# Large Scale Scrum

More with



Elad Sofer - Practical Agile



### What should we cover?

Write down the questions you have about Large Scale Scrum.

Each question - One sticky note





Konosuke Matsushita [1979 WD management visit to Japan speech]

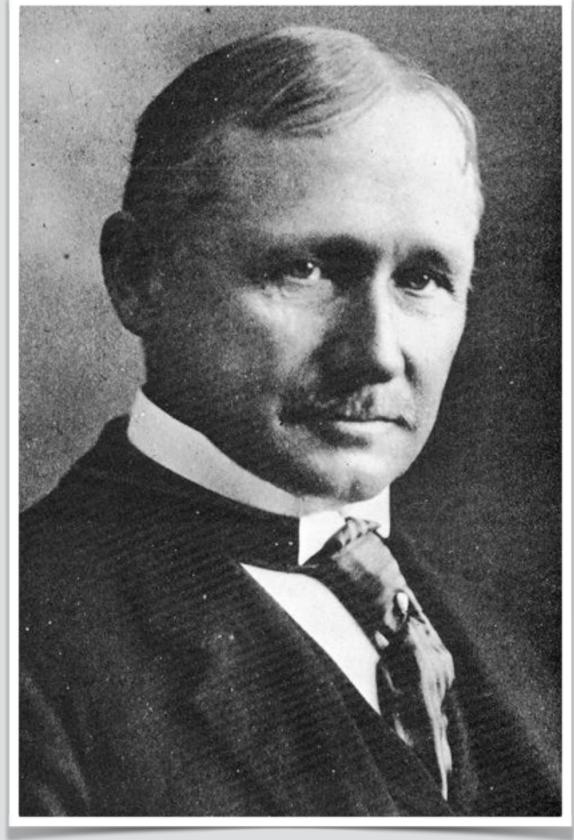
"We will win and you will lose. You cannot do anything about it because your failure is an internal disease.

Your companies are based on Taylor's principles.

Worse, your heads are Taylorized, too.

You firmly believe that sound management means executives on one side and workers on the other, on one side men who think and on the other side men who can only work.

For you, management is the art of smoothly transferring the executives' ideas to the workers' hands."



Frederick Winslow Taylor (1856 - 1915)

There is **no question** that the cost of production is lowered

by **separating** the work of **planning** and the **brain work** as much as possible

from the manual labor



"We have passed the Taylor stage. We are aware that business has become terribly complex. Survival is very uncertain..

..We know that the intelligence of a few technocrats, even very bright ones, has become totally inadequate to face these challenges. Only the intellects of all employees can permit a company to live with the ups and downs and the requirements of its new environment. Yes, we will win and you will lose. For you are not able to rid your minds of the obsolete Taylorisms that we never had."

# Taylorizm is not a good idea.



Process prescription is not a good idea



LeSS is not a good idea.

Except when...

### Shu - Ha - Ri



Apprentice = Follow the rules and practice until you reach a good level



Journeyman = Start using the rules and use a sensei to explore improvement options



Master = Create new rules and become a sensei (teacher) for new apprentices





# How did we get here?

### Larman's Laws of Organizational Behavior

- Organizations are implicitly optimized to avoid changing the status quo of middle- and first-level manager and "specialist" positions & power structures.
- 2. As a corollary to (1), any change initiative will be reduced to redefining or overloading the new terminology to mean basically the same as status quo.
- 3. As a corollary to (1), any change initiative will be derided as "purist", "theoretical", "revolutionary", "religion", and "needing pragmatic customization for local concerns" which deflects from addressing weaknesses and manager/specialist status quo.
- 4. Culture follows structure.

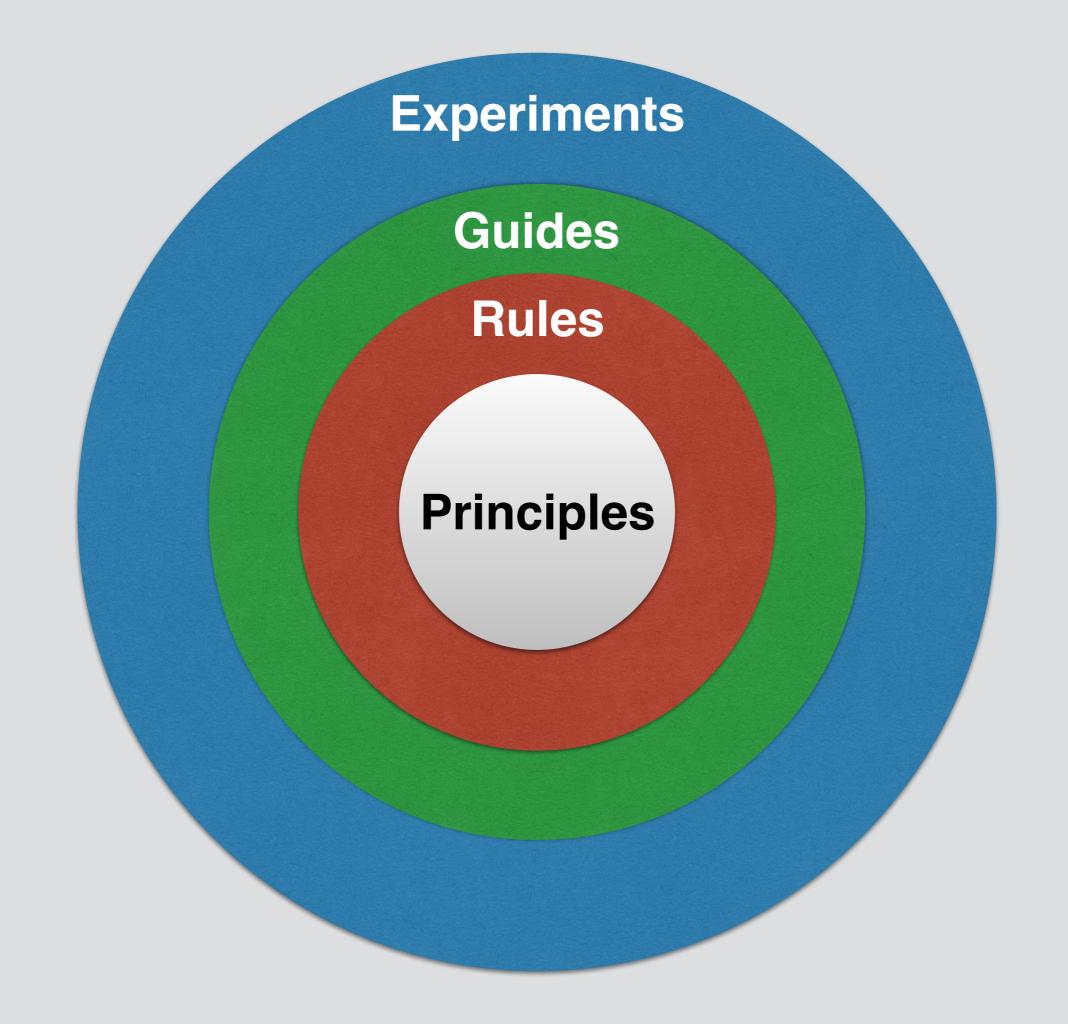
(just like scrum...)

For large groups, LeSS hits the sweet spot between defined concrete elements and empirical process control.

and...

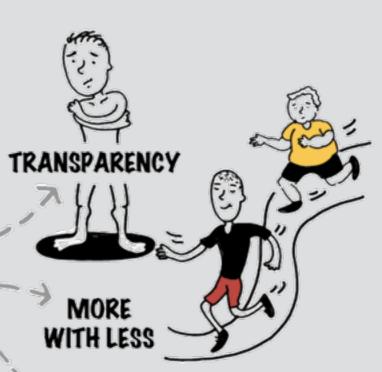
There are no best practices.

Only good practices within a specific context









QUEUEING THEORY



EMPIRICAL PROCESS CONTROL



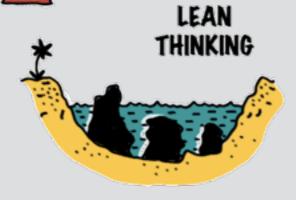
SYSTEMS THINKING



WHOLE PRODUCT FOCUS



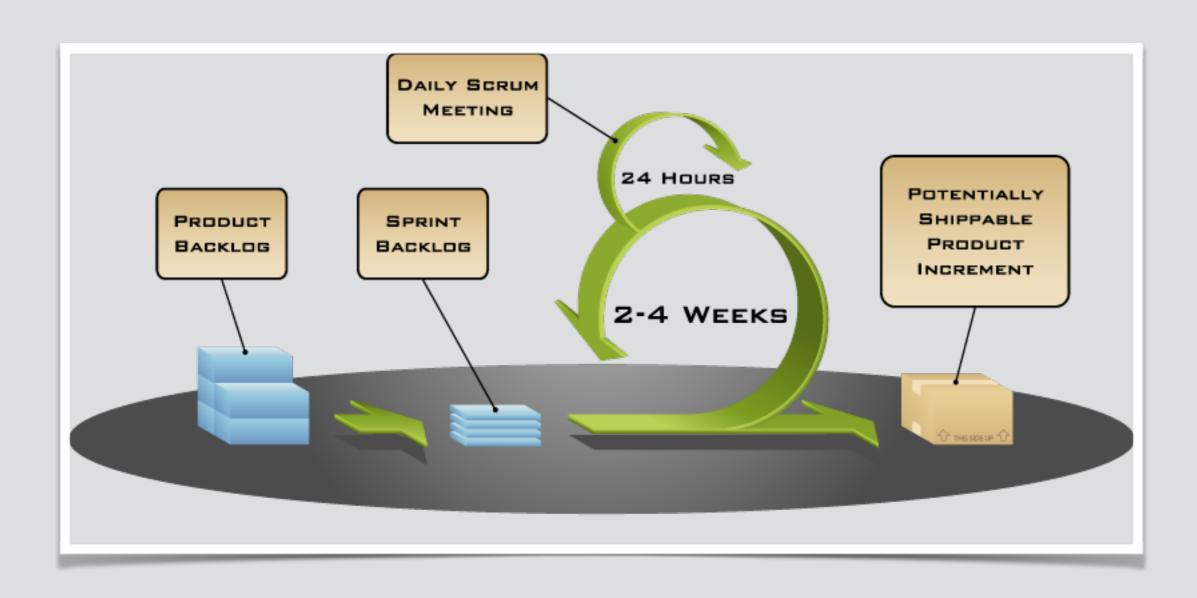








# Large scale Scrum is Scrum



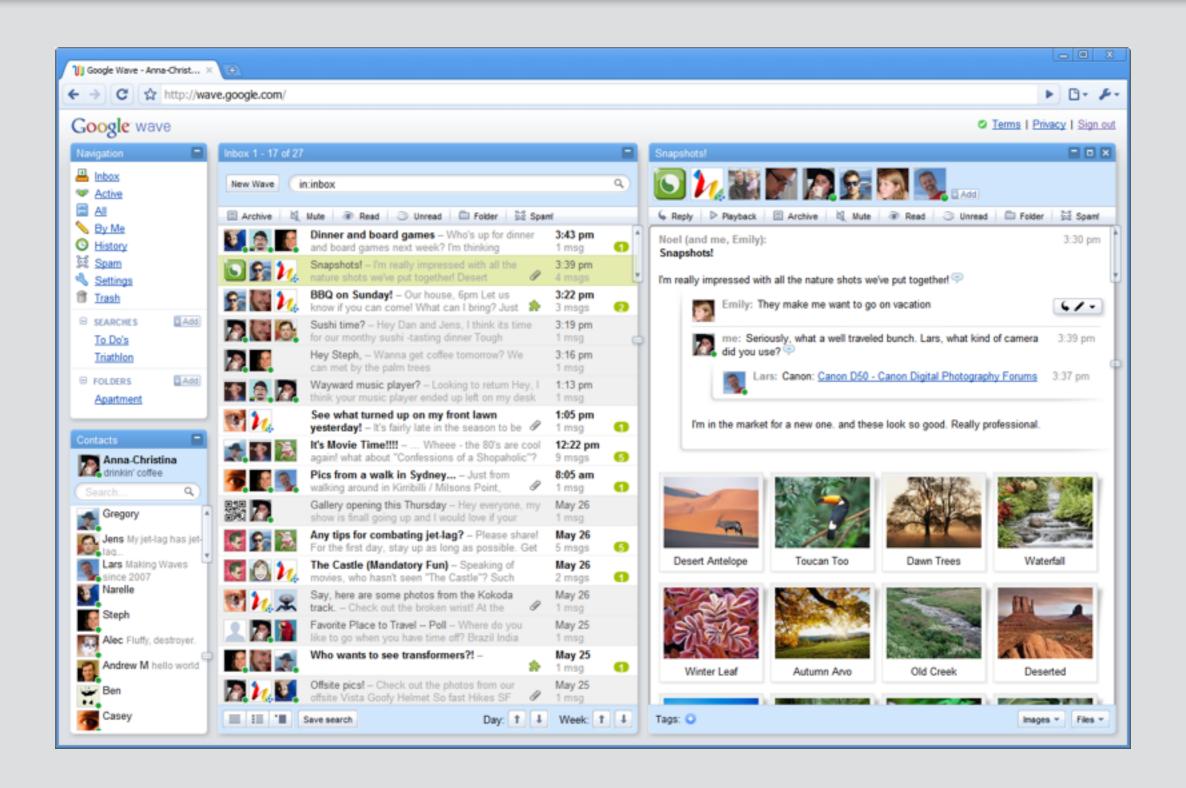
# Transparency



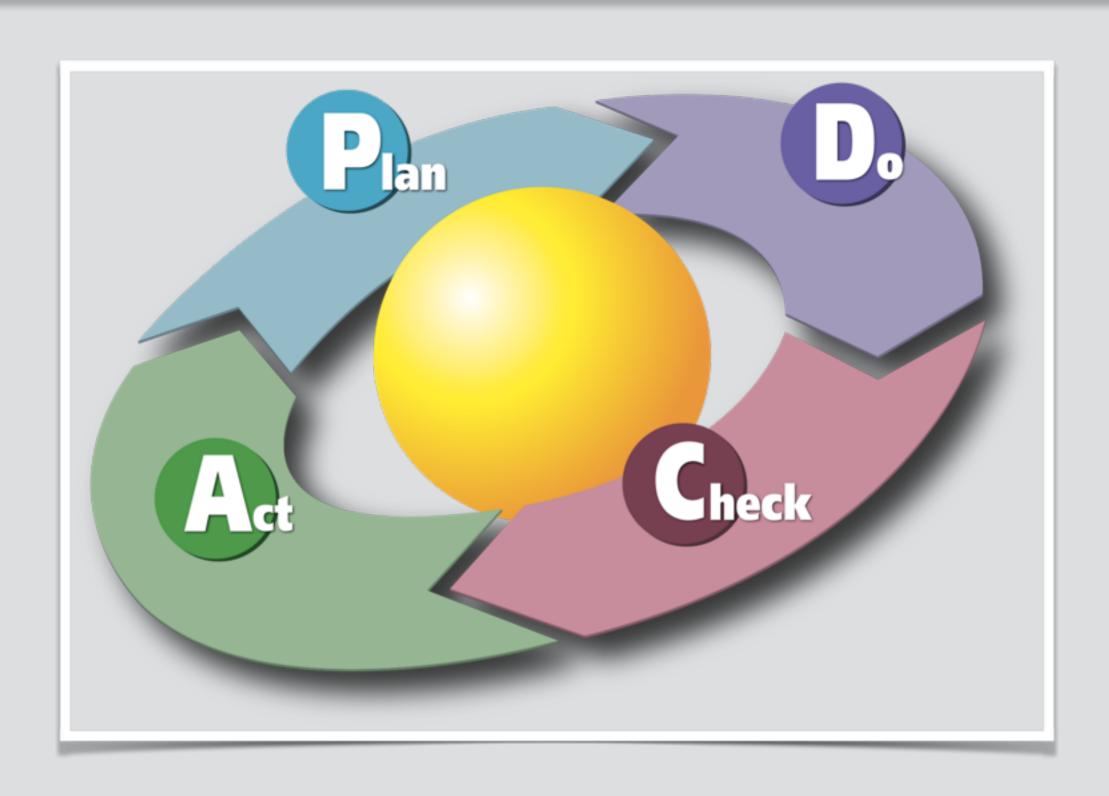
## More with less

More	Less		
Learning	Process		
Agilty	Roles & Artfiacts		
Outcome	Output		
Employee satisfaction	Taylorism		

### Whole product focus

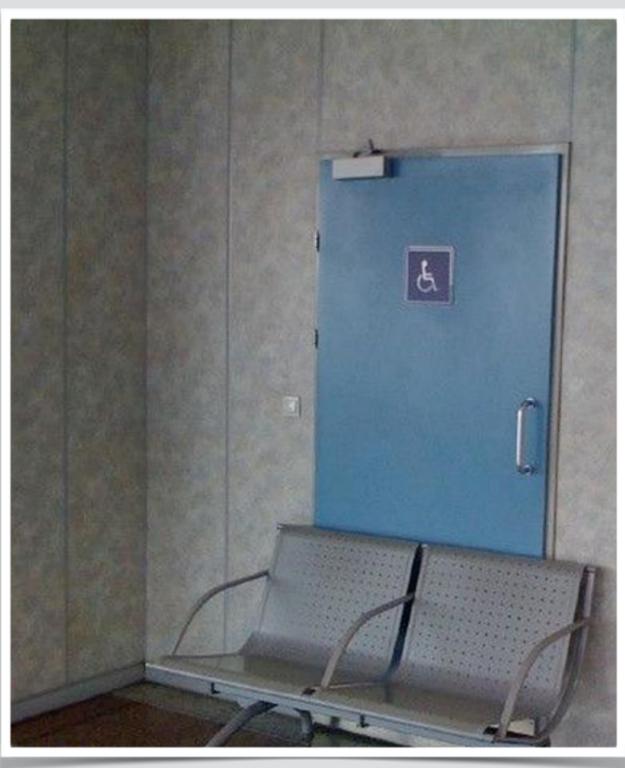


# Empirical process control



### Customer centric





# Queuing theory



## Lean thinking

Sustainable shortest lead time, best quality and value (to people and society), most customer delight, lowest cost, high morale, safety

### Respect for People

- don't trouble your 'customer'
- "develop people, then build products"
- no wasteful work
- teams & individuals evolve their own practices and improvements
- build partners with stable relationships, trust, and coaching in lean thinking
- develop teams

#### **Product Development**

- long-term great engineers
- mentoring from managerengineer-teacher
- cadence
- cross-functional
- team room + visual mgmt
- entrepreneurial chief engineer/product mgr
- set-based concurrent dev
   create more knowledge

#### 14 Principles

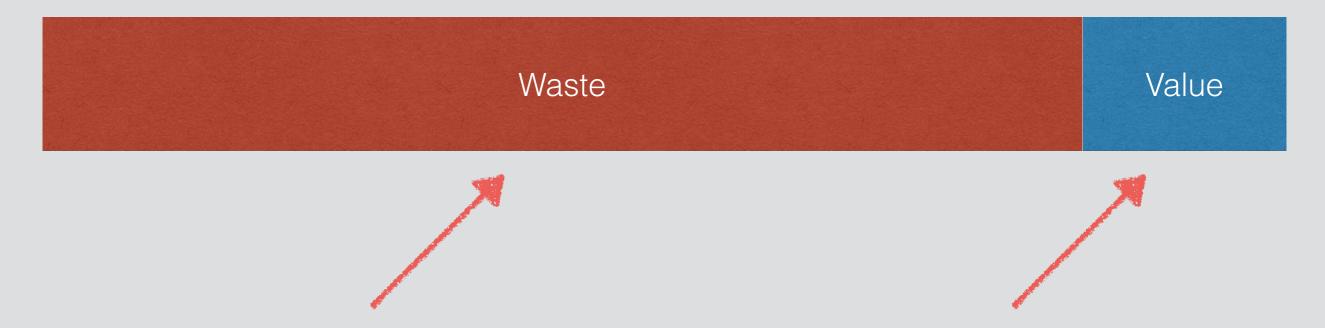
long-term, flow, pull, less variability & overburden, Stop & Fix, master norms, simple visual mgmt, good tech, leader-teachers from within, develop exceptional people, help partners be lean, Go See, consensus, reflection & kaizen

#### Continuous Improvement

- Go See
- kaizen
- spread knowledge
- small, relentless
- retrospectives
- 5 Whys
- eyes for waste
- \* variability, overburden, NVA ... (handoff, WIP, info scatter, delay, multitasking, defects, wishful thinking..)
- perfection challenge
- work toward flow (lower batch size, Q size, cycle time)

Management applies and teaches lean thinking, and bases decisions on this long-term philosophy

## Lean thinking



Opportunity for improvement

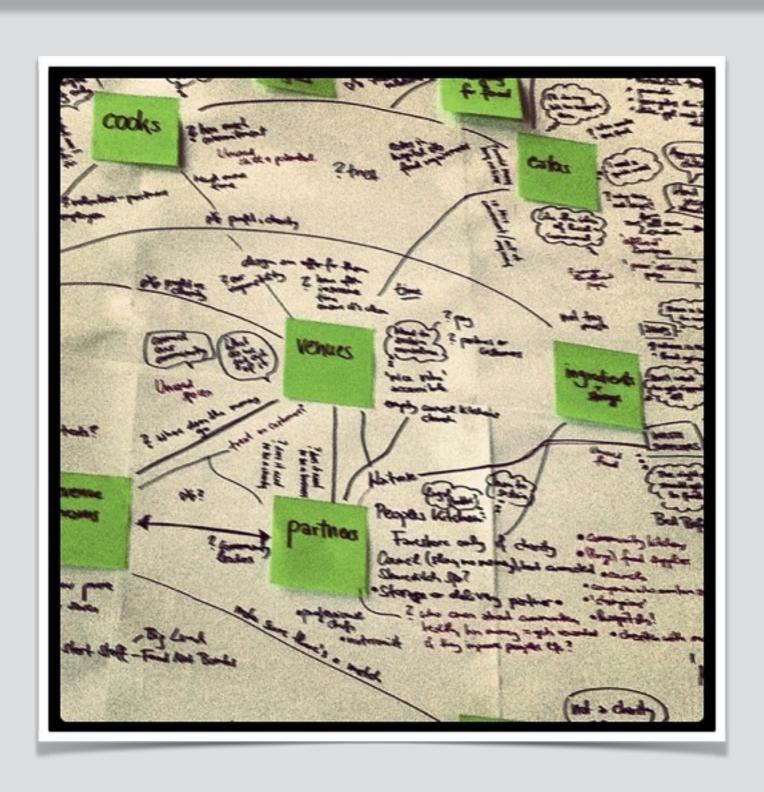
Traditional improvement

### Detect and eliminate waste

- 1. Overproduction of features
- 2. Waiting, delay
- 3. Handoff
- 4. Extra process
- 5. Partially done work
- 6. Task Switching
- 7. Defects
- 8. Under-realizing people's potential
- 9. Knowledge scatter
- 10. Wishful thinking

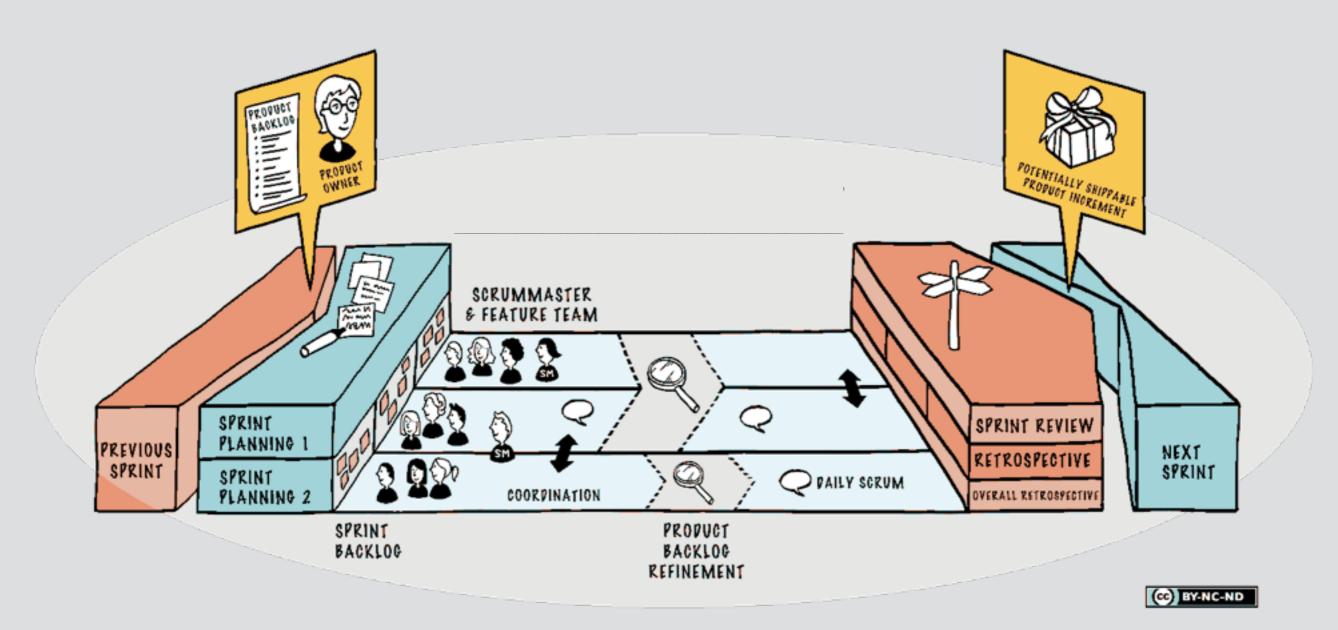


# System thinking



# Continuous improvement towards perfection





### Product

- One product, one backlog
- Needs to have a shared codebase.
- As broad as possible to minimize constraints.





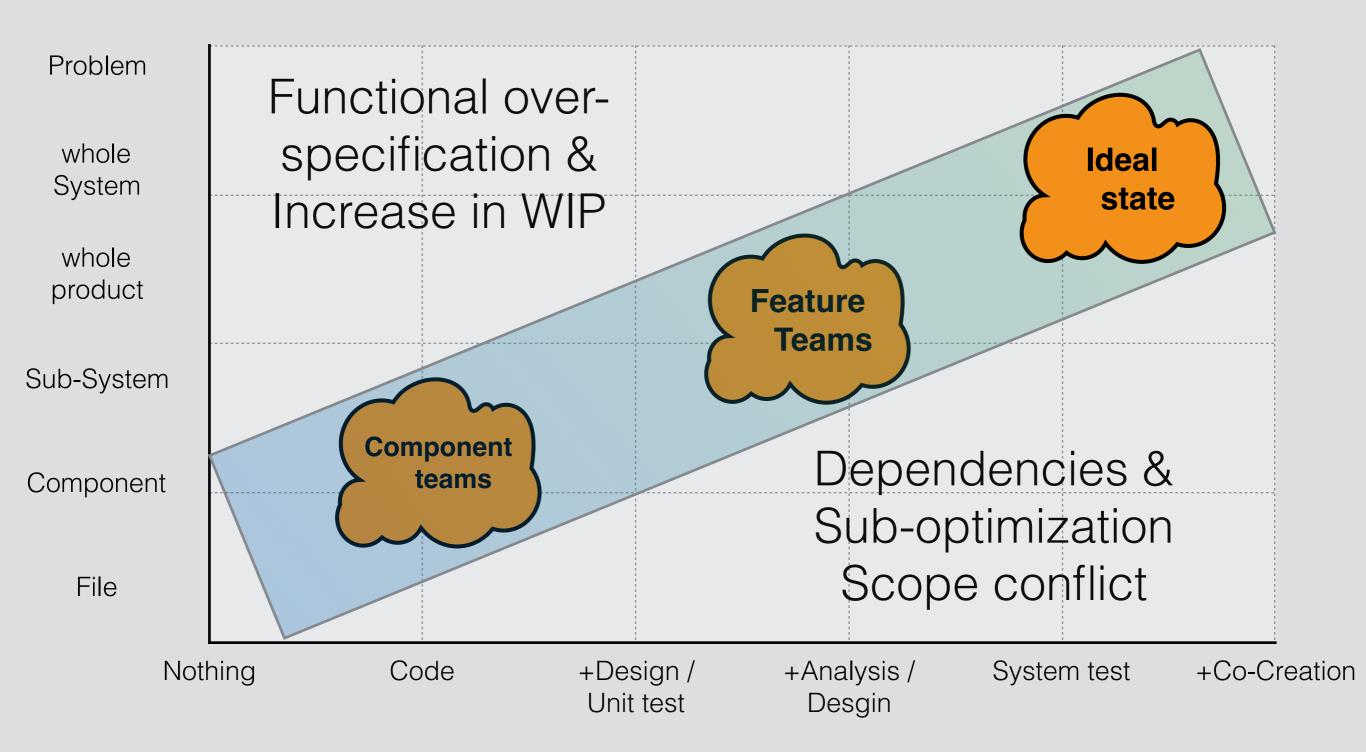
### Product owner

- The person that owns the product.
- Accountable for results.
- Define the features based on business needs.
- Manages the product backlog.
- Focus on prioritization, Less on clarification.
- Not "Mr nice-guy"

### The Team

- · The minimal unit of resourcing
- Fixed (100% allocated people)
- Long-Lived
- Cross-functional feature teams
- Co-located.
- Self managing

### Feature team adoption map



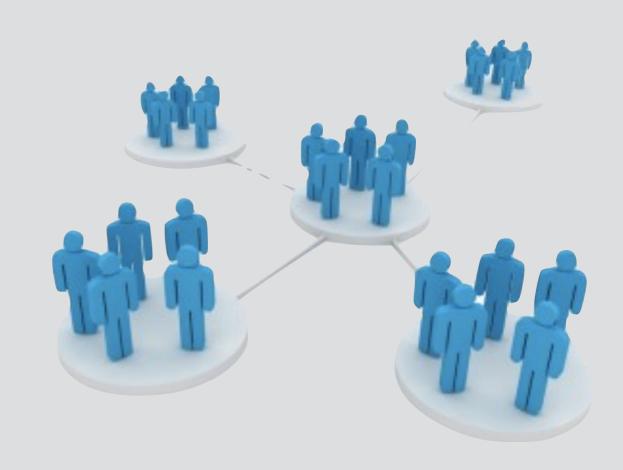
### One sprint

- Fixed timebox for development.
- Interruptions and change of scope are forbidden.
- Starts with planning meeting.
- Sustainable pace
- Ends with a sprint review.



### Cross team coordination

- Teams are responsible to decide how and when.
- Some options:
  - Just talk.
  - Communicate via code.
  - Continuous integration.
  - CoP
  - Travellers
  - Component Mentors.
  - SoS.



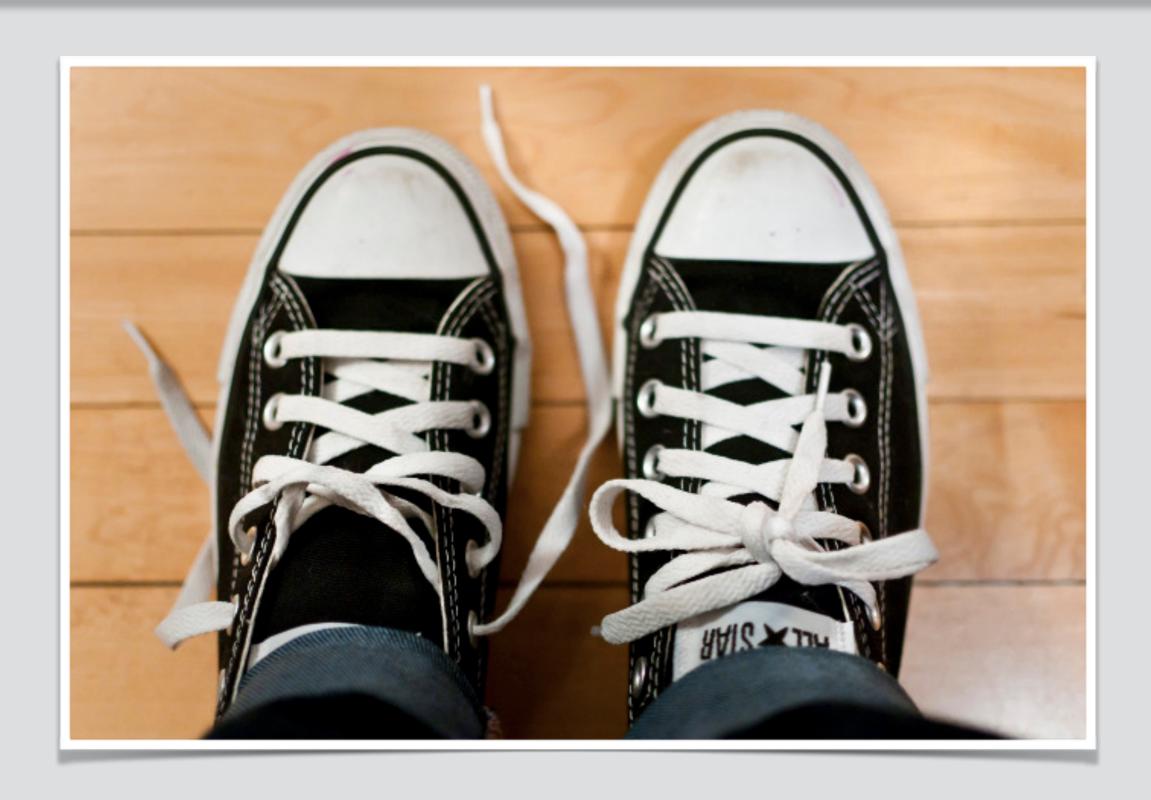
## What does a Shippable product include?

On a flipchart - list the elements. Be specific. one element per sticky. avoid repetitions.

#### Definition of Done

- Teams and PO agree on the definition of Done.
- Done reflects the current minimal common denominator of technical skills in the teams.
- Teams can expand the DoD.
- Backlog Items that are not done are not reviewed.
- The DoD should expend over time.

### Undone vs. Unfinished



## Undone



## Dealing with undone work

- Strategy 1: Undone department Awful idea!
- Strategy 2: Release sprint Bad idea!
- Strategy 2.5: Release sprint done by the team. average idea!
- Strategy 3: Expand team skills no undone.
   Good idea!

## Product Backlog refinement

- Done every sprint with representatives of all teams and the product owner.
- Split and clarify items into fine grained items.
- Estimate items.
- Identify need for cross-team coordination.
- Some techniques include: User Story mapping,
   Spec by example.

## Avoid the contract game



## Sprint review

- One sprint review meeting for all teams.
- Performed after every sprint.
- Inspect and adapt not judgment.
- Avoid "slideware"
- Demonstrate only done items.

## Sprint retrospective

- Not a post-morten! Nobody is dead...
- Done per team after the sprint review.
- Focus on learning and improving.
- "The art of the possible"
- Generate experiments for the next sprint(s).
- Important to keep the meeting safe.

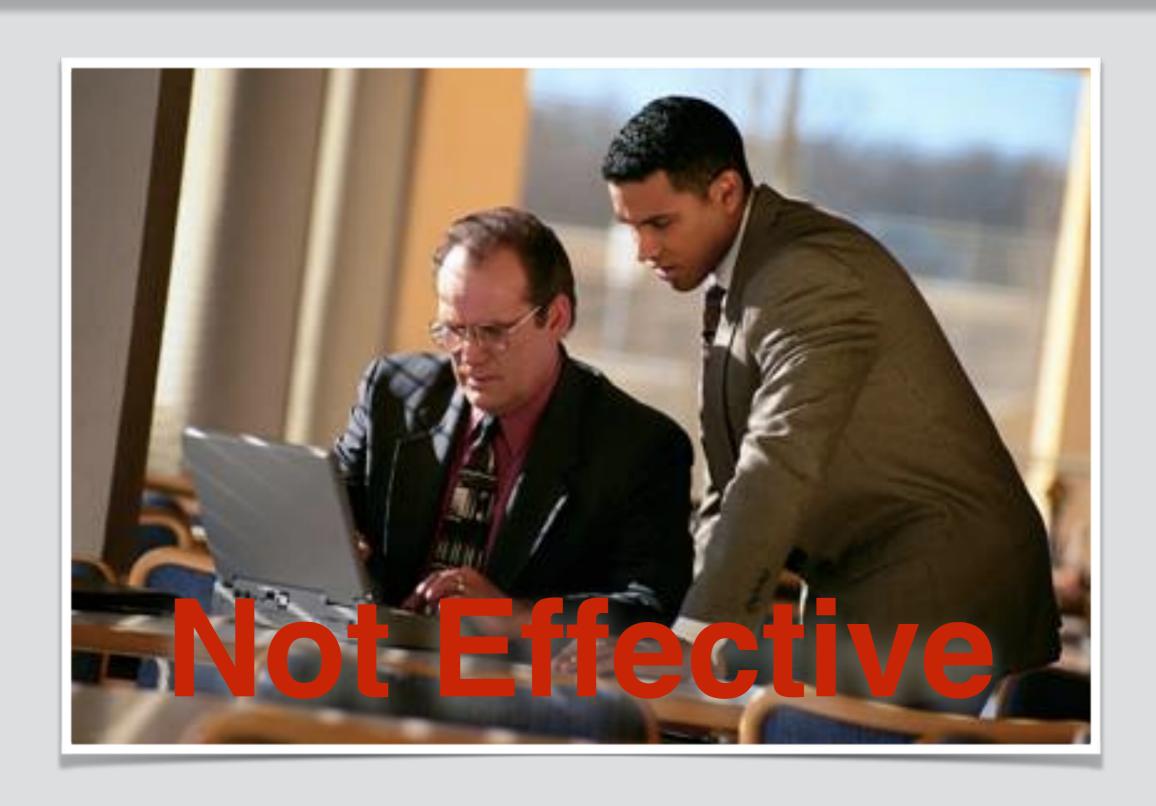
## Overall sprint retrospective

- Product owner, Representatives of all teams,
   Scrum masters.
- Usually performed at the beginning of the next sprint.
- Focus on system level and cross team learning.
  - Use system thinking tools such as causal loop diagrams.
- Generate system experiments for next sprint(s)

## Management in LeSS



## Supervision

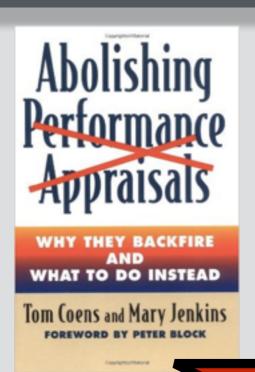


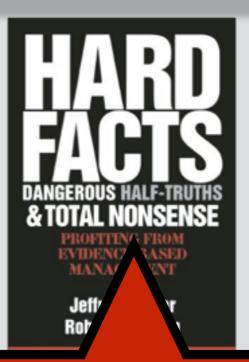
## Delegated monitoring

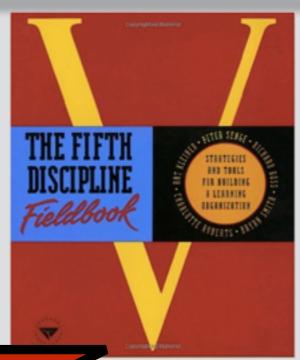


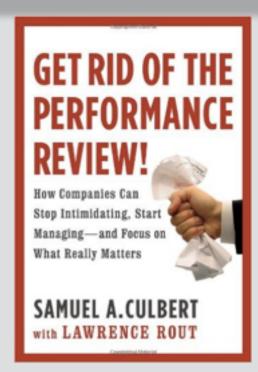
#### Performance reviews



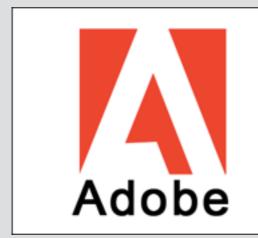








They stopped



accenture



## Managers are teachers



#### Go See at Gemba

- Gemba = Place where work is done.
- Focus on improvement
- Teach problem solving over solving problems.
- DO NOT MICRO-MANAGE!



#### Scrum master

- Dedicated role.
- May serve up 1-3 teams
- Process owner and team coach \ facilitator.
- Not a team leader.
- Not a manager.
- Not the team representative.



#### Scrum master - Questions

- How is my team doing?
  - Are they Collaborating?
  - Do they improve?

- How are our engineering practices?
  - Are they improving?
  - How is the automation doing?
  - Is done being expanded?

- How is my organization doing?
  - Is Inter-team coordination working?
  - Are there impediments to handle?

- How is my product owner doing?
  - Is the product backlog in good shape?
  - Does he understand Scrum?

# LeSS Adoption Guidelines



## Principles

- deep and narrow over broad and shallow
- top-down and bottom-up
- use volunteering

## Getting started

- educate everyone
- define 'product'
- define 'done'
- have appropriately-structured teams
- only the Product Owner gives work to the teams
- · keep project managers away from the teams

## Next steps

- Use coaching to develop the organization by experimenting
  - Coaching both internal and external
- Repeat until you are perfect
  - continuous improvement.



#### Less rules - structure

- Structure the organization using real teams as the basic organizational building block.
- Each team is (1) self-managing, (2) cross-functional, (3) colocated, and (4) long-lived.
- The majority of the teams are customer-focused feature teams.
- ScrumMasters are responsible for a well-working LeSS adoption. Their focus is towards the Teams, Product Owner, organization, and development practices. A ScrumMaster does not focus on just one team but on the overall organizational system.
- A ScrumMaster is a dedicated full-time role.
- One ScrumMaster can serve 1-3 teams.

#### Less rules - structure

- In LeSS, managers are optional, but if managers do exist their role is likely to change. Their focus shifts from managing the day-to-day product work to improving the value-delivering capability of the product development system.
- Managers' role is to improve the product development system by practicing Go See, encouraging Stop & Fix, and "experiments over conformance".
- For the product group, establish the complete LeSS structure "at the start"; this is vital for a LeSS adoption.
- For the larger organization beyond the product group, adopt LeSS evolutionarily using Go and See to create an organization where experimentation and improvement is the norm.

## Less rules - product

- There is one Product Owner and one Product Backlog for the complete shippable product.
- The Product Owner shouldn't work alone on Product Backlog refinement; he is supported by the multiple Teams working directly with customers/users and other stakeholders.
- All prioritization goes through the Product Owner, but clarification is as much as possible directly between the Teams and customer/users and other stakeholders.
- The definition of product should be as broad and end-user/customer centric as is practical. Over time, the definition of product might increase. Broader definitions are preferred.
- One shared Definition of Done for the whole product.
- Each team can have their own expanded Definition of Done.
- The perfection goal is to improve the Definition of Done so that it results in a shippable product each Sprint (or even more frequently).

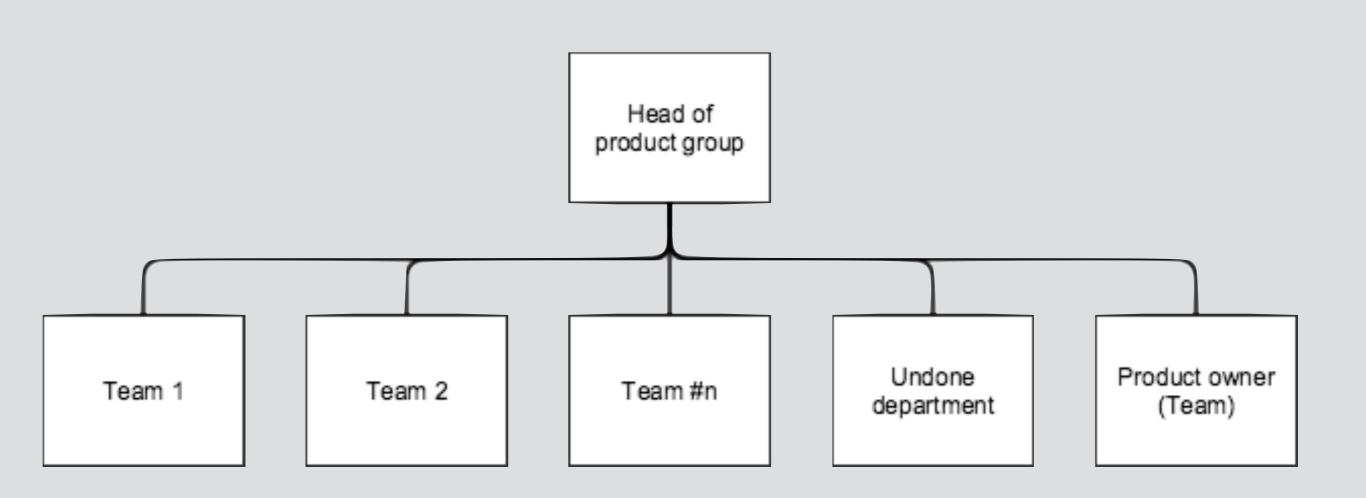
## Less rules - sprint

- There is one product-level Sprint, not a different Sprint for each Team.
   Each Team starts and ends the Sprint at the same time. Each Sprint results in an integrated whole product.
- Sprint Planning consists of two parts: Sprint Planning One is common for all teams while Sprint Planning Two is usually done separately for each team. Do multi-team Sprint Planning Two in a shared space for closely related items.
- Sprint Planning One is attended by the Product Owner and Teams or Team representatives. They together tentatively select the items that each team will work on the that Sprint. The Teams identify opportunities to work together and final questions are clarified.
- Each Team has their own Sprint Backlog.
- Sprint Planning Two is for Teams to decide how they will do the selected items. This usually involves design and the creation of their Sprint Backlogs.
- Each Team has their own Daily Scrum.

## Less rules - sprint

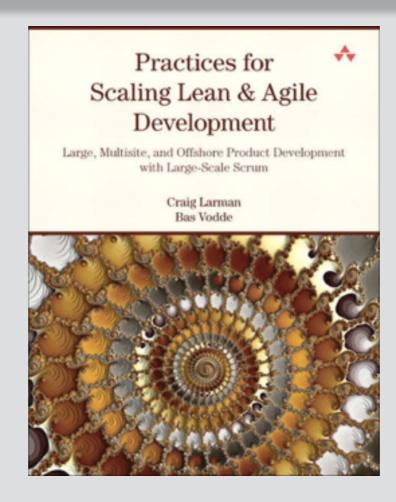
- Cross-team coordination is decided by the teams. Prefer decentralized and informal coordination over centralized coordination. Emphasize Just Talk and informal networks via communicate in code, cross-team meetings, component mentors, travelers, scouts, and open spaces.
- Product Backlog Refinement (PBR) is done per team for the items they
  are likely going to do in the future. Do multi-team and/or overall PBR to
  increase shared understanding and exploiting coordination
  opportunities when having closely related items or a need for broader
  input/learning
- There is one product Sprint Review; it is common for all teams. Ensure
  that suitable stakeholders join to contribute the information needed for
  effective inspection and adaptation.
- Each Team has their own Sprint Retrospective.
- An Overall Retrospective is held after the Team Retrospectives to discuss cross-team and system-wide issues, and create improvement experiments. This is attended by Product Owner, ScrumMasters, Team Representatives, and managers (if any).

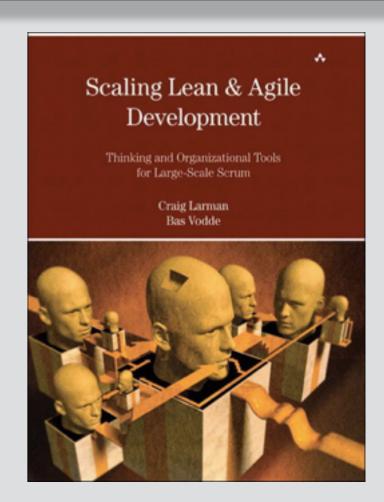
## Less org-chart



#### More information on LeSS







http://less.works