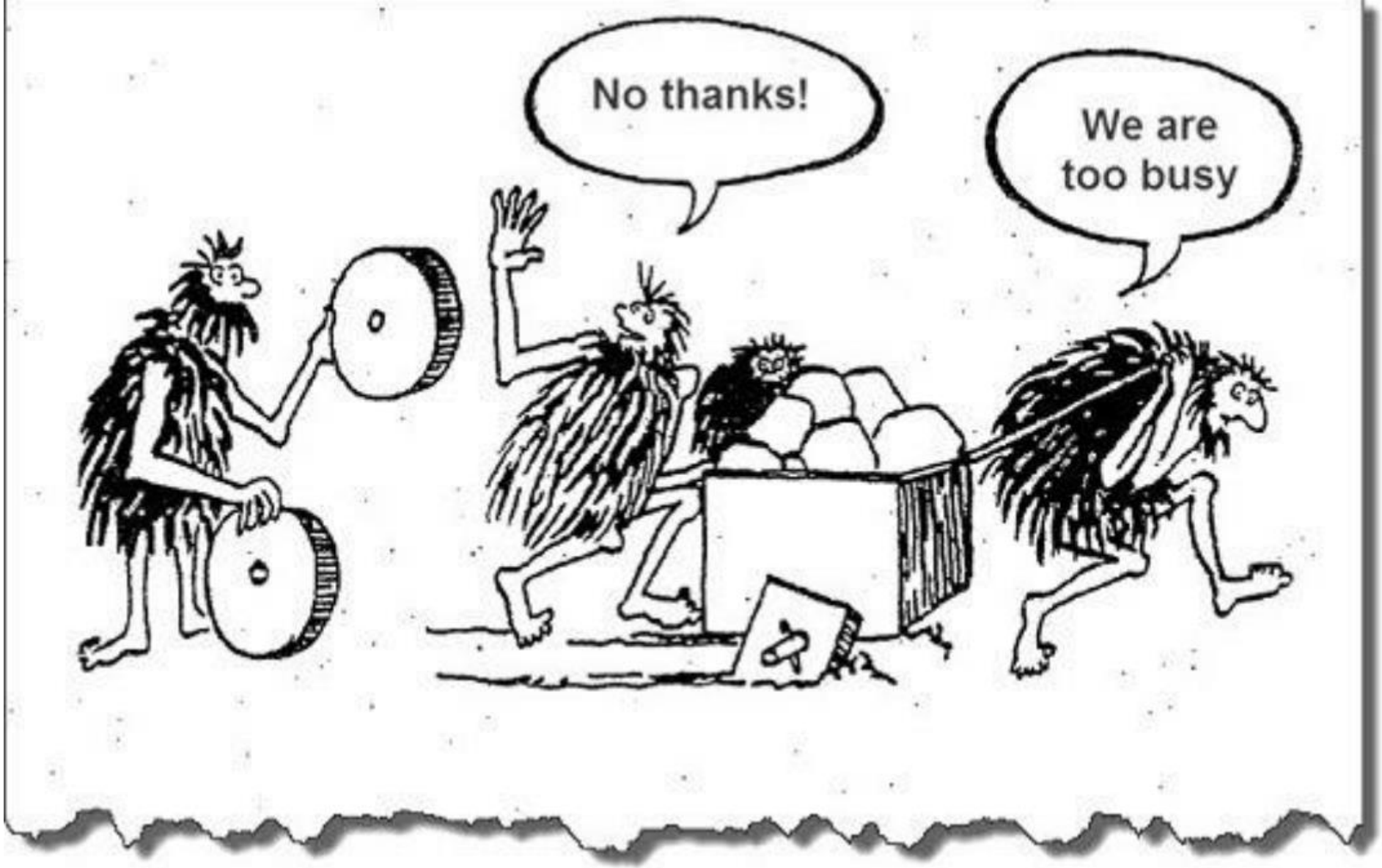


There is More To Lean Than You Know

Agile Australia 2015
TJ Gokcen

codebyts

City Council runs out of time to discuss shorter meetings

LAGUNA BEACH, Calif. (AP) — Another marathon City Council meeting forced councilors to put off agenda item No. 6: a proposal to limit the length of meetings.

"We didn't have time to discuss time," Councilwoman Ann Christoph said after Tuesday's meeting.

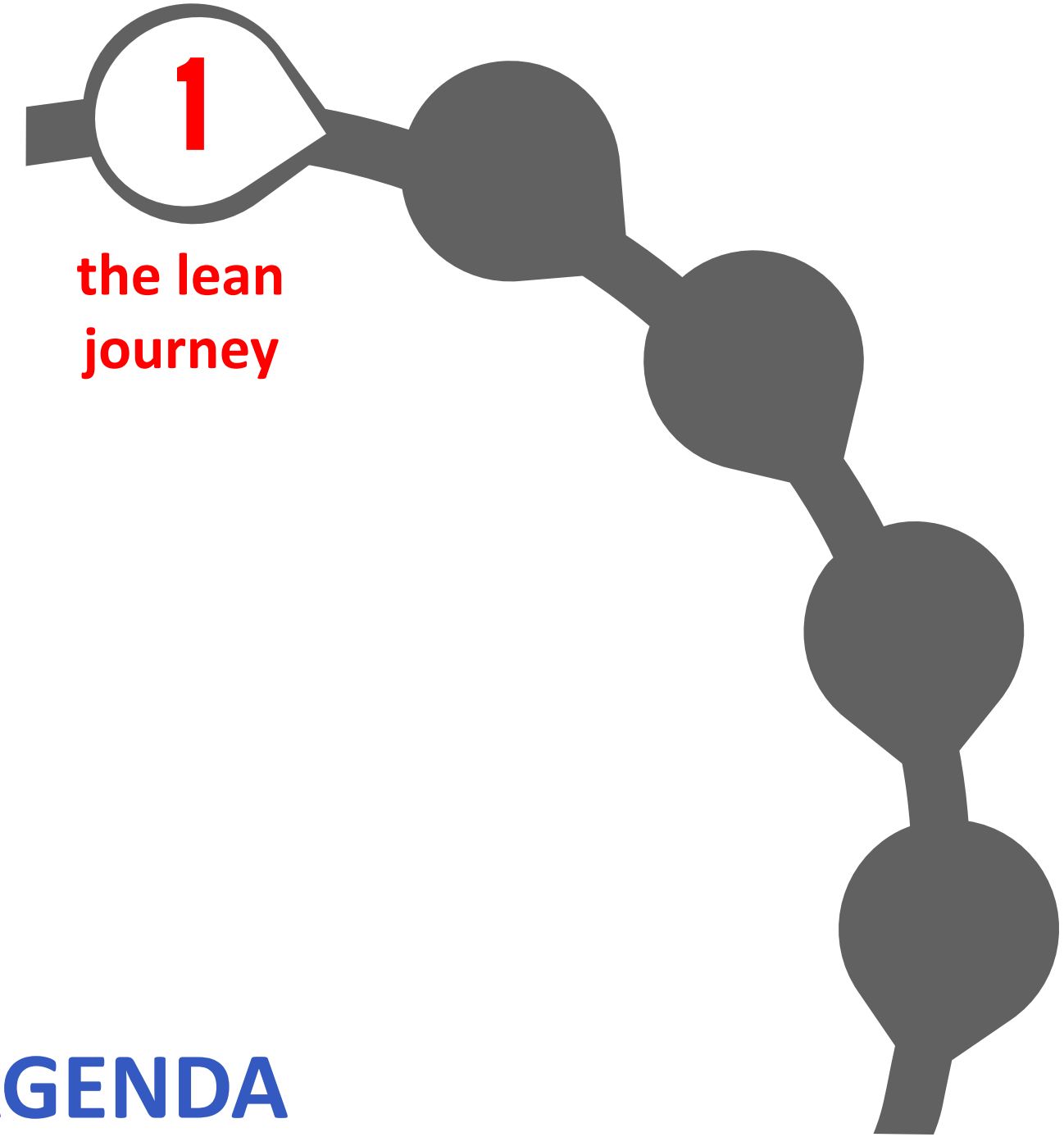
Members have been known to stay as late as 3 a.m. for meetings that regularly begin at 6 p.m. But even the most dedicated politician can run out of patience in the wee hours.

"It is not good for the public and i is not good for the counci members," Christoph said. "Ou decision-making is not that good a that time of the morning."

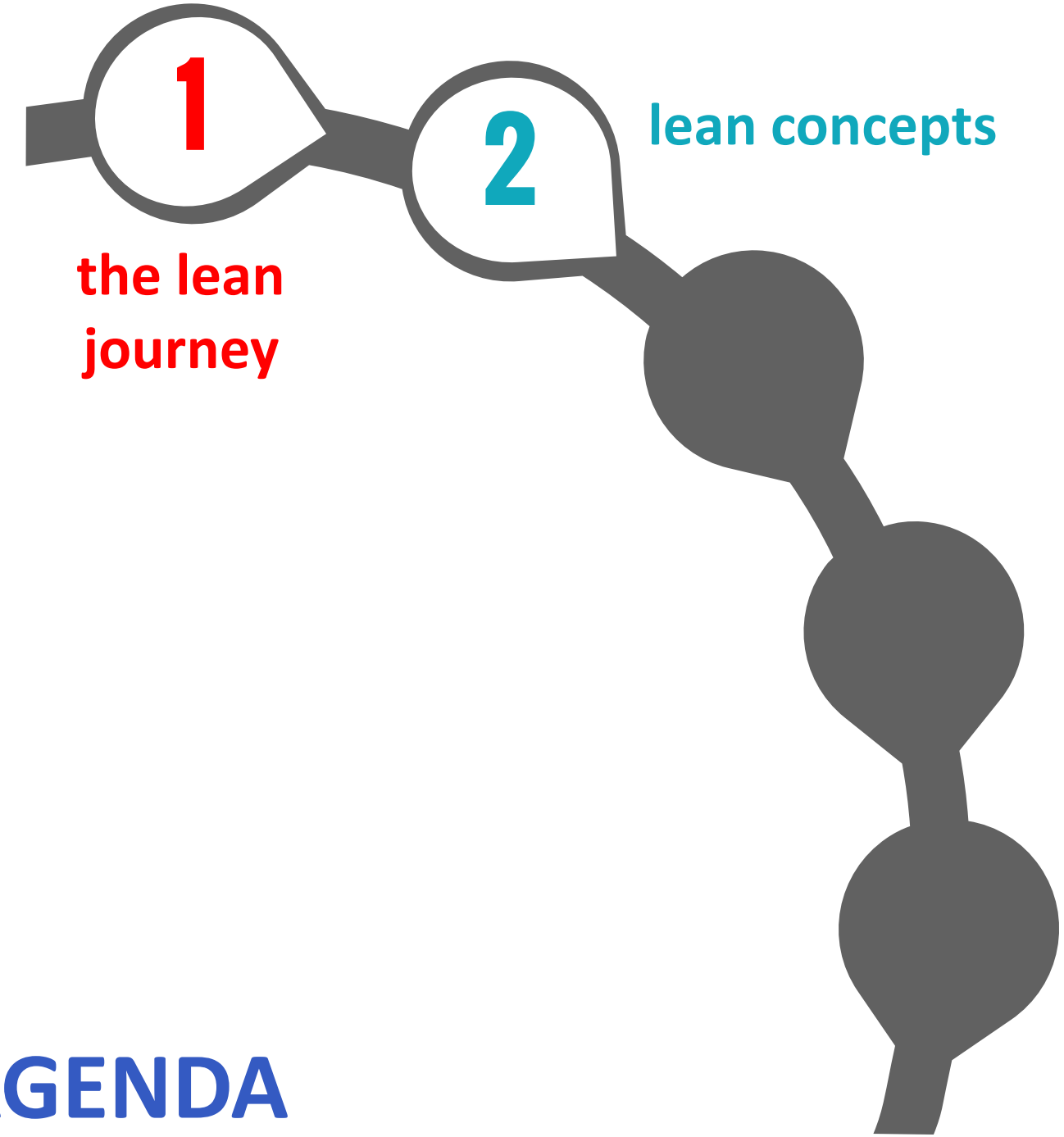
Christoph and Councilman Wayn Peterson introduced the meeting limitation measure, which also pro poses to limit time allotted t speakers.

Tuesday's meeting ended at 1:3 a.m. and item No. 6 was tabled unti Feb. 2. But then it will be item No. 1.

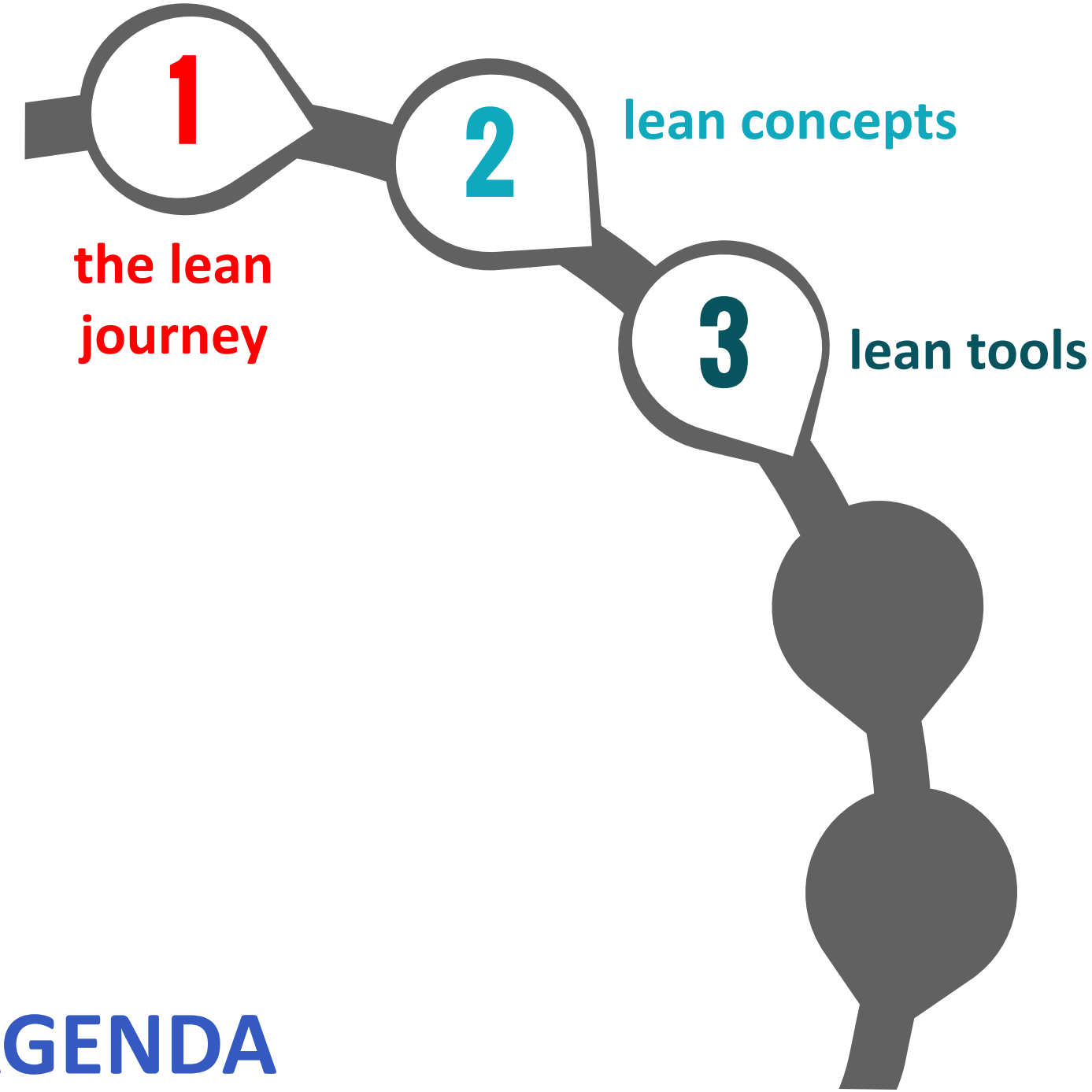
AIM and Agenda



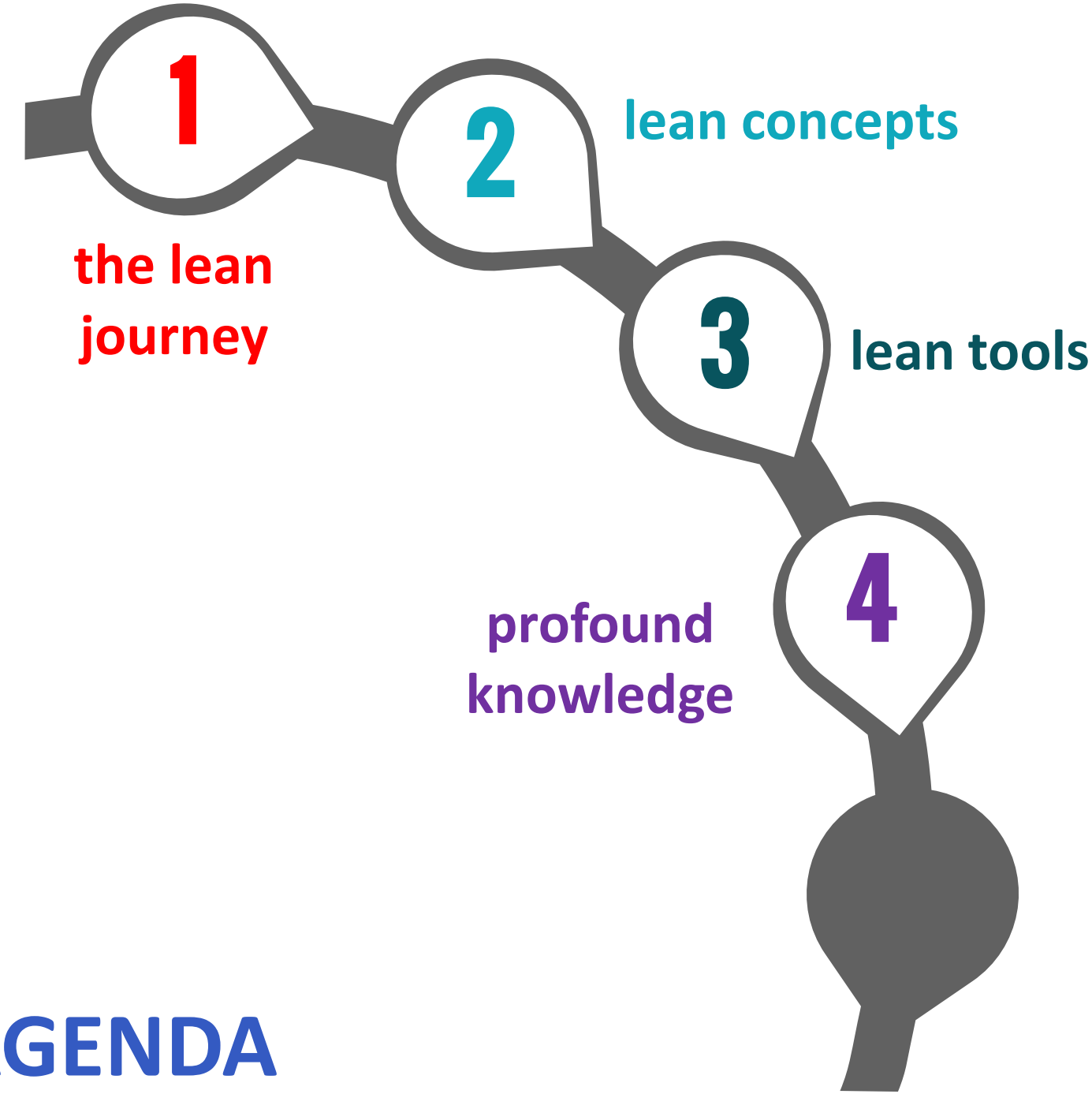
AIM and AGENDA



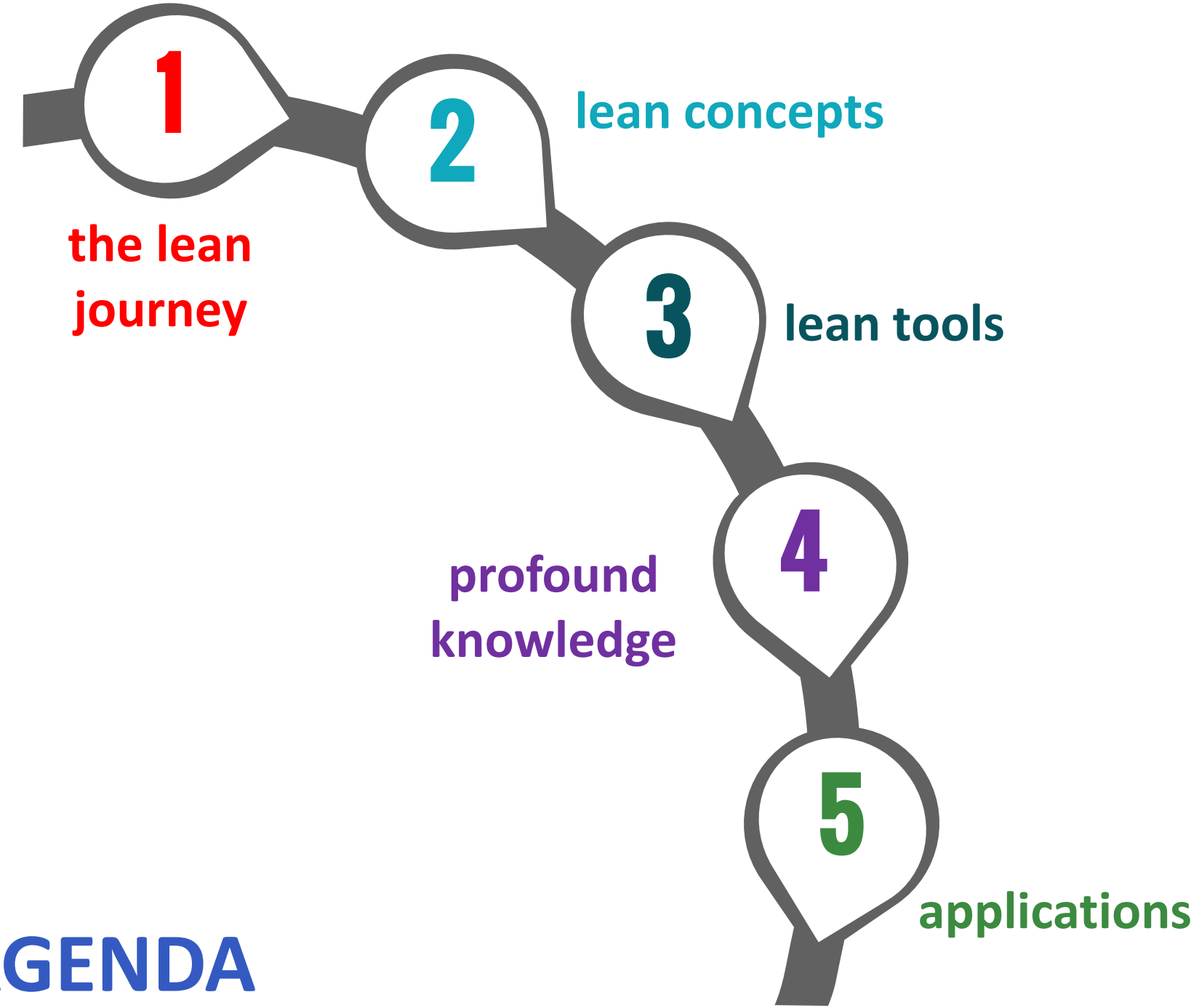
AIM and AGENDA



AIM and AGENDA



AIM and AGENDA



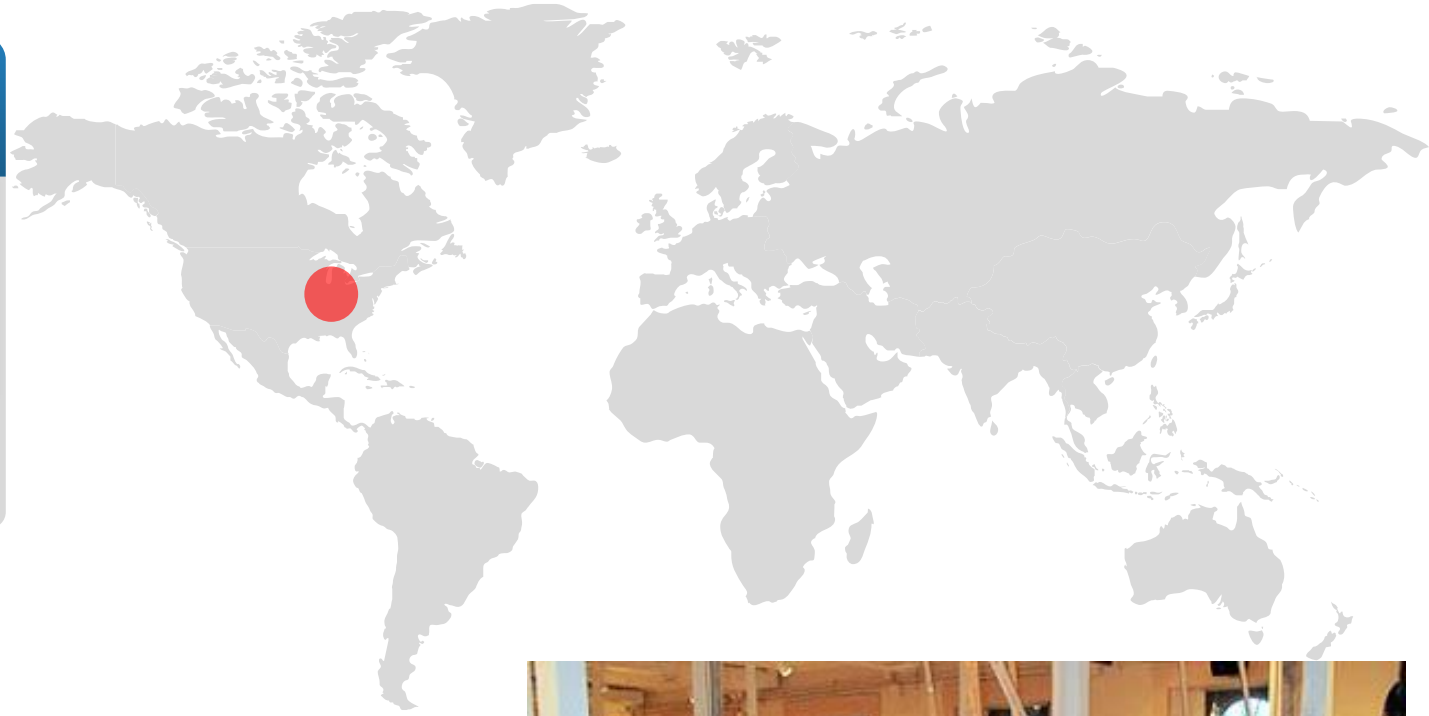
AIM and AGENDA

the lean journey

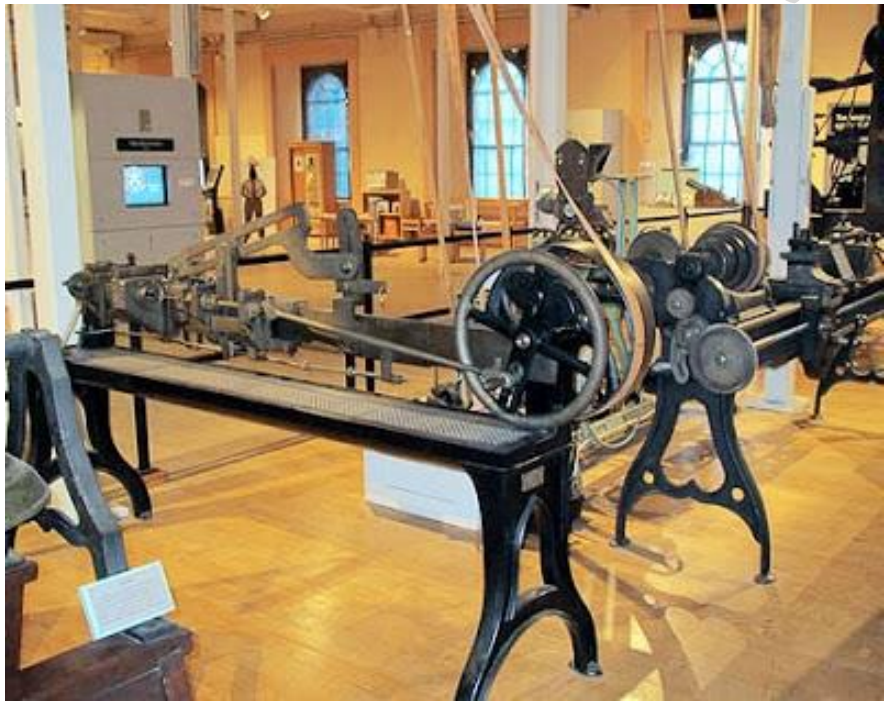
Venice Arsenal, Italy

Mass producing methods for building warships.

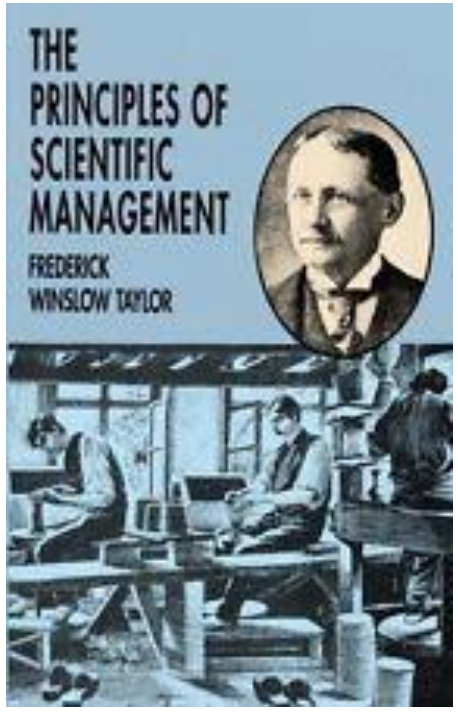
U.S.A.



Automatic Production of Complex Parts

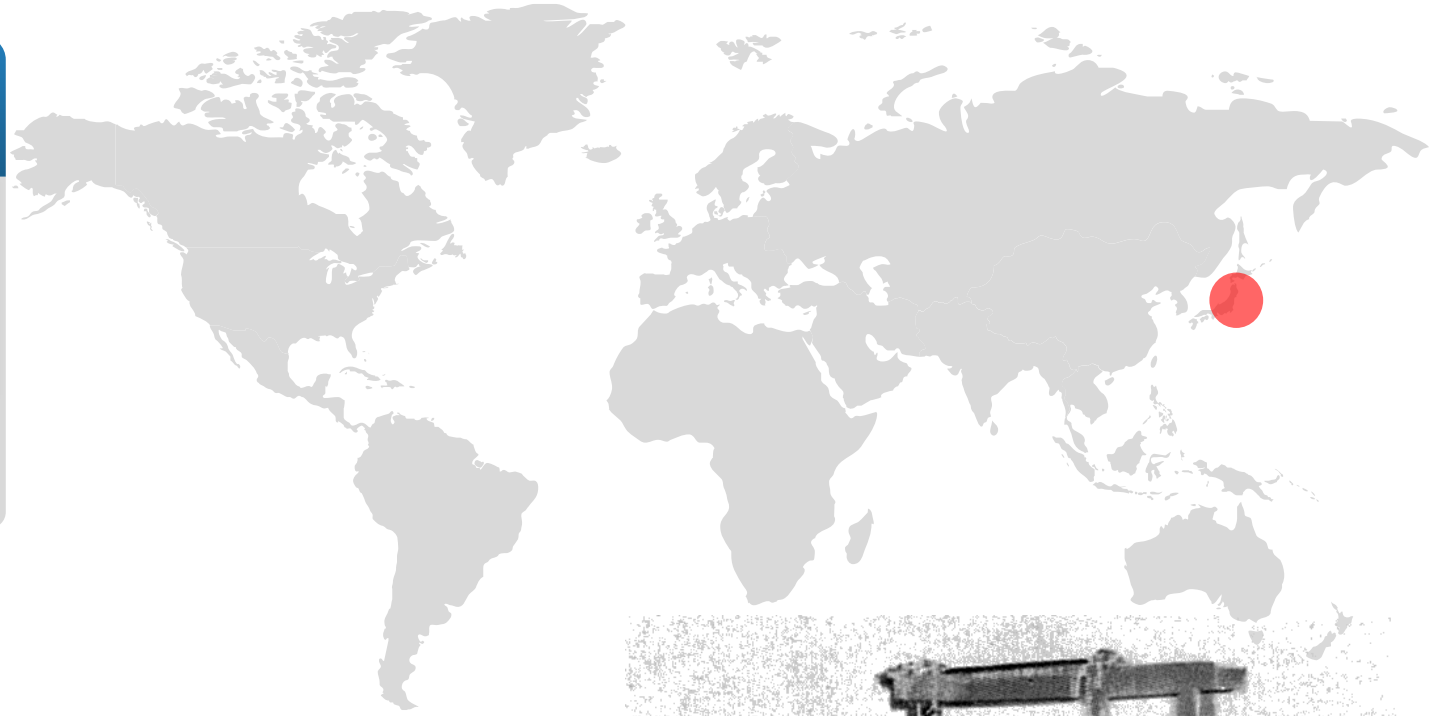


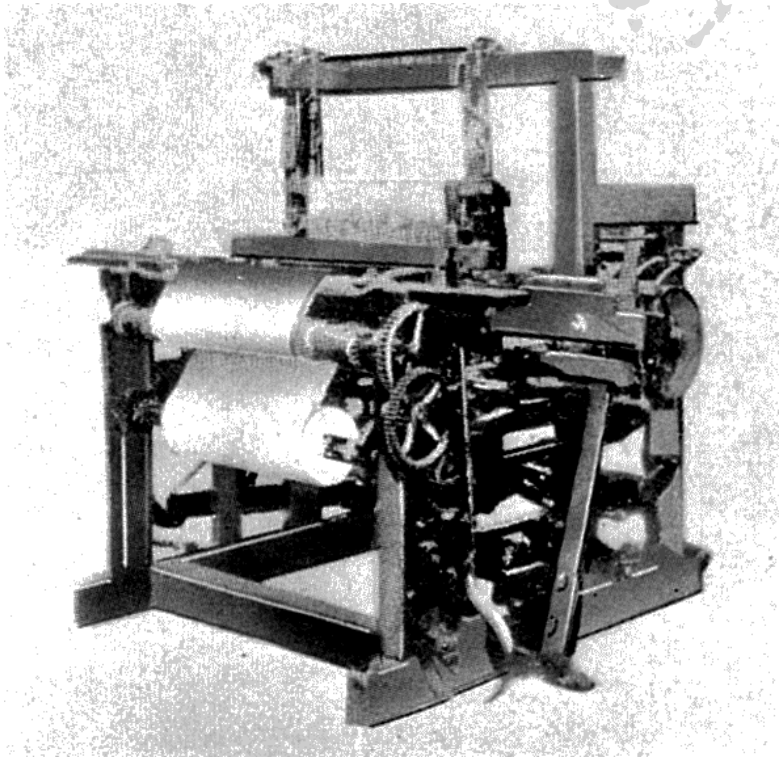
U.S.A.



The Principles of Scientific Management

Japan





Toyoda Power Loom

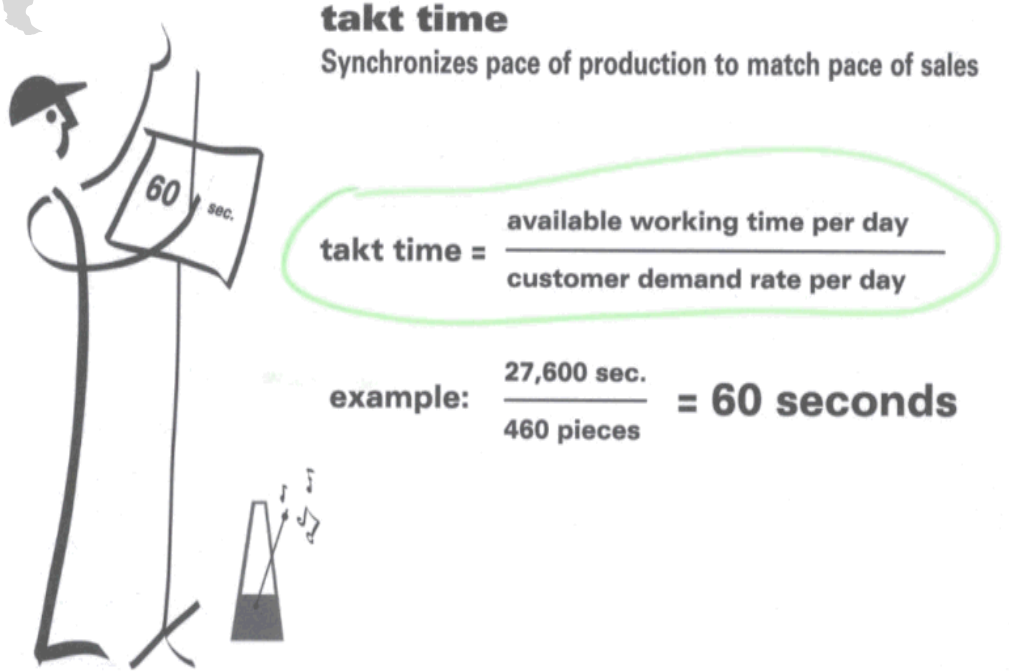
U.S.A.

Ford T-Model

Japan

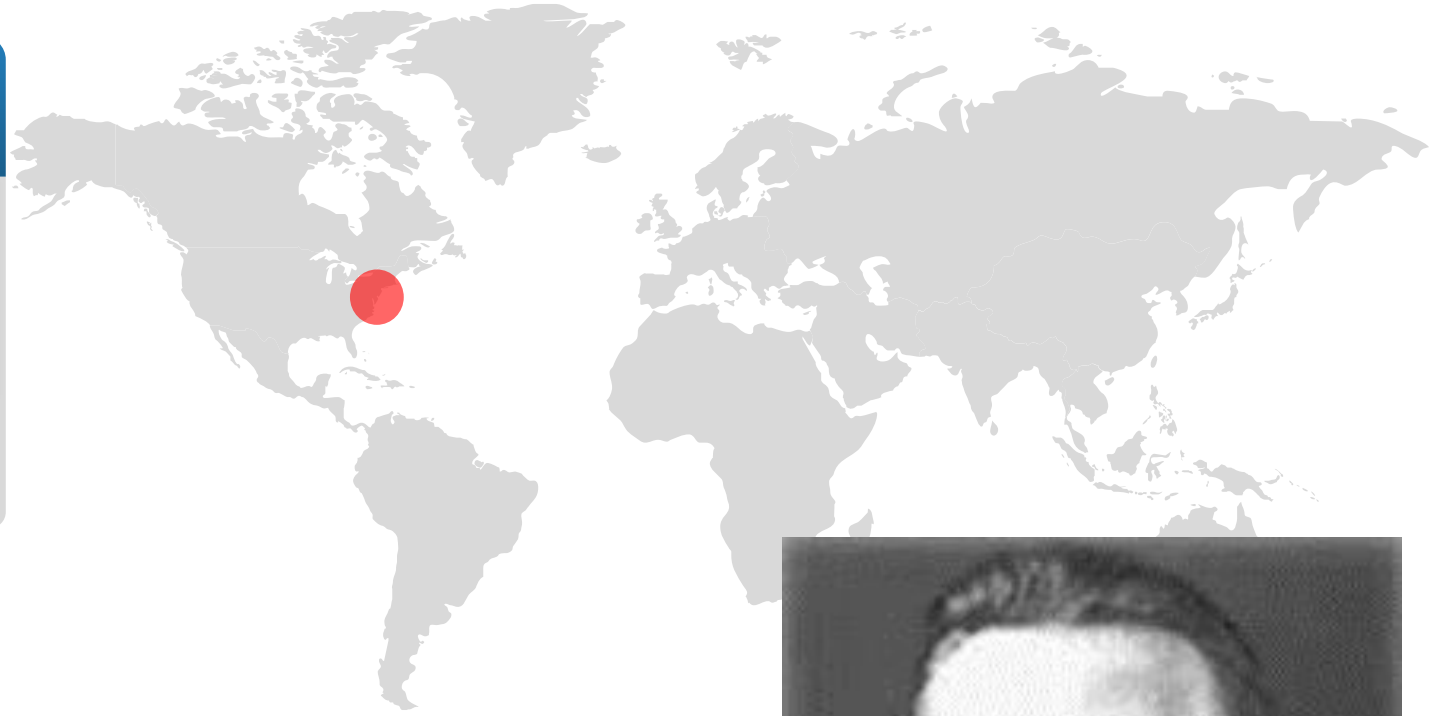
Toyoda Automatic Loom

Germany



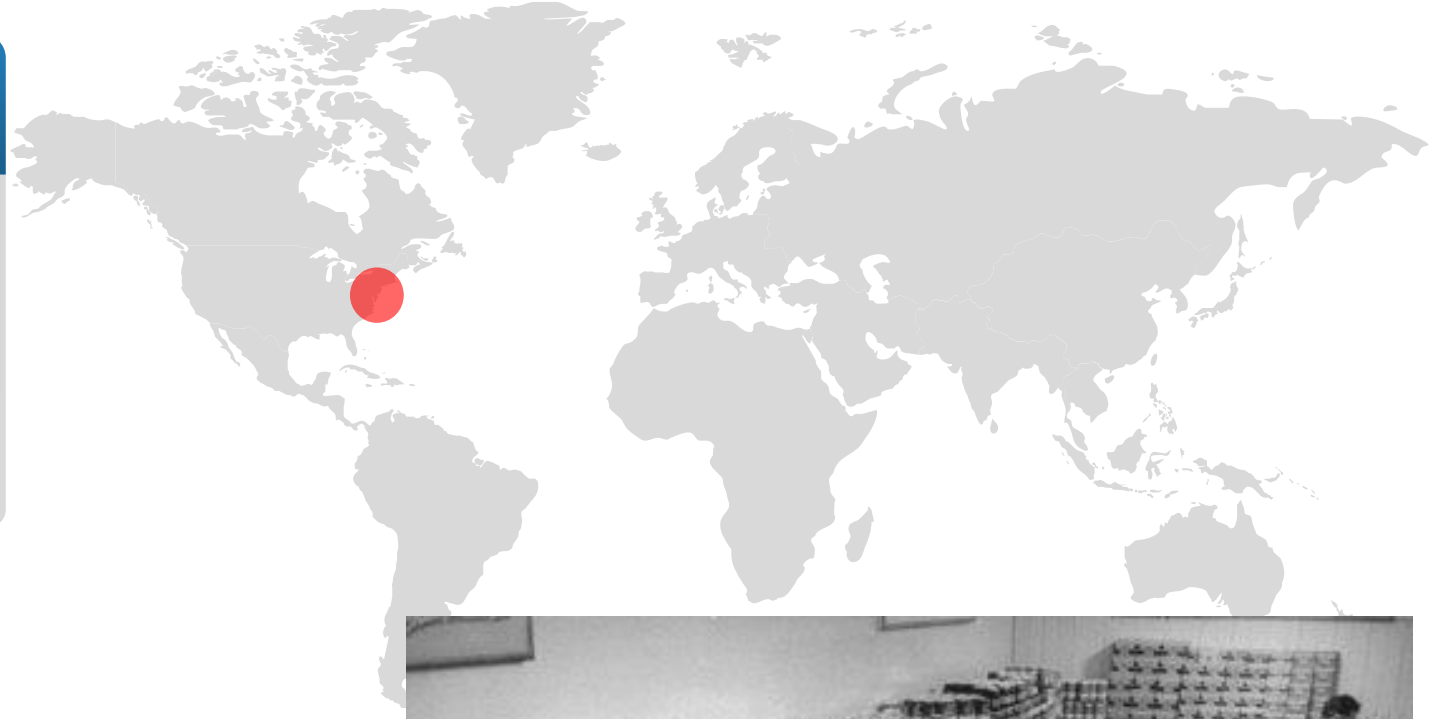
Takt Time

U.S.A.



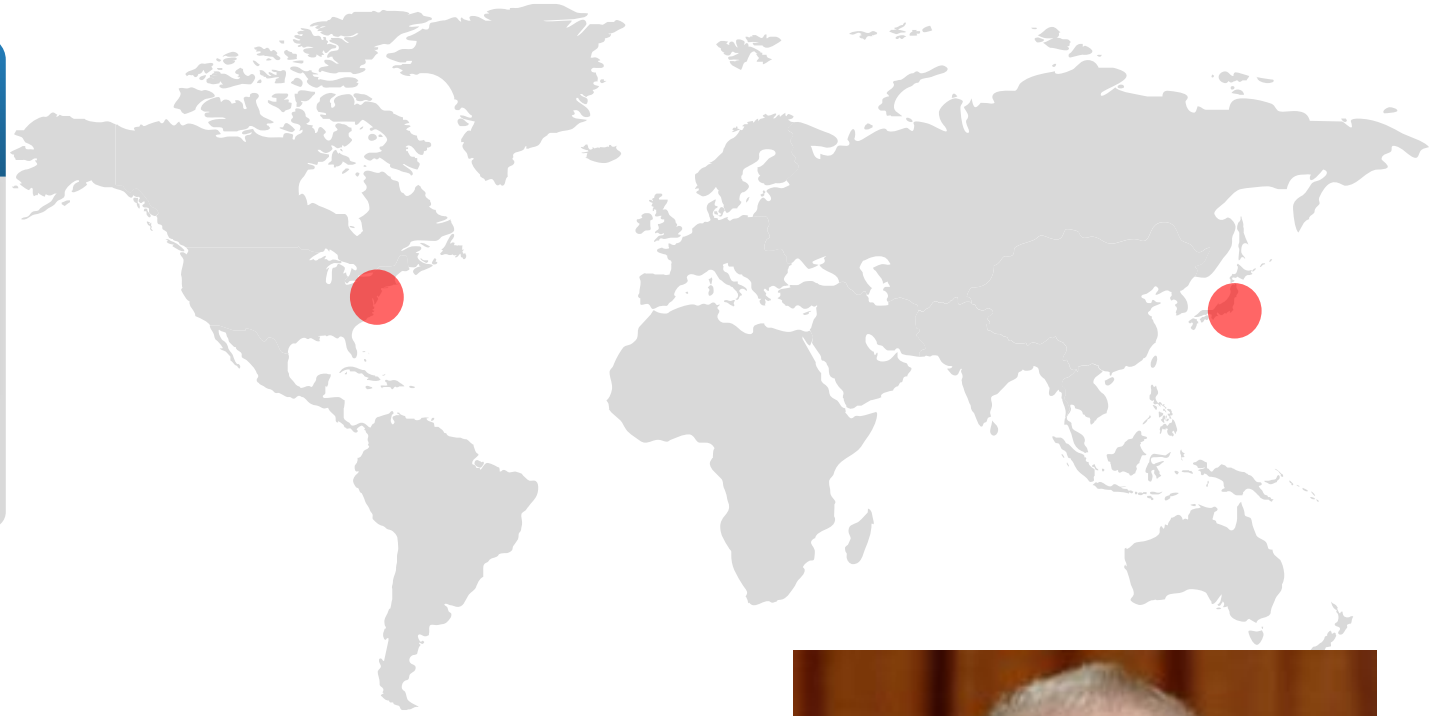
Statistics

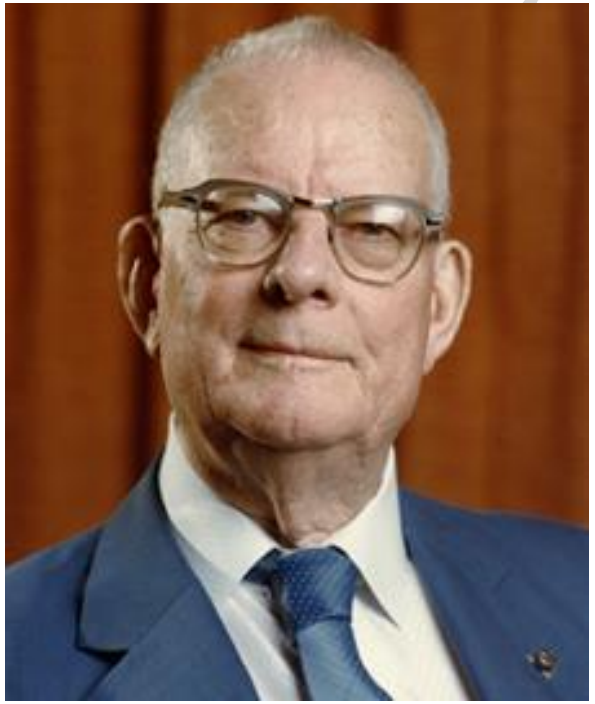
U.S.A.



Supermarkets : JIT

U.S.A.





Father of Quality

Japan

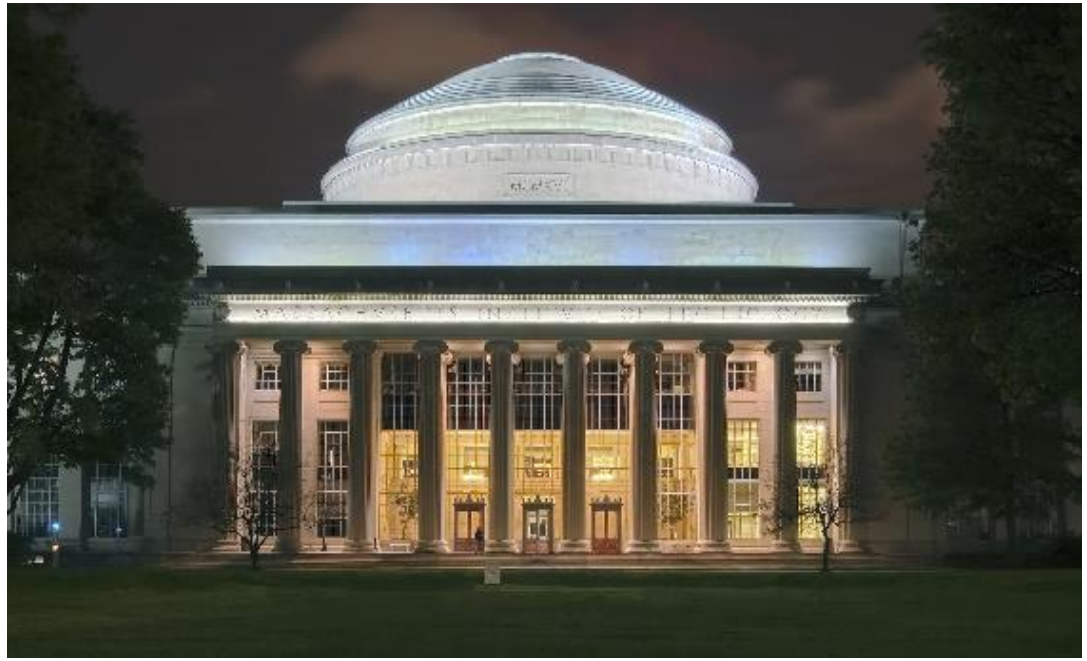
Toyota Production System

Japan

Toyota Production System – The Book

U.S.A.

Lean – John Krafcik, MIT



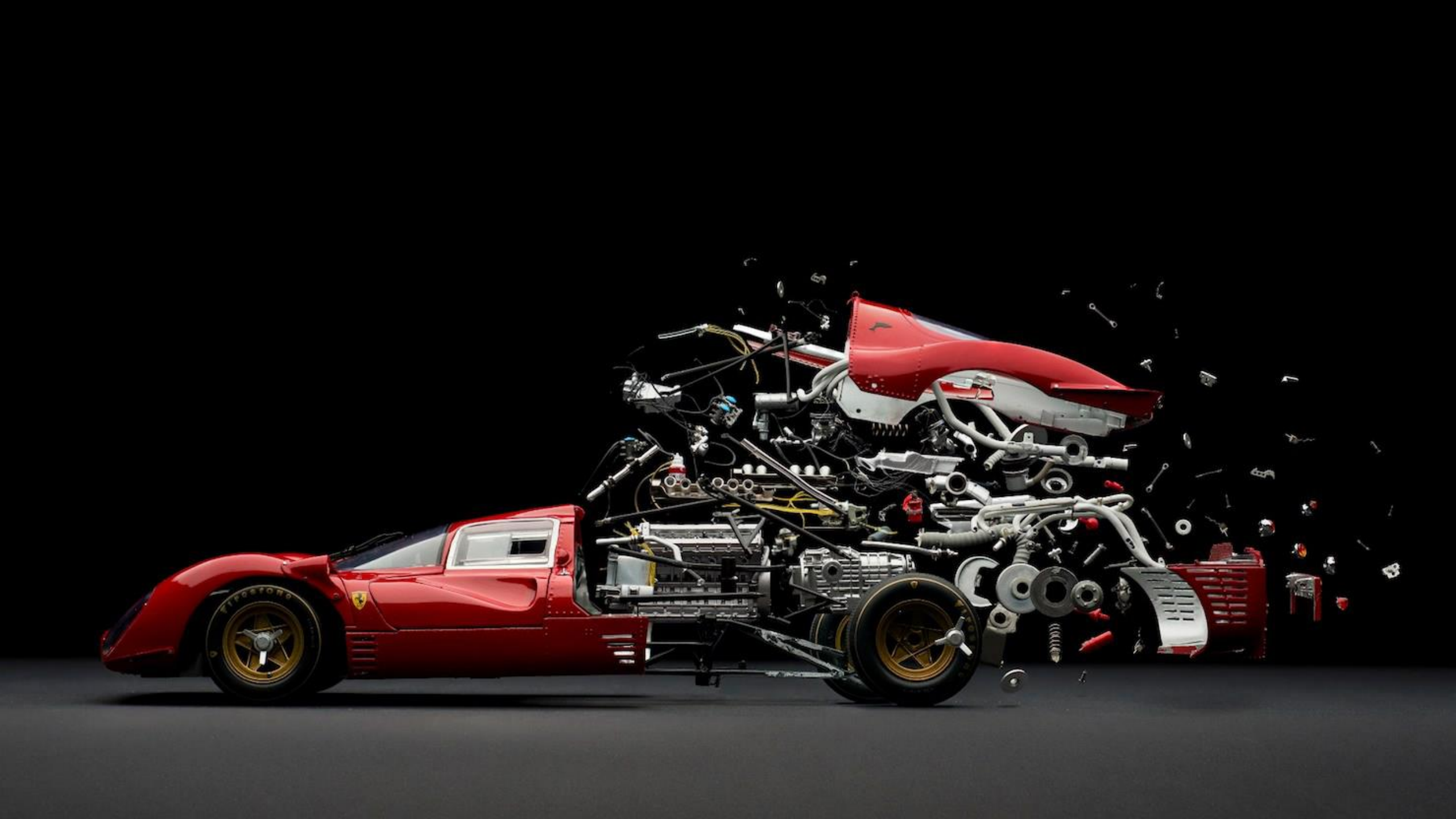
lean concepts

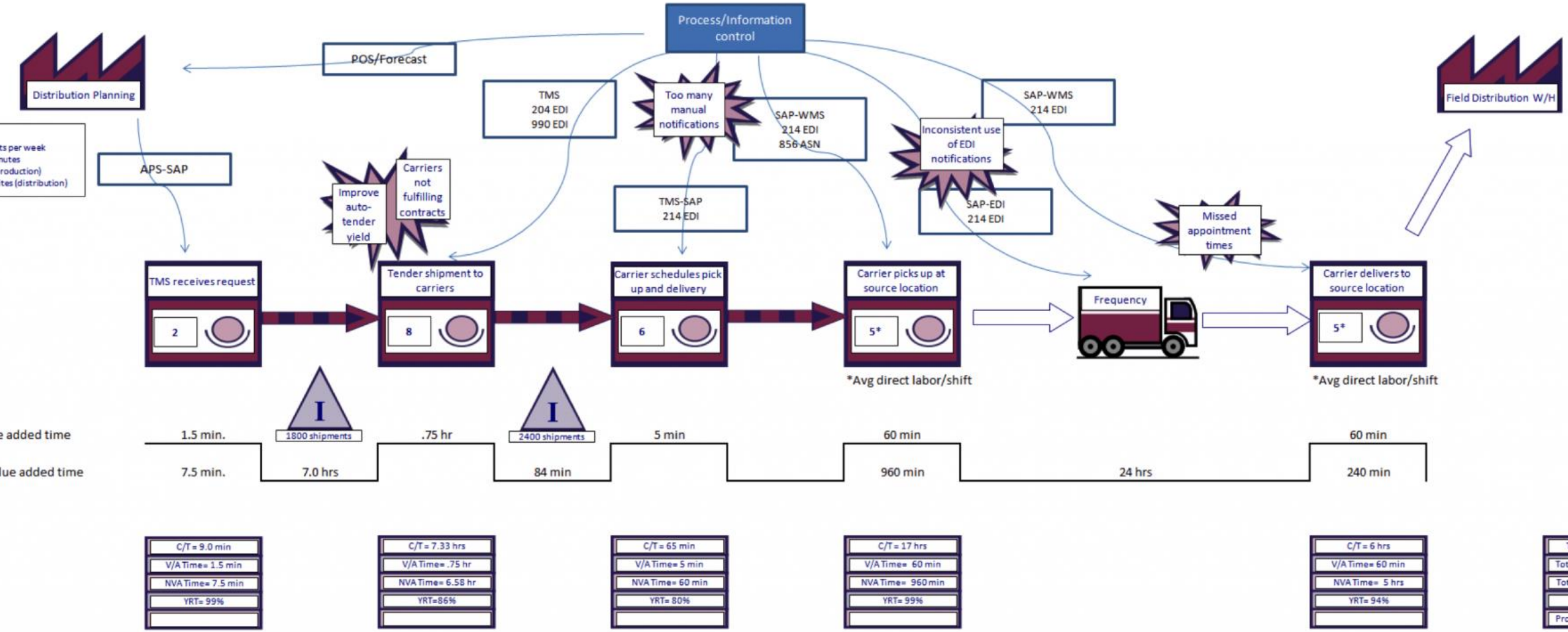

TRON


TRON


74 %
-23°
32
72
95
4G
58:34


74 %
-23°
32
72
95
4G
58:34




Process/Information control
POS/Forecast
Distribution Planning
Field Distribution W/H
APS-SAP
TMS
204 EDI
990 EDI
Too many manual notifications
SAP-WMS
214 EDI
856 ASN
SAP-WMS
214 EDI
Inconsistent use of EDI notifications
SAP-EDI
214 EDI
TMS-SAP
214 EDI
Improve auto-tender yield
Carriers not fulfilling contracts
Missed appointment times
TMS receives request
2
Tender shipment to carriers
8
Carrier schedules pick up and delivery
6
Carrier picks up at source location
5*
*Avg direct labor/shift
Frequency
Carrier delivers to source location
5*
*Avg direct labor/shift
1800 shipments
2400 shipments
e added time
1.5 min.
.75 hr
5 min
60 min
60 min
lue added time
7.5 min.
7.0 hrs
84 min
960 min
24 hrs
240 min
C/T = 9.0 min
V/A Time= 1.5 min
NVA Time= 7.5 min
YRT= 99%
C/T = 7.33 hrs
V/A Time= .75 hr
NVA Time= 6.58 hr
YRT=86%
C/T = 65 min
V/A Time= 5 min
NVA Time= 60 min
YRT= 80%
C/T = 17 hrs
V/A Time= 60 min
NVA Time= 960 min
YRT= 99%
C/T = 6 hrs
V/A Time= 60 min
NVA Time= 5 hrs
YRT= 94%


Finished
Artist Trading Cards
MOVIE
UNITED STATES POSTAL SERVICE

Defective Production

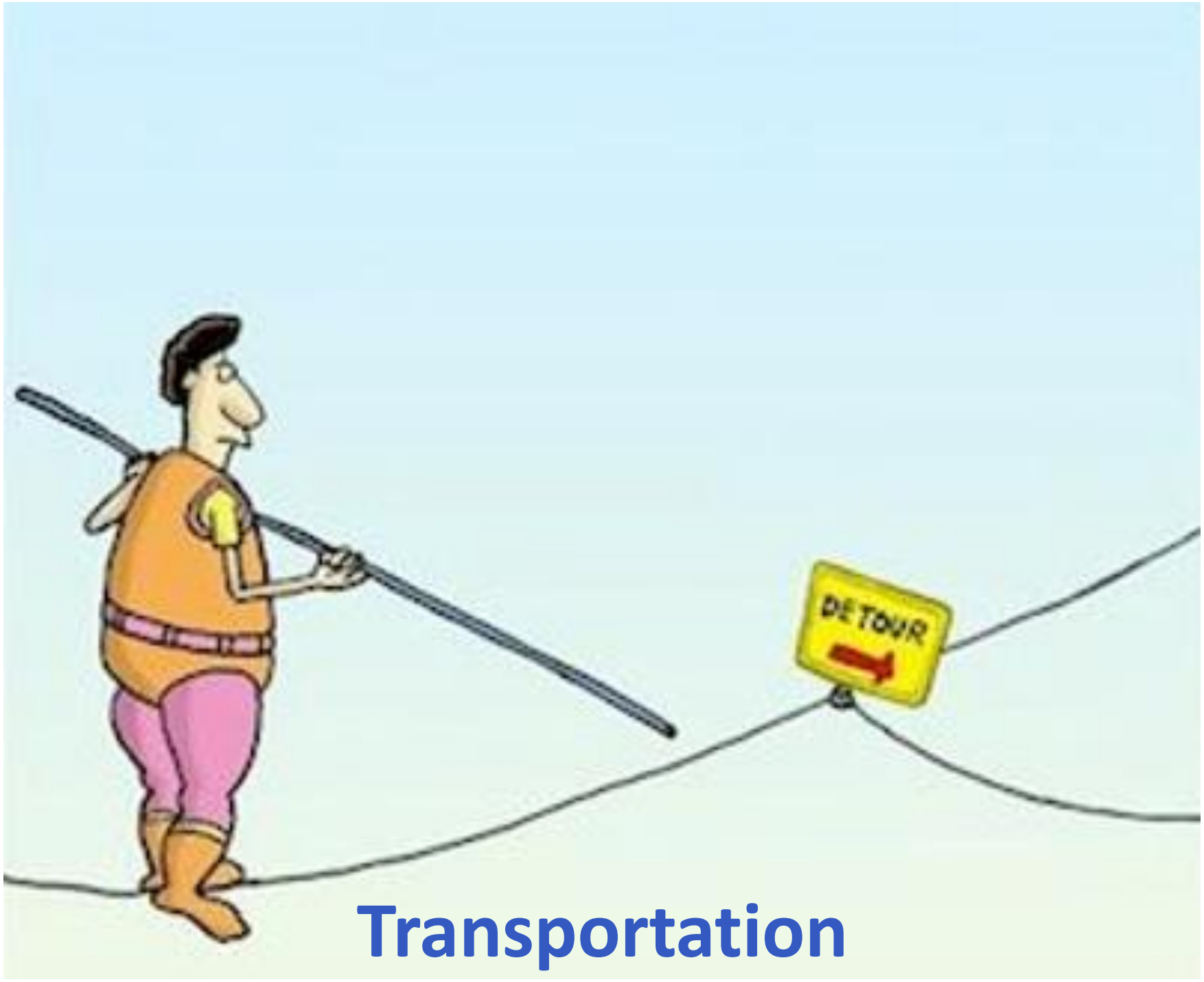
```
class Program
{
    static void Main(string[] args)
    {
        for (int i = 0; i < 10; i++)
        {
            Foo();
        }
    }

    static void Foo()
    {
        for (int i = 0; i < 40; i++)
        {
            string temp = "";
            Thread.Sleep(i);
            temp += i.ToString();
        }
    }
}
```

Overproduction

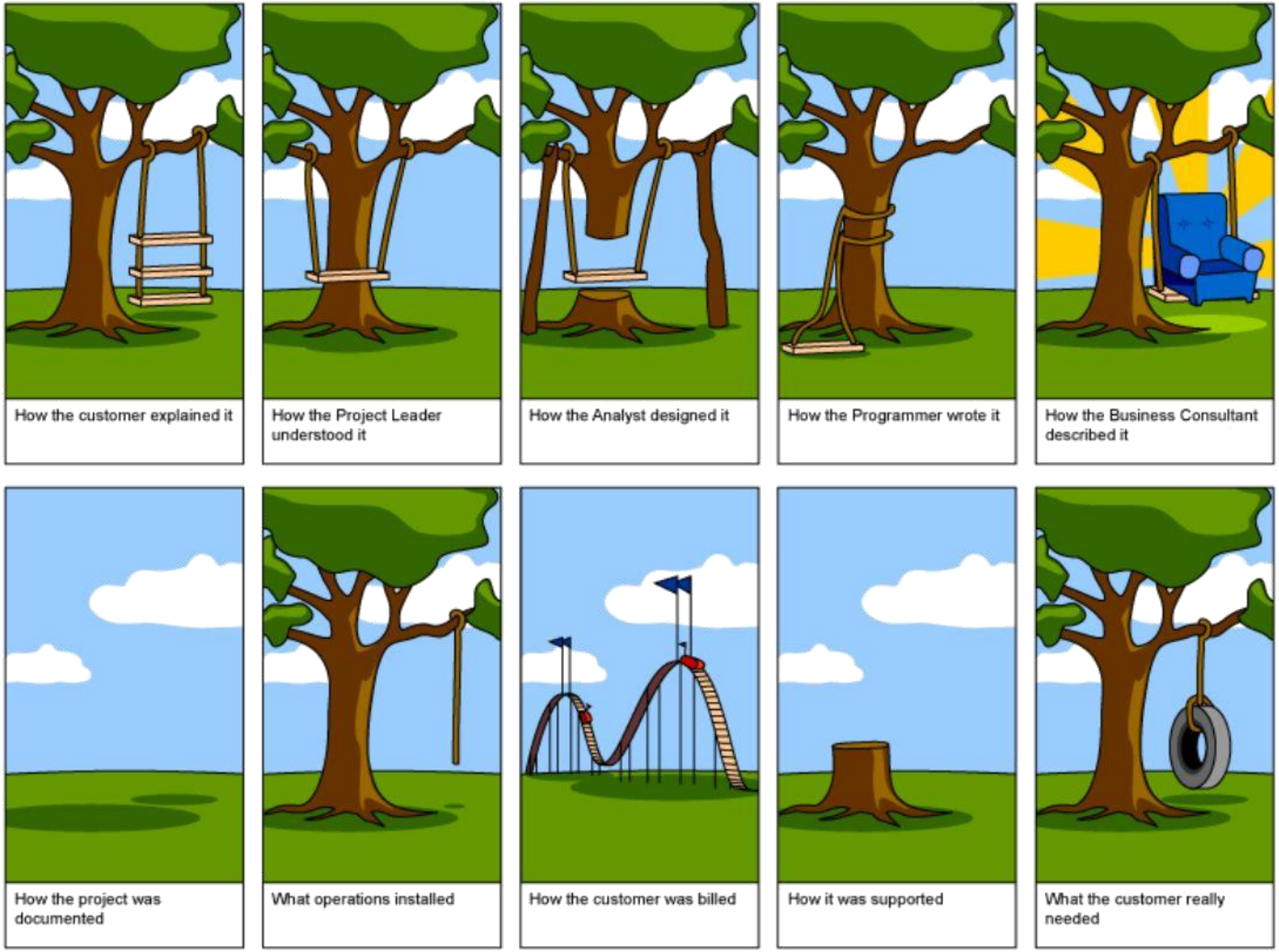
Waiting

Neglected Talent

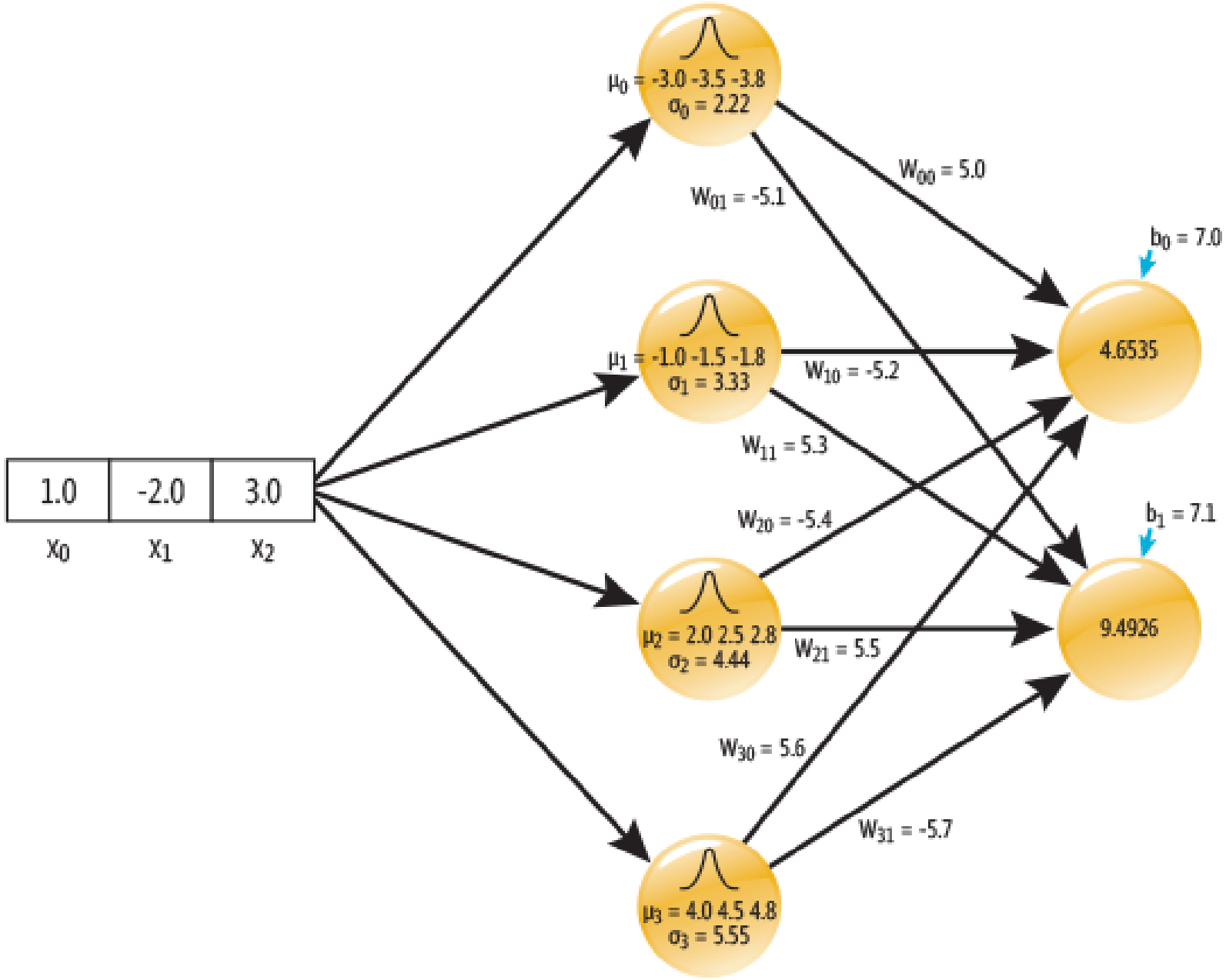


Transportation

Inventory


How the customer explained it
How the Project Leader understood it
How the Analyst designed it
How the Programmer wrote it
How the Business Consultant described it
How the project was documented
What operations installed
How the customer was billed
How it was supported
What the customer really needed

Motion



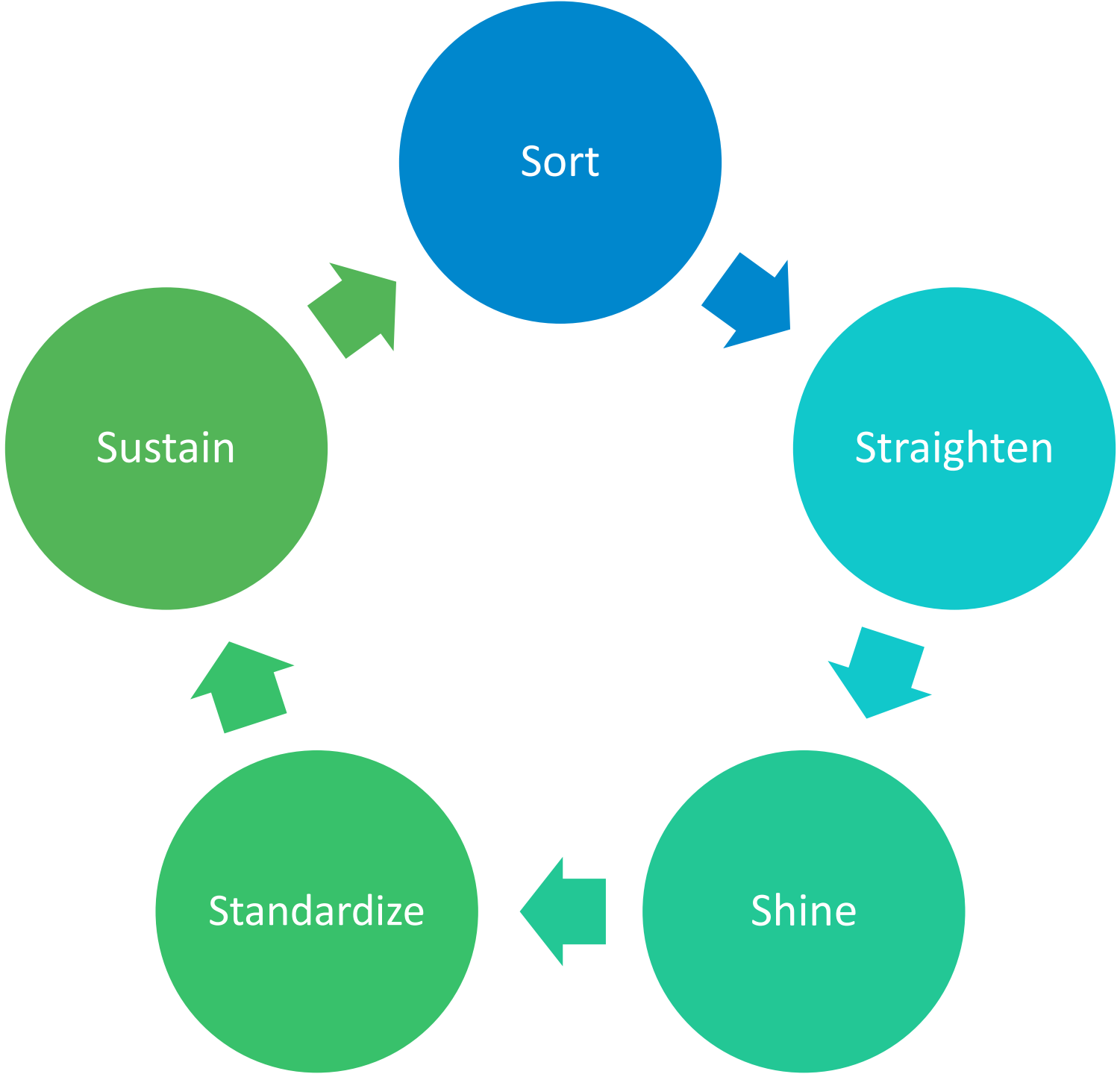
Excessive Processing

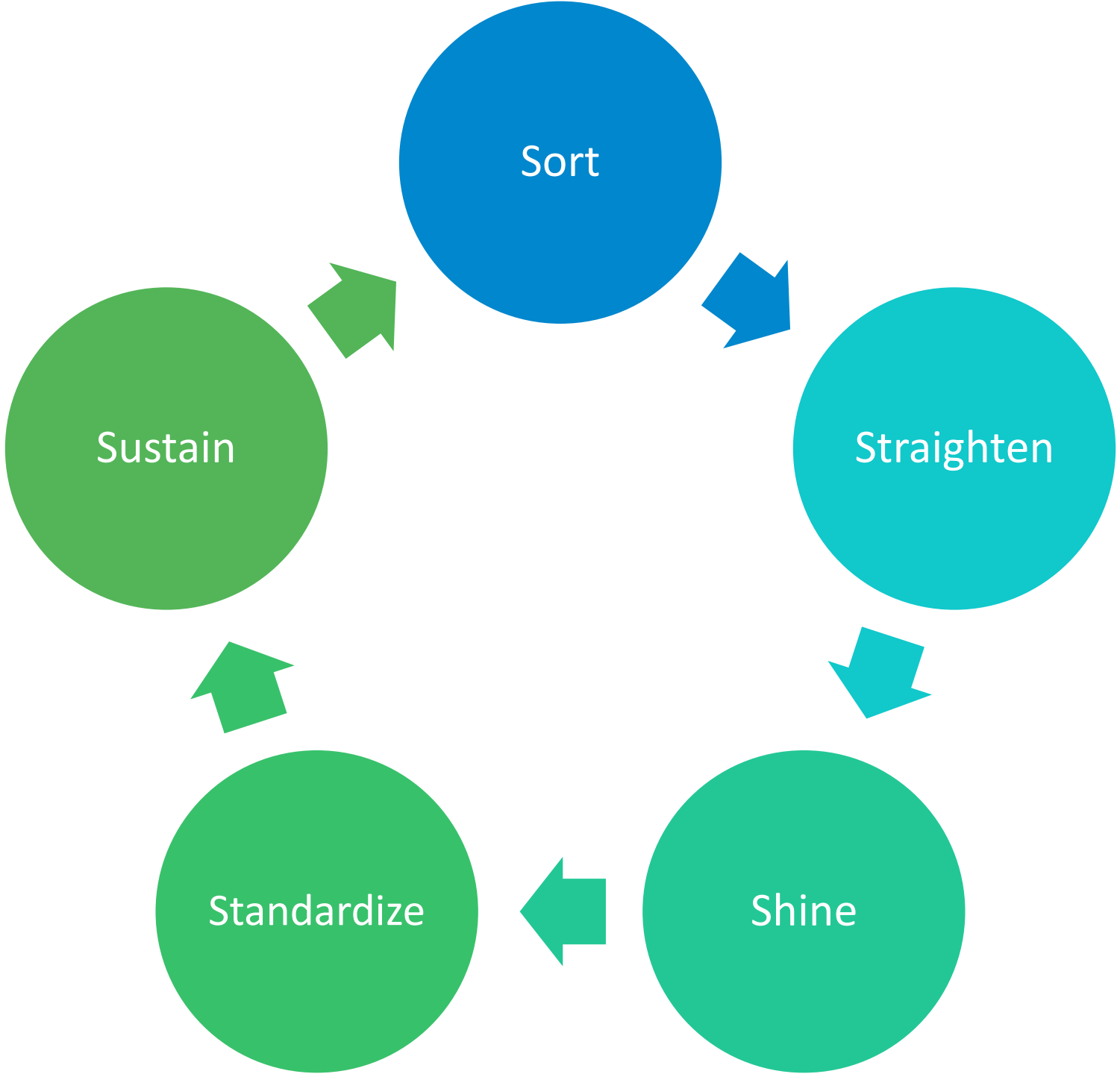
Defective Production
Overproduction
Waiting
Neglected Talent
Transportation
Inventory
Motion
Excessive Processing

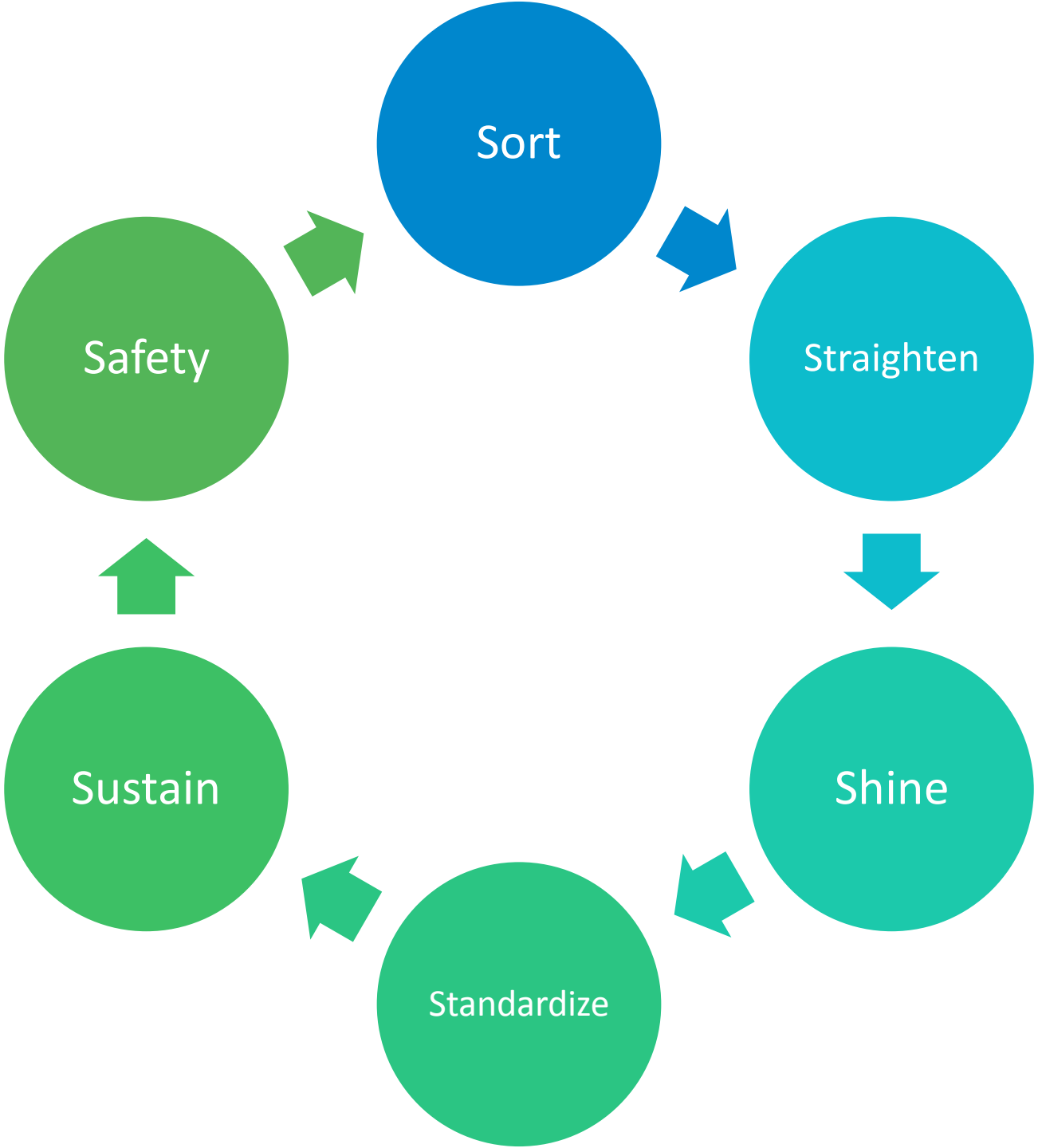
D O W N T I M E

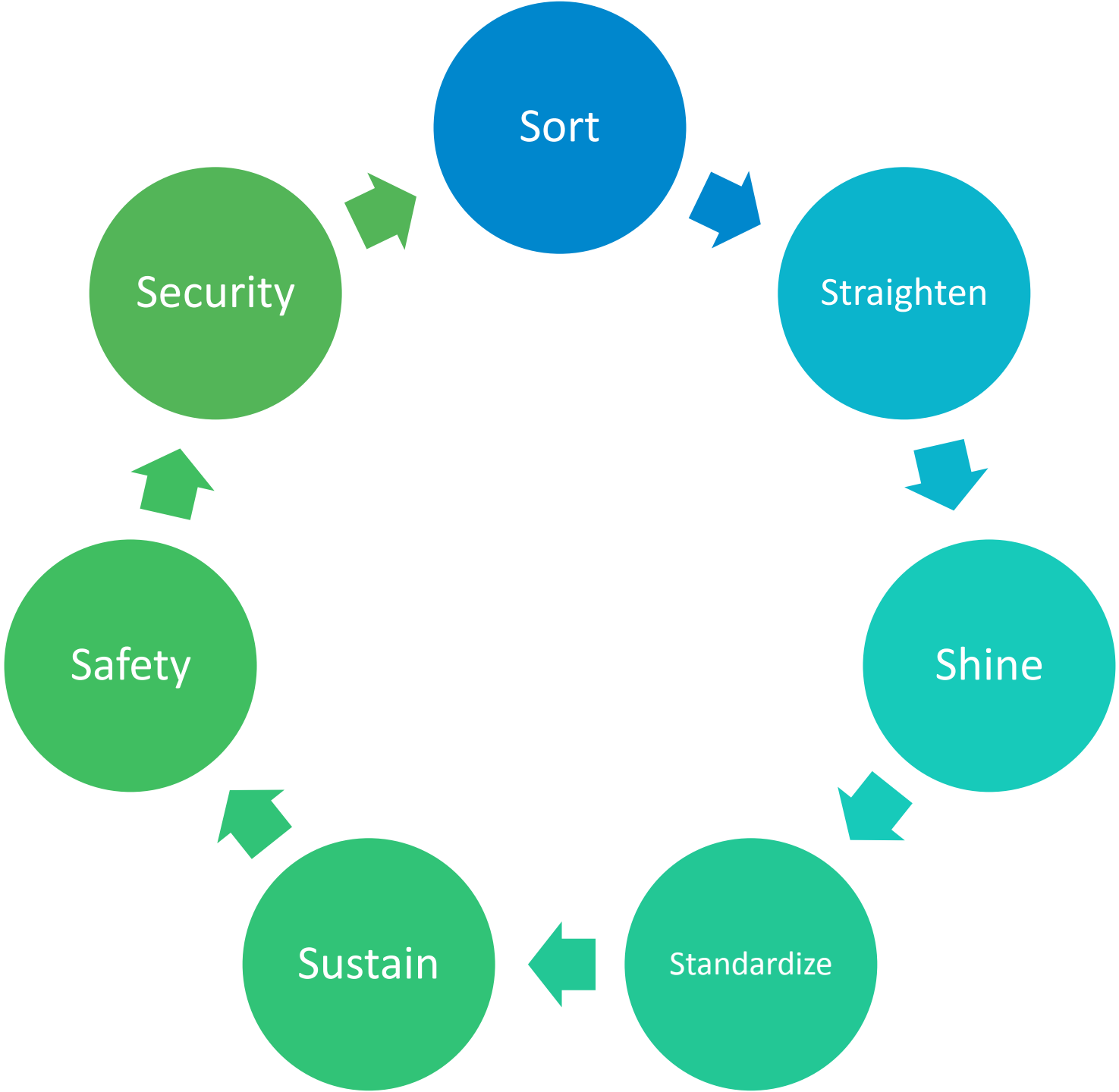
lean tools


10 x ALKALINE
CONAN 1
CONAN 2
CONAN 4
CONAN 5
MASTER MADNESS
MISERY LOVES COMPANY
FROM HELL


Sort
Straighten
Shine
Standardize
Sustain


Sort
Straighten
Shine
Standardize
Sustain


Sort
Straighten
Shine
Standardize
Sustain
Safety


Sort
Straighten
Shine
Standardize
Sustain
Safety
Security

Reduce lead-time of reworked items from 14.6d to 10d

June 10, 2011
C Perrone

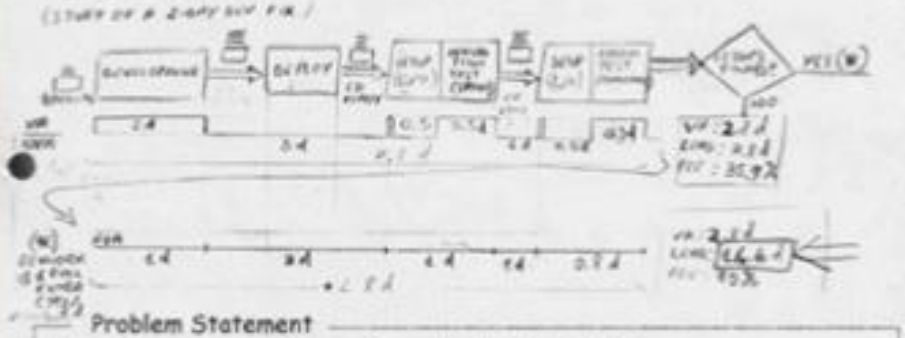
Background

Team is looking at improving its internal feedback loop to reduce cost of delay, particularly when rework is involved.

Current Situation

Lead-time of reworked stories: 14.6 days
Processing time: 2.8 days

Current State Map



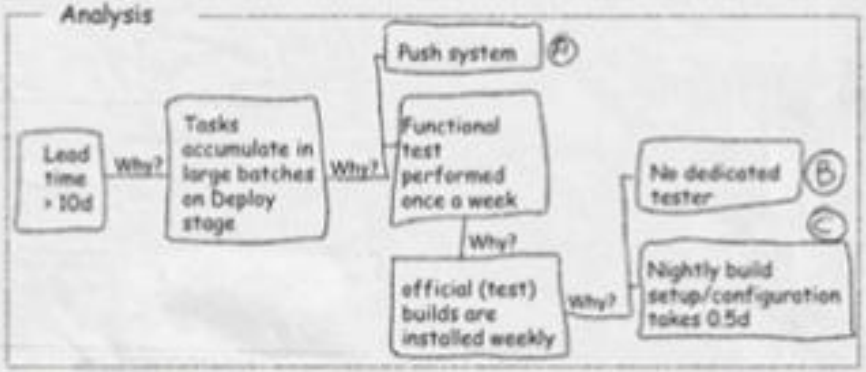
Problem Statement

Expectation: Lead-time of reworked stories: 10d
Discrepancy: Team takes 4.6d longer to deliver a reworked story
Extent: The problem affects about 15% of all stories
Rationale: If no action is taken, customers will continue to suffer delays

Target

Reduce lead-time of reworked items from 14.6d to 10d by July 31st 2011

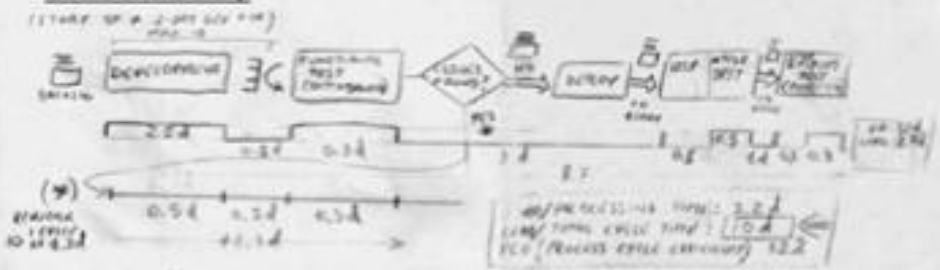
Analysis



Countermeasures

Cause	Countermeasure	Description	Benefit	Effectiveness	Feasibility	Impact
A	Limit WIP/Pull	Limit how many stories team can start in parallel	-improve flow -encourage small stories	+	++	0
B	Hire tester	Hire dedicated internal tester	eliminate dependency on external people and spend more time on testing	-	++	--
B	Do system Test internally	Devs that don't work on feature can test someone else's work	Reduces testing bottlenecks, improves knowledge sharing	+	+	-
B	SLAs with external testers	Create service level agreements between team and external testes	-more predictable flow -clear expectations -no "begging" -closer collaboration	++	+	-
C	"sattebance"	Test the latest version of a subset of component files skipping the full product setup	Don't need to wait for daily/weekly builds, reduce feedback delay between dev/test	++	+	-

Future State Map



Action Plan

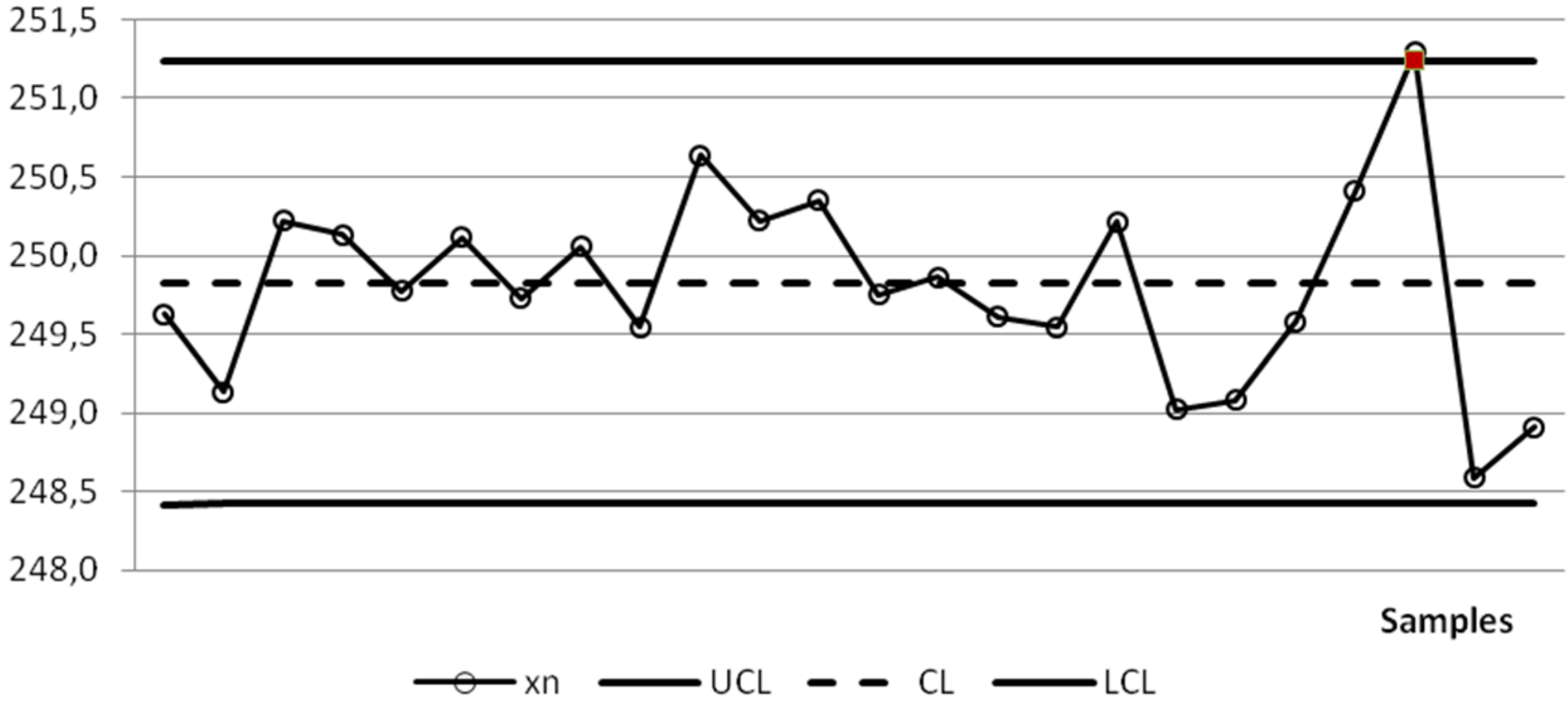
What	Who	Where	How	Proj. Completion	Actual completion
Vsm	Stef / Claudia	Team Room	Post-its	10/6	10/6
Trace processes metrics	Paola	Whiteboard	Mark at each standup	15/7	N/A
Adopt Sattebance procedure	Team	Team room	Agree policy	10/7	10/7
Limit WIP	Team	Whiteboard	Agree policy	27/6	27/6
Hire tester	Stef	Meeting room	Begging Mgmt to	Never	29/6
Agree internal testing policy	Team	Meeting Room	Retrospective	10/7	10/7
SLAs with external testers	Claudio/ Elena/ Stef	Meeting Room	Agree policy	10/7	15/7

Indicators

Item	Initial	15/7	31/7
Lead-time non-reworked items	7.8d	5d	5d
Lead-time reworked items	14.6d	6d	5d
WIP	15	9	6

Follow-up

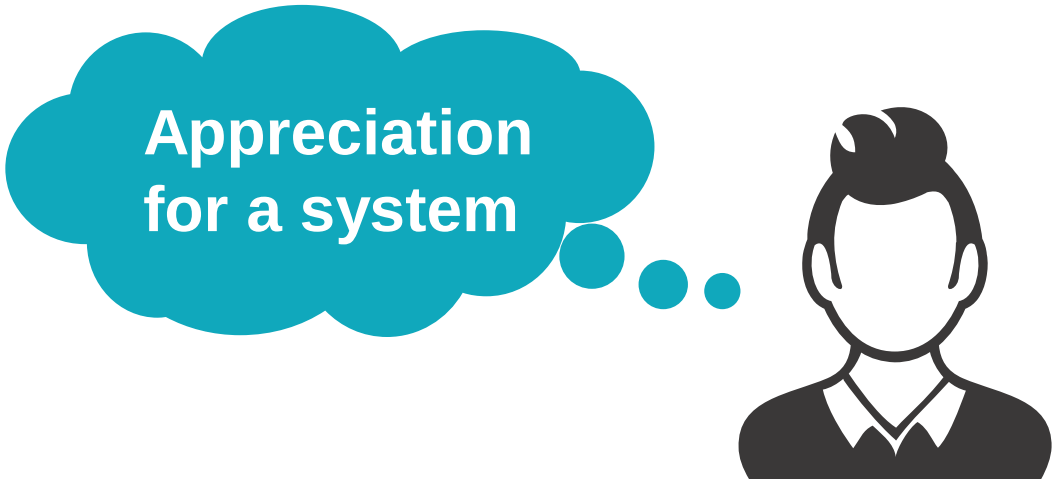
IF	THEN
Countermeasure plan failed	Begin A3 process to identify root cause of failed plan
Target achieved but problem could recur	Identify other root causes and find new countermeasures
Target achieved and problem won't recur	Share findings, standardize countermeasures, begin A3 process to reduce percentage of reworked items


251,5
251,0
250,5
250,0
249,5
249,0
248,5
248,0
Samples
xn
UCL
CL
LCL

PDSA Cycle

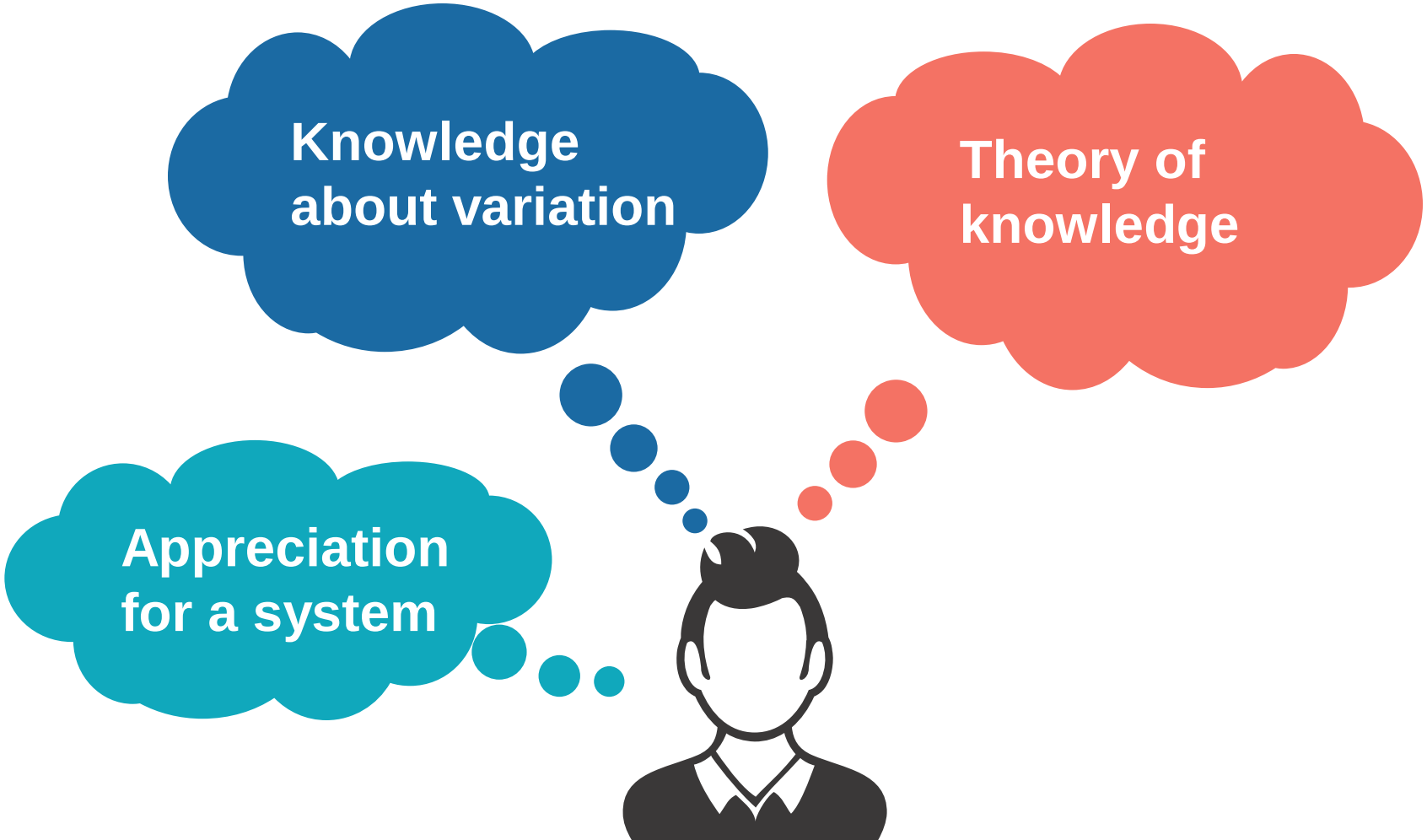

profound
knowledge

System of Profound Knowledge

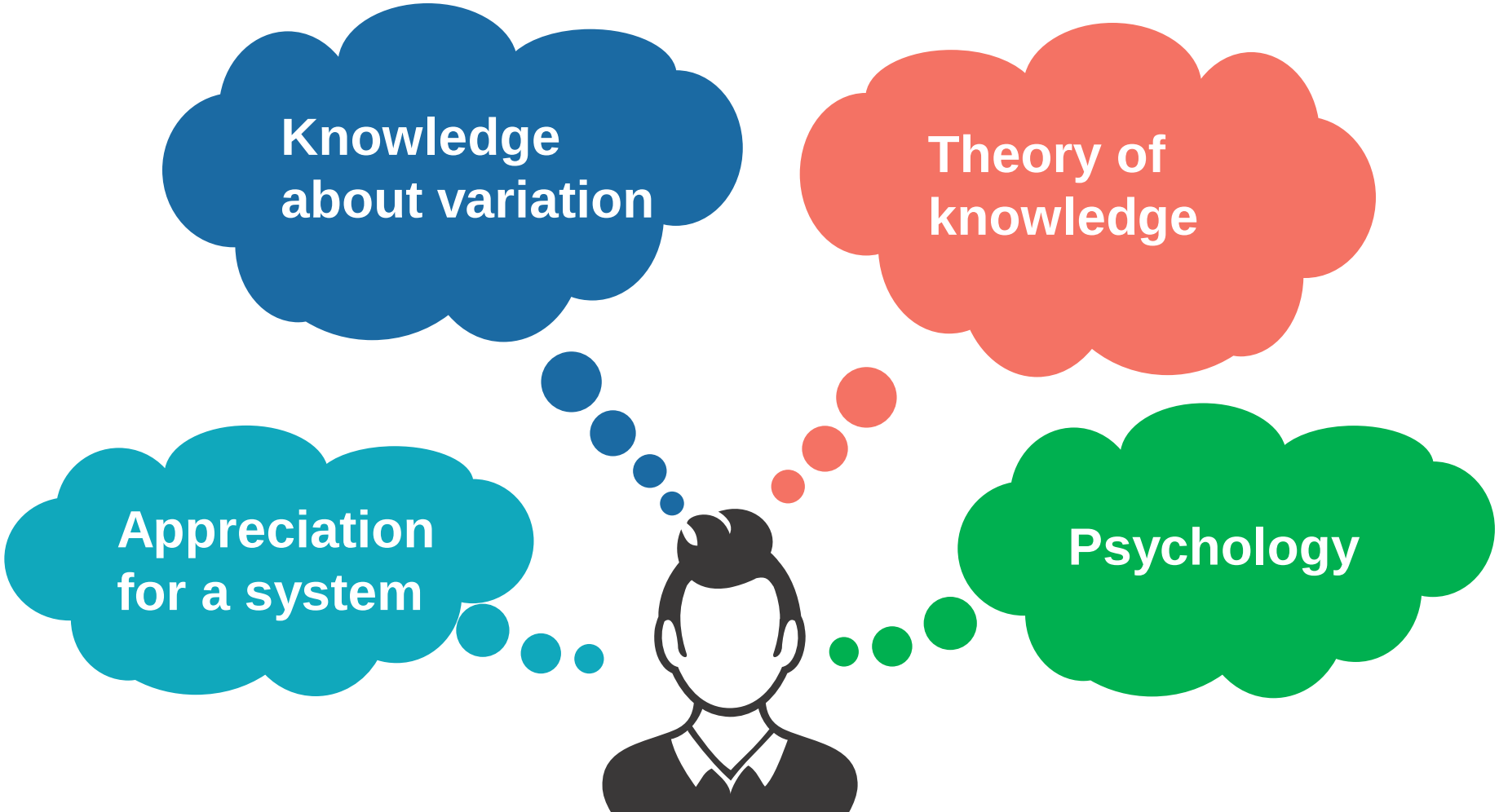


System of Profound Knowledge

System of Profound Knowledge



System of Profound Knowledge



applications

Software Project

- Aim of the project
- Feature List
- Infrastructure, Design
- Predictions

- Develop
- Deploy

- Outcome vs Aim
- Outcome vs Prediction
- Study the process

- Rework or Deploy
- Change Process, Aim or Predictions

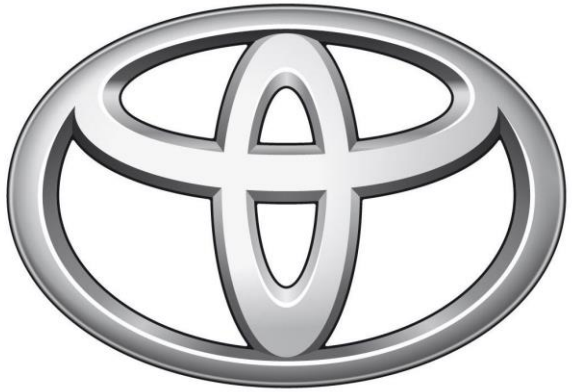
Software Features

- Aim of the feature
- Acceptance criteria

- TDD, BDD
- Coding

- Tests
- Outcome vs Aim
- Outcome vs Prediction
- Process

- Deploy
- Rework
- Change Process, Aim or Predictions



TOYOTA

HONDA

Mercedes-Benz