



How to bring Lean into government agencies?

Opportunities & Obstacles to Lean in Government – case Finland



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Infrastructure provides a platform for growth in Finland

€ Infrastructure assets

20 billion €

€ Current spending on ongoing projects

2.6 billion €

€ FTA's share of the total infrastructure market

1/5

€ Annual budget approximately

2.1 billion €

FTA personnel, permanent

600
experts

Number of people the FTA employs indirectly through projects

12,000

Service Providers estimate FTA every year

Procurement capability

Network skills

Partnership skills



We are not yet in top level

Needs to development from procurement of contracts in FTA:

- The sharing of risks and benefits in contracts
- The selection criteria, which are encouraging contractors to develop their expertise and innovations

Strategic Targets for Lean

US Construction Value Put in Place per Employee

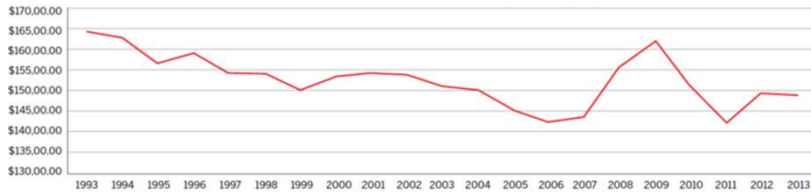
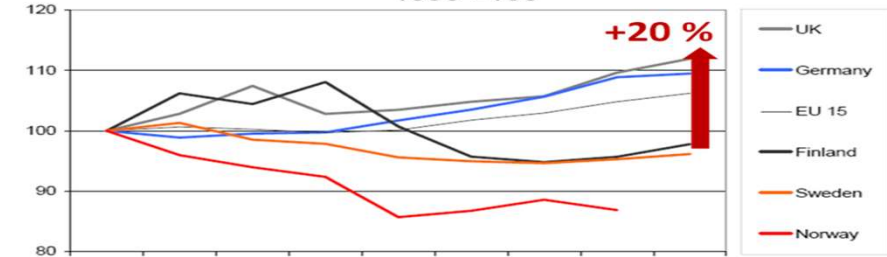


CHART CREATED BY MATT STEVENS WITH DATA FROM THE US DEPARTMENT OF LABOR AND THE US BUREAU OF ECONOMIC ANALYSIS.

- To improve productivity of the entire industry
- To change the culture into a more open and trusting way of working
- To improve the customer satisfaction for end products – faster, better quality and cheaper
- To develop innovativeness and knowledge
- We do believe there is huge potential, which is connected to the way of acquiring services and cooperating during the project

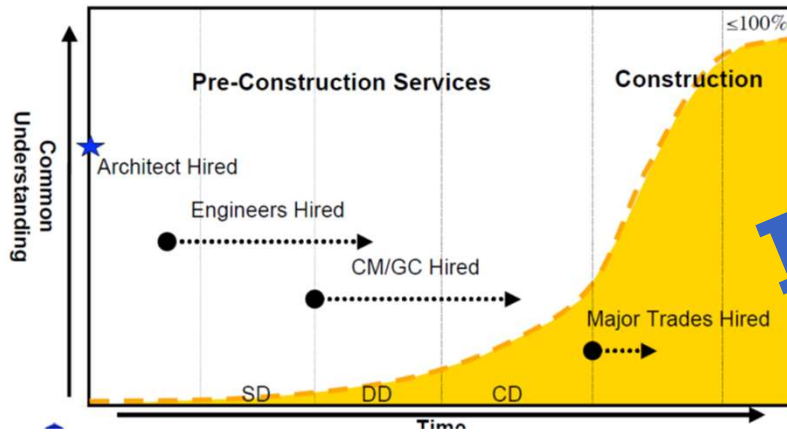
Rakentamisen tuottavuus, arvonlisäys työtuntia kohden 1995 = 100



Lähde: Groning



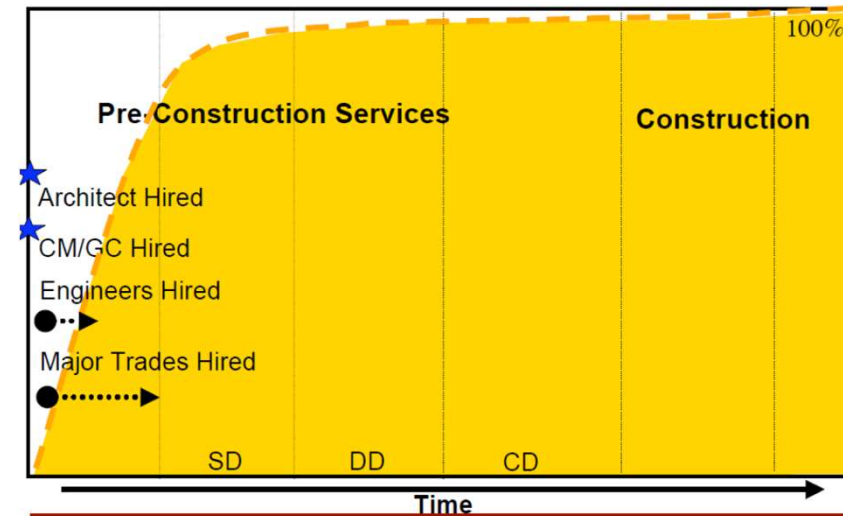
Traditional Project Delivery Level of Common Understanding



- Confrontation
- Extra works
- Problems with time schedules
- Owner and service providers do not have common goals
- => Prerequisites for VfM do not exist
- => Low productivity

International Studies

Integrated Project Delivery Level of Common Understanding



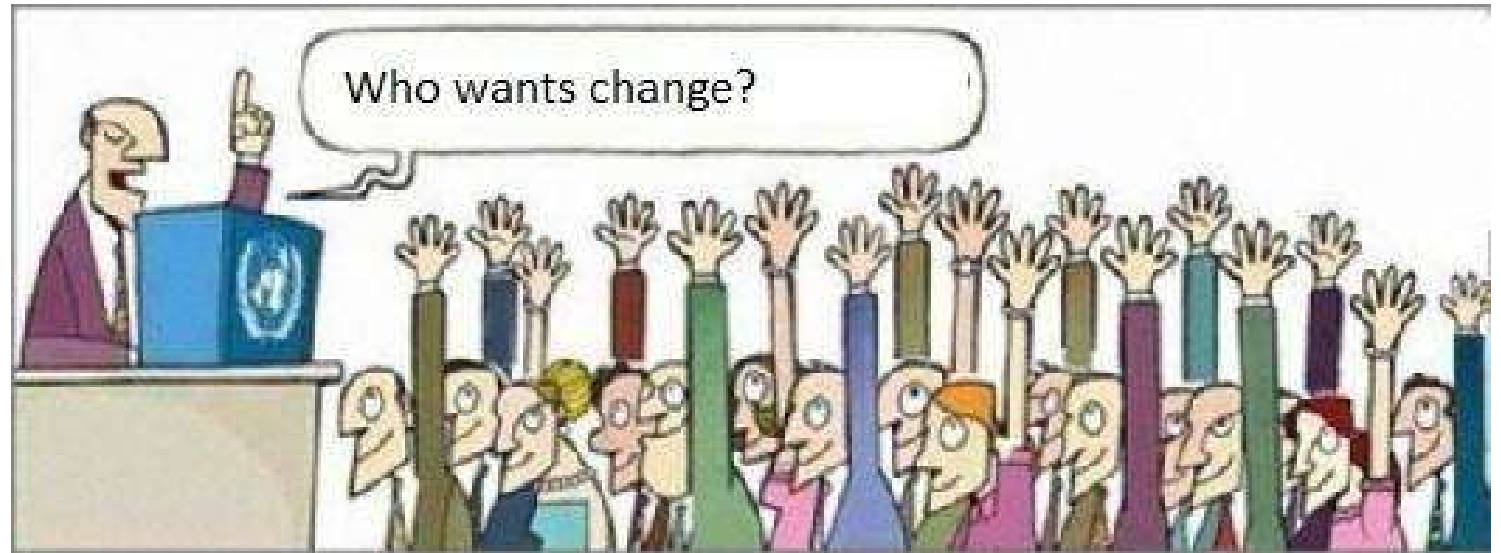
Early Contractor involvement

- Shared goals
- Better supply chain management
- Real possibilities for innovations
- Enables better VfM approach in project management

⇒ Prerequisites for increasing productivity

⇒ Productivity improves

- If you want a change, you need somebody to kick it off !!!



Leading Public Organizations in FIN

Liikennevirasto



FINAVIA
for smooth travelling



- Promoting change
- An example of leading owner organizations and people
- Dialogue between the owner organizations
- Dialogue with the industry

FIRST PILOT PROJECTS 2011

- Liekki-project (Railway renovation) 2011-15, 100 M€
Finnish Transport Agency
- Vuolukiventie Campus renovation 18 M€, 2011-13
University of Helsinki, Center for the Premises and Facilities
- Tampere Tunnel 2011-17, 180 M€
City of Tampere, Finnish Transport Agency



GROUP PROJECT 2013-2016

- Integrated Project Delivery for Finnish Public Owners = IPT
- 11 public organizations, 13 real pilot projects
- Key Question: How the Finnish public owners will develop and manage the new way to delivery projects using IPD models?



GROUP PROJECT 2017-2019

- Integrated Project Delivery for Finnish Public Owners
= IPT2
- 13 public organizations, 13 real projects
- Key Question: How we can develop our culture by developing people; better value and productivity



Possible Obstacles to use Lean

- Benefits are obvious but it is crucial for Owner to understand the risks
- The poorly planned and implemented selection process can ruin the entire process - it requires
 - resources, commitment, expertise ...
- An expanded risk range - beyond your own abilities
- Changing a key person can seriously damage your team's performance
- It requires more commitment from all - including the agency/company directors
- Does it exist real leadership inside owner's organization?



3000 M€ IPD Projects in 6 years

Project	M€	2011				2012				2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1 Lielähti-Kokemäki radan peruskorjaus	100																												
2 Vuolukiventie 1b:n peruskorjaus	18																												
3 Tampereen Rantatunneli	180																												
4 Helsinki-Vantaan liikennealueiden päällystyöt ¹⁾	20																												
5 Terveystieteiden ja hyvinvoinnin laitoksen päärakennus ²⁾	18																												
6 Järvenpään sosiaali- ja terveystalo	51																												
7 Franzenian peruskorjaus ³⁾	6																												
8 Lahden matkakeskus	19																												
9 Pakilan alueurakka	8																												
10 As. Oy Helsingin Retkeilijänkatu 3-7 ⁴⁾	9																												
11 Jyrkkälän lähiön julkisivuperuskorjaus	28																												
12 As. Oy Gunillankallio 10	13																												
13 VTT:n ydinturvallisuustalo ²⁾	30																												
14 Joensuun oikeus- ja poliisitalo ²⁾	30																												
15 Naantalın voimalaitoksen allianssiurakka	45																												
16 Yliopistonkatu 4 peruskorjaus	25																												
17 Kainuun keskussairaalan peruskorjaus ja laajennus	120																												
18 VT 6 peruskorjaus	76																												
19 Kempeleen TK	14																												
20 Hiukkavaaran monitoritalo	24																												
21 LaNa (Lasten ja naisten sairaala) ⁵⁾	60																												
22 Kotkan poliisitalo ²⁾	20																												
23 Espoonlahden kirkko ⁶⁾	8																												
24 Tampereen raitiotie	280																												
25 Turun Syvälahden koulun allianssiurakka	28																												
26 Finavian Asematason allianssiurakka	100																												
27 Jakomäen keskiosan kehittäminen	50																												
28 Tammelan stadion	60																												
29 Pohjankartanon koulusaneerausohjelma ⁷⁾	10																												
30 Pitkäkankaan koulusaneerausohjelma ⁷⁾	10																												
31 Finavian terminaali laajennus ⁶⁾	200																												
32 Harppuunakortteli ⁷⁾	100																												
33 Äänekosken radan peruskorjaus	80																												
34 Rataverkon KP2-palveluallianssi	25																												
35 Tesoman hyvinvointipalvelut	140																												
37 Suomenlinnan huoltotunneli	7																												
38 Yliäärin koulun	22																												
39 Raide-Jokeri	275																												
40 Lahden eteläinen kehätie - Allianssi	150																												
41 Vantaan koulut 2 kpl	40																												
42 Kuopion uusi sairaala	120																												
43 Tiestötietojärjestelmä- ja palvelut	8																												
44 Tikkurilan kirkko	44																												
44 Keravanjoen yhtenäiskoulu	32																												
45 Vaasan sairaala H-uudisrakennus	110																												
46 Pakilan palvelurakennukset -allianssi	40																												
47 Infra-alan kustannuslaskentajärjestelmä	8																												
48 Kruunusillat-allianssi	120																												
Total	2981																												

Public Owners: IPT2 Project

2014-16 Project level



Foundation

- 11 Public organizations
- 11 Pilot Projects
- IPD Procurement
- IPD Agreements and commercial models
- IPD phases
- Lean principles and some tools

2017-19 Organization level



Producing value and improving productivity

- 13 Public Organization
- 13 Projects
- Building new culture
- Challenging and educating people
- Lean processes and tools
- Creating value and reducing waste

Industry level



#1 in Using Integrated Projects

- New strategies
- New business models and opportunities
- Focus to operational and lifecycle value
- Something we have not seen yet

The Global Project of the Year 2018





Thank you

Nothing
teaches us better than our own
experiences!