

SAFE AND HEALTHY WORK IN THE DIGITAL AGE 2023



“Global trends in digitization in work and its impact on occupational safety and health”



Универзитет “Св. Кирил и Методиј” во Скопје
МАШИНСКИ ФАКУЛТЕТ СКОПЈЕ

Презентер: ас. Д-р Маја Аначкова
Машински Факултет-Скопје

What is a digital workplace?

A digital workplace solution integrates line-of-business technologies (email, instant messaging, virtual meetings, digital forms, document management, news, and announcement, and more) to enable more effective ways of working, raise employee agility, and engagement.

Business Adoption

89% of companies have already adopted a digital-first business strategy.

89%

Investment

By 2023, it is expected to reach \$7 trillion as companies are becoming digital enterprises.

\$7 trillion in
2023



Why is Digital Workplace Important?

Today, digital workplace is not an option; it is necessary to escape the comfort zone, reinvent the processes and systems to compete in this world overrun by technological advancements. Among the established organizations, the wind of change is blowing heavy with 89% of companies either already adopting or planning to adopt a digital-first business strategy.

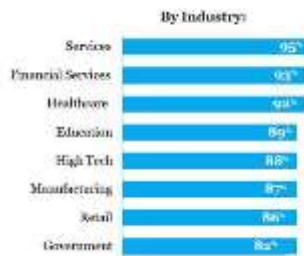
Talent Attraction: Over 64% of employees will take a lower paying job if they have the option to work away from the office.

Productivity: Companies with a strong online social network reported seven percent more productivity as compared to their counterparts.

Employee Retention: Organizations with digital workplaces have reported an 87% increase in employee retention.

Communication Tools: Employees prefer newer communication tools like instant messaging over other traditional channels for collaboration.

Source: [Deloitte](#)



What does digitalization mean for occupational safety and health?

The emergence of technologies such as

- digital platform work,
- automation of tasks,
- remote and hybrid work,
- worker management through AI, and
- smart digital systems

as priority areas, brings opportunities for workers and employers but also

new challenges and risks.

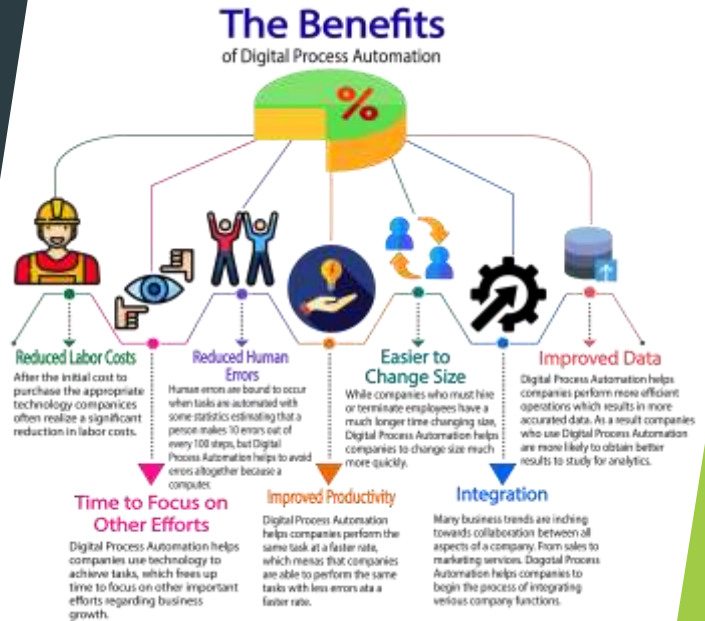


How is digitalization shaping our working lives and workers' safety and health?

Organizations are benefiting from the increased digitization of the workplace through:

- ▶-increased productivity,
- ▶-cost savings,
- ▶-a more mobile and agile workforce, and generally increased flexibility and adaptability in an ever increasingly complex marketplace.
- ▶Enterprises are collaborating more globally, and with more diverse and global staff.

Employees can now work all over the world, from the jungle to the arctic, as long as they have reliable Internet.



How is digitalisation shaping our working lives and workers' safety and health?

This new digital workplace also creates its own challenges, including:

- ▶ security,
- ▶-developing a new kind of digital etiquette to expectations for employees, and
- ▶-the tendency for building expectation of always being "on," causing burnout and often leading to retention problems.

Integrating digital technologies into the workplace can not only wreak havoc on the productivity of workers, but it also creates its own distinct culture, impacting the previous work culture and the general work experience.



DIGITAL PLATFORM WORKS

► Opportunities:

- Data-Driven Insights
- Remote Monitoring
- Real-time Alerts
- Training and Education
- Predictive Analytics
- Efficient Communication
- Documentation and Compliance
- Wearable Technology

► Risks:

- Privacy Concerns
- Cybersecurity Threats
- Training Gaps
- Overreliance on Technology
- Data Accuracy and Reliability
- Digital Divide
- Maintenance and Upkeep
- Resistance to Change



How can digitization allow a workload undertaken by employees to be transferred to technology?



AUTOMATION OF TASKS

Opportunities:

- Reduced Human Error
- Hazardous Task Offloading
- Enhanced Ergonomics
- Consistency and Standardization
- Data and Insights
- Remote Operation

Risks:

- Job Displacement
- Cybersecurity Vulnerabilities
- Skill Gaps
- Overreliance on Automation
- Maintenance Challenges
- Complexity and Training
- Loss of Human Oversight
- Unintended Consequences

REMOTE AND HYBRID WORK

► Opportunities:

- Reduced Commute-Related Risks
- Greater Flexibility
- Lower Exposure to Illness
- Improved Work-Life Balance
- Reduced Overcrowding
- Access to Health and Wellness Resources

► Risks:

- Isolation and Mental Health
- Inadequate Ergonomics
- Communication Challenges
- Increased Sedentary Behavior
- Inadequate Work-Life Boundaries
- Cybersecurity Risks
- Limited Access to First Aid and Emergency Response
- Unequal Access to Resources



WORKER MANAGEMENT THROUGH -AI (ARTIFICIAL INTELLIGENCE), -BIG DATA

Opportunities:

- Data-Driven Insights
- Predictive Analytics
- Real-time Monitoring
- Safety Predictions
- Automated Reporting
- Enhanced Training
- Health Monitoring
- Resource Allocation

Risks:

- Data Privacy and Security
- Bias and Fairness
- Complexity and Maintenance
- Overreliance on Technology
- Skill Gaps
- Ethical Dilemmas
- Data Accuracy and Reliability



SMART DIGITAL SYSTEMS

Opportunities:

- > Real-time Monitoring
- > Predictive Analytics
- > Efficient Communication
- > Automated Reporting
- > Ergonomics Improvement
- > Wearable Technology
- > Machine Safety
- > Enhanced Training

Risks:

- > Data Privacy and Security
- > Bias and Fairness
- > Overreliance on Technology
- > Skill Gaps
- > Ethical Dilemmas
- > Data Accuracy and Reliability



Shares of employees with high automation risk by occupation, EU27, 2020 (%)

CONCLUSION

building an **INTELLIGENT WORKPLACE**

- 1 Seamless collaboration
- 2 Continuous communication
- 3 Centralized knowledge
- 4 Streamlined processes
- 5 Inclusive culture

THANK YOU FOR YOUR ATTENTION