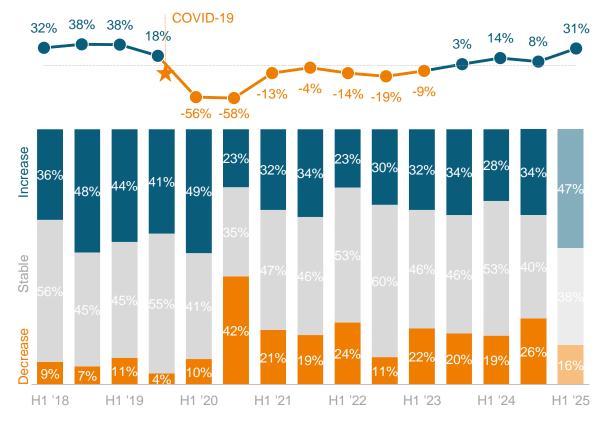


# The upward trend that started approximately 2,0 years ago, will continue in H1

## USP

## Net share of contractors' experience regarding turnover

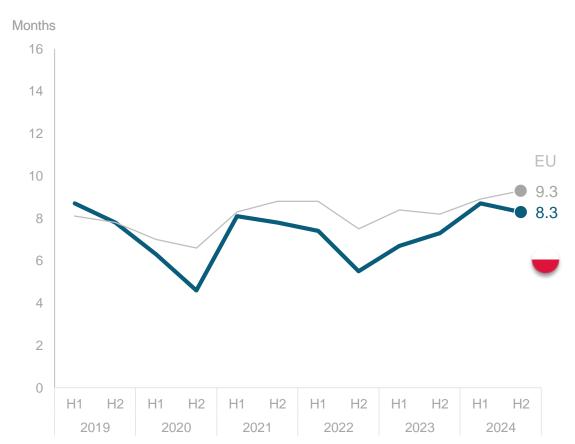
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European overview\*

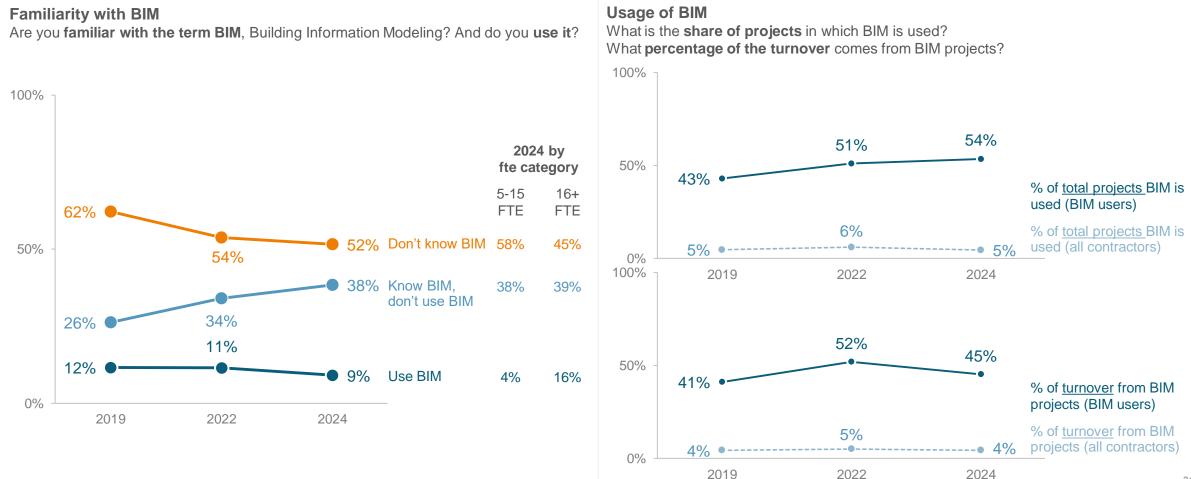
Appendix

\* The usage and awareness will be shown on a total European level, as well as per country. Other results regarding BIM will be shown on a total level since the usage in most countries is too low to show that on an individual country level. Some results are, however, shown per country in the appendix.



# The awareness of BIM is slightly increasing. However, the share of contractors using it remains more or less the same

The share of BIM within the total portfolio of those contractors that use BIM is also increasing. The share of the turnover these BIM projects represent are slightly decreasing, meaning smaller projects are done in BIM. It could also reflect the economic situation of the construction sector in some countries: in difficult times contractors are more reluctant to implement big changes. Same pattern we saw regarding prefab.



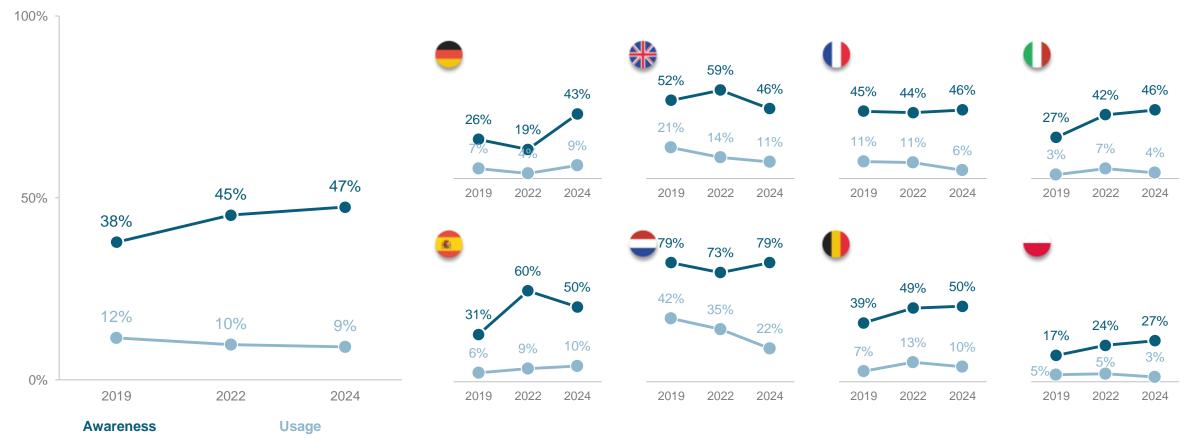


# Looking at country level we see an increase in Germany and a drop in the Netherlands

The increase in awareness and usage in Germany can be explained by the fact that since the end of 2022, BIM has been mandatory for public building projects. Although awareness remains high in the Netherlands (the highest of all countries), we see a drop in the number of contractors using it. This can be explained by the fact that new build production has dropped slightly, and part of the production is done by industrial prefab producers.

### Trend in awareness and usage

Are you familiar with the term BIM, Building Information Modeling? And do you use it?

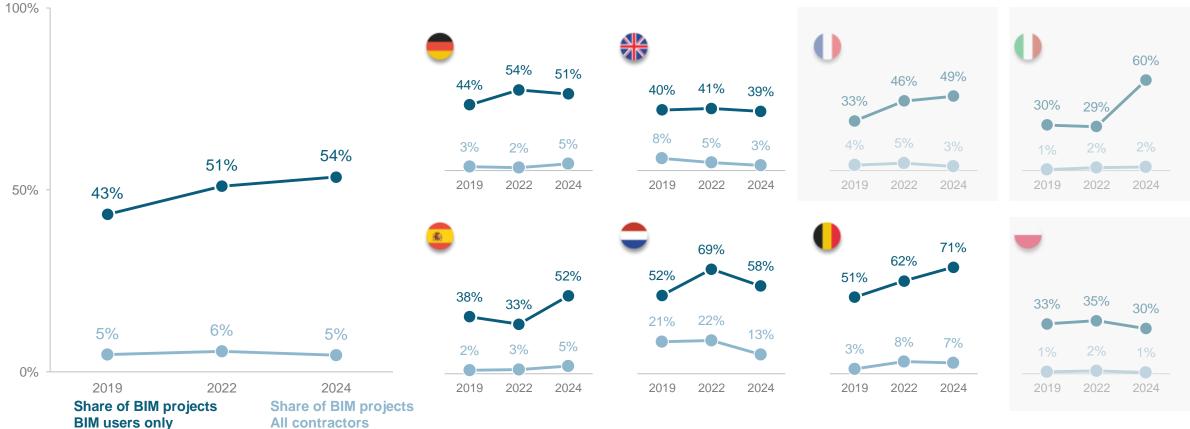


# The share of BIM is slightly increasing for those contractors that use BIM

The total share of BIM within all projects, remains rather limited. This has multiple reasons, which will be explained in detail later. Two main reasons are the economic situation of the construction sector (amongst users) and the size of the company or projects (amongst non-users).

#### **Trend in BIM Shares**

What is the **share of projects** in which BIM is used?



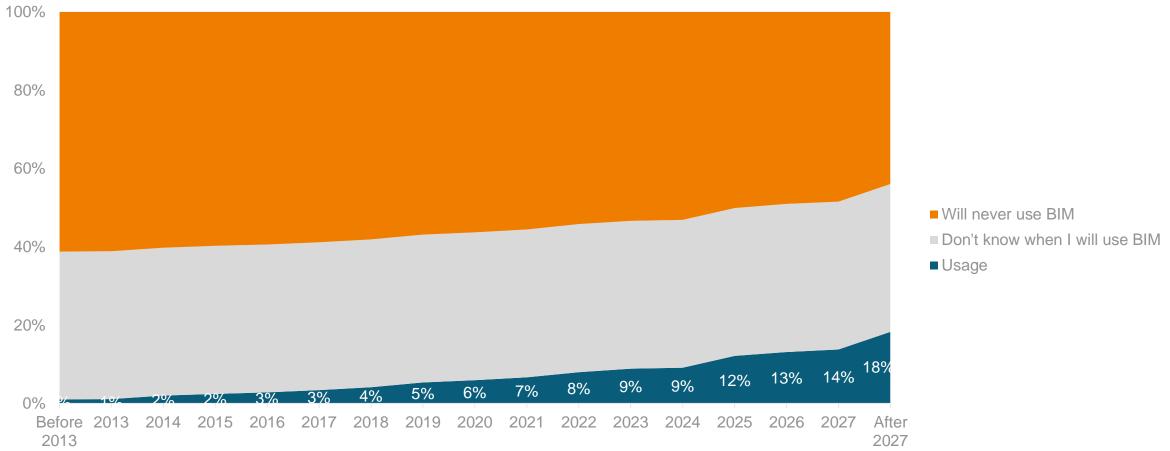
Total N=81: Belgium N=10; France N=7; Germany N=11; Italy N=5; Netherlands N=22; Poland N=3; Spain N=12; United Kingdom N=11.

Total N=951: Belgium N=100; France N=125; Germany N=126; Italy N=125; Netherlands N=100; Poland N=125; Spain N=125; United Kingdom N=125.

# The amount of BIM users will be at least doubled in the future

There is also a large group of contractors who still don't know whether or when they will use BIM (38%) and almost half of the contractors state they will never use BIM (44%), not even after 2027.

Year of BIM start in the company / Future BIM start When did your company started to work with BIM? / When will your company start using BIM?

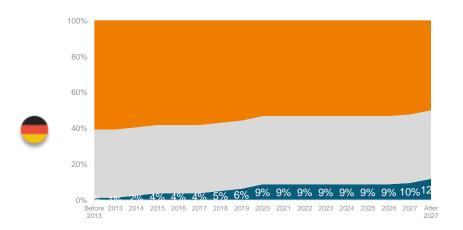


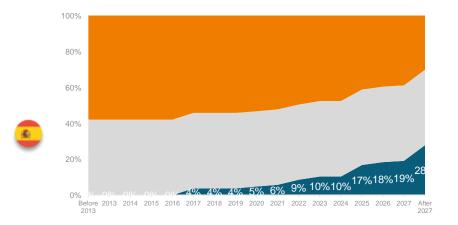
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# The Netherlands, United Kingdom and Spain are the countries were BIM will be used the most in the future

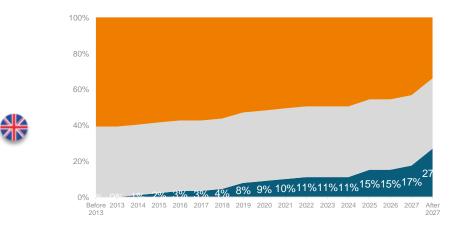
#### Year of BIM start in the company / Future BIM start

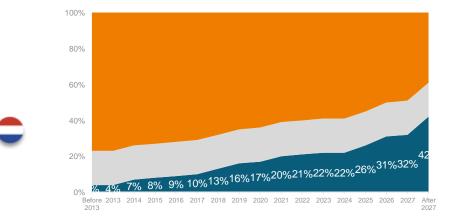
When did your company started to work with BIM? / When will your company start using BIM?









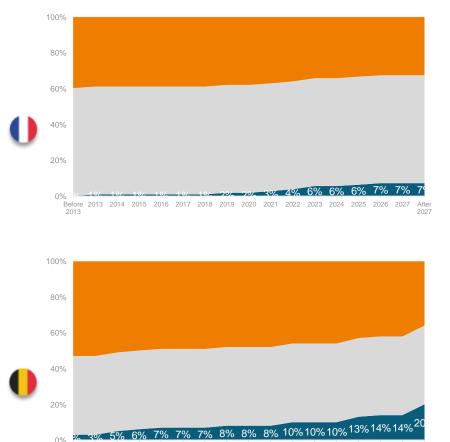




# In Italy, most contractors state they will never use BIM, and in other countries, a large portion of the contractors does not know yet whether or when they will use it

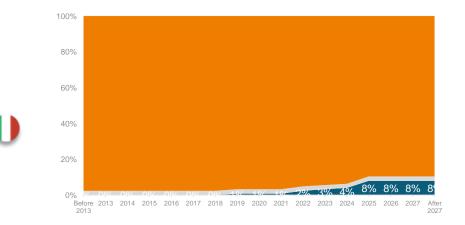
#### Year of BIM start in the company / Future BIM start

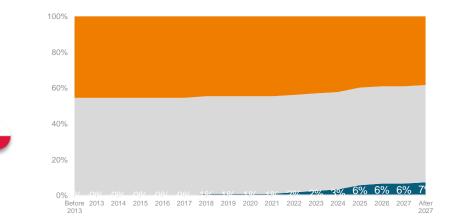
When did your company started to work with BIM? / When will your company start using BIM?



Before 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 Af 2013 201

#### Usage Don't know when I will use BIM Will never use BIM





# Main driver for using BIM is public clients demanding it, especially in Germany and the United Kingdom; other market parties are less of a driver

The main reason for not using BIM is size: the size of projects and/or the size of the company.

<b>Reasons for using BIM</b> Why did your organization start using B	IM?		
	2024	2022	2019
Public clients demanded it	23%	15%	26%
Optimize own business process	19%	27%	27%
Optimize internal organization	16%	11%	13%
Forced by the market / other parties also work with BIM	12%	20%	28%
Project accuracy/ quality control	12%	-	-
Real estate developers / investors / building owners demanded it	10%	8%	11%
Because of future expectations	10%	11%	19%
Technological adaptation/ innovation	6%	-	-
Public policy / government regulation	5%	4%	8%

Reasons for not using BIM

Why is your organization not (yet) started with using BIM?

	2024	2022	2019
Projects are too small	20%	8%	25%
Small company	20%	11%	-
They have not considered it yet	20%	20%	20%
Type of work doesn't require BIM	19%	10%	0%
BIM offers no benefits for my organization	13%	21%	12%
Commercial/ private clients don't ask for BIM	12%	26%	11%
The investments are too big	7%	-	-
It takes time	7%	-	-
Not prepared yet (lacking trained stuff/ technology)	5%	6%	11%

# The advantages of BIM have become more precise than five years ago when they just said 'all information together': it is about efficiency and error-free designs

Amongst the non-users we still see the answer 'all-information together' in second place as (perceived) advantage, but even amongst these contractors we see an increase of more precise answers when it comes to the advantages of BIM.

#### Main advantages of BIM

What do you consider the greatest advantages of BIM?

	BIM USER 2024	2022	2019		BIM NON-USER 2024*		2022	2019
Efficiency	26%	15%	20%	Efficiency		15%	7%	21%
Error-free designs	20%	17%	14%	All information together		14%	14%	24%
More overview/ insight/ control	20%	14%	6%	Error-free designs		13%	6%	6%
Better collaborative working	19%	9%	11%	Better collaborative working		12%	8%	15%
Better planning	19%	-	-	Better planning		12%	-	-
All information together	12%	23%	36%	More overview/ insight/ control		11%	14%	8%
Lower failure costs	9%	8%	6%	Lower failure costs	6%	6	-	-
Designs are better thought out	6%	8%	2%	Design and detailed plans made more quickly	J /	0	10%	2%
Easier to convince client of design	6%	-	-	Quicker lead time of projects	5%	0	7%	2%

USP Both users and non-users see exchangeability as the most significant limitation of BIM, meaning it is difficult to share with other stakeholders in a project

#### Main limitations of BIM

What do you consider to be the greatest limitations or pain points for BIM?

	BIM USER 2024	2022	2019		BIM NON-USER 2024*	2022	2019
Exchangeability	59%	5%	3%	Exchangeability	67%	-	-
Takes more time	17%	14%	13%	Requires financial investment / too expensive	13%	12%	9%
Not all parties already (can) work with BIM	16%	22%	19%	Too complex	13%	13%	19%
Requires financial investment	14%	5%	-	Takes more time	13%	10%	9%
Requires training/ gaining knowledge	9%	16%	8%	Requires training/ gaining knowledge	9%	20%	14%
Too complex	7%	17%	22%	Not all parties already (can) work with BIM	9%	7%	11%
Difficult to understand, not clear what BIM is	7%	5%	3%	Not always appropriate	6%	-	-
Not always appropriate	6%	5%	6%	Requires a lot of information (in an early stage)	5%	4%	5%
Requires a lot of information (in an early stage)	6%	6%	8%	Difficult to understand, not clear what BIM is	4%	7%	7%

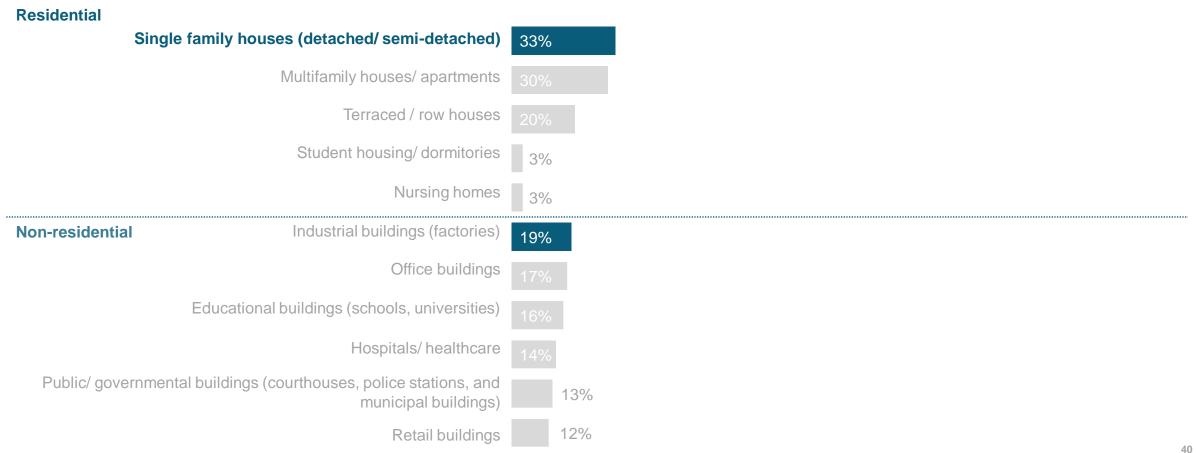
# BIM is used more in residential projects than in non-residential projects

This does not mean it is more applicable to residential projects. It also has to do with 1) whether contractors are building specific projects, 2) the size of a project, and 3) the frequency and repetition of a type of project

USP

#### Types of projects for BIM

In what type of projects (building types) is BIM used the most?



# Most contractors already cooperate in BIM with architects

The architect is, however, not more responsible than the main contractor when it comes to the responsibility of the data in the model

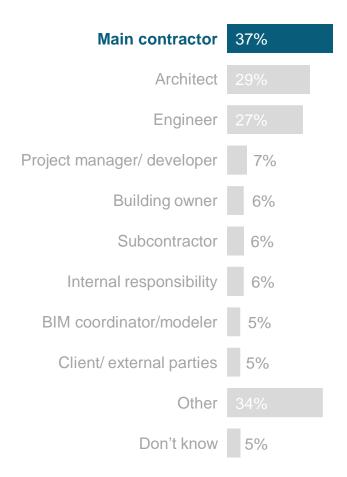
#### **Cooperation with other parties**

Which other parties do you already cooperate with using BIM processes in your projects?

Architects/ designers	53%
Sub-contractors (flooring/ roofing contractors, etc.)	22%
Electrical installation company	17%
Main contractor	17%
Engineering company for construction	16%
Building owner/ end user	13%
HVAC installation company	13%
Engineering company for installations	10%
Manufacturer of building and installation materials	10%
Other	33%
Don't know	5%

#### Data responsibility in BIM

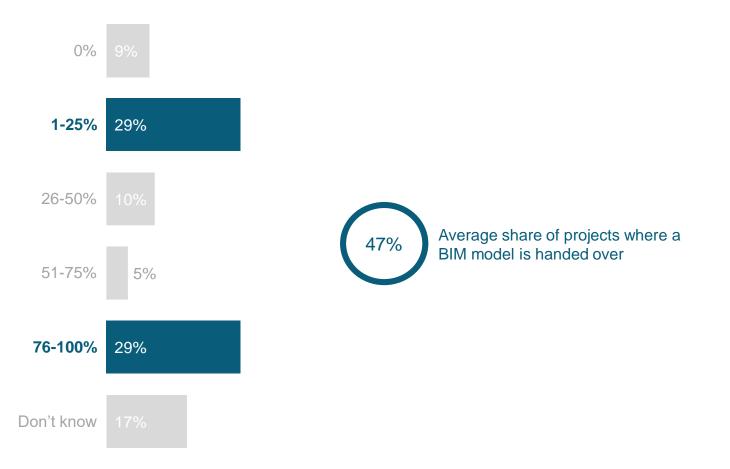
Who is responsible for the data within the model?



# Although the building owner is often not included during the project, the contractors hand over a BIM model to them in half of the projects (47%).

#### Share of projects with BIM model handover

What is the share of projects in which you handover a BIM model to the client/ building owner?



# Although not all features of BIM are used by the users, we do see an increase in all individual features, indicating contractors are using more of the potential BIM offers The increase is mainly within the more basic features and not yet within the features that allow links to planning, costs and LCA.

#### **BIM** features

Which of the following features of BIM do you use?

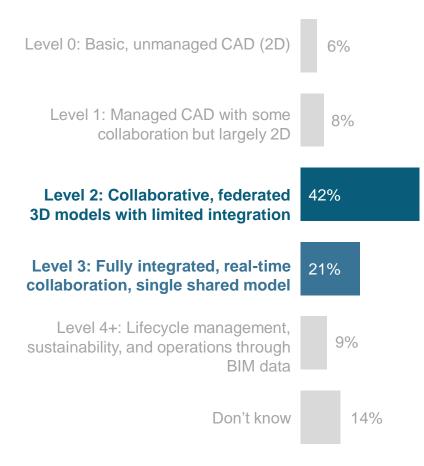
	Yes			No		2022	
3D visualisation and animation	81%			19%	(	66%	+15%
Generation of 2D drawings from the 3D model	77%		2	23%	-	73%	+4%
Determining quantities of construction materials, equipment and man hours	73%		279	%	Į	56%	+17%
Clash detection/ clash control, early warning of design errors	76%		24	4%	Į	50%	+26%
4D, coupling/ linkage with the planning	28%	72%				29%	-1%
5D, coupling/linkage with the costs	31%	69%				21%	+10%
6D, includes sustainability and energy analysis	28%	72%			2	24%	+4%
7D, includes life cycle and maintenance information, like manuals and warranties)	24%	76%				-	-
Exchange of structured product information via a Common Data Environment	53%		47%		ł	51%	+2%

7D, i

# Most contractors who use BIM mainly operate on level 2: collaboration with limited integration, only a limited amount operate on level 4+ (11%)

#### **BIM level**

On what BIM level do you mainly operate within projects?



USP Although theoretically, there are some differences between level 2 and level 3, the contractors don't differ that much; the real potential of BIM is used at level 4+

#### **BIM** features by level of implementation

Which of the following features of BIM do you use? t RIM level do you mainly aparata within praiacted

On what BIM level do you mainly operate within projects?	Level 0: Basic, unmanaged CAD (2D)	Level 1: Managed CAD with some collaboration but largely 2D	Level 2: Collaborative, federated 3D models with limited integration	Level 3: Fully integrated, real- time collaboration, single shared model	Level 4+: Lifecycle management, sustainability, and operations through BIM data	Don't know
	6%	8%	42%	21%	9%	14%
3D visualisation and animation	100%	86%	89%	83%	88%	42%
Generation of 2D drawings from the 3D model	60%	86%	78%	89%	88%	50%
Determining quantities of construction materials,	00 %	00 /0	1070	0970	00 /0	50 %
equipment and man hours	60%	43%	81%	78%	100%	50%
Clash detection/ clash control, early errors warning	80%	57%	83%	89%	88%	33%
4D, coupling/linkage with the planning	20%	14%	25%	44%	50%	8%
5D, coupling/ linkage with the costs	20%	29%	36%	17%	88%	8%
6D, includes sustainability and energy analysis						
7D, includes life cycle and maintenance	40%	29%	22%	28%	75%	8%
information, like manuals and warranties)	20%	29%	17%	33%	63%	8%
Exchange of structured product information via a Common Data Environment	40%	43%	50%	83%	88%	8%
Average number of features used (max. 9) Total N=86; Level 0 N=5; Level 1 N=7; Level 2 N=36; Level 3 N=18; Level 4+ N	4,9	4,6	5,3	6,0	8,1	2,4 45

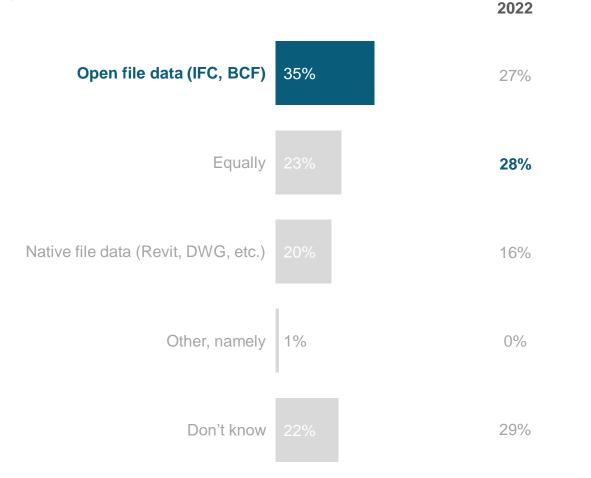
### USP

# Most BIM using contractors use open file data (35%), although there are also contractors who work more with native file data (20%)

Compared to two years ago, contractors are more focused on either open file or native file data

#### Type of file data

Do you work more with open file data or with native file data?



Preface | Management Summary | Profiling Building Contractor | **BIM – European overview** | Appendix

## Autodesk Revit is the most used BIM-related software

Autodesk Revit is therefore the most used software amongst contractors and architects

#### **BIM software (contractors)**

Which BIM-related software do you use?

Autodesk Revit	36%
AutoCAD	23%
Solibri	16%
ArchiCAD	10%
Trimble	9%
BIM360	7%
Navisworks	6%
Tekla	6%
Allplan	5%
Other	38%
Don't know	21%

**BIM software (architects)** Which software is used to deliver your BIM projects?

- 1. Autodesk Revit
- 2. Graphisoft Archicad
- 3. Vectorworks

# Laptops and desktops are the most used devices when using BIM

Every third BIM-using contractor is also using tablets, and every fifth BIM-using contractor uses smartphones when working in a BIM model or tool

#### **Devices for BIM usage**

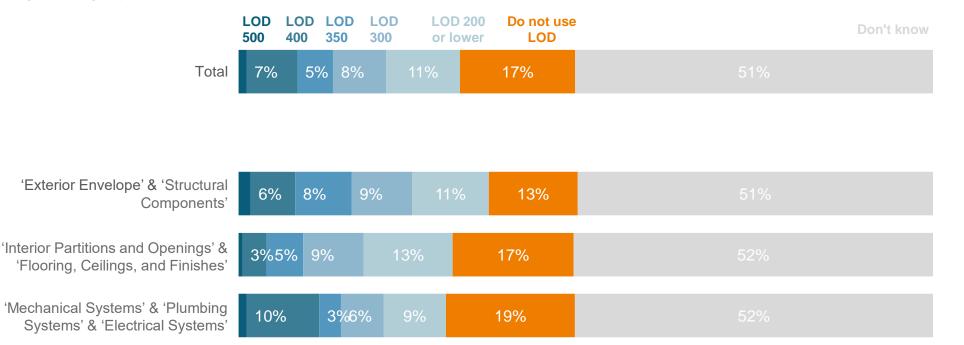
On what devices does your company make use of BIM and/or BIM tools?

Laptops	76%
Workstations/Desktops	67%
Tablets (iPads, Android Tablets)	31%
Smartphones (iOS and Android)	20%
Cloud Platforms	9%
VR/AR Devices (VR Headsets: Oculus Rift; AR Devices: Microsoft HoloLens)	5%
Drones	5%
Laser Scanners	5%
Other	6%
Don't know	1%

# LOD levels are not daily practice since half of the BIM users don't know to what level of detail they include information in their BIM models

#### LOD used for information in BIM

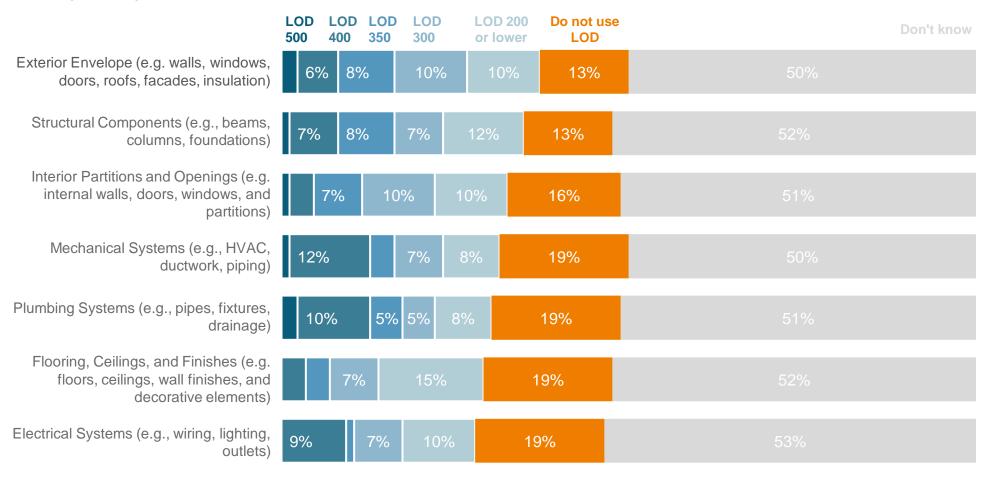
To what level of detail (LOD) do you include information in your BIM model regarding the following product groups?



If LODs are used, we see that the installation parts (mechanical, plumbing, and electrical) are more detailed – meaning LOD 400 or 500 – than other building parts

#### LOD used for information in BIM

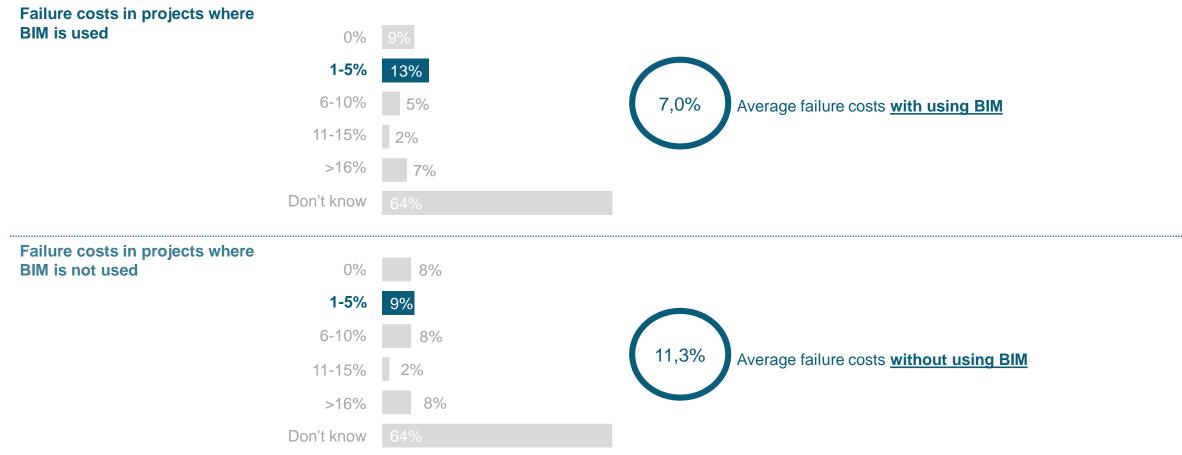
To what level of detail (LOD) do you include information in your BIM model regarding the following product groups?



# Failure costs are lower in projects where BIM is used: 7% versus 11%

#### Failure costs in BIM and non-BIM projects

Can you give a rough estimation of the failure costs in projects where ...?



USP

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# Index

#### Preface

Management summary

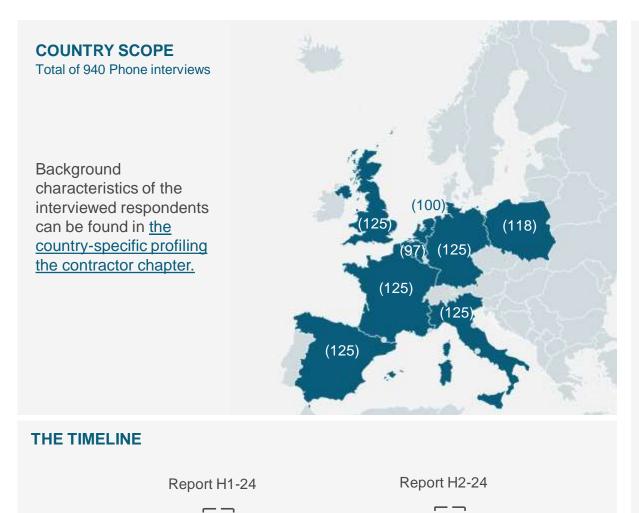
Profiling the building contractor

Theme part: Digitalisation and BIM

Appendix



# About European Contractor Monitor – BIM



July '24

January '25

#### **DEFINITIONS USED**

In this report, we also go into detail about the usage of BIM. For BIM we used the following definition: "BIM (Building Information Modeling) is a collaborative digital process for designing, constructing, and managing buildings throughout their lifecycle".

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#### USP

## About target group & methodology



#### Surveying construction companies...

**Mid-sized** (5 to 15 employees) and **large** (more than 15 employees) building contractors who are active both in residential and non-residential segments are interviewed. Most interviews are conducted with owners/ directors or with purchasers of these companies.

#### ... selected from a country-representative database

USP possesses an **international database of construction companies**, which is constantly updated. Therefore, respondents are not part of a fixed panel; the sample varies from wave to wave.

#### ... through phone interviews, by native-speaking agents

Phone surveys are the best approach for obtaining a sufficient sample in order to provide insights that can be relied upon. These phone calls are made **by fixed fieldwork partners**, **located in the respective countries**.

#### ... centralised and continuous quality control

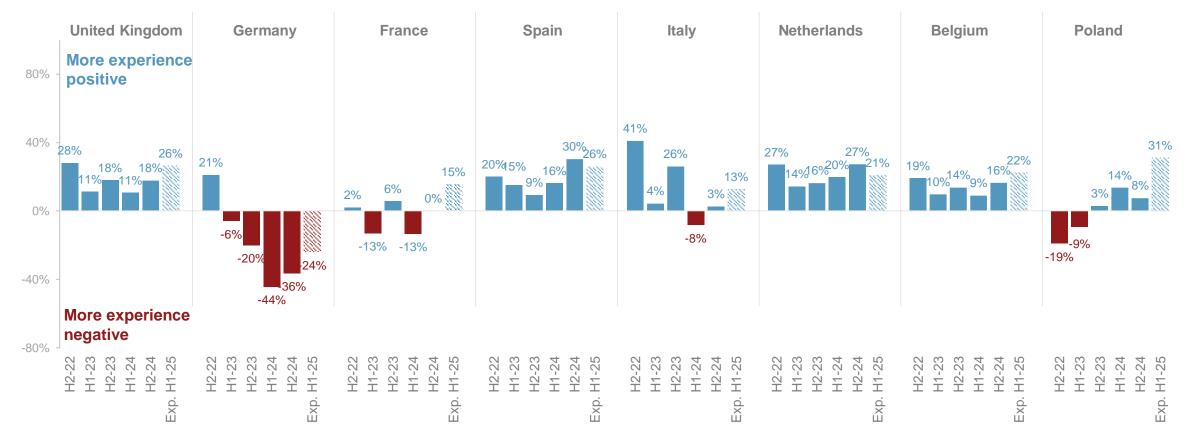
Results in each country are monitored by the USP project team throughout the fieldwork period. We implement our extensive experience in order to **make sure the answers are of high quality and provide the insights that meet the goal of the project.** 

# Turnover development

#### Net share of contractors' experience regarding turnover

If you compare your turnover of H2-24 to H2-23, how did your turnover develop? What are your expectations for the development in H1-25 compared to H1-24?

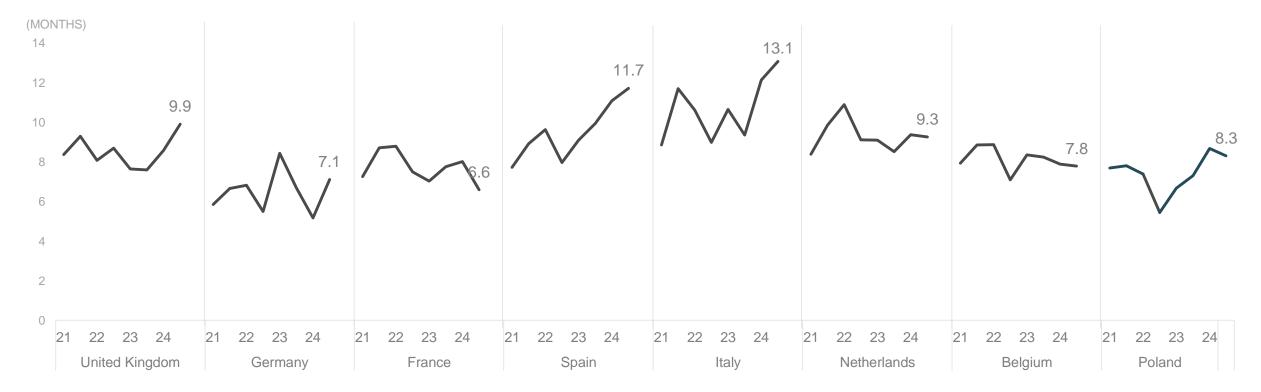
(Share of contractors reporting INCREASE minus the share of contractors reporting DECREASE in their turnover)



## Order book portfolio

#### Order book portfolio

How big (in months) is your current order book portfolio? [So how many months can you keep your current staff working?]

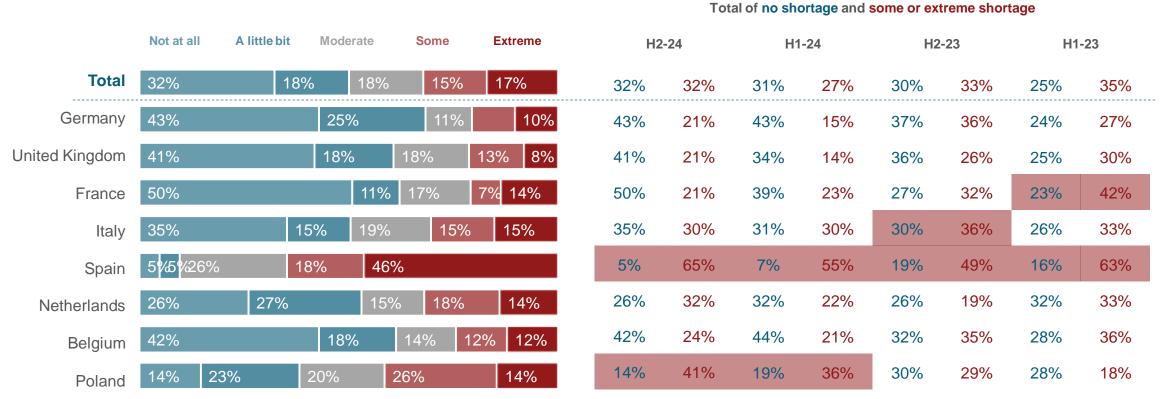


# Labour shortage

In general, 32% of European respondents stated that there is some or extreme labour shortage in their countries, which was 27% in the previous wave. The smallest labour shortage is seen in France, Germany and United Kingdom, while the biggest is seen in Spain and Poland.

#### Labor shortage

To what degree do you face labour shortage for this year in your company?

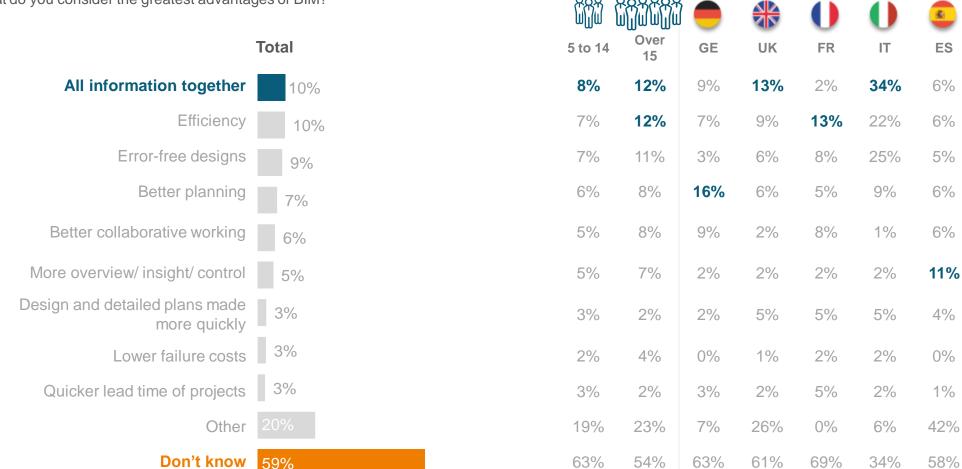


\*\*Actual N=951 Belgium N=100; France N=125; Germany N=126; Italy N= 125; Netherlands N=100; Poland N=125; Spain N=125; United Kingdom N=125

JSP

# Advantages of BIM by country

Main advantages of BIM



What do you consider the greatest advantages of BIM?

Total N=951: Belgium N=100; France N=125; Germany N=126; Italy N=125; Netherlands N=100; Poland N=125; Spain N=125; United Kingdom N=125; 5-15 FTE N=547; 16+ FTE N=404.

USP

PL

0%

1%

3%

2%

2%

2%

0%

0%

1%

14%

89%

18 C

ES

NL

8%

15%

12%

3%

18%

19%

2%

19%

3%

52%

26%

BE

5%

4%

8%

7%

7%

6%

2%

3%

4%

22%

67%

# Pain points of BIM by country

#### Main disadvantages of prefab

In your opinion, what are the main challenges or pain points of BIM elements?



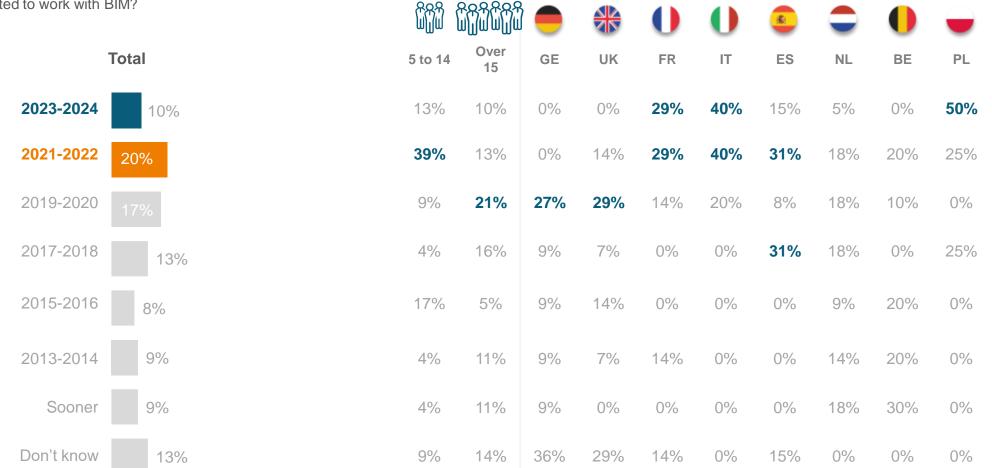
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82%	77%	88%	77%	100%	90%	64%	48%	73%	88%	
10%	10%	23%	3%	10%	24%	4%	4%	8%	2%	
7%	11%	5%	8%	1%	27%	6%	12%	11%	3%	
5%	9%	10%	8%	7%	4%	3%	14%	9%	1%	
4%	7%	5%	3%	9%	2%	8%	7%	8%	1%	
3%	7%	6%	3%	1%	9%	6%	10%	2%	2%	
5%	4%	17%	5%	2%	6%	0%	1%	3%	0%	
4%	4%	5%	8%	5%	2%	0%	2%	7%	6%	
2%	4%	2%	4%	3%	2%	5%	5%	2%	1%	
18%	23%	12%	23%	0%	10%	36%	52%	27%	12%	
65%	55%	45%	60%	74%	42%	72%	44%	55%	86%	

Total N=951: Belgium N=100; France N=125; Germany N=126; Italy N=125; Netherlands N=100; Poland N=125; Spain N=125; United Kingdom N=125; 5-15 FTE N=547; 16+ FTE N=404.

# Year of BIM start by country

Year of BIM start in the company

When did your company started to work with BIM?



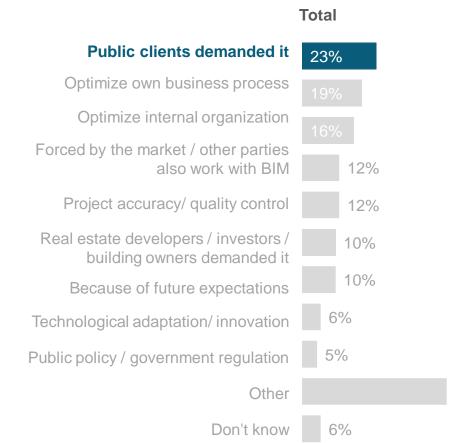
# Future BIM start by country

Future BIM start When will your company start using BIM? ໞຨໟໟໟໟ ຆ຺຺຺ຆຆຆ຺຺ 畿 18 C Over Total 5 to 14 GE UK FR IT ES NL BE PL 15 49% 45% 56% 93% 34% 40% **52%** 39% 35% 50% 40% Never 2025 4% 0% 5% 4% 7% 3% 3% 3% 1% 5% 3% 2026 1% 2% 0% 0% 0% 2% 1% 1% 1% 6% 1% 2027 1% 3% 0% 1% 1% 1% 0% 1% 0% 0% 1% After 2027 4% 6% 3% 11% 0% 0% 10% 13% 7% 1% 5% 41% **Don't know** 43% 3% 55% 40% 40% 43% 64% 46% 24% 49%

# Reasons for BIM usage by country

Reasons for using BIM

Why did your organization start using BIM?



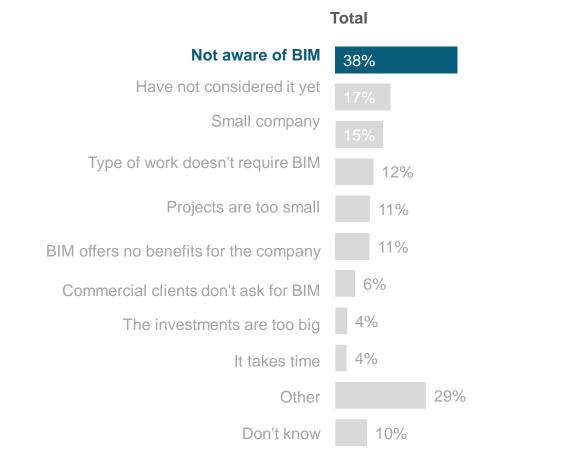
ېمې لالله 5 to	유유유유유 비 비၂비비비 14 Over 15	GE	UK	<b>I</b> FR	<b>О</b> IT	ES		<b>e</b>	PL	
9%	<b>29%</b>	36%	43%	29%	20%	15%	9%	20%	25%	
179	% 19%	36%	0%	14%	40%	8%	23%	20%	25%	
229	<b>∕₀</b> 14%	45%	0%	14%	40%	8%	18%	0%	25%	
4%	b 14%	9%	14%	29%	0%	8%	14%	10%	0%	
139	% 11%	0%	7%	0%	0%	8%	27%	10%	25%	
9%	5 11%	9%	14%	57%	0%	0%	0%	10%	25%	
139	% 10%	27%	7%	14%	0%	8%	14%	0%	0%	
9%	5%	0%	0%	0%	0%	23%	9%	0%	0%	
0%	6%	18%	7%	14%	0%	0%	0%	0%	0%	
43%	% 46%	0%	43%	0%	20%	77%	68%	50%	50%	
9%	5%	9%	21%	0%	0%	0%	0%	10%	0%	

45%

# Reasons for not using BIM by country

#### Reasons for not using BIM

Why is your organization not (yet) started with using BIM?



ዮዮጵያ ሠሀሠ 5 to 14	ନ୍ନନନନ ሠሀሠሠሀሀ Over 15	GE	<b>Ж</b> UK	<b>O</b> FR	<b>О</b> гт	ES		<b>B</b> E	PL	
41%	35%	45%	29%	62%	51%	17%	6%	46%	41%	
16%	19%	6%	8%	80%	3%	4%	6%	10%	13%	
18%	10%	13%	15%	45%	16%	8%	10%	8%	1%	
11%	13%	4%	9%	0%	8%	23%	35%	9%	16%	
13%	8%	20%	4%	20%	16%	4%	12%	7%	4%	
12%	10%	21%	9%	8%	2%	13%	4%	21%	10%	
5%	9%	5%	15%	8%	3%	4%	8%	8%	3%	
4%	4%	7%	1%	3%	3%	4%	8%	4%	2%	
4%	4%	8%	0%	9%	3%	3%	3%	3%	0%	
26%	32%	13%	25%	0%	18%	50%	78%	33%	29%	
10%	10%	9%	17%	2%	5%	17%	5%	6%	18%	

Total N=859: Belgium N=90; France N=118; Germany N=112; Italy N=120; Netherlands N=78; Poland N=119; Spain N=112; United Kingdom N=110; 5-15 FTE N=523; 16+ FTE N=336.

# USP Marketing Consultancy

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