

The Art of Kanban Effectiveness

The Kanban approach to work on the right thing at the right time



ALISSON VALE



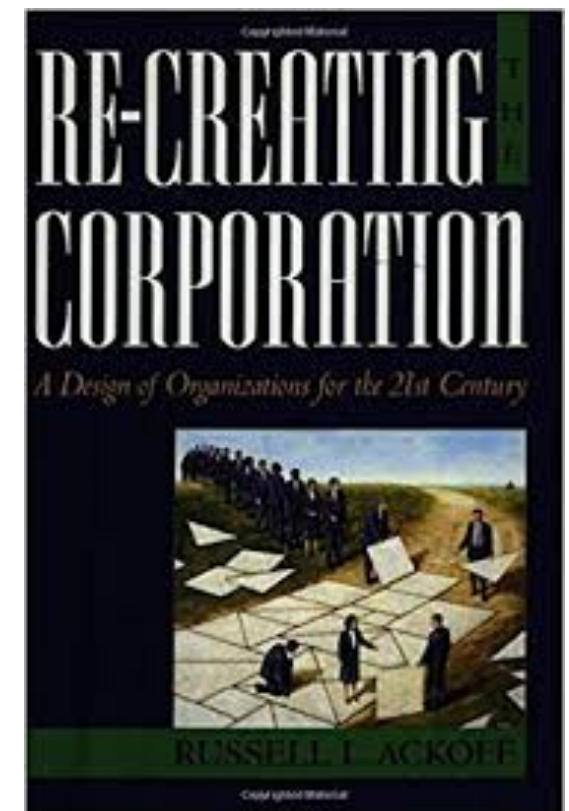
TWO DIMENSIONS



RUSSEL ACKOFF

“The performance of any system has two dimensions: the efficiency with which it does whatever it does (doing things right) and the effectiveness of what it does (doing the right thing, its value).”

The tow dimensions of any system



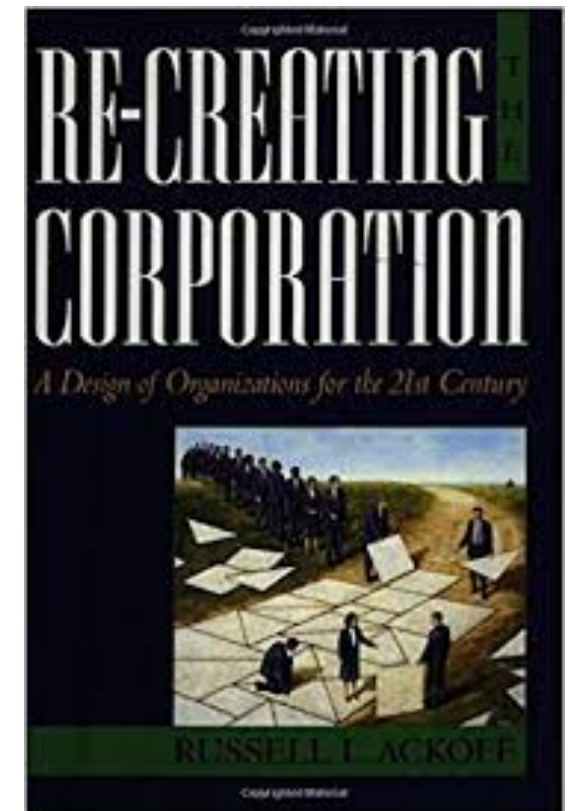
TWO DIMENSIONS

The two dimensions of any system



RUSSEL ACKOFF

“(...) These should be taken together because the righter we do the wrong thing, the wronger we become. It is better to do the right thing wrong than the wrong thing right. When we do the right thing wrong, we make a mistake that can be corrected; hence, we learn how to be more effective.”



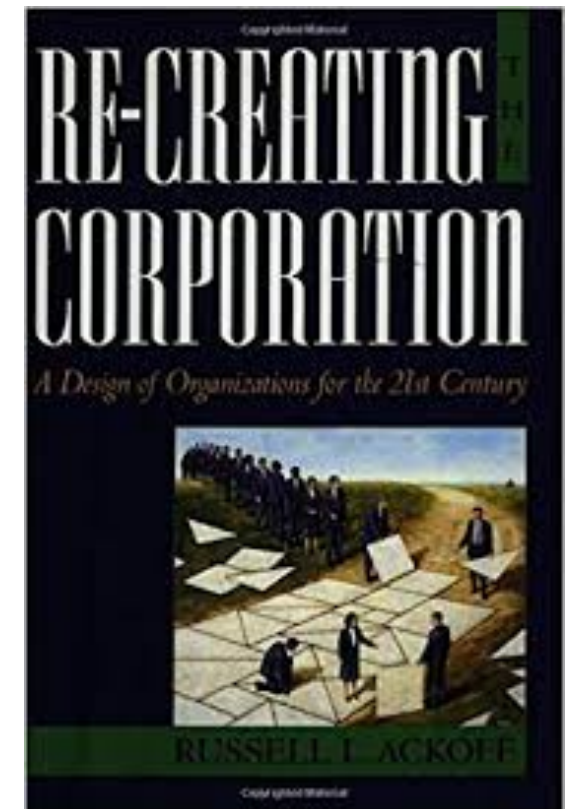
TWO DIMENSIONS



RUSSEL ACKOFF

"(...) Put another way: it is better to aim at and miss the right thing than aim at and hit the wrong thing."

The two dimensions of any system



The Art of Kanban Effectiveness

The Kanban approach to work on
the right thing at the right time

- a story -



Once upon a time, a CEO, worried about signing a very expensive contract with a software development service provider, decides to run an experiment.



He asks one of his managers to hire two different software service providers to solve exactly the same problem for the company.



The idea is to experiment how the work goes with each one, so they can choose the one that will be hired to work with them in the long term.



Their inventory system has several problems that is making the company loose money month by month. So they decided to start with that.



The experiment ran for 3 months. The two companies successfully completed the project. The manager has just sent the following summary report to the CEO:



Summary Report

Final Result

	Company A	Company B
Time to Complete	3 months	3 months
Total Cost	US\$ 27,000.00	US\$ 35,000.00
Features delivered	48 features	27 features
Cost/Feature	US\$ 562 per feature	US\$ 1296 per feature

On the following day, the CEO and the Manager met to discuss the result of the experiment...



- It sounds like we do have a winner, don't we? - the CEO starts the conversation.
- What do you mean? - the Manager replies.
- Well ... the numbers seem pretty clear about who did better. "Company A" was cheaper and delivered more.



Summary Report

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- Yes, but... - the Manager continued.
- but?
- The numbers don't show this, but Company B was much, much better in every aspect I can imagine.
- Really? How so? - the CEO asks surprised



- I'm not sure. I can't explain why, but I can tell the story. Maybe it will make sense for you.
- ok, go ahead - says the CEO. So, tell me how "Company A" started?



- "Company A" analysts came here in the first week of the project and interviewed me. They gathered a bunch of requirements and ask me for approval few days after. I did approve them.

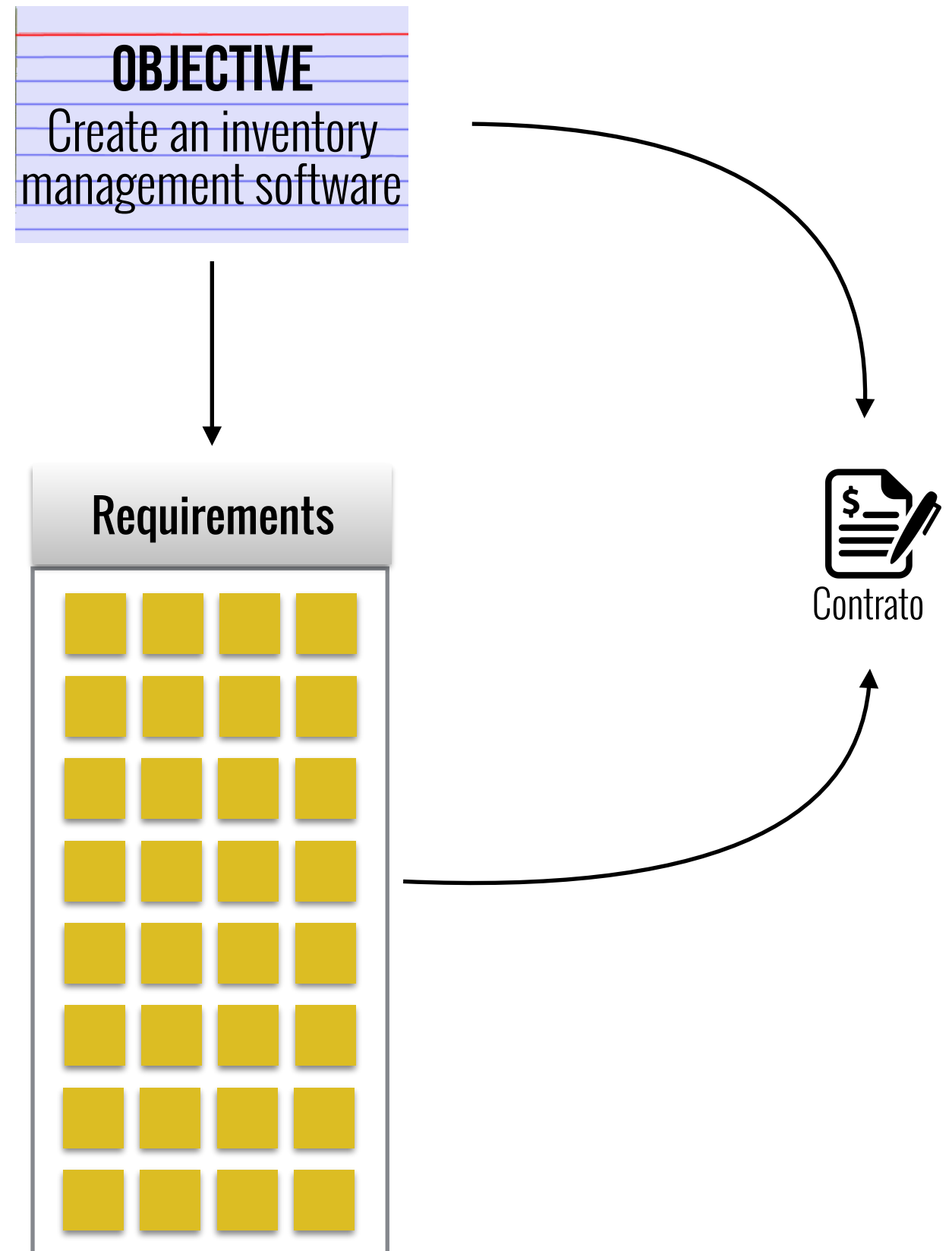


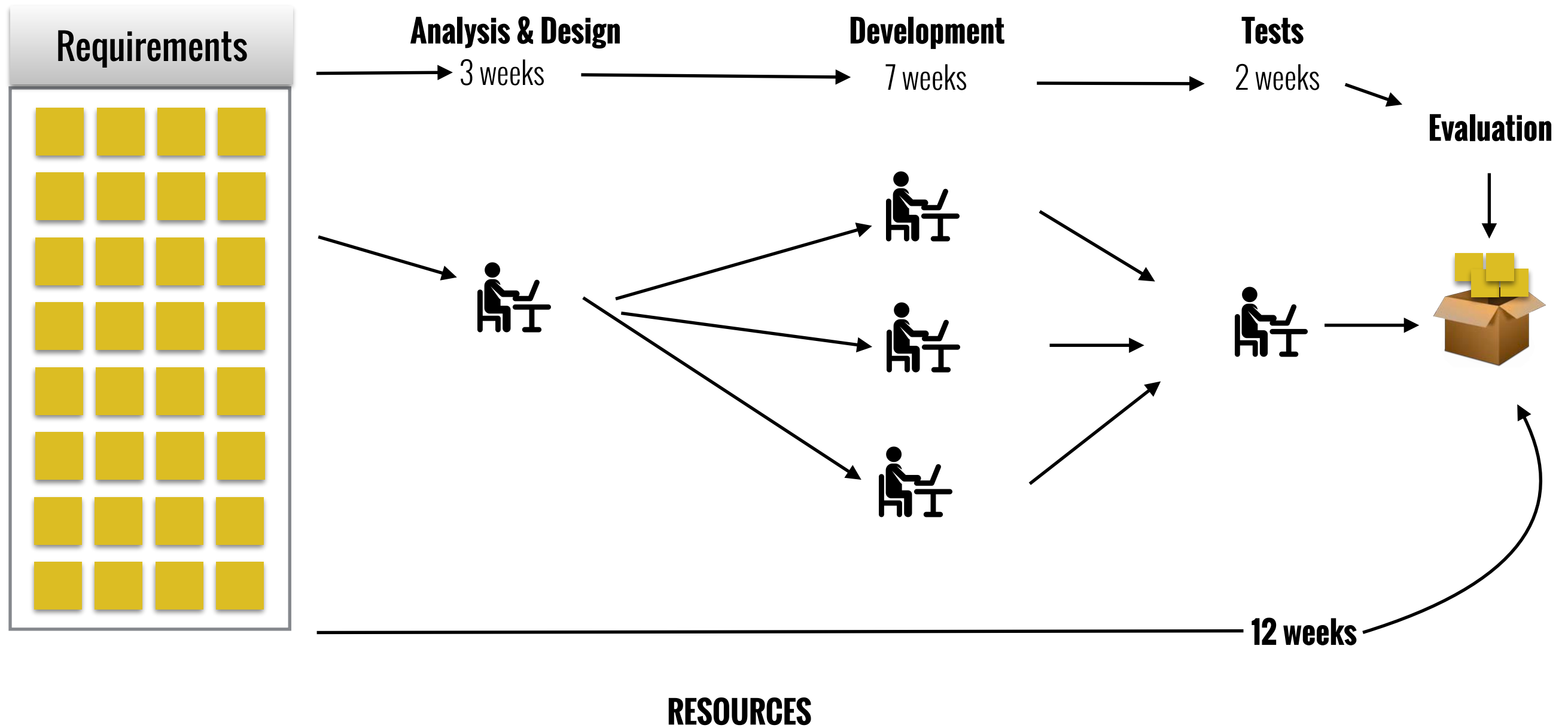
- Ok, then?
- After few weeks they came back with more detailed specifications. They presented to me and I asked for a few changes. I've approved all specifications. We signed the contract and they got back to their offices to start the development phase of the project.



Point of Reflection:

Company A starts by defining an “a priori” solution



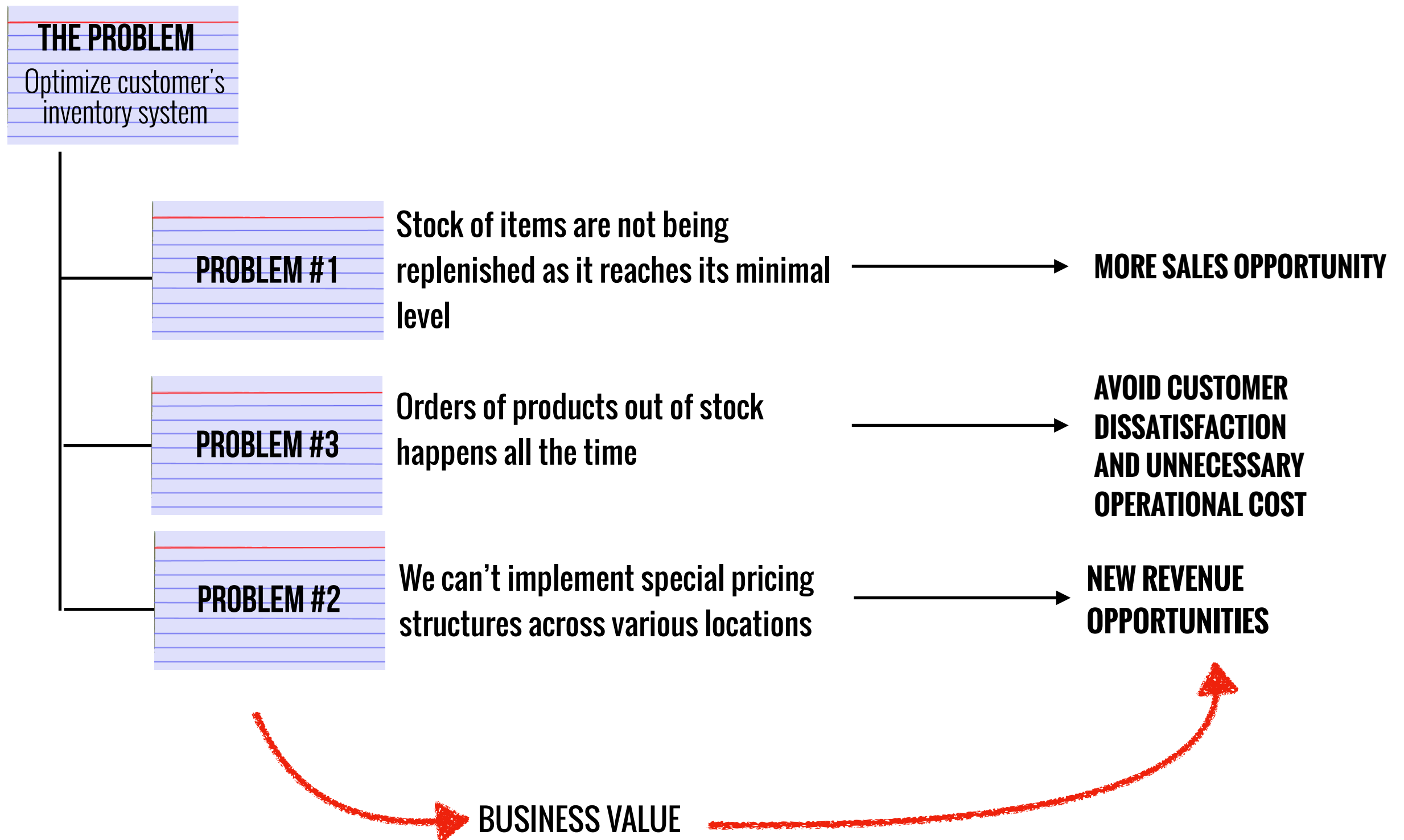


- What about "Company B"? How have they started? - the CEO asks.
- They brought the whole team for a design workshop with me and my team. They asked me a lot about our business and the problems that we have. We agreed that our inventory system should be enhanced. They found a way to work with what we already have... preserving aspects that are working well and building new solutions on the top of that.



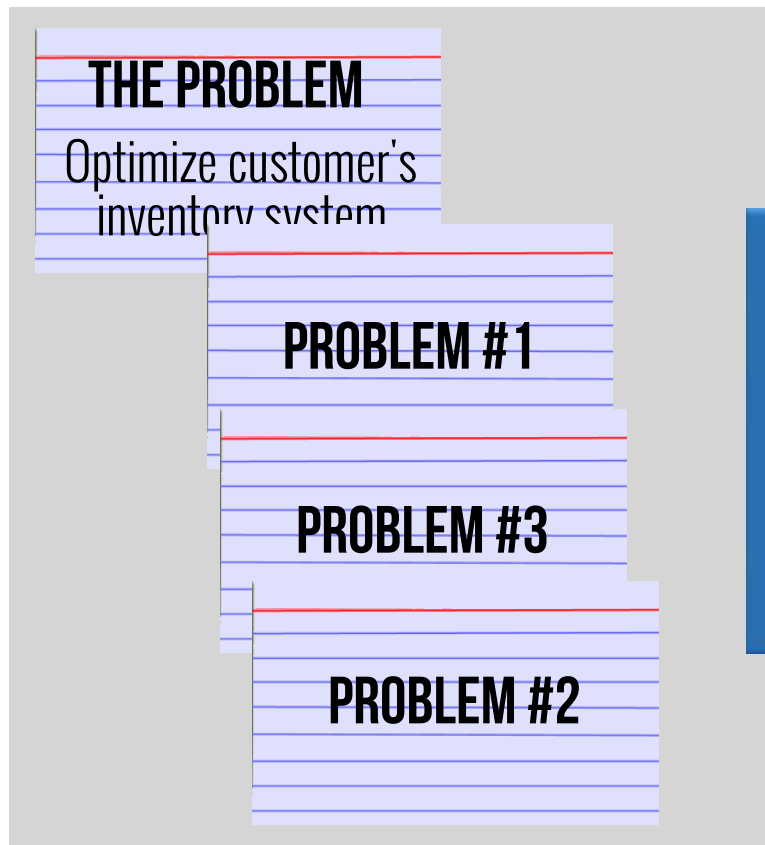
- Then we broken down the main business problem in smaller problems. We also agreed in the right sequence to solve them.





Company B starts with a problem-solution fit approach

instead of "an a priori solution"



PROBLEM UNDERSTANDING



SOLUTION PROPOSAL
(LOW RESOLUTION)



Company A

- is working to deliver "a thing": an inventory management software

Company B

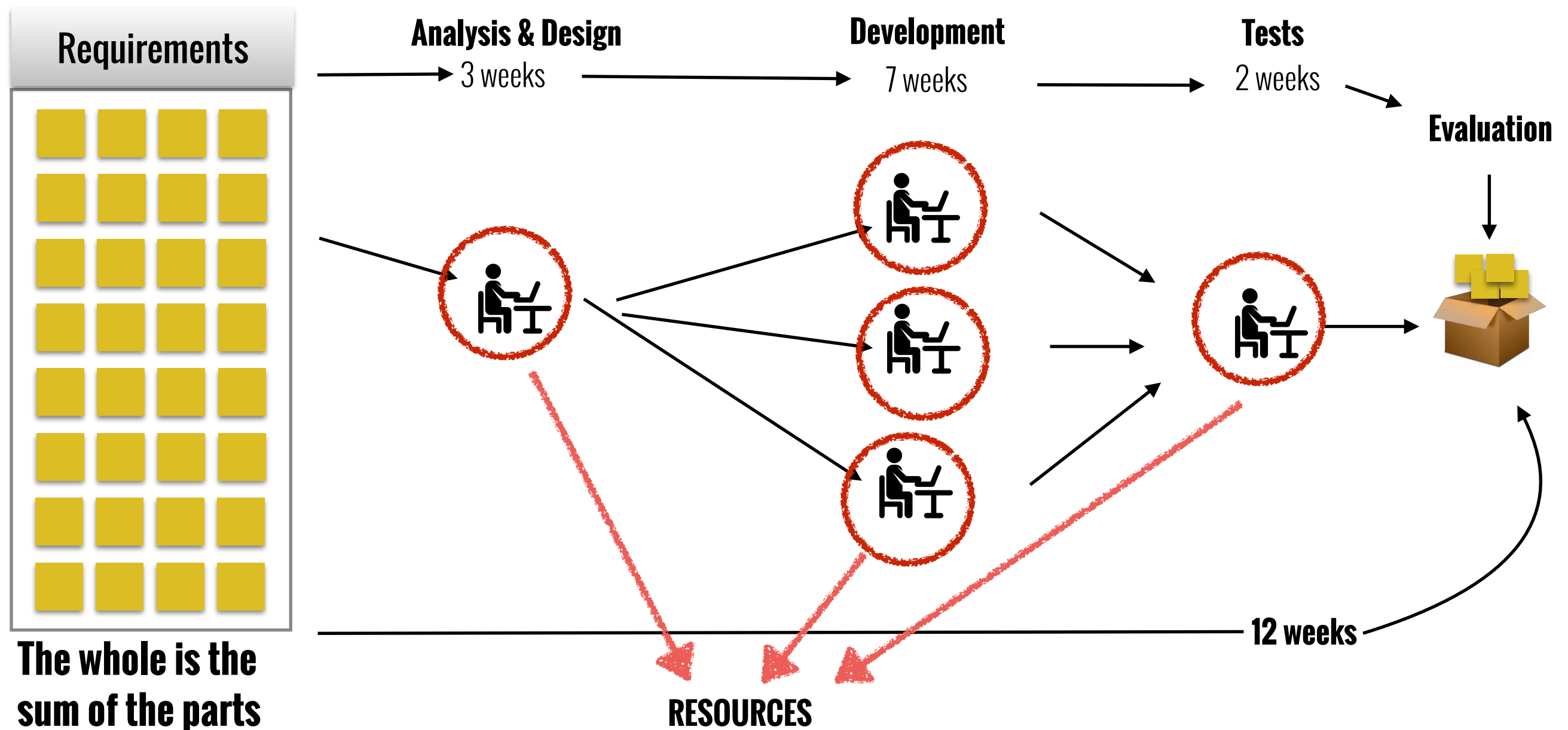
- is working to deliver a result: "a better inventory system"

The Manager continues:

- I also was invited to visit the office of both companies. In "Company A", they have a big room with a lot of developers. Then I met the people that were going to work with us: three programmers and one tester. After that, we didn't met much.



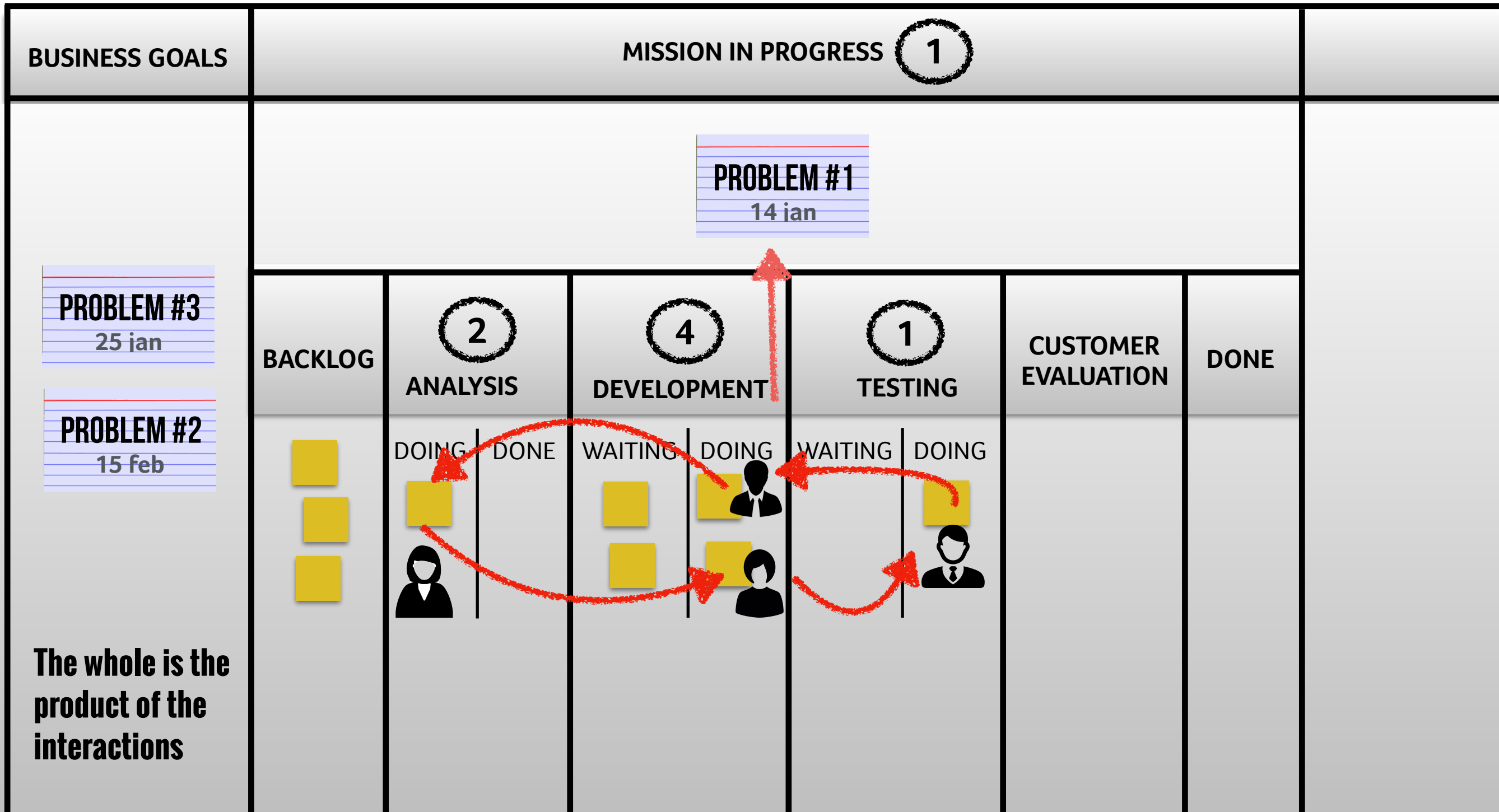
Company A model treats the final result as the sum of individual parts, and those are produced by “resources”



- In "Company B", I saw a totally different thing. - says the Manager. People were sitting and working together exploring alternatives to solve the business problem that we've discussed earlier. It's seems like a mission to them. They have this really awesome kanban board which was like a map showing all aspects of the work that should be done and what the team was doing as well.



"People were sitting together exploring alternatives to solve the business problem that we've discussed earlier. It's seemed like a mission to them."





RUSSEL ACKOFF

"A system is a product of the interaction of its parts and never the sum of its parts. Decision makers should learn how the parts interact and not how the parts act independently."

Company A

- It is working to deliver "a thing": an inventory management software
- That "thing" is composed by parts. People work individually on each part so those parts can be plugged together at the end. Company A uses an analytical thinking.

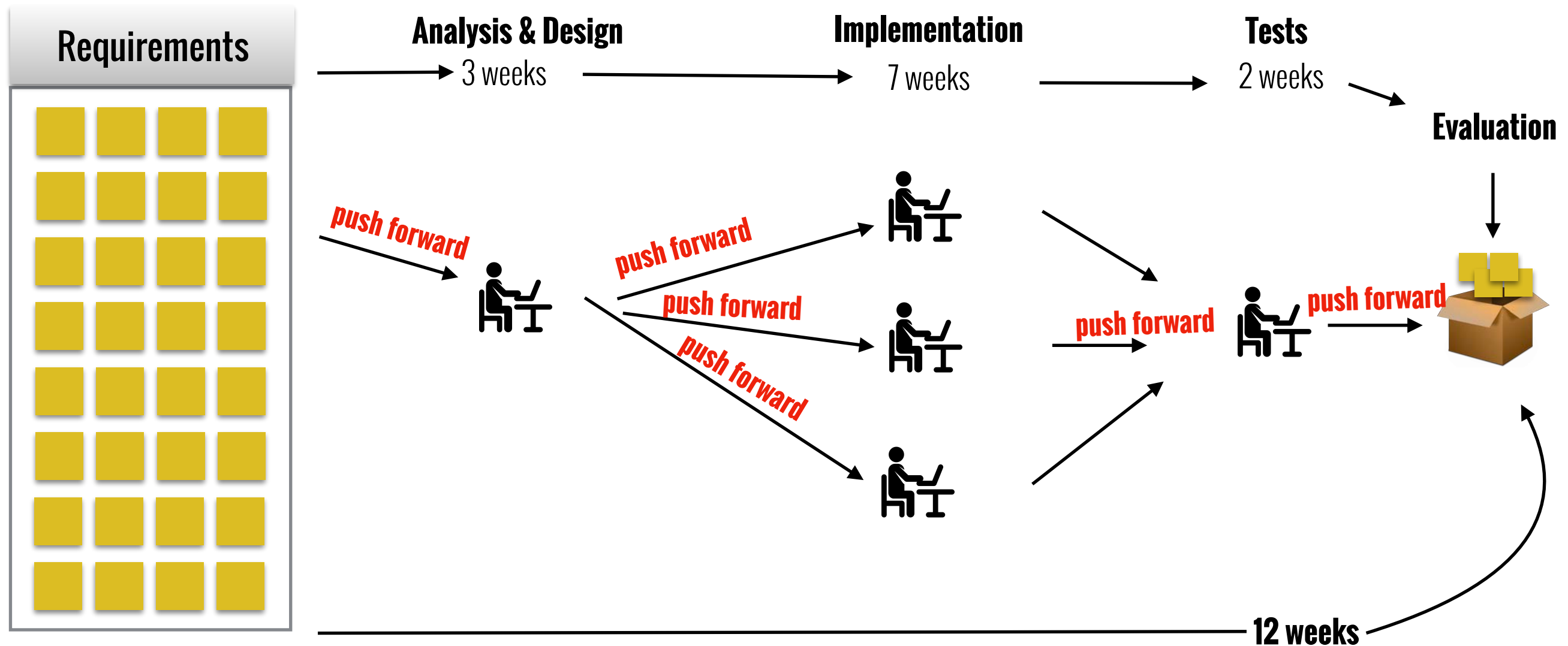
Company B

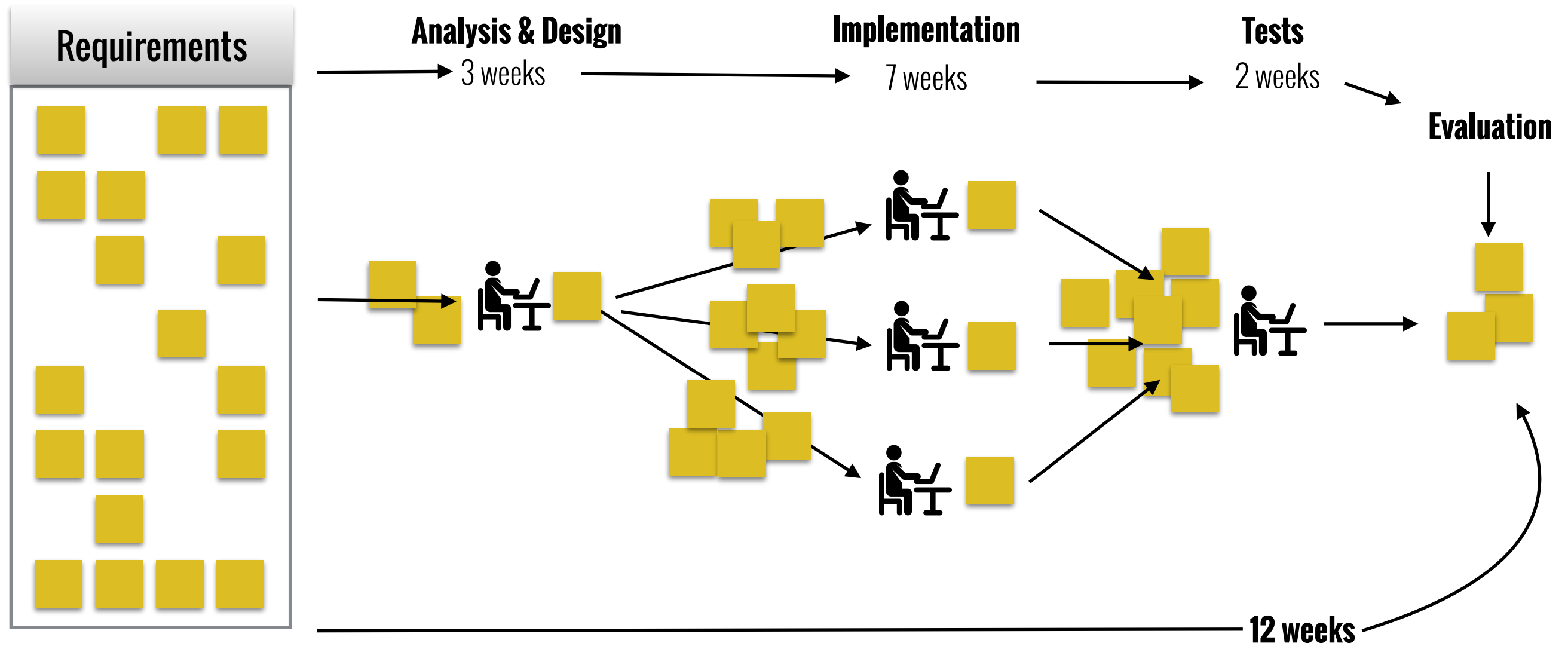
- It is working to deliver a result: "a better inventory system"
- The result is going to be related to how people interact to solve the problems towards the business goal. Company B uses a systemic thinking.

- In "Company A", each developer has his own list of requirements to build. They become specialized very quickly in the specific parts of the software that they work on.



Company A production model makes work to be pushed forward with a guideline that focus on “follow the process”

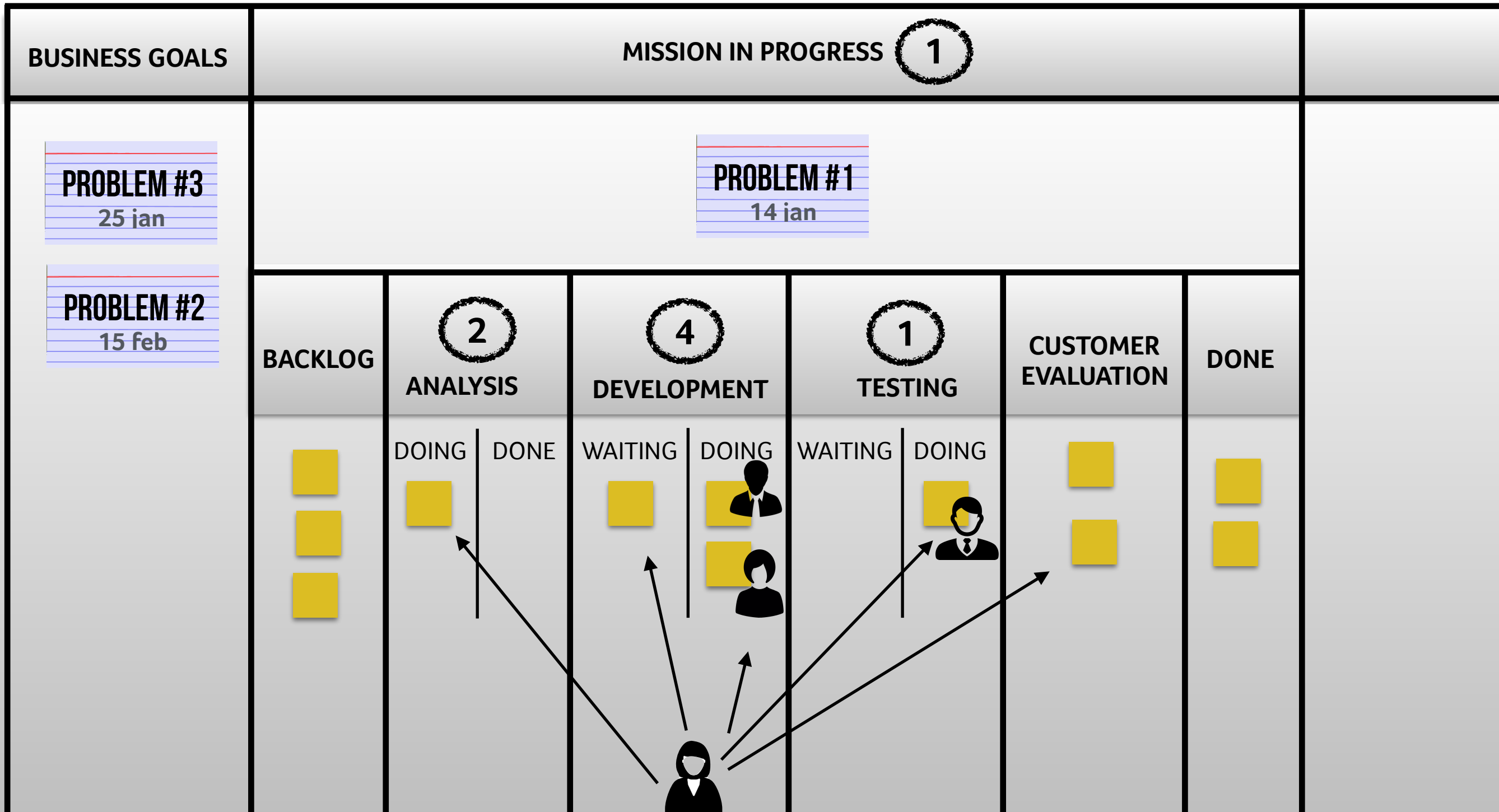




- "Company B" has an interesting model. The team "go after" the work. Every time a team member finishes something, they seek, on their kanban board, the right thing to do. They assign the work to themselves based on the need to reach the goal.



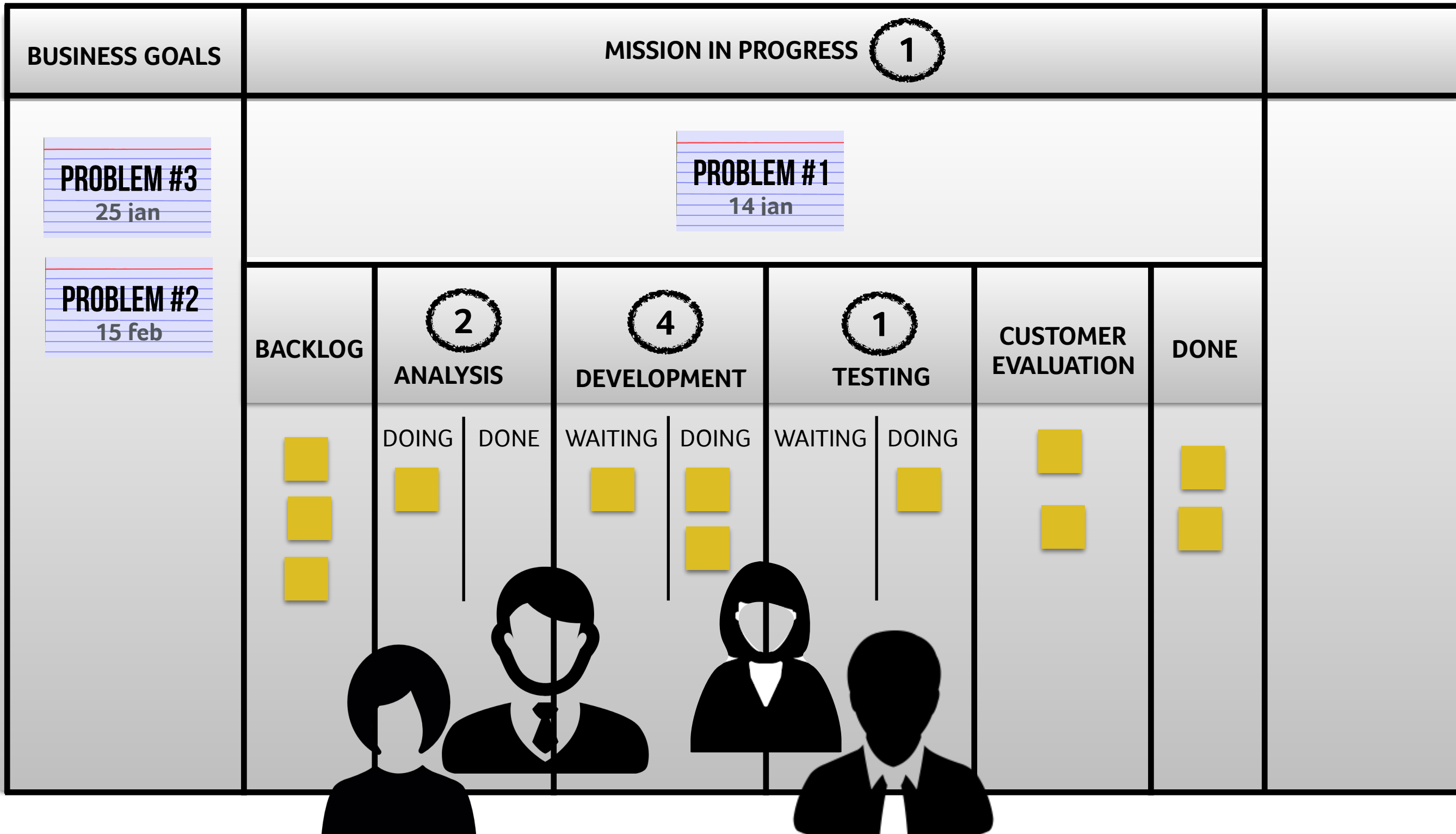
**Company B's team member "go after" the work.
They look for the work that needs them.**



- They also have a regular meeting in front of the board to validate such decisions.



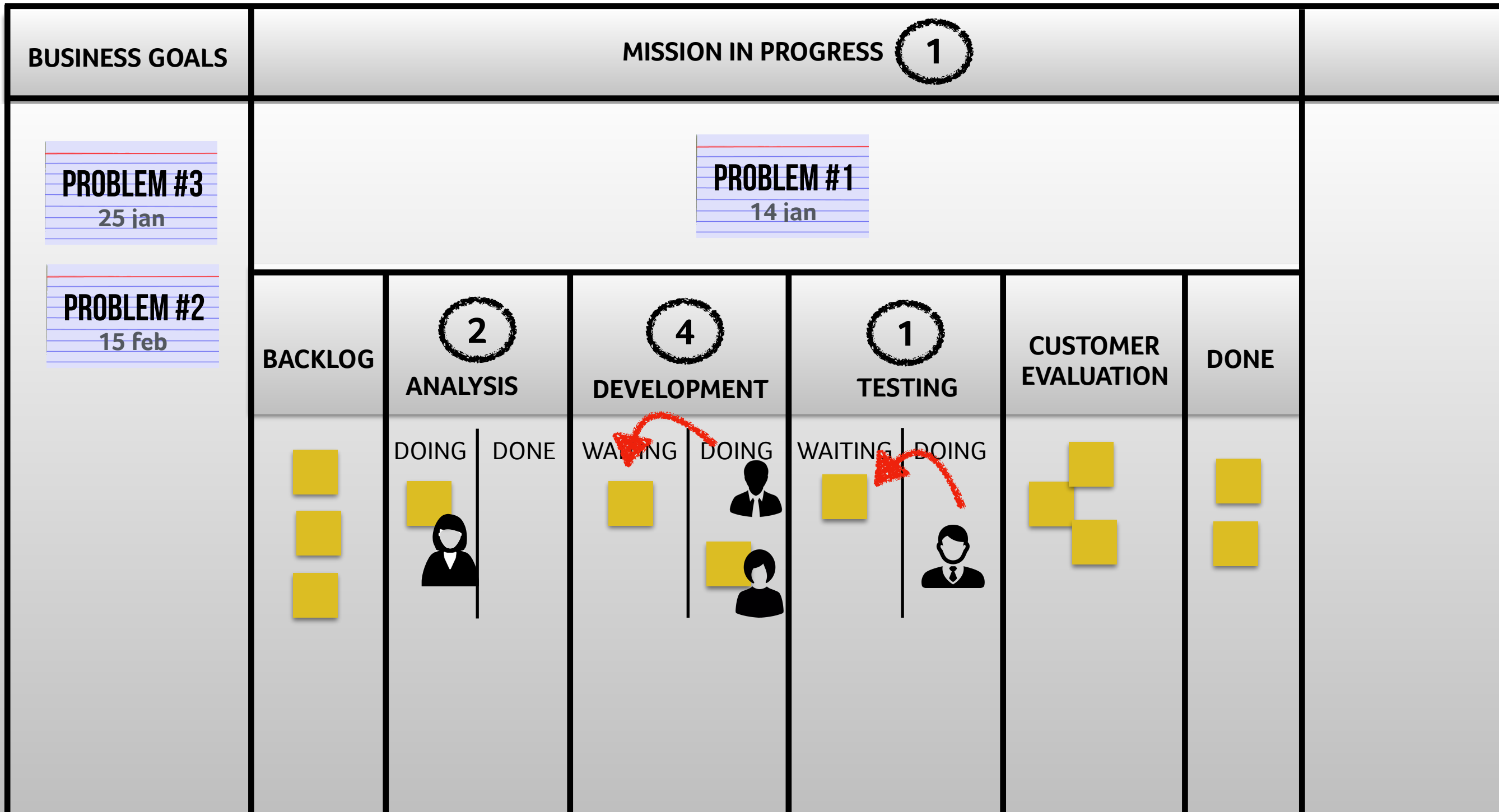
Company B's tactical coordination



- "Company B" also has a system that prevents overproduction. The work is not pushed towards them, but pulled as soon as capacity becomes available. That's the trigger for a new search for "the right thing" to do in the current system.



A new search for the right thing: Company B's team members pull work items in order to make them flow



Company A

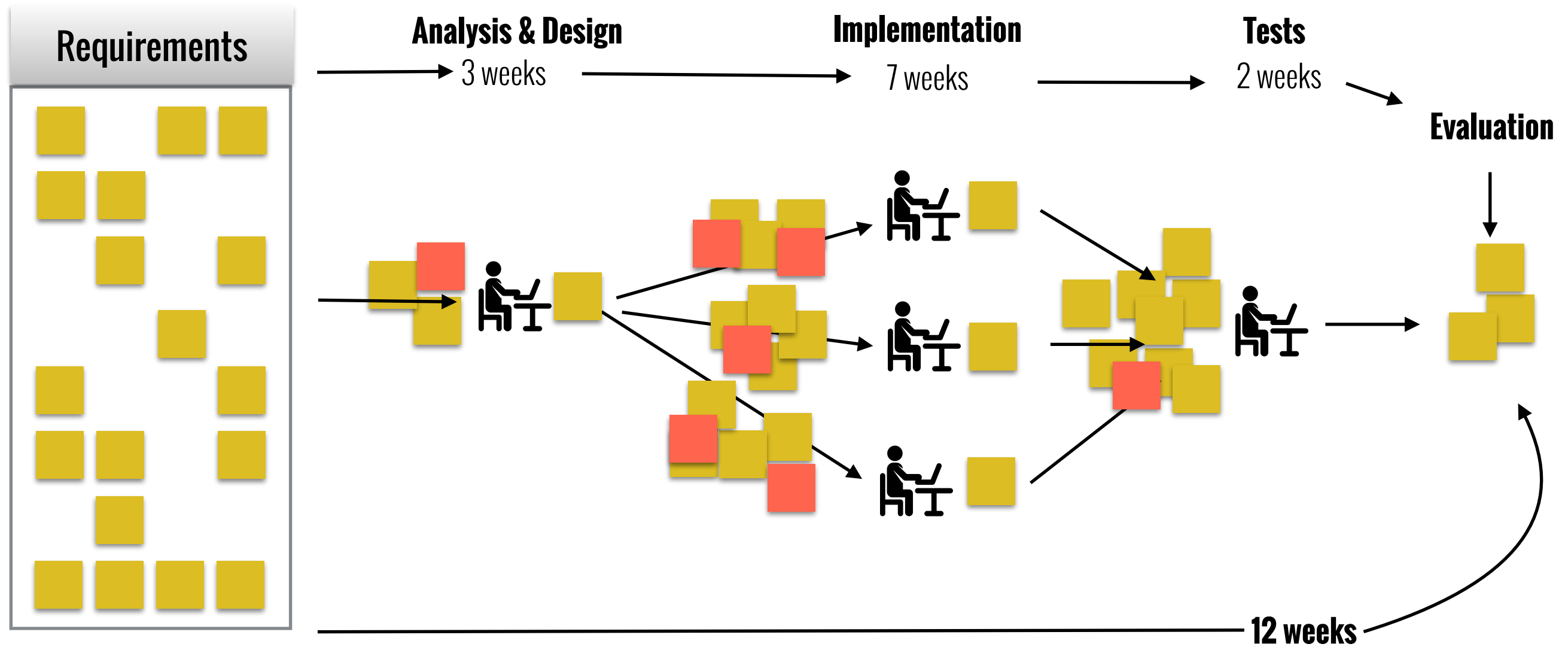
- It is working to deliver "a thing": an inventory management software
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- **People are resources. The work is assigned to them and they do what they are told to do. They all have their own personal queue.**

Company B

- It is working to deliver a result: "a better inventory system"
- The result is going to be related to how people interact to solve the problems towards the business goal. Company B uses a systemic thinking.
- **People are problem solvers. They help to define the solution and go after the work that it is the right work to do at that time. The queues are in the system and are intentionally managed.**

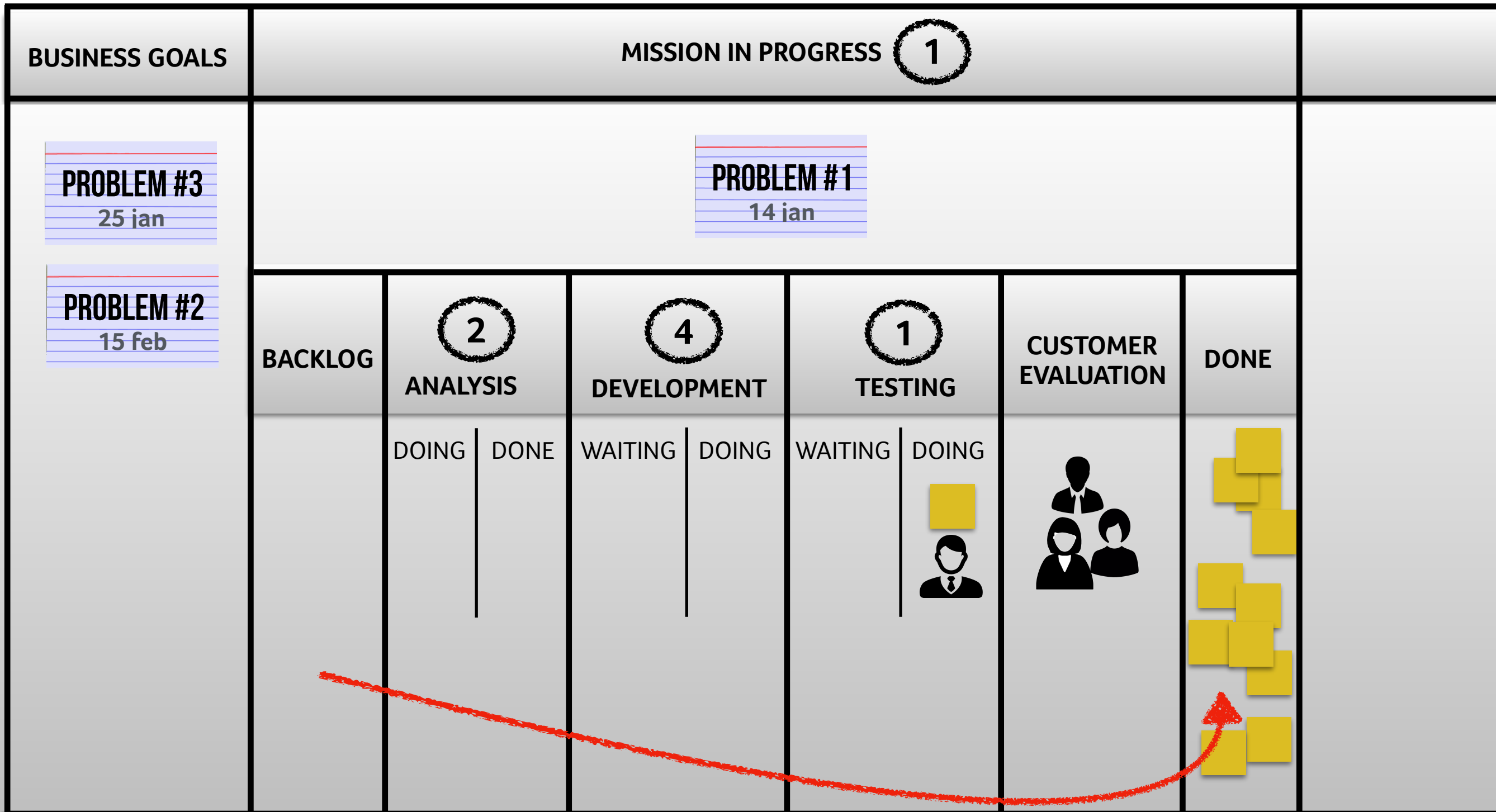
- During the project, I realised that "Company A" had too much trouble to end things. 80% of the work was finished only in the last quarter of the project. Some of the work was delayed or never finished.





- "Company B" works with a date constraint that creates a sense of urgency and limit the expansion of the solution scope. The team is working together to solve small problems that will become shared goals with viable deadlines.





- "Company A" presented to us their final product after 3 months. I still can't use it, because I have to set up everything from scratch and start over from the very beginning. "Company" A is now asking for another contract to import data from our legacy systems and to implement the solution for real.



- Company B's solution is already working. They considered all legacy systems since the beginning. Few weeks after the project starts, we already had solved our problem with stock replenishment. Now all of our main issues with inventory are in a much better situation.



Company A

- It is working to deliver "a thing": an inventory management software
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- People are resources. The work is assigned to them and they do what they are told to do. They all have their own personal queue.
- **The purpose of the work is going to be fulfilled only at the end of the project (when all pieces come together)**

Company B

- It is working to deliver a result: "a better inventory system"
- The result is going to be related to how people interact to solve the problems towards the business goal. Company B uses a systemic thinking.
- People are problem solvers. They help to define the solution and go after the work that it is the right work to do at that time. The queues are in the system and are intentionally managed.
- **The purpose of the work is being fulfilled during the development process (customer cashes out their investment as we solve each of their business problems)**

Company A Ethos

- Follow specifications and "a priori" solutions
- Follow the process
- People are resources (utilization)
- They need to work fast (execution time is more important)
- They need to produce more
- They need to get all done

Company A Ethos

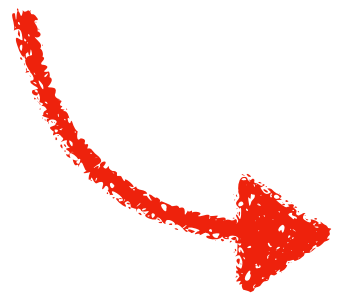
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- People need to get all done

Company B Ethos

- Establish a problem and pursue the solution as a shared goal
- Design the process that best respond to the need of fast feedback
- People are problem solvers (meaning)
- The work needs to flow fast (remove of delays is more important)
- People need to choose the right thing to work at the right time
- People need to get customer problems solved

Company A Ethos

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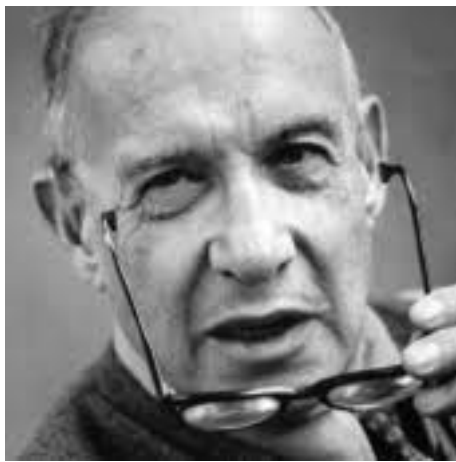
 **Do things right**

Company B Ethos

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Do the right thing 

EFFICIENCY VS EFFECTIVENESS

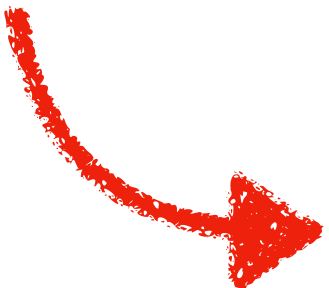


PETER DRUCKER

“Efficiency is doing things right. Effectiveness is doing the right things.”

Company A Ethos

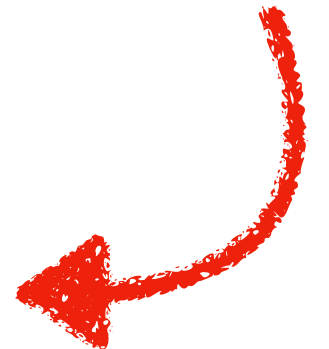
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**Efficiency:
Do things right**

Company B Ethos

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**Effectiveness:
Do the right thing**

TWO DIMENSIONS

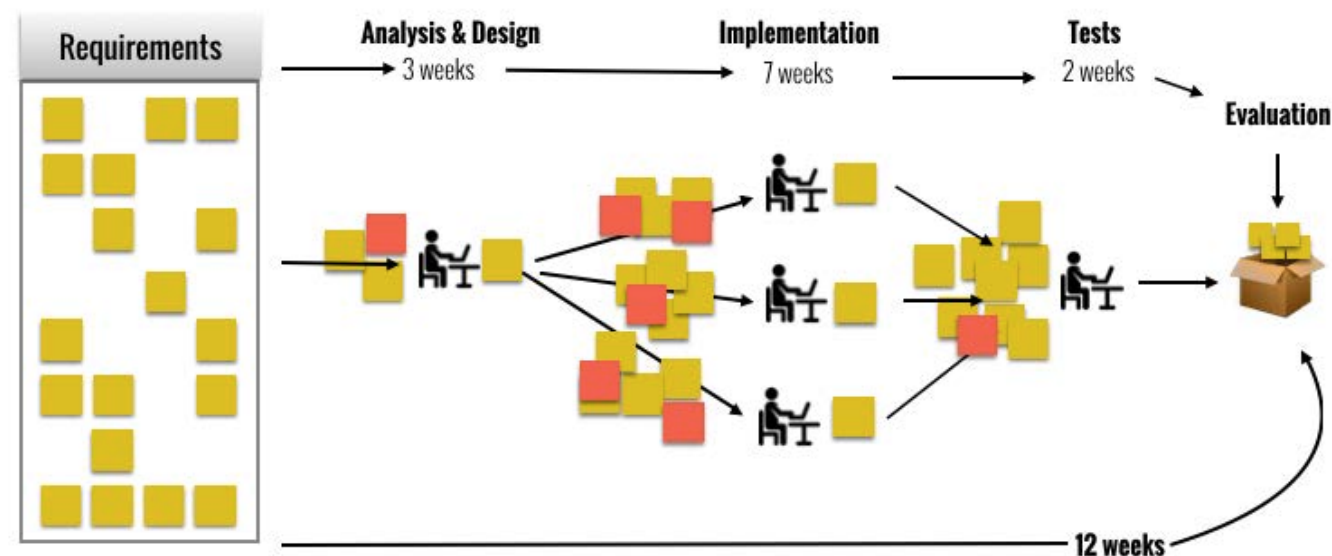


RUSSEL ACKOFF

The two dimensions of any system

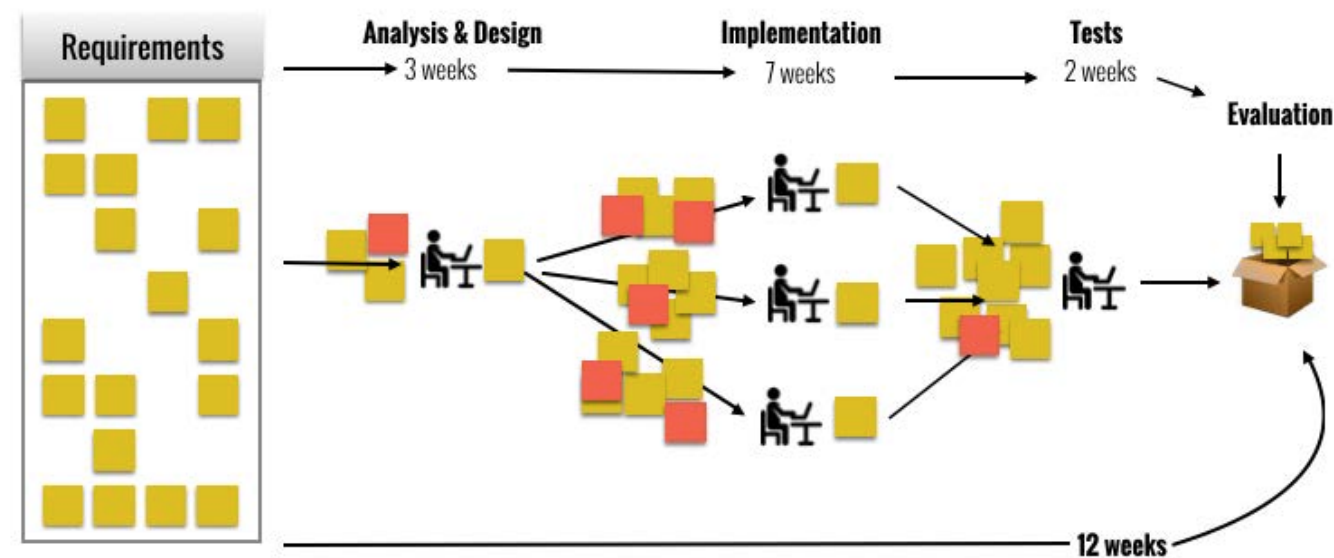
**“The performance of any system has two dimensions:
the efficiency with which it does whatever it does
(doing things right) and the effectiveness of what it
does (doing the right thing, its value).”**

In order to be able to deliver all projects in accordance with the initial agreement, Company A needs to be **efficient**



use a system that aim the
best use of resources to get
high volumes of output
delivered with a lower cost

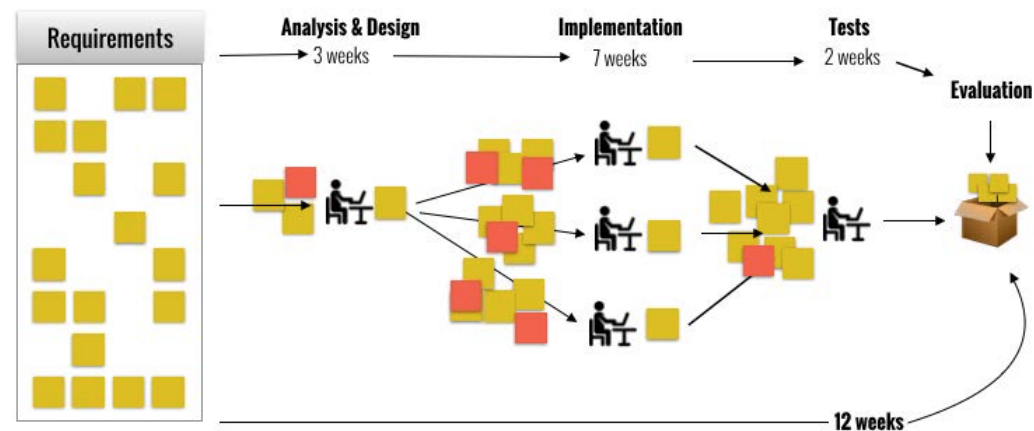
In order to be able to deliver all projects in accordance with the initial agreement, Company A needs to be **efficient**



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**RESOURCE
EFFICIENCY**

Company A



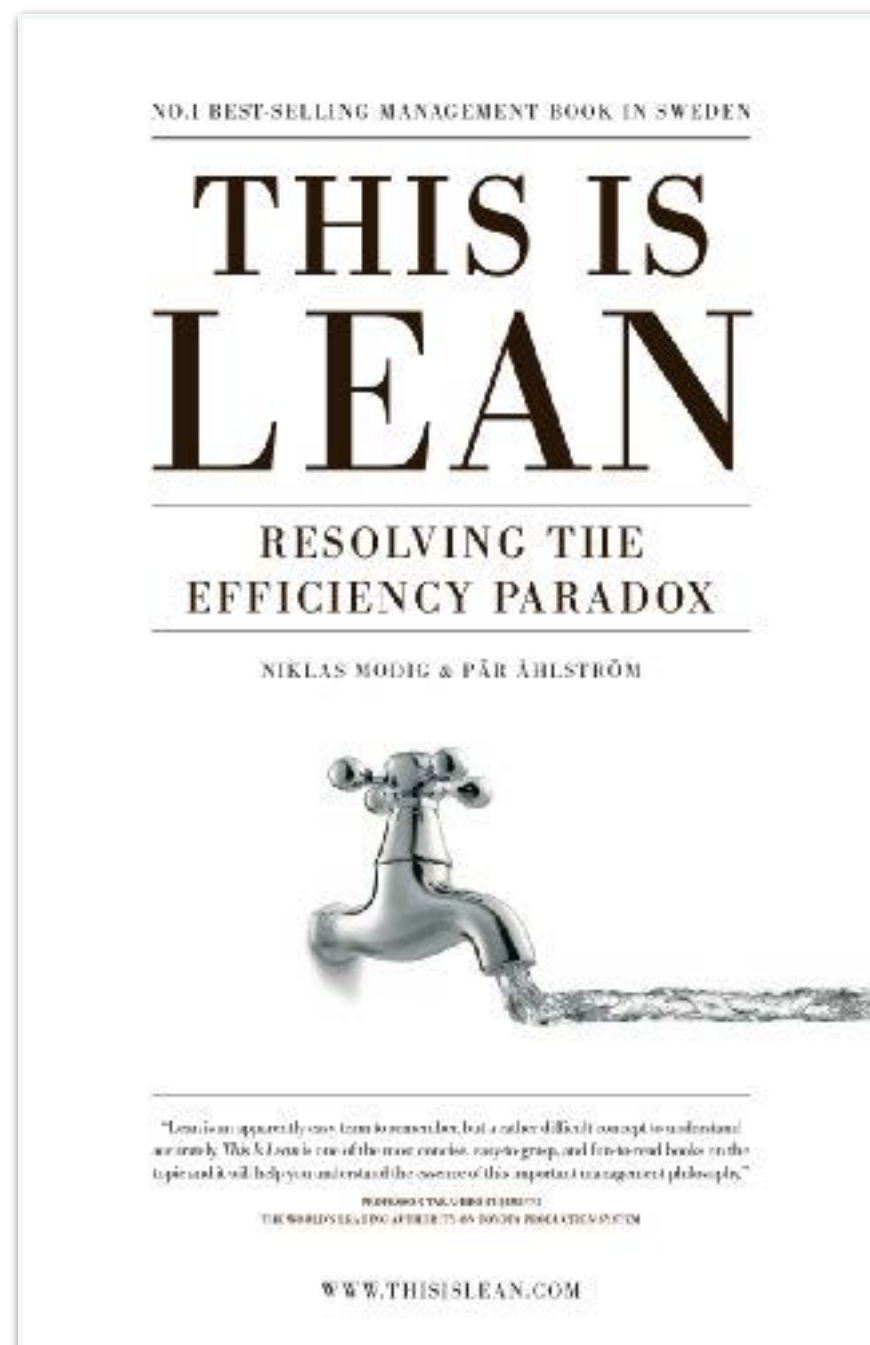
uses

Resource Efficiency

to be
Efficient

That sounds ok...

**So, what is the
problem with
resource efficiency?**



“There is a negative effect of focusing too much in resource efficiency. These negative effects create new needs that demand a lot of additional resources, work and effort that would not be necessary in a flow efficient organization. The paradox is that a greater focus on utilizing resources efficiently tends to increase the amount of work there is to do. We believe we are utilizing our resources efficiently, but we are actually being inefficient, since much of that utilization comes from non-value adding activities.”

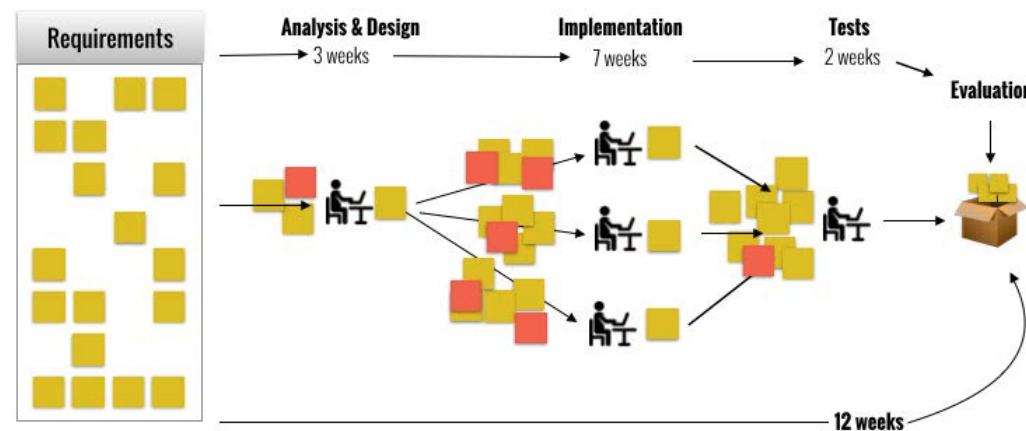
**But we still need to
be efficient, so what
is the solution?**



Flow Efficiency

REMEMBER?

Company A



uses

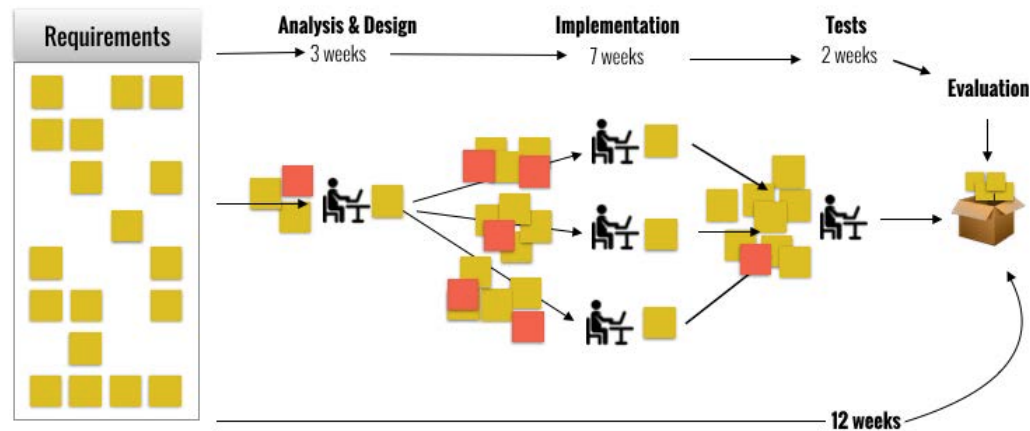
Resource Efficiency

to be
Efficient

What your customers need is not “just features”, but the business problems that they stop having because of them



Company A

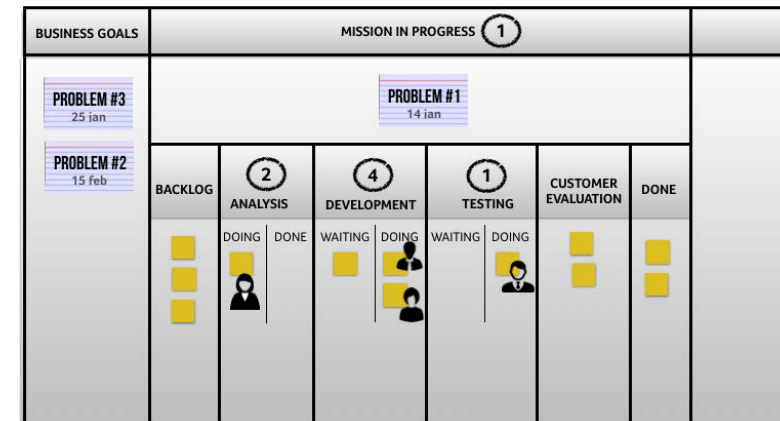


uses

Resource Efficiency

to be
Efficient

Company B



uses

Flow Efficiency

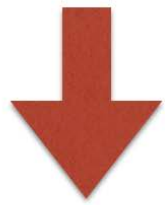
to be
Effective

Getting back to our story...

Company A

3 months

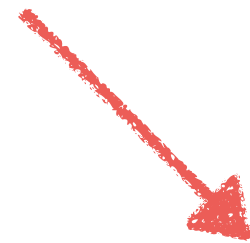
US\$ 27,000.00



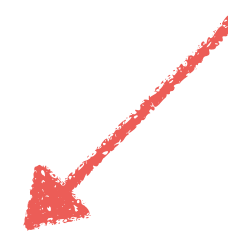
48 features

0,53 features/day
1 feature each 1,8 days
US\$ 562.50 per feature

**What is the cost of doing
with a lot of efficiency what
shouldn't be done in the
first place?**



$$48 - 27 = 21$$

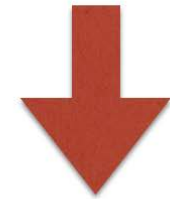


21 features more? Or 21 unnecessary features?

Company B

3 months

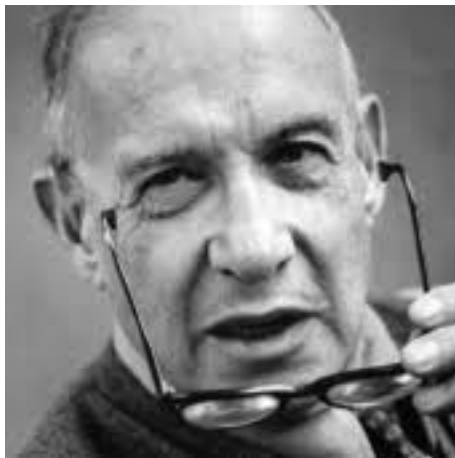
US\$ 35,000.00



27 features

0,3 features/dia
1 feature each 3 days
US\$ 1296.29 per feature

- + training
- + difficult to use
- + support
- + maintenance
- + product complexity
- + bugs



PETER DRUCKER

**“There is nothing quite so useless, as doing with
great efficiency, something that should not be
done at all.”**

THANK YOU!

