



/ Procuring Innovation in the Transit Industry

As an Example: Fare Collection Systems

**Manfred Troll,
Product Line Manager Back End Systems**

There Will Always Be Challenges Upgrading To New Technology

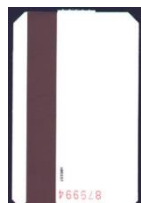


40 YEARS



Microprocessors
used in FCS

Multi-ticket
type printer



Mag-stripe
tickets

Credit Card Terminals



Validating
farebox



Account-based
ticketing

1978

1984

1991

1993

1995

1996

2003

2013

2016

2018+



1st Microprocessor
controlled TVM

Touchscreens
used in TVMs



Smart Cards



Modern back-end system



PCI DSS



MaaS



Fare collection
systems

SCHEIDT&BACHMANN 

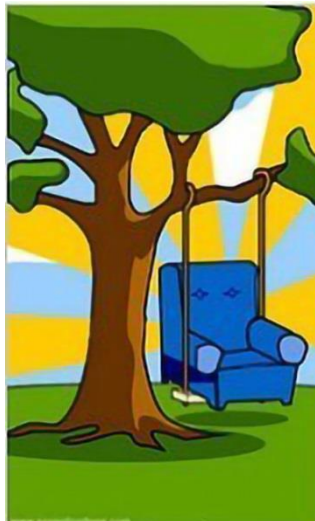
Opportunity 1: Specify requirements

... and not the solution

Specifying solution and technology may require higher development efforts, increases budget, and hinders innovation



What the Agency
Wanted



What the Vendor
Wanted to Build



Vendor's Response to
the RFP

Opportunity 2: The procurement process

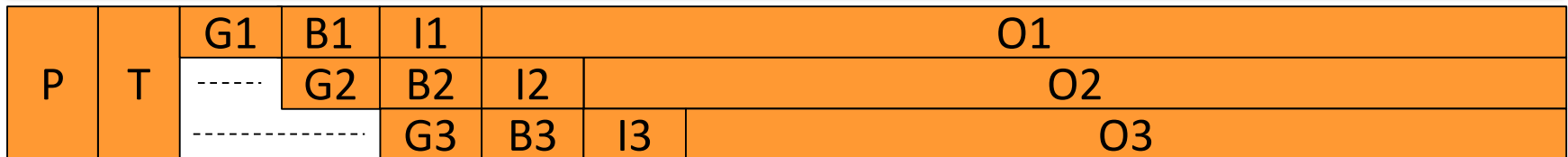
Traditional process – at once



Traditional process – phased approach



Agile process



G: grooming

10 -15 years

Opportunity 3: New commercial models

Moving CAPEX to OPEX increases financing demands for the vendors

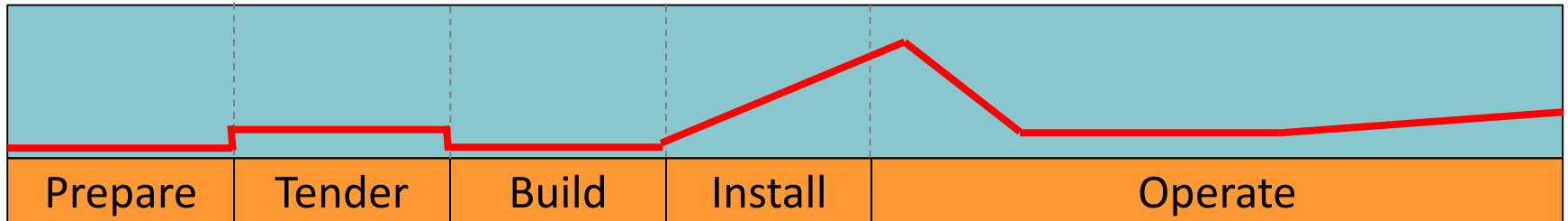
Applying the attractive financing conditions the agencies enjoy would lower the total budget

Revenue share type price components require de-risking components

- Transaction guarantees lower financial risks and therefore the overall budget
- Service interruptions or shortages out of vendors responsibility shall be compensated by the agency

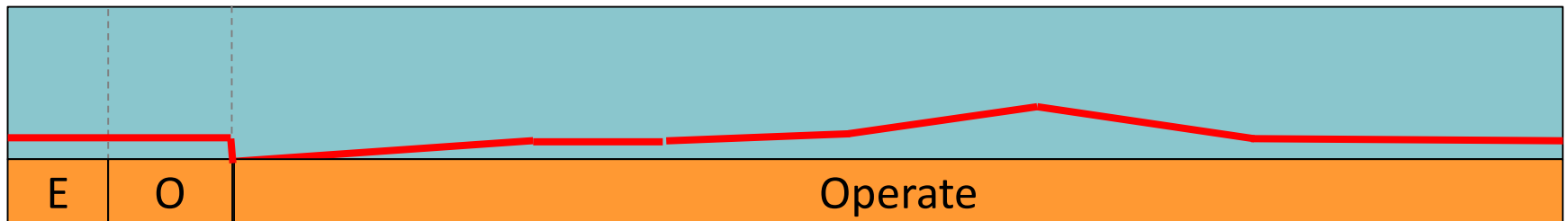
Opportunity 4: New operational models

Traditional procurement process



Long lead time / low standardization / high budget

Cloud ticketing



High standardization / fast onboarding / pay-per-use / always up2date / low budget due to economy of scale

Thank you for your attention!



Visit us:

