



The influence of Covid-19 Pandemic on Project Delays and Digitalisation in Construction Sector

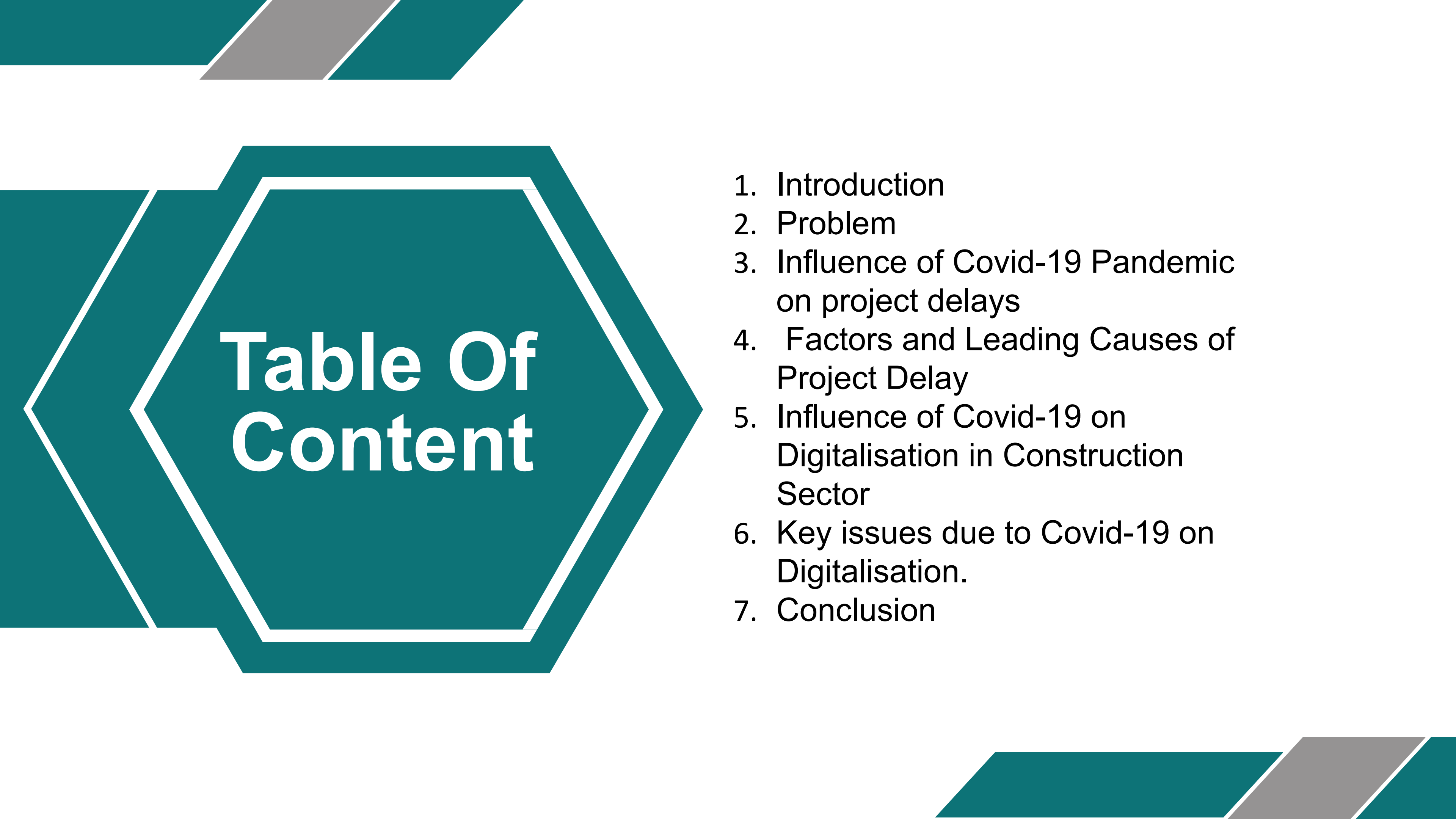


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The COVID-19 epidemic has harmed society, the economy, and many industries. The construction sector has not been immune to the impact of the epidemic and has experienced considerable difficulty in delivering projects on time and within budget (Zamani, 2021).

Introduction

Today's presentation will focus on the influence of the Covid-19 pandemic on project delays and digitization in the construction sector. **It** will analyse the variables that have contributed to project delays in the construction sector, including personnel shortages, supply chain interruptions, and social distancing measures.

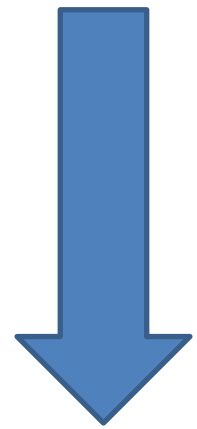
- ❑ Construction projects have been severely impacted by both labour shortages and disruptions in the supply chain.
- ❑ Construction materials and equipment deliveries have been impacted by the epidemic, which has led to project setbacks and increased expenses (Zamani, 2021).
- ❑ Social distancing measures have also had an impact on the construction industry, as it has become more challenging to maintain productivity while adhering to safety protocols.



PROBLEM

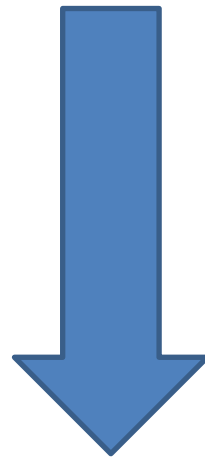
Influence of Covid-19 Pandemic on project delays

Many workers have been unable to work because of illness, quarantine procedures(Chu, 2020).



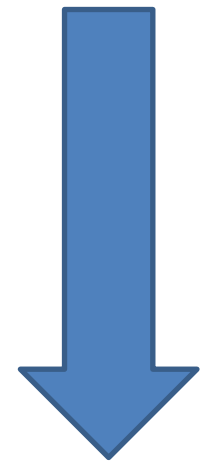
- More time to complete tasks

A result of a combination of worker shortages and supply chain interruptions.



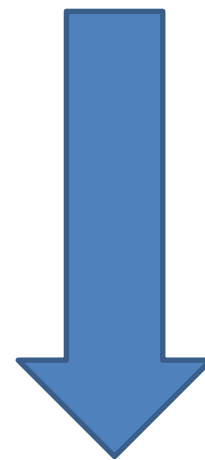
- Increasing the overall cost
 - Project delay

Due to quarantine and travel restrictions.



- labour shortages and decreased productivity
- Disturbed supply chain

Lower revenues and greater expenses as a result of additional safety precautions (Fairlie, 2021).

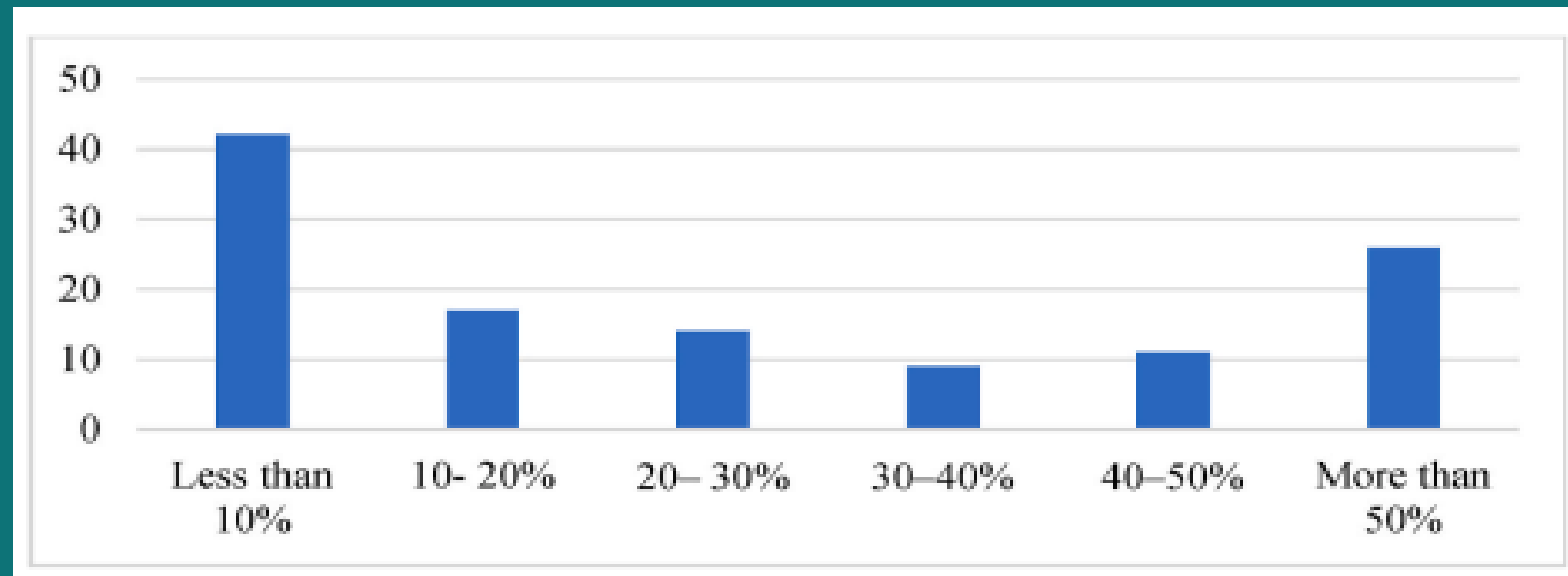


- Financial strain
- Project delay

Influence of Covid-19 Pandemic on project delays

Several factors contribute to construction delay, including

1. Material shortages,
2. Supply chain disruptions,
3. Labour shortages,
4. Design errors.

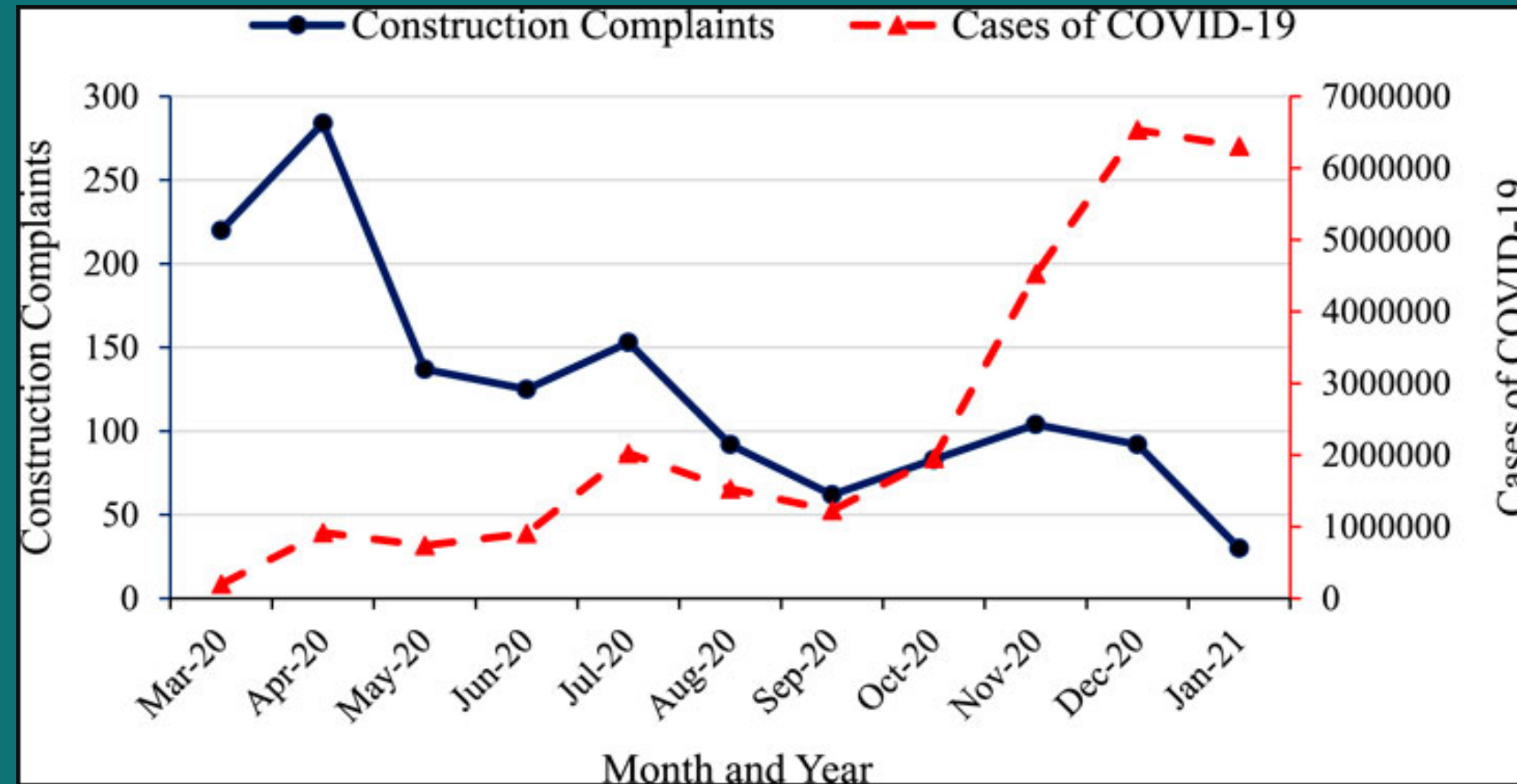


According to survey About 80% of the construction companies were not in full operation during the pandemic (figure) In fact, for some 50% of the companies, only 20% of their sites were in operation.

Factors and Leading Causes of Project Delay

Figure 1 Operational construction sites
Source: Research Gate (2022)

Delays in projects can also be caused by a lack of available labour, especially skilled labour.



The highest number of construction-related complaints closed by OSHA(occupational safety and health administration) in 2020 was in April. Social distancing measures and travel restrictions during the pandemic have further compounded the labour situation.

Factors and Leading Causes of Project Delay

Figure 2 Complaints ration in COVID period

Source: Bou Hatoum,. *et al.* (2021)



Figure 3 COVID IMPACT (CAGR 6.0)
Source: Markets(2021)



The epidemic has raised awareness of antibacterial construction materials, which is projected to improve construction sector demand.



Influence of Covid-19 on Digitalisation in Construction Sector



The research estimates that Covid-19 will have a global economic impact of 13572.4 billion by 2024 at a CAGR of 6.0

The economic impact of the pandemic has made it difficult for many construction companies, to engage in digitalization.



The absence of digital skills among construction employees



Key issues due to Covid-19 on Digitalisation.



The limited availability of high-speed internet in remote construction sites

CONCLUSION

- o The COVID-19 epidemic has delayed construction projects and expedited digitalization.
- o Supply chain disruptions, labour shortages, and health and safety measures caused construction project delays during the pandemic
- o Construction workers' lack of digital skills, limited internet connectivity

References

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The image features a solid teal background. In the center is a white hexagon with a thick teal border. The words "THANK YOU" are centered within this hexagon in a dark grey, sans-serif font. The text is arranged in two lines: "THANK" on the top line and "YOU" on the bottom line. In the four corners of the image, there are geometric shapes consisting of a white triangle and a grey triangle meeting at a point, creating a star-like pattern.

**THANK
YOU**