

# **IRSC 2022**

INTERNATIONAL RAILWAY SAFETY COUNCIL

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## Preparing railway staff for cultural changes linked to digital and technical innovations 1/2

- Digital and technical innovations will be **sooner or later** in the **railway landscape**, **including AI**, **ML**, **DL**, **etc**.
- Railway compagnies will increasingly integrate digital technologies into their operations & safety management, and other activities.
- While becoming more fluid and more connected to the rest of the world, railway system is also becoming more vulnerable to its ecosystem & environment, more exposed to cyber-risks but also to fire, climate, and consequently economic and political risks

=> As Human play a key role in **this process of change**, it is important that digital and technical innovations are **accompanied with/by the necessary cultural change**, to better prepare all **staff**, **operators**, **managers**, **leaders**, **and decision-makers**.

Strengthen the development of future technological and digital innovations in the railways by accompanying the necessary cultural changes of all levels of employees













## Preparing railway staff for cultural changes linked to digital and technical innovations 2/2

Objective of the UIC study: enhance safety & performance by **avoiding** overall **reluctance** to changes with digital and technical innovations.

Resistance is based on the notion that, even though technical barriers have fallen, some features of technology are difficult **for end-users to learn**.

The other resistance is based on the "personality profile" of the end-user.

- Anticipate and accelarate the shaping transformation of employees through rail automation and digitalization
- Reduce "organizational" resistance to digital changes
- Promoting / Sharing practical examples and best experiences



















#### **Accompaniment of staff for cultural changes**

Focusing on **employee engagement** can create more efficient and **productive workforce**. Any initiatives of improvement which are **taken by management** can not be fruitful without **willful involvement** and engagement of employees

Managers will face more challenges because organizations will need more employees with increased technical and professional skills

- Strengthening the role of operational staff in knowledge, via the involvement of Managers' eye, is on how to keep employees engaged & committed in their job
- Certifying acquired knowledge and in particular technical knowledge: "establishing a certification system also enables the company's employees to adopt a "culture of virtuous competition"
- Involving and engaging senior & second line managers in new/disruptive methods of training competencies & skills

















## **Inspire motivation of Staff for cultural changes 1/2**

- such a major change requires management of employee motivation
- is recommended that a **maturity assessment be carried out prior any deployment**, to consider what incentive measures should be put in place and to **anticipate employee resistance**.
- Commonly encountered resistance is related to emotional and psychological needs on the one hand, and the workstation design on the other.
- "Factors such as remuneration, promotion, recognition, and relationship with the hierarchical superior [...], affect personal and emotional needs, and therefore condition they support for any new initiative" (even some jobs will disappear/shift)

These knowledge workers can not be managed with old styles of management. They will deeper expect operational autonomy, job satisfaction and status/recognition















## Inspire motivation of Staff for cultural changes 2/2

- Transport companies will not only need technological skills, but also soft skills, psychological skills, communication skills.
   Adaptability, curiosity, and social intelligence are important and welcome in the future if companies want their employees to have good working conditions.
- In times when technologies used in the transport sector are rapidly changing, it is important to consider that each person has different biological, physical, and psychological capacities to adapt to changing circumstances, and these changing circumstances are not only relevant to their actual job
- Resiliency to stress, skills for coping to change, need to be addressed not only in employee on-the-job training, but already start in school.

N.B these soft skills should be developed earlier in stage, to allow people to have a higher level of adaptability.

















## Design workplaces

- > Start from the top: Employee engagement requires leadership commitment and appropriate skills
- foster employee autonomy through a less hierarchical organization (organizational leverage) as persuasion, social intelligence, emotional responsiveness, and teaching others, may well be in higher demand (old workforce must keep relation with technology)
- establish new relationships based on trust, commitment and transparency (two-way communication) between employees, customers, and business partners: co-creation may be a new way of working which enables collectivity, gives workers the opportunity to express themselves, but must importantly, it is reflected in the results
- > Deliver employees appropriate training: help employees to update by themselves their knowledge and skills through training methods, and establish learning as a lifelong passion to consistently acquire new skills over time
- > Have strong feedback system: Build a distinctive corporate culture, companies should promote a strong work culture in which the goals and values of board & managers are aligned/shared across all work sections.















#### Outcomes



Learning Lab for cultural changes interactive and evolutive tool to identify barriers, issues and solutions December 2023



**Guidelines** - recommendations and best practices on how to engage staff at all levels of the organization December 2024



Cultural changes: final conference to disseminate and share
December 2025



will host and highlight best practices, solutions and recommendations















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