Benefits of combining process mining with LEAN Six Sigma

Sharing my experiences at VolkerWessels Telecom

Robin Schouten
vwtelecom.com

VolkerWessels Telecom

| 2 thuismarkten | 1.600 medewerkers | 4 werkmaatschappijen | 3 portfoliobedrijven |

WE MAKE CONNECTIVITY GROW.

VolkerWessels Telecom bouwt aan verbindingen die onze samenleving sterker maken en mensen dichter bij elkaar brengen. Het geheel aan verbindingen tussen mensen, dingen en ideeën noemen wij total connectivity. En die connectiviteit speelt een belangrijke rol bij het verbeteren van onze levenskwaliteit, nu en in de toekomst. Wij kijken niet alleen naar technische uitdagingen, zoals exploderend dataverbruik of het mobiele bereik in goed geïsoleerde gebouwen. Het zit hem juist in de menselijke maat en sociale kwesties waar we iedere dag mee te maken hebben: mobiliteit, veiligheid, energie, gezondheidszorg en afvalstromen.

Nederland				Duitsland	Portfoliobedrijven
VWT Infratechniek	VWT Netwerk Solutions	24/7 VWT Services	VWT FttX		recognize Hyrde MAPXACT

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Critical to Quality trees

Voice of the Customer

Delivered within 41 working days

Drivers

Timely

Quality

KPI

LSL

USL

Required information

Information correct

Score

> 0 working days

< 41 working days

95% FTY

95% FTY

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First Time Yield (FTY) versus Rework analysis

Items in → **Process activity** → **Inspection** → Items out
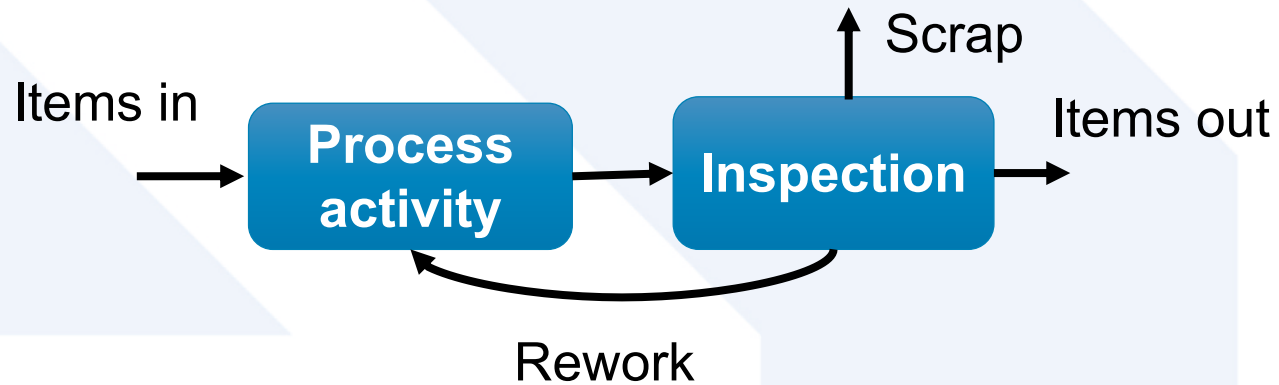
Scrap

Rework

PROCESS ACTIVITY	SCRAP	REWORK	OUT	FIRST TIME YIELD
1				99,4%
2				98,9%
3				99,1%
4	0	321	2003	83,9%
5				93,5%
6				98,6%

First Time Right Yield	(OUT – REWORK) / (OUT + SCRAP) = FTY %		
(2003-321) / (2003+0)	= 1682 / 2003	= 83,9%	

Absolute- & Case freq.

Case coverage
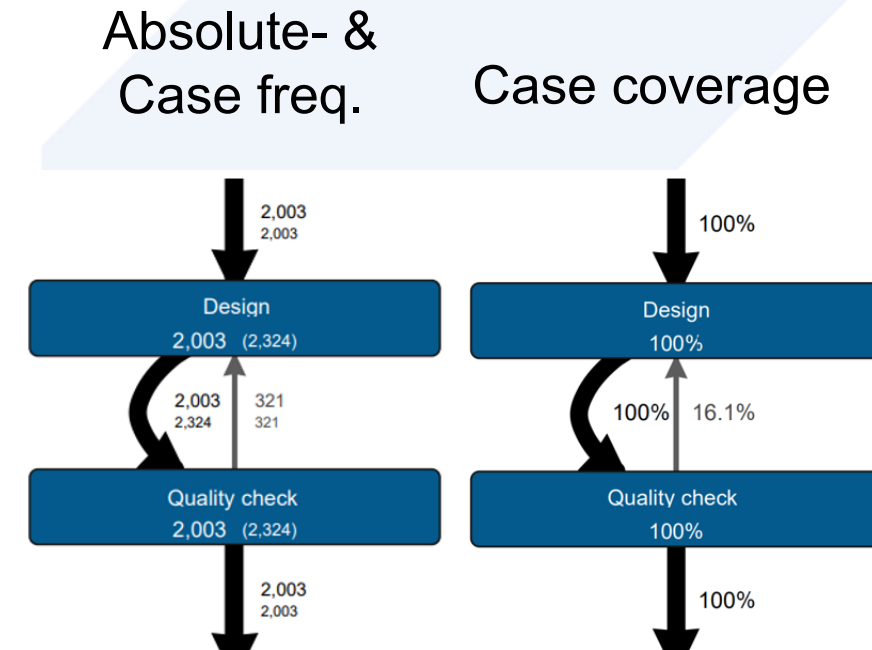
FTY calculation

FTY per activity

84% - 95%
321 to 100
rework items

Price rework item

Hourly rate *
process time

Calculation

€ * 221 rework
items =
€ yearly basis

Expectation

€ X > 50 to 80%
yearly basis

Other hard benefits

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Analyzing the process

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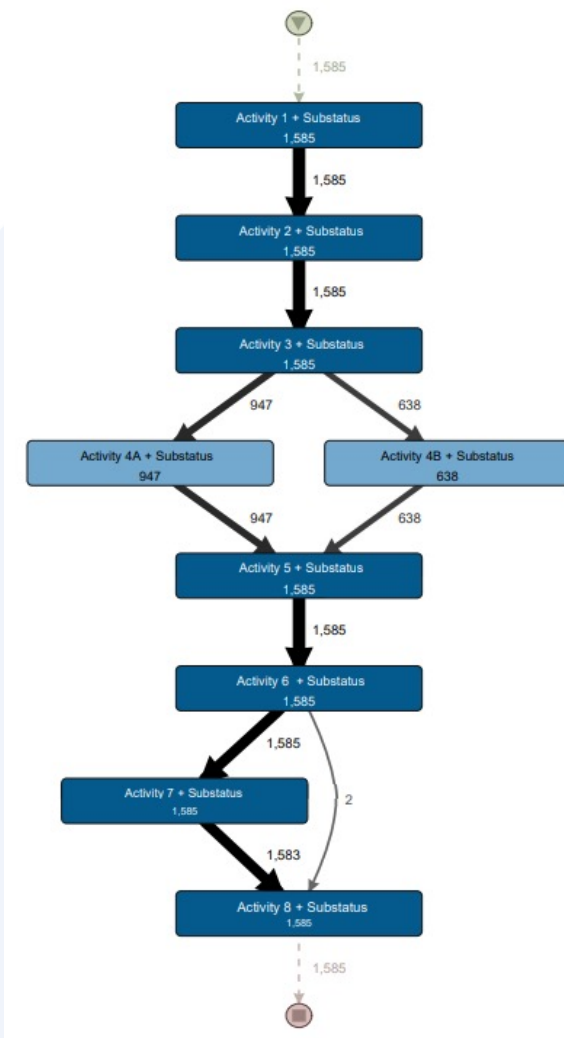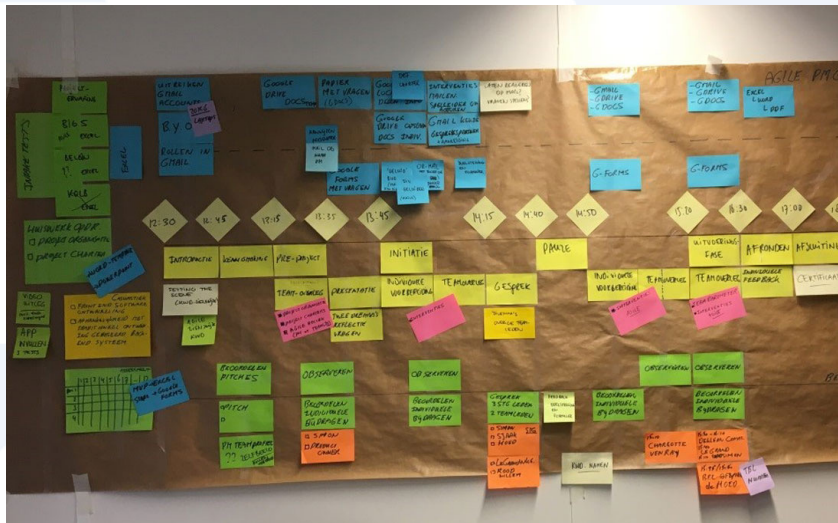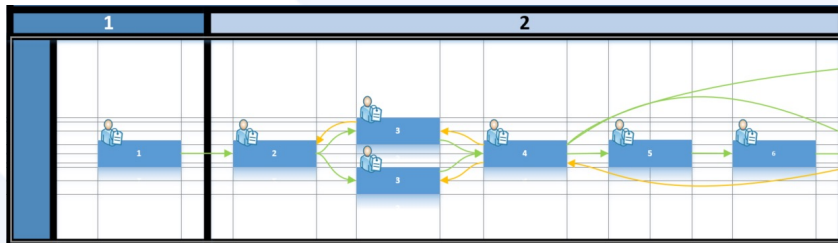
Critical to Qualities

Voice of the Customer

Delivered the first time within 41 working days

Drivers

Timely

Quality

KPI

LSP

USP

Required information

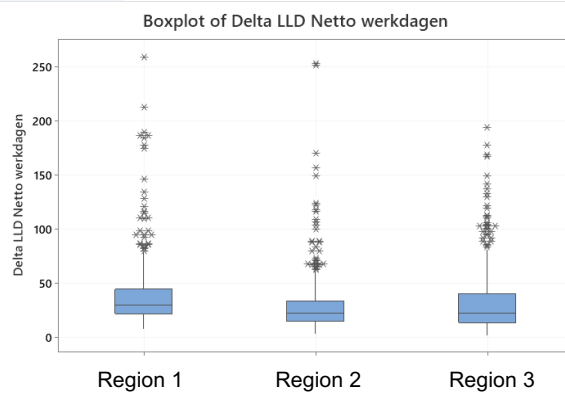Information correct

Score

> 0 working days

< 41 working days

95% FTR

95% FTR

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Diving a bit deeper
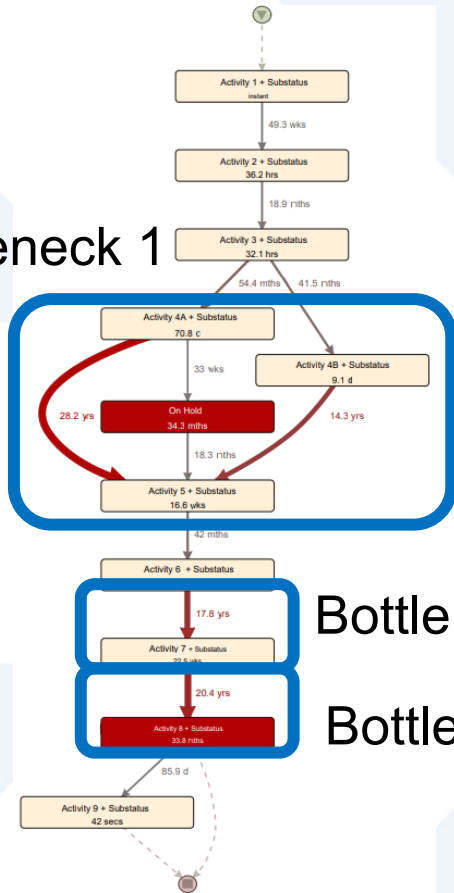
The current state

Quality

| Activity 1 | Activity 2 | A | B | C | Activity 5 | Activity 6 |

Performance

The future state

Performance

| 1 | 2 | D | B | E | A | C | 5 | 6 |

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Results of the pilot

Boxplot of Netto DLT WD min WOK

Case coverage / FTY
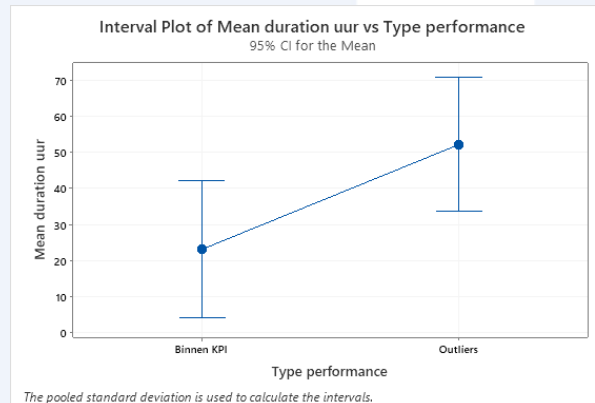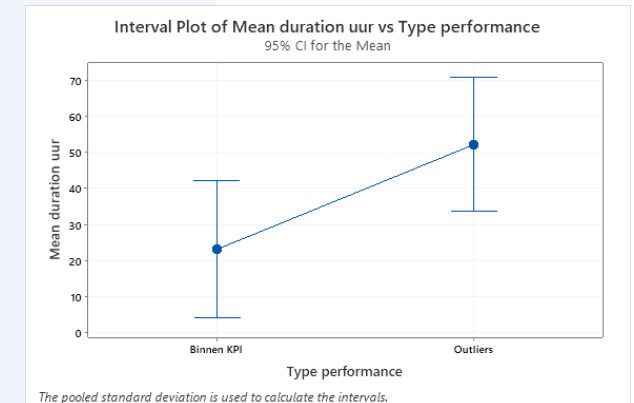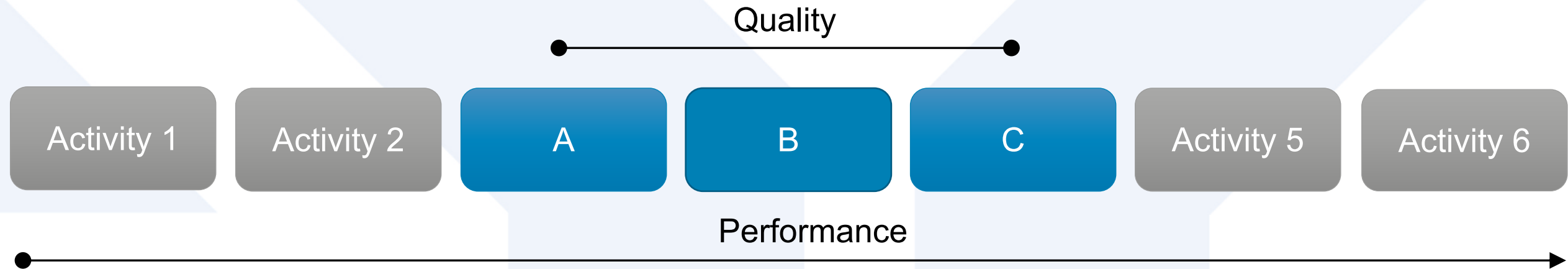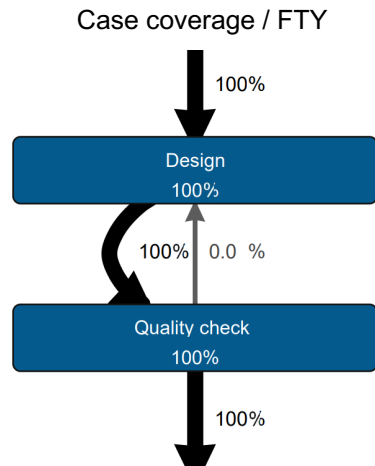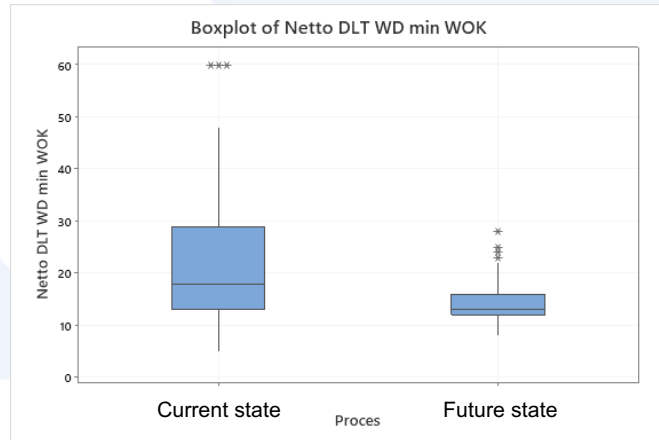
Forecast upcoming year = X orders

PROCESS ACTIVITY	Process time	HOURLY RATE	OUT	FIRST TIME RIGHT YIELD
1				
2				
3				
4	X	€	X	84%
5				
6				

PROCESS ACTIVITY	Process time	HOURLY RATE	OUT	FIRST TIME RIGHT YIELD
1				
2				
3				
4	X	€	X	100% > 95%!
5				
6				

€ prognosis on yearly basis > (50 – 80%)

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Learnings

- Both methods complement each other.

- Accelerate in the lead time of my change.

- More recognition, more interaction, and therefore support.

- Disadvantage: differences in the design of the databases.

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