

# Information Loss in Construction

How to identify and eliminate hidden costs that affect profitability and productivity?



# Content

- 1**      **Information loss is a global challenge**

---
- 2**      **Why do inefficient processes hinder the progress of construction projects?**

---
- 3**      **The impact of information loss on finances and productivity**

---
- 4**      **The role of investors and project managers in solving problems**

---
- 5**      **How to prevent information loss and achieve better results with PlanRadar**

---
- 6**      **SiteView: Simple 360° documentation for clear oversight**
- 7**      **Conclusion**

# Information Loss in Construction

## How to identify and eliminate hidden costs that affect profitability and productivity?

Construction project management implies precise coordination and the timely exchange of information. But what happens when key data is lost? This usually leads to delays, additional costs and budget overruns – problems that are all too common for construction companies. Statistics show that only one in ten projects is completed on time and within the planned budget. **Feels like a familiar situation?**

Incomplete or unreliable information hinders the timely implementation of projects, reduces efficiency and slows down company growth. In modern business, the key to success lies in a centralised information management system, as the use of unsynchronised methods and tools often leads to data loss or difficult access to information. The hidden costs of this data loss can be high – but they can be identified and eliminated. Read on to find out how.

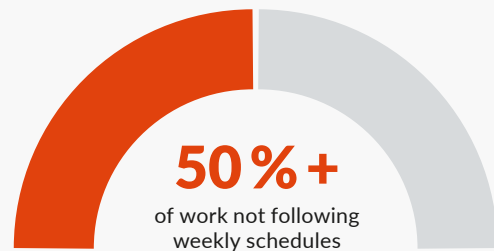


# 1. Information loss is a global challenge

**Have you ever faced unexpected costs or project delays due to incorrect or unavailable information?**



You're not alone – the construction industry in general is facing low productivity and delays, with **more than 50%** of work not following weekly schedules.



The reasons for this are the complexity of projects, frequent changes to documentation, unforeseen conditions and unsynchronised tools used by investors, engineers, contractors and suppliers. The lack of key information can lead to over-ordering of materials, incorrect cost estimates or misunderstandings between project participants.

In addition to operational problems, data security is also a challenge. In the digital age, the construction industry is not exempt from cyber threats. According to the **PWC Digital Trust Insights Survey 2025<sup>1</sup>**, **more than 38 % of companies have experienced a data breach**, with the average cost of damages reaching more than **three million dollars**. Despite this, only **37% of companies have a cybersecurity plan**, while **61 % of managers recognise cyber threats as a serious business risk**.

Information is just as important as people, materials and equipment. A stable information flow directly affects the success of a project, while ineffective communication causes delays and a drop in productivity<sup>2</sup>. **Research results show that 90 % of construction projects are not completed within the planned time frame<sup>3</sup>**, the main reason being an inadequate exchange of information.

<sup>1</sup> <https://www.pwc.com/gx/en/news-room/press-releases/2024/pwc-2025-global-digital-trust-insights.html>

<sup>2</sup> Howard H.C., et al., Computer integration reducing fragmentation in AEC industry. Journal of Computing in Civil Engineering, 1989. 3(1): Pp. 18–32.

<sup>3</sup> Flyvbjerg, B.: What You Should Know About Megaprojects and Why: An Overview, Project Management Journal, 45 (2014).



It is estimated that construction companies worldwide lost a staggering \$1.8 trillion in 2020 due to information loss and unreliable data.<sup>4</sup>

In other words, this means that a construction company with an annual revenue of \$1 billion is losing \$165 million a year due to bad data. This information may sound abstract, but in all likelihood, you yourself have encountered the consequences of poor organisation and the loss of key information.

**In 2020, bad data cost the construction industry**

↘ **1.84 trillion**

**Due to poor decision making**

**That means that for a contractor with \$1 billion in annual revenue, the cost of bad data is**

↘ **165 million**

Figure 1 Global revenue loss for construction companies due to poor data<sup>5</sup>

## The future of the construction industry depends on the adoption of digital technologies.

By implementing centralised systems, all stakeholders – investors, engineers, contractors and subcontractors – can access up-to-date data in real-time. This reduces misunderstandings, speeds up decision-making, and optimises project execution.

Before you start solving this challenge, you first need to understand the causes that lead to information loss.

<sup>4</sup> <https://www.autodesk.com/blogs/construction/autodesk-fmi-study-global-construction-industry-data-strategies/>

<sup>5</sup> FMI/Illustration: GoCodes

## 2. Why do inefficient processes hinder the progress of construction projects?

Poor communication in construction projects is the result of several interrelated factors, including language and cultural differences among team members, as well as the **lack of standardised protocols for sharing information**.

Incomplete information and belated submission of information can lead to costly errors, delays, and even endanger the safety of stakeholders in a construction project<sup>6</sup>. A particular problem is communication between the construction site and the head office – unadjusted data and delays in information transfer extend the construction period.

**Data loss can be obvious during the process of collecting information, but it is often hidden in the analysis and use of that data, especially when using outdated methods like paper forms and text messages.** Writing down information (instructions, data, dimensions, etc.) on paper may be convenient in the moment, but it has serious drawbacks. Forms are often incomplete, the handwriting is illegible, and paper is easily lost or damaged. Without proper organisation, such notes become useless. Even when preserved, they make it difficult to share information, causing managers to be late in receiving key information needed to make the right decisions. **Paper may have been useful once, but that time has passed.**

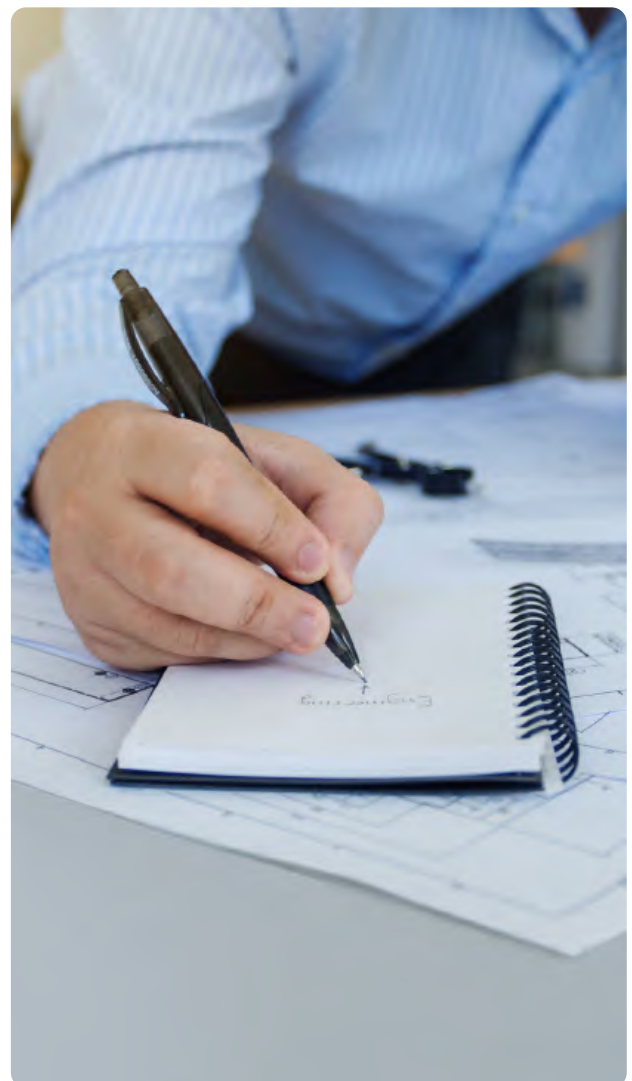


<sup>6</sup> Evbuomwan N.F.O., Anumba C.J., An integrated framework for concurrent life-cycle design and construction, Advances in Engineering Software, 29(1998) 7–9, pp. 587–597

The same applies to email communication. Have you ever been looking for a specific message related to a project but couldn't find it? What if key project information was left in a former employee's email, so you no longer have access to it? Such methods can cause major delays and make data storage difficult, making subsequent analysis and retrieval of information impossible.

Information loss is not just an administrative problem; it directly reduces the ability to make timely decisions, effectively manage resources, and achieve planned profits.

The lack of systematic data organisation means that information is often shared sporadically – through weekly meetings or unsynchronised channels, which can lead to poor decisions that jeopardise the project. Remember the weekly coordination meetings at the construction site, when everyone writes down information and instructions in their own planner? Did everyone understand everything correctly or was some information misinterpreted? Without standardised processes, projects become chaotic, decision-making imprecise, and you lose money in the process. **Information loss directly impacts the financial results and productivity of construction projects.**



# 3. The impact of information loss on finances and productivity

Poor project planning, which often results from neglecting clear lines of communication between key stakeholders (client, contractor, and project team), can have serious consequences: work inconsistencies, delays, increased costs and long-term damage to business relationships.



The problem lies in the lack of consistency and organisation, which makes it difficult to make quick decisions in crisis situations or jeopardises your position in the event of a legal dispute.

These insights come from research conducted by FMI Corporation and Autodesk, which also found that **nearly a third of construction professionals surveyed believe that they receive incomplete or inaccurate data<sup>7</sup>**. Among respondents whose companies had not yet implemented a formal data management strategy, the most frequently cited reasons for not doing so were costs and/or the resources required (40%). Lack of organisational support was cited by 36 % of respondents, while the same percentage (36 %) stated that their teams felt overloaded with work and didn't know where to start. Given the importance of a quality data-management strategy in projects, all teams should strive to improve – even those who aren't sure where to start.

**Why hasn't your organization implemented a formal project data plan/strategy?**

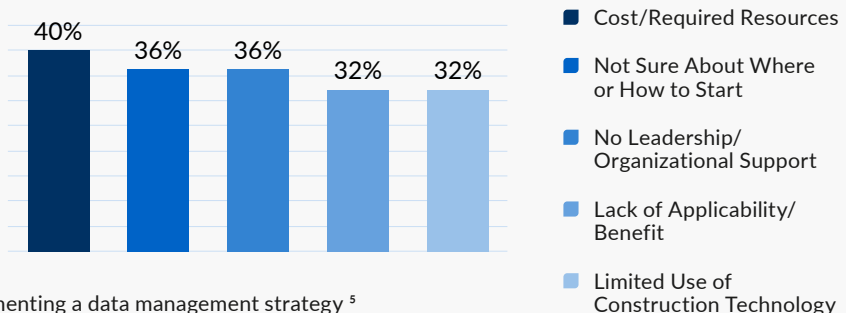


Figure 2 Main obstacles to implementing a data management strategy <sup>5</sup>

<sup>7</sup> Autodesk, FMI: Harnessing the Data Advantage in Construction, <https://www.autodesk.com/blogs/construction/autodesk-fmi-study-global-construction-industry-data-strategies/>

Problems often arise early in the construction phase. **Most investors and project managers have encountered specific challenges related to construction rework.**

**In addition to the financial implications, the loss of information also affects the quality of the work performed.** If instructions are unclear or incomplete, contractors may misinterpret requirements, leading to poor quality of the construction works.



In construction projects, clear communication is as important as the draft itself. Missteps in the transmission of information can lead to unnecessary and costly delays.

In addition, it often happens that project managers and other engineers are simultaneously engaged on multiple construction sites, which further complicates efforts to organise and increases the pressure on all stakeholders. **Increased costs due to rework, delays in implementation and administrative burdens reduce efficiency, resulting in reduced project team productivity and decreased motivation.** This can lead to an unwanted level of employee turnover, which further increases costs and threatens team stability. All this becomes the basis for conflicts that threaten the success of the project. More importantly, these conflicts can seriously damage your company's reputation.



It is in your interest to ensure that all team members are aligned, because any wrong decision at this stage can have long-term consequences.



# 4. The role of investors and project managers in solving problems

**Project managers play a crucial role in establishing clear communication channels and ensuring that all stakeholders, from the client to the contractor, have timely and accurate information.** Experts' opinions confirm the fact that effective communication is the key driver of success in construction projects, and this applies not only to technical results but also to the overall team dynamics and project agility<sup>8</sup>.

When communication is clear and timely, all stakeholders work in harmony, which reduces stress, increases employee satisfaction, and creates a positive work environment. There are fewer misunderstandings, decisions are made faster, and problems are resolved before they escalate.

Besides, when teams feel that information is easily accessible and that their voices are heard, mutual trust improves and team spirit is strengthened. This also reduces employee turnover, saving on training and reducing the risk of mistakes made by new employees.



Effective communication is not just about avoiding mistakes; it's about building a cohesive team that can adapt and effectively respond to any challenge.

For investors, clearly defined information management processes mean better control over budgets and deadlines. When all stakeholders are aligned and informed, the project runs smoothly and potential obstacles are addressed before they become a serious problem. Furthermore, the availability of quality data facilitates strategic decision-making and reduces unforeseen costs.



Gamil,Y., Rahman, I.A., Studying the relationship between causes and effects of poor communication in construction projects using PLS-SEM approach, Journal of Facilities Management, 21 (2023) 1, pp.102-148.

**By using advanced software solutions for document management, reporting and data analysis, construction companies can significantly reduce the risk of information loss.**

Digital tools allow data to be stored and organised in one place, reducing reliance on outdated methods such as paper documentation and email correspondence. With the application of technologies such as mobile applications, BIM (Building Information Modelling) systems and IoT (Internet of Things) sensors, it is possible to improve the monitoring of construction site progress in real-time.



Digitisation and centralisation of data are no longer an option, but a necessity for adapting to market requirements and increasing the efficiency of projects.

Investors and project managers who recognise the importance of digitisation and investing in effective information management ensure the long-term growth of their companies, strengthen their competitive position and create the foundations for more successful projects in the future.



# 5. How to prevent information loss and achieve better results with PlanRadar

In previous chapters, we highlighted how delays, budget overruns, and communication misalignments can have a significant impact on the results of a construction project. Now let's look at a solution.

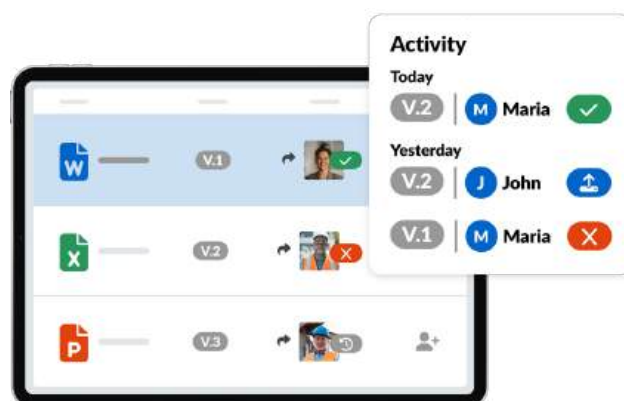
**PlanRadar helps solve these challenges by enabling timely and accurate real-time monitoring of all aspects of a project.**



PlanRadar is a digital documentation, communication, and reporting platform that enables centralised management across all phases of a construction project. Over 170,000 users in more than 75 countries are already replacing paperwork and advancing their projects with PlanRadar.

PlanRadar offers a simple, intuitive interface for tracking and organising all project-related documentation. Teams work from the same up-to-date plans, with site activity logged in real time—photos, tasks, and notes linked directly to plans. Captured data can be compiled into reports in seconds and remains accessible in one central location.

By keeping everything documented and connected in one place, PlanRadar reduces the risk of information loss and provides a clear, reliable record of the project.



A great advantage of the platform is the ability to track and document errors that may happen during the construction project. Any irregularities can be marked on 2D plans or BIM models, making their identification easier and reducing the costs of rework and repairs. Plus, thanks to a comprehensive database, all project participants can easily access the history of changes, reducing the possibility of misunderstandings and enabling faster decision-making.

### 2D Plans



### BIM



**Think about your own projects: could better communication and better information management have prevented some of the challenges you encountered?**



Text messages, voice messages, photos and videos can be shared through the centralised platform, ensuring that no information is lost



PlanRadar makes information available to all team members



The Communication history remains permanently stored, which reduces misunderstandings and enables better collaboration.



All stakeholders have insight into the latest data

For project managers, PlanRadar offers the flexibility to track the status of tasks, completed work and the current stage of the project. Every change can be recorded immediately, and reports can be generated in real-time. This reduces stress, increases team efficiency and enables a decision-making process based on information.



In addition, it allows for better control over costs and budgets because all financial data, budgets, and cost estimates are always available in one place.

Imagine a situation where in a project a defect occurs during the warranty period, but you have no evidence that you followed the manufacturer's instructions. Or a safety issue arises, and there is no record of the inspection or repair performed by the contractor. In such cases, the consequences can be serious, including costly compensation claims. PlanRadar enables safe and reliable collection and storage of all relevant data in one place, eliminating the risk of losing important information and ensuring long-term protection for all stakeholders.

With PlanRadar, the construction site becomes transparent and well-organised, allowing all stakeholders to work together in order to achieve optimal results. On top of that, with additional features such as statistical displays and customised reports, the platform enables detailed data analysis, so that all stakeholders have a clear insight into the status and progress of the work.



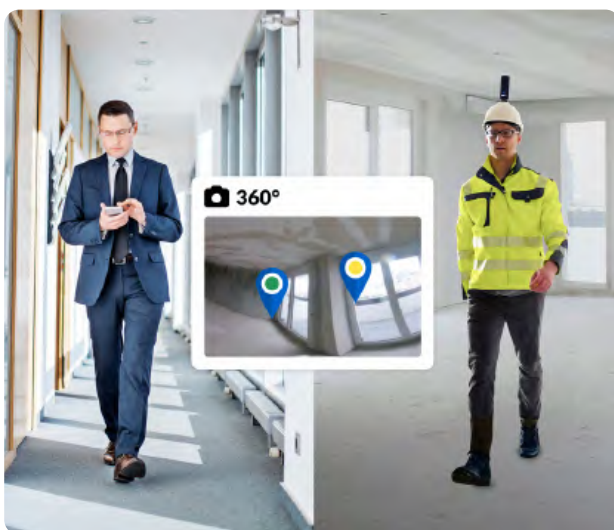
# 6. SiteView: Simple 360° documentation for clear oversight

SiteView helps prevent information loss by capturing a complete visual history of the construction site. Using a helmet-mounted 360° camera, teams document site conditions simply by walking the project. The result is a time-stamped visual record that can be accessed throughout the project lifecycle—improving clarity, supporting decisions, and reducing the need for repeated site visits.



## Comprehensive Visual Documentation

360° images are automatically mapped onto the project's 2D plan, creating a clear, location-based chronological record of site activity. This supports accurate progress tracking and verification of completed work.



## Improved Collaboration

Consistent visual updates ensure that all stakeholders – whether on-site or remote – are working from the same information. This reduces misunderstandings and helps teams align faster.



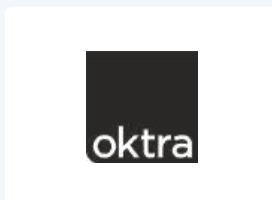
## Remote Site Management

Project teams and stakeholders can access current site conditions from anywhere, without needing to be physically present – supporting faster reviews and reducing delays.



## Reduced Rework, Higher Quality

With a full visual record in 360°, teams can access “behind-the-wall” views showing what was installed before walls or ceilings were closed – making it easier to check each stage of construction and avoid rework caused by missing or unclear documentation.



SiteView elevates how we deliver projects by improving on-site visibility and oversight. It enables us to better deliver for our customers, as we can provide visual updates on how the project is progressing.”

– Alex Turner, Digital Construction Director, Oktra

# 7. Conclusion



Information loss in any construction project can lead to serious financial difficulties, jeopardise the safety and quality of construction works and damage relationships between stakeholders.

By providing a clear and overall picture of project progress in real-time, companies can actively improve their processes and profit margins. Stop unnecessary loss, prevent rework and eliminate incomplete or inaccurate data that causes inefficiency and increases your costs.

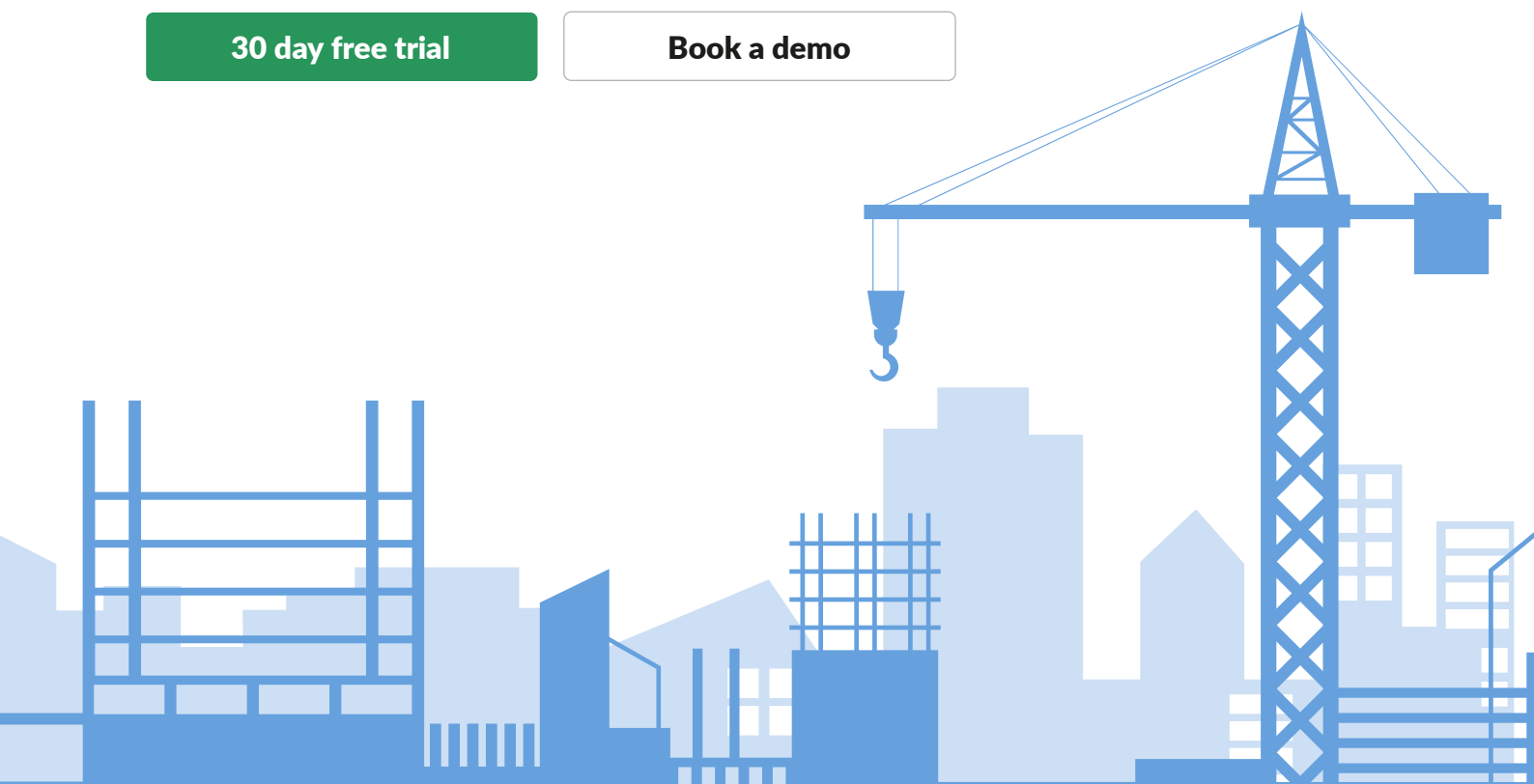
Digitisation is not just a trend, it is essential for survival and growth in a competitive environment. As the market becomes more demanding, the ability to quickly adapt to new technologies is becoming an advantage that every company must adopt to ensure long-term success.

By implementing modern digital solutions, you can optimise all aspects of a construction project – from document organisation to real-time progress monitoring, allowing for better cost and time management.

**Get started with a free trial of PlanRadar and see how it can improve your construction projects:**

**30 day free trial**

**Book a demo**



# References:

- [1] <https://www.pwc.com/gx/en/news-room/press-releases/2024/pwc-2025-global-digital-trust-insights.html>
- [2] Howard, H.C., et al.: Computer integration reducing fragmentation in AEC industry, *Journal of Computing in Civil Engineering*, 3 (1989) 1, pp. 18–32.
- [3] Flyvbjerg, B.: What You Should Know About Megaprojects and Why: An Overview, *Project Management Journal*, 45 (2014).
- [4] Autodesk, FMI: Harnessing the Data Advantage in Construction, <https://www.autodesk.com/blogs/construction/autodesk-fmi-study-global-construction-industry-data-strategies/>
- [5] Evbuomwan, N.F.O., Anumba, C.J.: An integrated framework for concurrent life-cycle design and construction, *Advances in Engineering Software*, 29 (1998) 7–9, pp. 587–597
- [6] Autodesk, FMI: Harnessing the Data Advantage in Construction, <https://www.autodesk.com/blogs/construction/autodesk-fmi-study-global-construction-industry-data-strategies/>
- [7] Gamil, Y., Rahman, I.A., Studying the relationship between causes and effects of poor communication in construction projects using PLS-SEM approach, *Journal of Facilities Management*, 21 (2023) 1, pp.102-148.
- [8] <https://www.planradar.com/hr/>



# About PlanRadar

PlanRadar is a leading platform for digital documentation, communication and reporting in construction, facility management and real estate projects. It enables customers to work more efficiently, enhance quality and achieve full project transparency.

PlanRadar connects all project stakeholders and provides real-time access to valuable project data, enabling teams to increase quality, cut costs, and realise work faster. The easy-to-use platform adds value to every person involved in a building's lifecycle, from contractors and engineers to property managers and owners, offering flexible capabilities tailored to accommodate all company sizes and processes.



**170k+**  
users



**75+**  
countries

**94%** of customers say PlanRadar helps improve overall quality control to deliver high-quality

**91%** of customer say PlanRadar increases productivity



# We'll show you how you can digitize your workflows.



**30 day free trial**

**Book a demo**