Economic Evaluation model for the Purchase of a Social Robot

Kimmo Vänni¹, John-John Cabibihan²

¹Tampere University of Applied Sciences, Finland

² Qatar University, Qatar





Costs of Decreased Performance

- About a half of employees have decreased performance and productivity
- Productivity loss can be from 2% to 46% but commonly from 5% to 16%
- On average 3.4% of annual working days are lost due to poor performance.
 Corresponding figure regarding sickness absence is 5.0%.
- In this study (N=495) a value of productivity loss was USD 1.5 million
- Robots could compensate a part of the loss but a robust evaluation model is needed (monetary and non-monetary)
- Policy makers are looking forward to real data from real cases
- If a half of employees with decreased productivity would use robots, an organization would invest in robots USD 600.000
- Still many open questions and challenges but we have to start somewhere