



Kaj je Lean Six Sigma ?

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Stremimo k operativni odličnosti:

- Ponuditi izdelke in storitve:

**najvišje kvalitete
z najnižjo ceno
in v ravno pravem trenutku.**

DfSS**5 – Robustnost**

- Robustnost procesov
- Oblikovanje za Six Sigma (DfS)
- Razvoj funkcij kakovosti (QFD)

6 Sigma**4 – Zmogljivosti**

- Zmanjšanje variance
- Nadzor v procesu samem
- Statistična orodja

Lean**3 – Stabilnost**

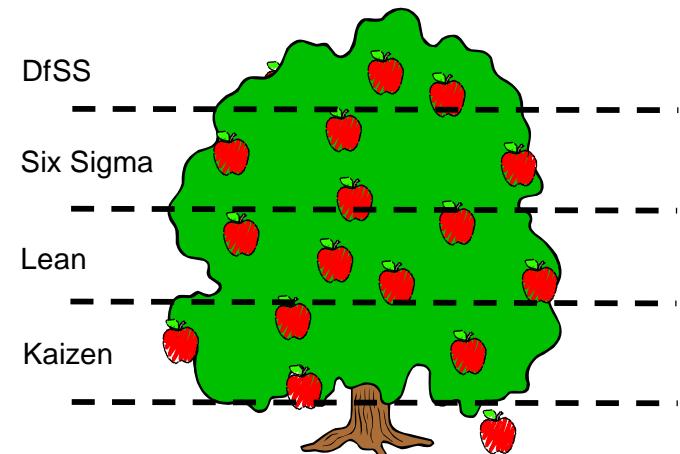
- Stabilost procesov
- Odstranjevanje potrat (waste)
- Flow & Pull pristop

Kaizen**2 – Pregled**

- Vizualno upravljanje ključnih indikatorjev učinkovitosti (KPI)
- Nadzor dela v teku (WIP)
- Model stalnih izboljšav

5S**1 – Struktura**

- Delovno okolje
- Postopki & navodila
- Vidne nepravilnosti



Poudarek na strukturi



Urejeno in profesionalno delovno okolje

Manufacturing Instructions	
Code: 1001	Revision: A
Part Number:	Charger Receptacle (Charging) (10.8V, 5000 mAh)
Date:	2012/08/06
Alt Revision:	1
Page #:	Page 8 of 30
Description of Task:	
Step 10: Fit base 12	
 <ul style="list-style-type: none"> Locate receptacle user label: Push Nut #107 (supplied with kit) into center hole. Locate user label recess in receptacle base. Push user label into recess until it is seated correctly. Push a flat sheet of film over top of receptacle. Do not fold film over receptacle edges, and hot glue to assembly base. Reassemble the receptacle assembly. 	
 <ul style="list-style-type: none"> Push Nut #107 (supplied with kit) into center hole. Locate user label recess in receptacle base. Push user label into recess until it is seated correctly. Push a flat sheet of film over top of receptacle. Do not fold film over receptacle edges, and hot glue to assembly base. Reassemble the receptacle assembly. 	
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Jasna navodila za delo
Poznavanje procesa dela in
posedovanje veščin

Strukturirano okolje
Celovito produktivno vzdrževanje
(TPM)



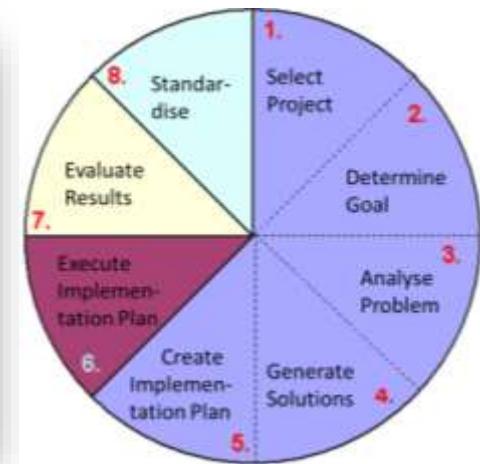
Poudarek na preglednosti in vpogledu



Vizualno upravljanje
Vsakodnevno vitko (lean) upravljanje



Nadzor nad delom v procesu
Poudarek na ozkih grlih (TOC)



PDCA / Skupinsko delo
Model stalnih izboljšav

Poudarek na stabilnosti

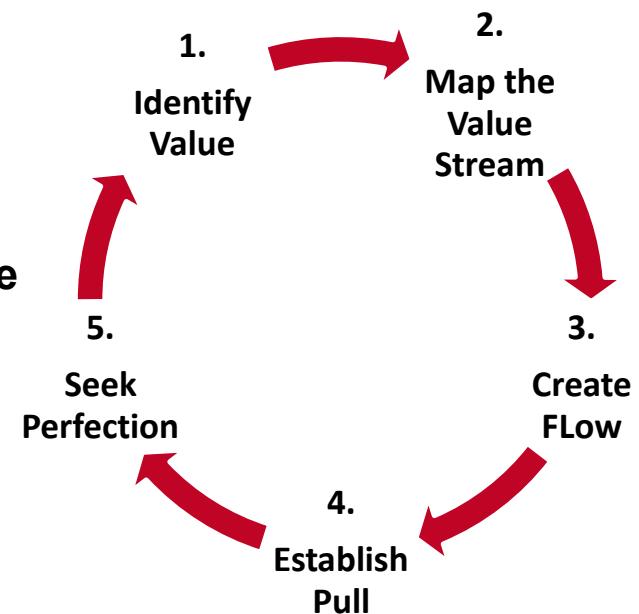
1. Vrednost: Definiramo kaj uporabnik ceni

2. Vrednostni tok: Identificiramo vrednostni tok / odstranimo potrate (waste)

3. Pretok: Implementiramo konstantni pretok

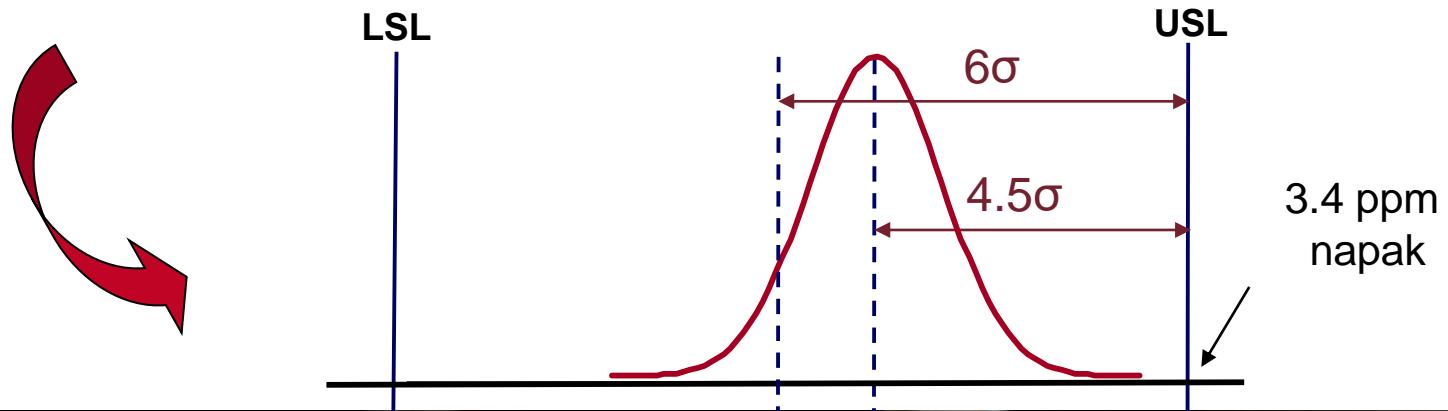
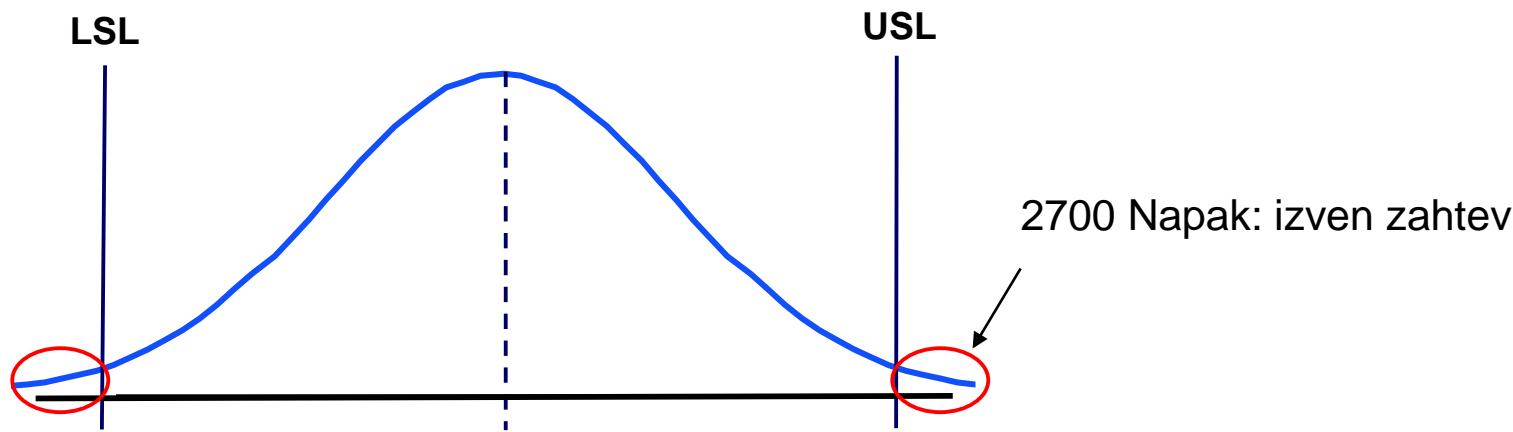
4. Pull načelo: Proizvodnja glede na povpraševanje

5. Popolnost: Stalne izboljšave

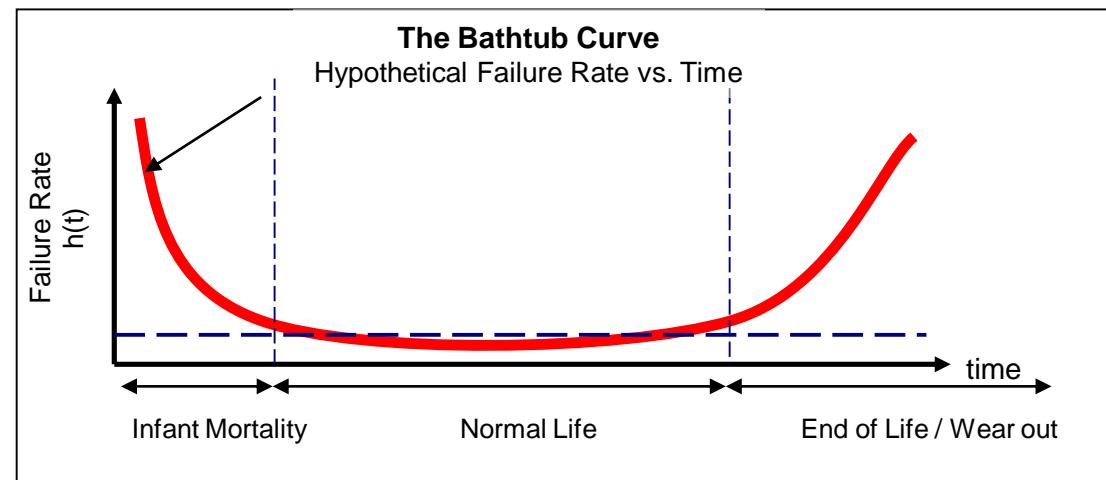
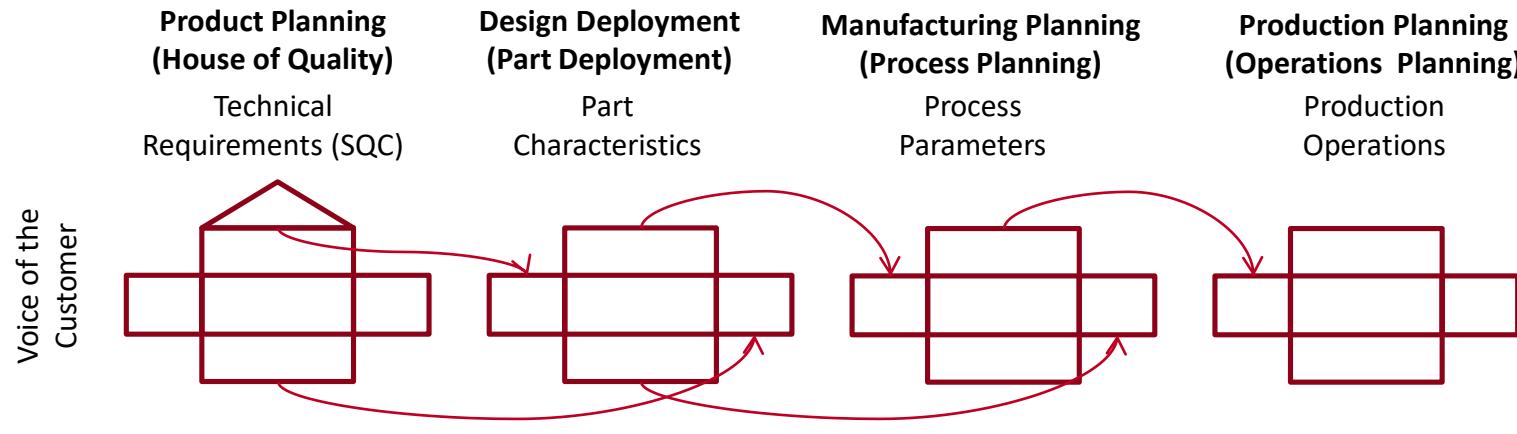


**1. Prekomerna proizvodnja****Več, kot zahteva trg****2. Čakanje****Čakanje, oprema v okvari****3. Transport****Transport surovin ali izdelkov****4. Prekomerno procesiranje****Nepotrebni koraki pri izdelavi****5. Zaloge****Nepotrebne zaloge****6. Premiki, gibanje****Nepotrebno iskanje in premikanje****7. Okvare****Zaradi napak, slabe kvalitete****8. Neizrabljen potencial****Znanje delavca je neizkorisčeno**

Six Sigma poudarek na zmogljivostih



Poudarek na zanesljivosti in robustnem oblikovanju

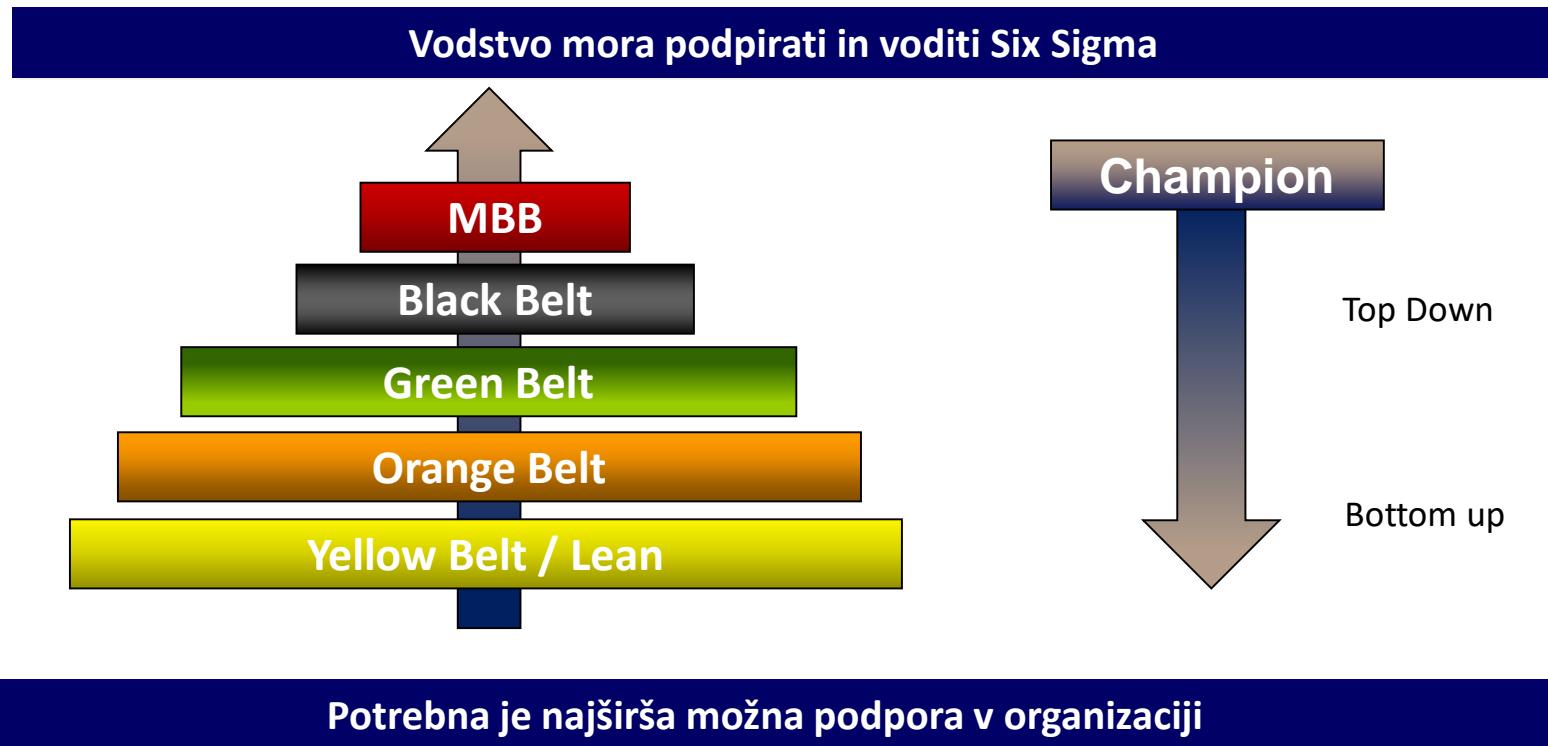


Kje vse se uporablja Lean & Six Sigma?

- **Avtomobilska industrija** skoraj vsi uporabljajo Lean & Six Sigma
- **Industrijska proizvodnja** uporabljajo Lean in vedno več Six Sigma
- **Banke & zavarovalnice** uporabljajo Lean in vedno več Six Sigma
- **Storitvena industrija** pričenjajo z uporabo Lean in Six Sigma
- **Prehrambena industrija** uporabljajo TPM in Lean
- **Zdravstvo** pričenjajo z uporabo Lean in Six Sigma
- **Razvoj izdelkov** oblikovanje za Six Sigma

Lean Six Sigma struktura

- Pri uspešni implementaciji Lean Six Sigma metodologije so odgovornosti in vloge različne in jasno razdeljene.



Lean Six Sigma Yellow Belt training – strukturiran pristop k zaznavanju možnosti za izboljšave v procesih ter njihova izvedba

Introduction/Needs Analysis on Lean Six Sigma in Health

- Roles & Responsibilities in Lean Six Sigma
- Lean Principles

Define Phase of Lean Six Sigma

- Process Mapping
- Voice of the Customer (VOC) & Critical to Quality (CTQ)

Measure Phase of Lean Six Sigma

- Data Types & Data Collection
- Basic Statistics
- Process performance Metrics
- Visualisation of data
- Measurement Systems

Analyse Phase of Lean Six Sigma

- Regression Analysis
- Hypothesis Testing
- Failure Mode Effect Analysis (FMEA)
- Root Cause Analysis
- Value Stream Mapping (VSM).

Improve Phase of Lean Six Sigma

- 5S
- Kaizen
- Statistical Process Control (SPC)/process Capability

Control Phase of Lean Six Sigma

- Visual Factory & Quality Assurance