

Fitting out machinery for reference change in a hosiery plant: A DES approach

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Progress presentation

Research practice 3

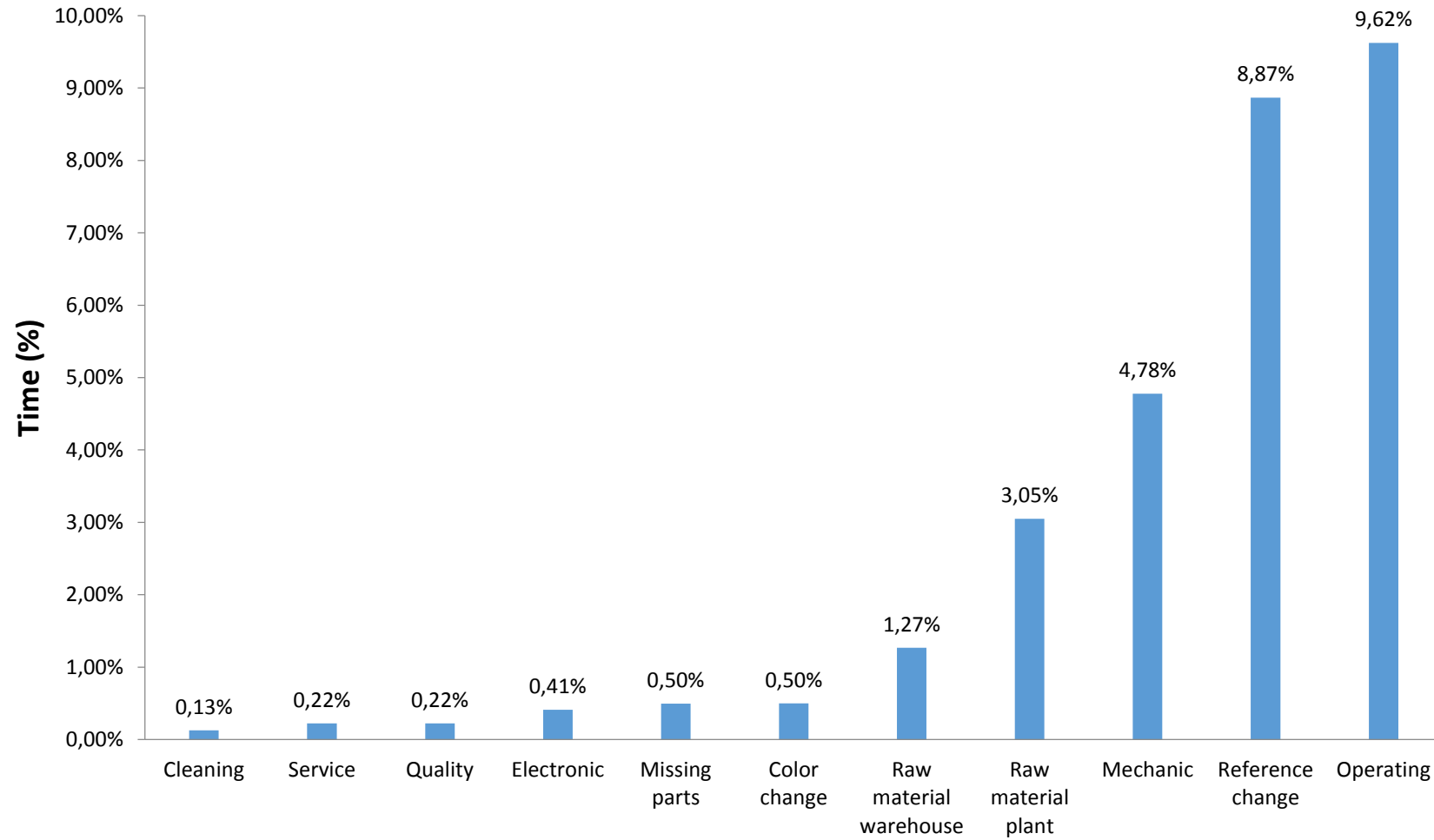
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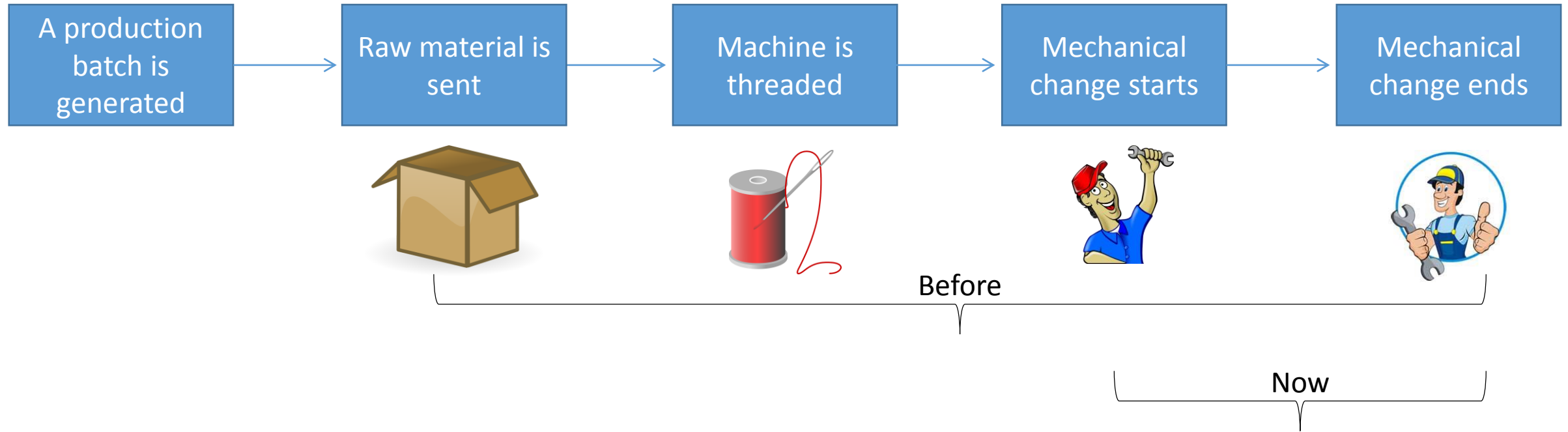
General objective

Implement a discrete event simulation model for the process of fitting out machinery for reference change in a knitting plant using Simul8.

Standstill times



Changing references – Data picking



Process

- Change parts of the machine
- Develop a program
- Establishes measures
- Test the machine
- Validate samples

Variables

- Technology
- Resource
- Tissue type
- Change type

Data picking - Technology

TECHNOLOGY	%
DOUBLE	7.12%
GOAL	56.60%
TECHNO	18.38%
KNIT-CLOSE	17.91%

Data picking – Tissue type

PREVIOUS TISSUE TYPE	CURRENT TISSUE TYPE	%
SMOOTH	SMOOTH	47.7%
MEDIA TOWEL SANDWICH	MEDIA TOWEL SANDWICH	15.2%
MEDIA TOWEL SANDWICH	SMOOTH	7.9%
SMOOTH	MEDIA TOWEL SANDWICH	7.8%
SANDWICH TOWEL	SANDWICH TOWEL	6.3%
MEDIA TOWEL SANDWICH	SANDWICH TOWEL	2.6%
SANDWICH TOWEL	MEDIA TOWEL SANDWICH	2.5%
CORRUGATED	CORRUGATED	1.8%
SANDWICH TOWEL	SMOOTH	1.5%
SMOOTH	SANDWICH TOWEL	1.4%
LINKS LINKS	LINKS LINKS	1.0%

Data picking – Change type

CHANGE TYPE	%
ACTIVATION	1.8%
RESOURCE CHANGE	12.6%
NEW	4.0%
NEW RESOURCE DEVELOPED	9.7%
REPETITION	71.9%

Thanks for your attention