

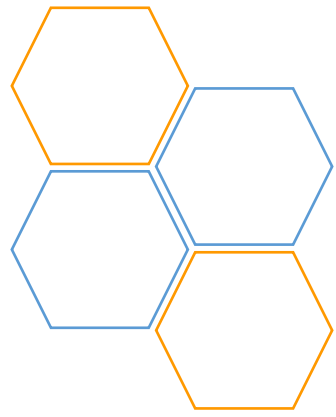
# The effect of digitalization on labor costs in construction

Yordan Yordanov

**SuSodCo 3<sup>th</sup> Virtual Capacity Building Event**

**Seminar 28.06.2021**

# Digital transformation/Digitalization



**A strategic process** in which we use digital tools and technologies to create entirely new processes or **to upgrade existing ones**

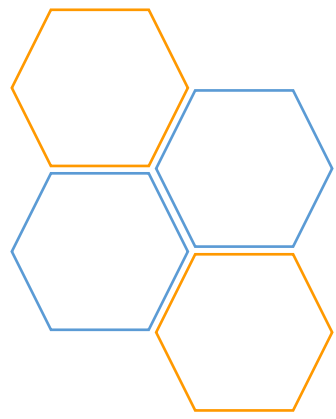
## **Benefits of digitalization:**

- Simplification and optimization of existing activities;
- Increasing the efficiency of employees;
- Better conditions for transparent communication and positive corporate culture;
- Improving the conditions for creating innovations in the company, etc.



# The digital transformation in construction

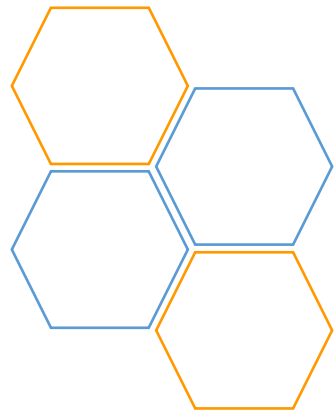
*THE EFFECT OF DIGITALIZATION ON LABOR COSTS IN CONSTRUCTION*



## Share of labor costs in construction in Bulgaria

	<b>Labour costs</b>	<b>Total building cost</b>	<b>% of labour costs from the total cost</b>
<b>2016</b>	690 059 561,41 €	5 916 158 357,32 €	11,66%
<b>2017</b>	659 640 491,76 €	6 877 898 385,85 €	9,59%
<b>2018</b>	761 046 709,07 €	7 580 924 722,50 €	10,04%

# The digital transformation in construction

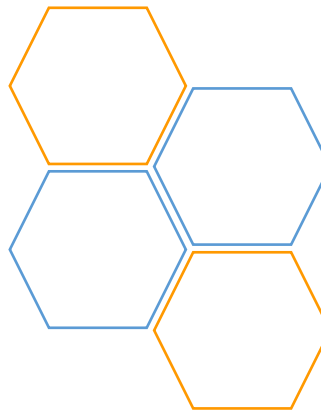


Digitalization and digital transformation of the construction sector in Bulgaria

Goals set in the long-term strategy of the **Bulgarian Construction Chamber** for the digitalization of the building industry until 2050:

- **Reduction of production costs:** reduction of costs for the entire life cycle of buildings;
- **Resource efficiency:** more efficient use of resources and improved waste management;
- **Business support:** improving the quality of the final construction product and increasing the competitiveness of companies;
- **Green and sustainable investments:** financing new products and solutions for the construction industry;
- **Improving the professional qualification and improving the management decision-making process**

# The digital transformation in construction

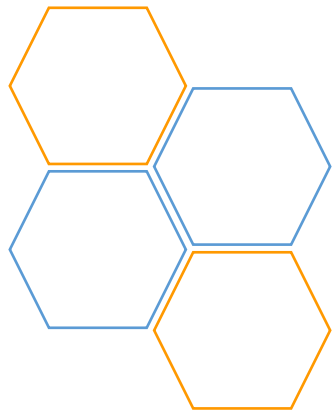


- Digitalisation **replaces jobs for low- and middle-skilled employees**, but not highly qualified ones. This makes the retention of highly qualified employees and workers an essential issue.
- Digitalization requires **raising the professional qualification** and retraining of the employees.
- **Construction sites** will become **increasingly digital**. Robotics, 3D printers, BIM (Building Information Modeling), drones are already entering the sector.

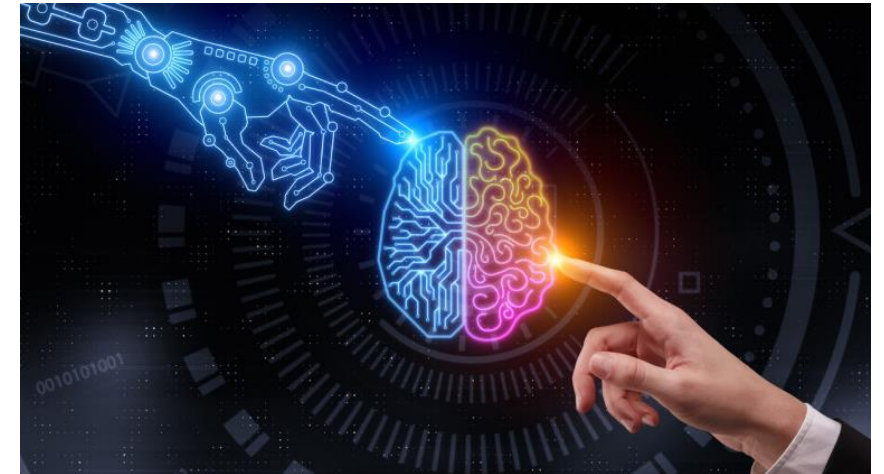


# The digital transformation in construction

*THE EFFECT OF DIGITALIZATION ON LABOR COSTS IN CONSTRUCTION*



- the **retention** of highly qualified employees and workers is an important issue - **higher pay**.
- **raising the professional qualification** and retraining of the workers and employees - highly qualified workers and employees - **higher pay**
- **Artificial intelligence and robotics** - their development in any industry always causes fear that more and more people will lose their jobs, replaced by smart algorithms or robots. But in the construction industry, these technologies are in demand due to **lack of labor force- higher pay**

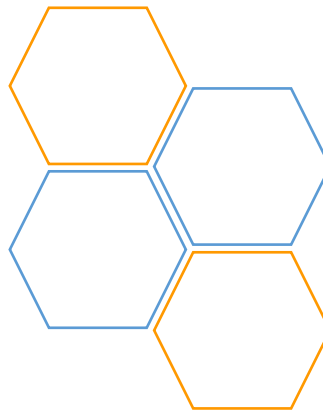
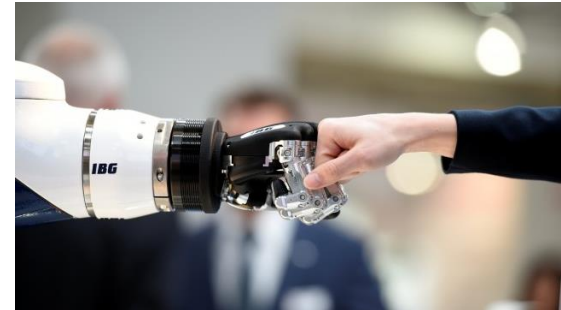




# The digital transformation in construction

## The Future

- *Undoubtedly, with the development of technology, the construction industry will undergo a revolution. If one wants to develop in this sector, he can no longer afford to neglect the opportunities digital transformation offers.*
- *Ultimately, the introduction of digital transformation in construction inevitably goes through:*
  - the retention of highly qualified staff
  - raising the professional qualification and retraining of employees
  - attracting new staff in the construction industry
  - INCREASE in the workers' wages





Chamber of Commerce  
and Industry of Slovenia

Chamber of Construction  
and Building Materials Industry  
of Slovenia



FEDERATION OF THE BUILDING  
CONTRACTORS ASSOCIATIONS OF CYPRUS

Ο.Σ.Ε.Ο.Κ

European Federation  
of Building  
and Woodworkers



ÉVOSZ



ΠΑΝΕΛΛΗΝΙΑ ΕΝΩΣΗ ΔΙΠΛΩΜΑΤΟΥΧΩΝ  
ΜΗΧΑΝΙΚΩΝ ΕΡΓΟΛΗΠΤΩΝ ΔΗΜΟΣΙΩΝ ΕΡΓΩΝ

PANHELLENIC ASSOCIATION OF ENGINEERS  
CONTRACTORS OF PUBLIC WORKS



КАМАРА НА СТРОИТЕЛИТЕ В БЪЛГАРИЯ  
BULGARIAN CONSTRUCTION CHAMBER

Thank you for your  
attention!