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# Lean with Distributed Teams

## "Aligning IT projects with the business"
## (2009-2011 experience)

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# Agenda

- LEAN Approach - Starting Point
- Step by Step Optimization
  - Time Management
  - Scope & Quality Management
- Distributed Teams Management
  - Communication Management
- Customer feedback & Conclusion

LEAN approach

# STARTING POINT

# When telecom meets IT

- IT-Telecom Convergence
  - 90's : Communication
  - Today : Services & Applications

1987 : [] Phoning becomes a sixth sense.

Today : [] The world is yours.

- Project context :
  - Services platform customization
  - Three mobile operators, MVNOs, one outsider
  - Highly competitive and reactive Mass Market
  - Launches linked to communication campaigns

# LEAN Starting Point

| Performance Domains | 2009 Status |
|---|---|
| Time | Project lead-time not matching the market<br>Poor response time to competitors (iterative project mode) |
| Scope | Change requests added during the whole project length |
| Quality | Significant cost of non quality (rework and defects detected during customer acceptance) |
| Communication | Customer complaining about a « tunnel » effect.<br>Teams complaining about scope creep/rework and response time between the development and the test teams. |
| Human resource | Stress and high turnover rate, bottleneck syndrome |

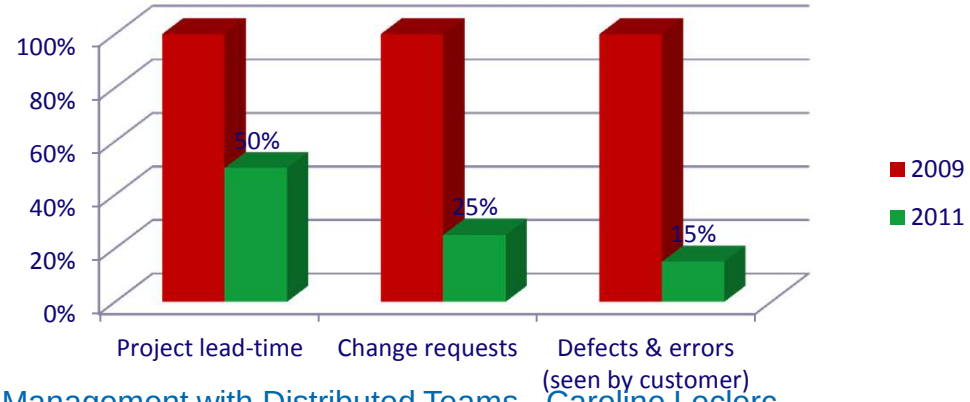
⇒ Customer demands :

- Reduce projects lead-time
- Ensure deliverables compliance – « no bug policy »
- Lower total costs

**LEAN reflexion is initiated in collaboration with the customer.**

# 2011 “win-win scenario”

| Performance Domains | 2011 Status |
|---|---|
| Time | Directly linked to project complexity |
| Cost | Price transparency (complexity model) |
| Scope | Scope “smoothing” and prioritization |
| Quality | Errors root causes are identified and actions taken. |
| Communication | • No tunnel effect, continuous feedbacks.<br>• Daily synchronisation and obstacles resolution.<br>• Responsibility clearly identified.<br>• Project KPIs and progress available for all stakeholders |




Time, Scope & Quality Management

# STEP BY STEP OPTIMIZATION

# The Muda Analysis : 7 types of waste

**<u>Principle :</u> Wastes in all our processes lead to higher costs and longer lead times.**

In our case : three wastes are identified

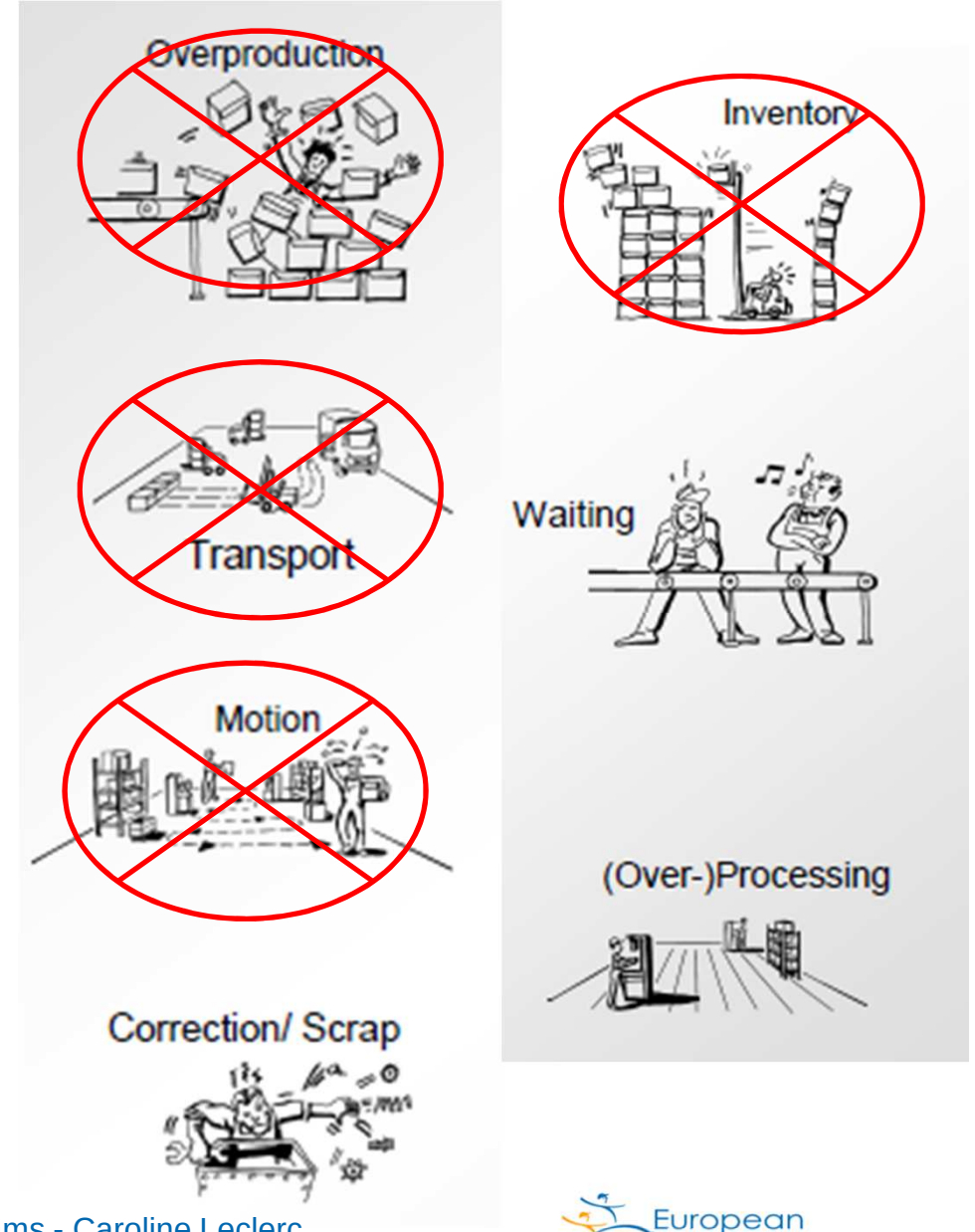
1 – Waiting : “waterfall” process

2 – Over-Processing (adding complexity)

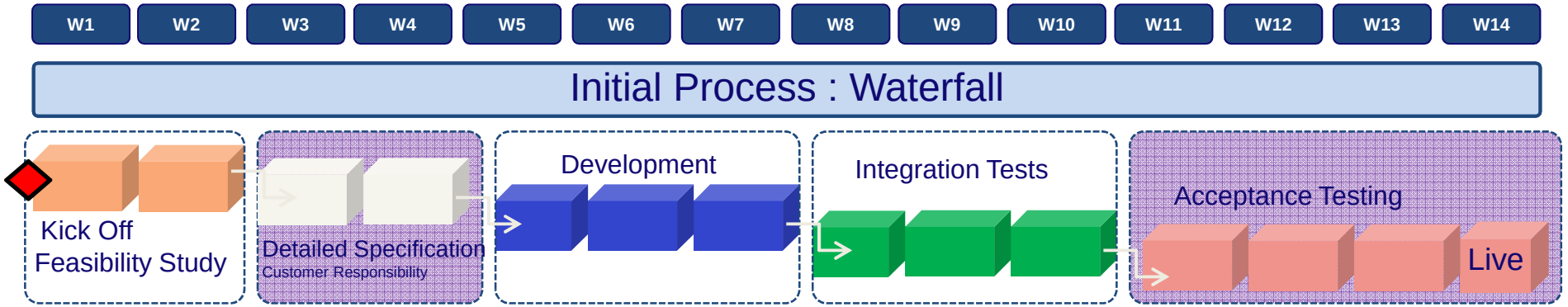
3 – Correction

Two last issues mostly linked to three factors :

- late change requests and scope creep
- errors partial analysis
- communication flaws between stakeholders

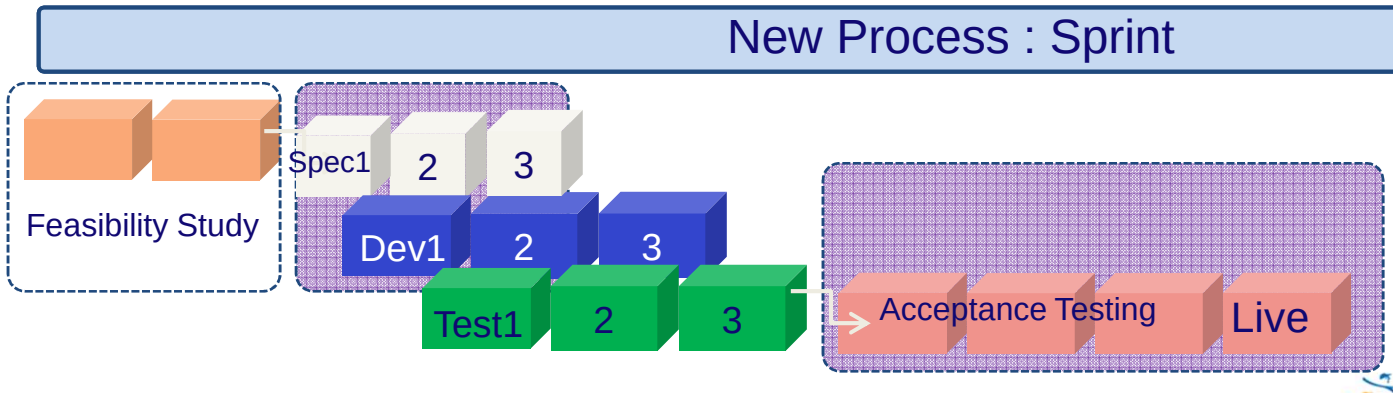


# Time Management – Step 1




⇒ Project particularities :

- Iterative project mode
- Feasibility study : recommendations to match customer needs with the platform logics
- Detailed specification from the customer is a prerequisite for both dev. and testing



# Kaizen feedbacks : Step 1

## Step 1 Assessment :

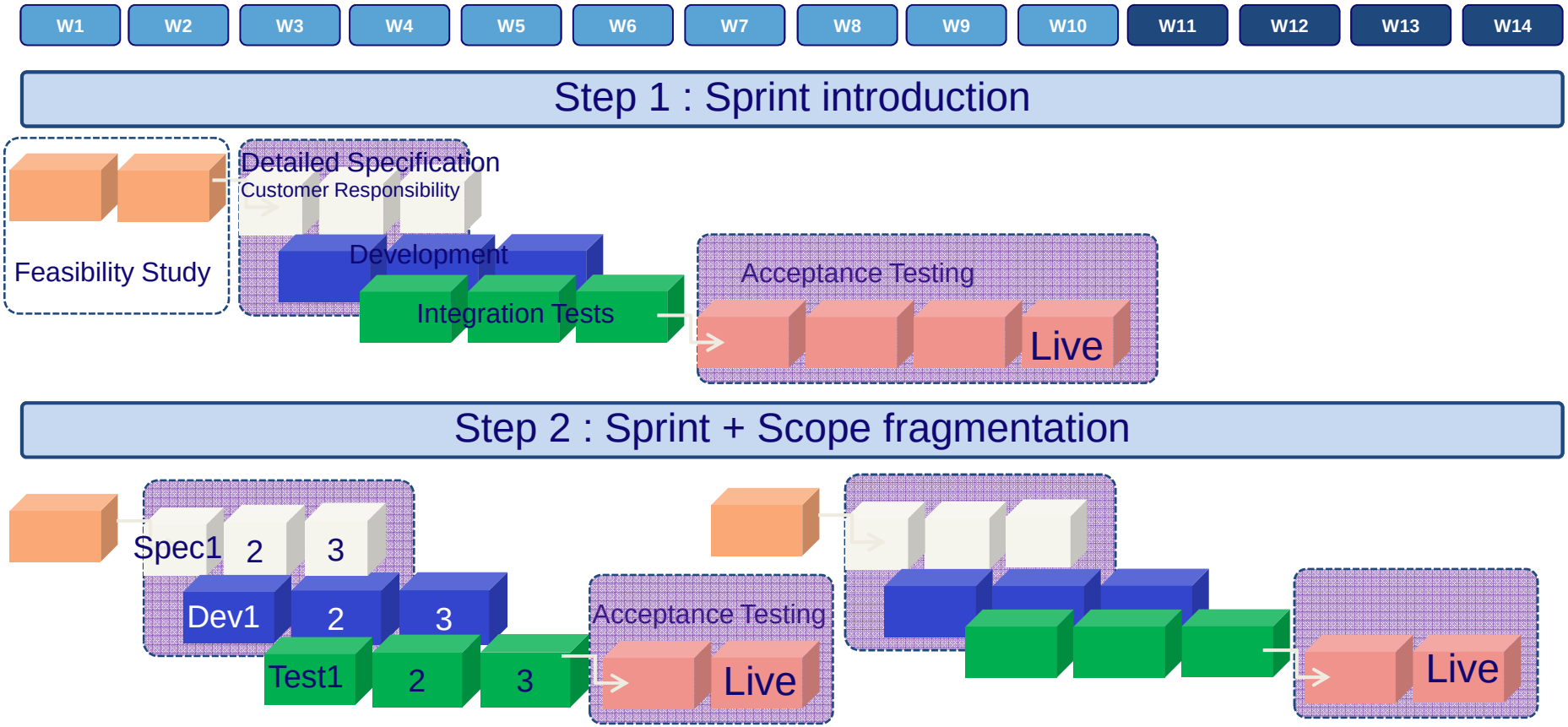

Collaboration & Communication



### Step 1 – results


⇒ Given this conclusion, the customer agreed to **split up the scope** if project **lead-time** was **directly linked to the scope complexity**.

# Time Management – Step 2




⇒ Two iterative optimized projects in one initial « waterfall » project time frame.

⇒ Scope reduction & quality improvement shortens the acceptance testing phase

# Kaizen feedbacks : Step 2

- Customer  involvement & reorganisation : scope “smoothing” over iterative projects
- Supplier engagement : lead-time proportionally linked to scope complexity
- Communication improvement
- Enforced quality control and corrective actions


**How did the project team managed ?**

Communication Management

# DISTRIBUTED TEAMS

# Distributed Team context

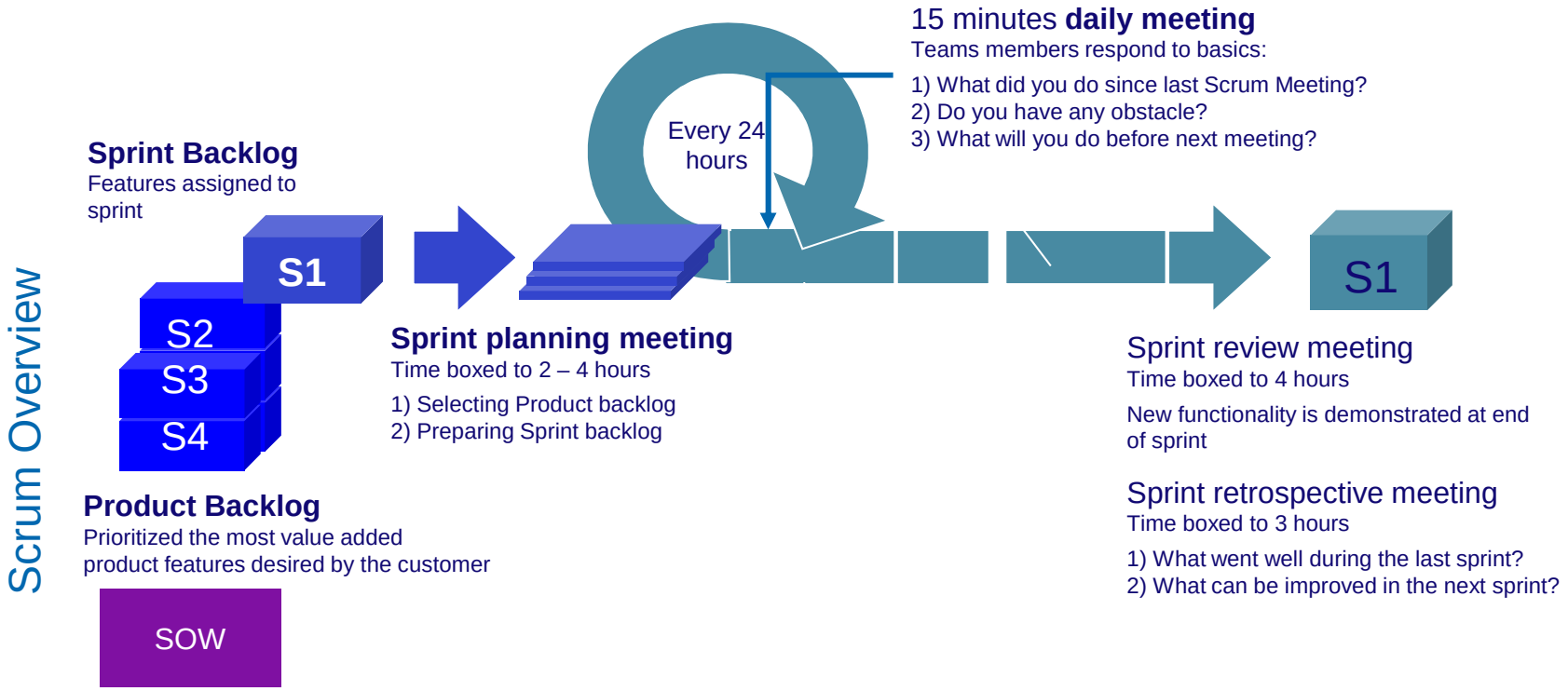
- Project Team based in four locations
  - Project Manager/Experts – Site A
  - Development team – Site B
  - Testing team – Site C & D
- Interventions on three customer locations

**How is Visual Management possible ?**

# Different methods applied

- Scrum – Stand Up Meeting
  - Collocated vs Remote Organization
- Planning & Quality Follow up
- Kaizen
  - Feedback loop
  - Success and points to improve
  - Field experience
- Team “buy in”
  - Roadmap
  - Project Aim

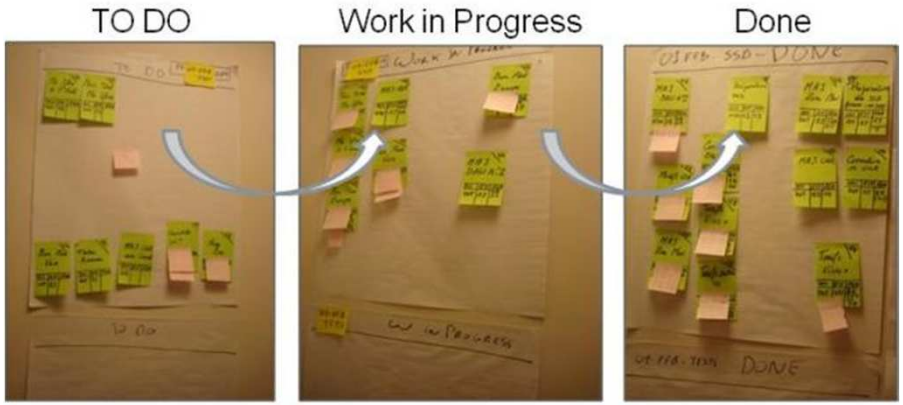
# Scrum Meeting




Prerequisite : The scrum will have 2 phases (with and without the customer).

# Scrum Management

- Colocated
  - Initiation of the sprint process with the team
  - Mentoring on visual management and scrums




- Distributed
  - Each coordinator is in charge of his projects local visual support

| | To Customer + Team |
|---|---|
| PM | Progress, Action Log |
| Coordinator | Exchange grid |


Visual Management limitation

- ➢ Visual management practice must be outsourced on each remote site
- ➢ Support must be adapted to digital exchanges

# Planning & Quality Follow up

## PLANNING FOLLOW UP - VISUAL

➢ The full project planning is available.

## QUALITY FOLLOW UP - VISUAL

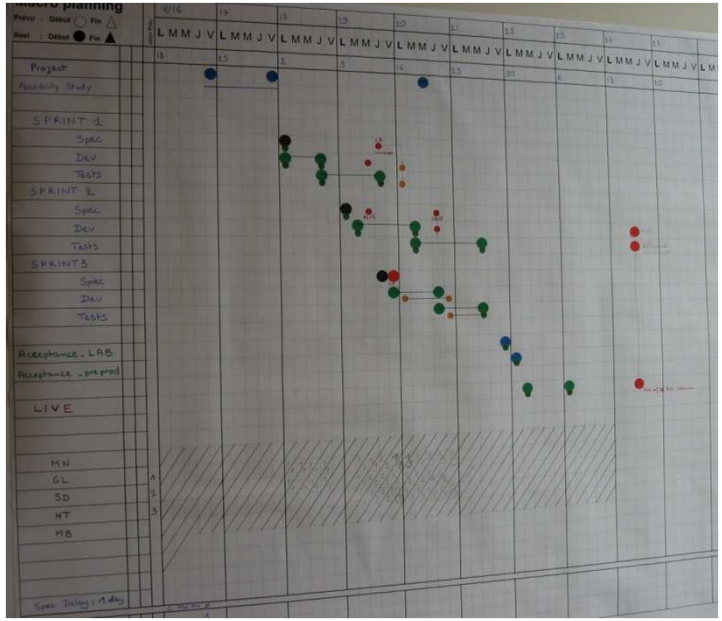
Including customer vs. Internal errors

➢Project Team can justify reworks and cost of non quality (his responsibility or customer's)

➢ Customers' errors are reported to the customer as soon as detected

➢ Project team errors are visible during the project and retroactively.

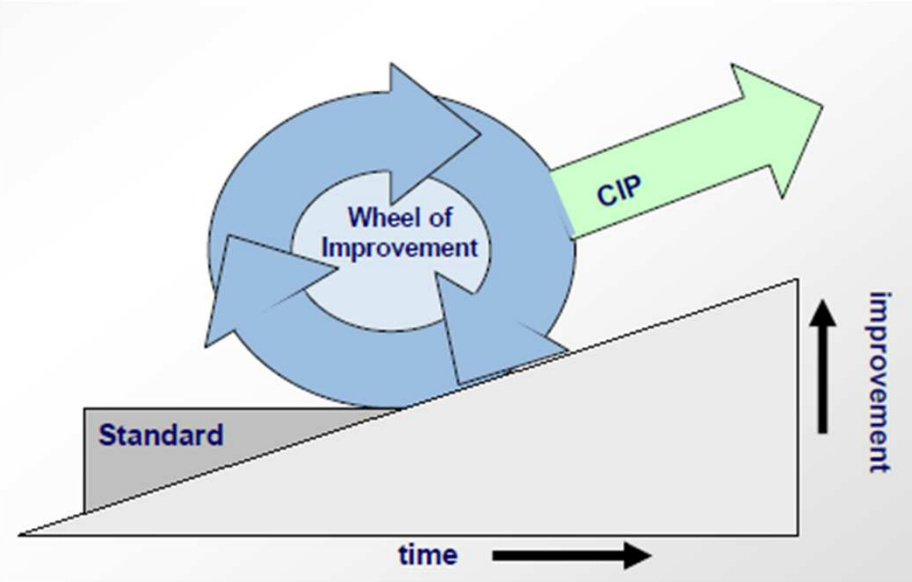
Next to the team
Updated in real time by the team




Support for Kaizen
Share of responsibility
Quality "real time audit"

# KAIZEN “ change for the better”

- Monthly meetings
- Debriefing of the last KAIZEN actions
- Main events & Feedback loops
  - Review of the Month Successes
  - Review of the Month Deficiencies
  - Level of deliverables conformance
- Review of field experience & sites’ visits
- Processes, Tools & Communication enhancement lead
- Experience feedbacks between projects



# Quality of deliverables follow up

**CUSTOMER responsibility**

Specific KPIs defined with the customer are monitored and reported by the project team.

**DEV or TEST TEAM responsibility**

-Is it a misunderstanding of the customer's need ? A lack of time ? A unexpected delay ?

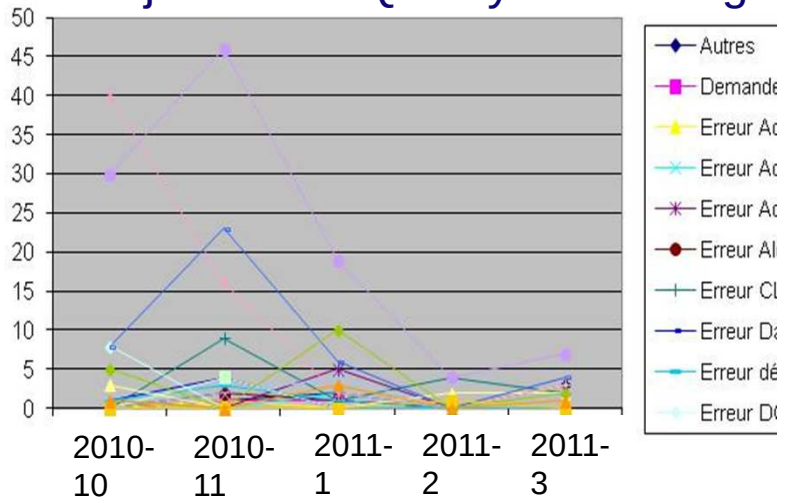
⇒Feasibility study, processes & communication to review

-Is it a human error ? A misunderstanding of the way to implement or a dev/test tool limitation ?

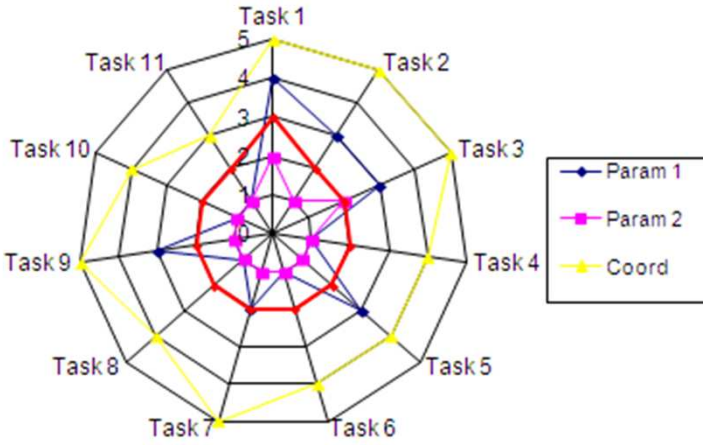
⇒Is the documentation up to date ? Has the proper training/briefing been made ? Can we improve the tools ?

**Each error is sorted out and KPIs monitored to follow the evolution project by project.**

Project Team Quality Monitoring




Project team Competence Monitoring



# On site management & Field experience

**SCRUM ON SITE**

- Once a week
- Updates of documents to display

**FIELD EXPERIENCE** (live deployment)

Emphasize problematic on :

-Logistic

-Organisation of operations

-Team share of responsibility

-Stress

-Tools limitation

-Workarounds in place

-Etc…

⇒Encounter with all teams' members

⇒Conclusions seen in Kaizen

# Feedback Loops & Recognition

How Do You Give Positive/Negative Feedback to Your Team Members?

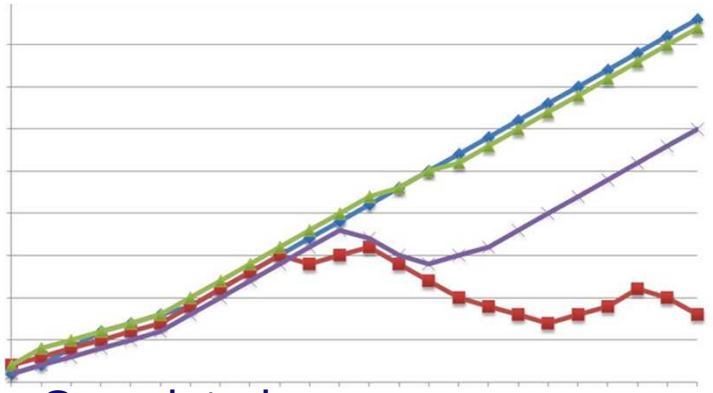
Weekly « satisfaction » KPIs enhance healthy competition between teams.

Weekly « weather forecast » is the occasion to summarize the week main events.

Subjective Dissatisfaction /Satisfaction is visible and reported.

Summary is presented by each team during the monthly KAIZEN workshop .


Snapshot



Cumulated

Three points of view :

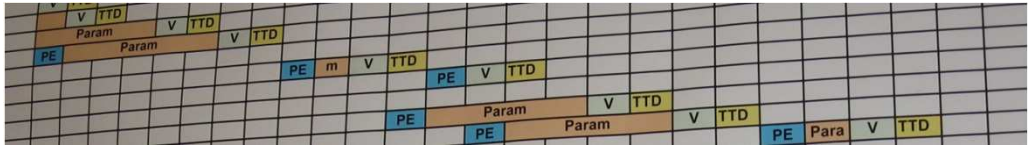
- Development Team (from PM)
- Testing & Deployment Team (from PM)
- Project perception (from customer)

# Team anticipation & Project business purpose

## ROADMAP

+ Locally displayed

+ Team members are fully aware of the planning to come  and free to comment it.




## PROJECT PURPOSE

+ Links technical projects to their business purpose

+ Align  team technical objectives with customer's strategy

Conclusion as a Project Manager

# CUSTOMER FEEDBACK

## Customer feedbacks

Congratulations received in 2011

## PM experience

+ Close collaboration with the team

+ Work together with customer toward shared outcomes

+ Business and technical constraints shared and understood by all stakeholders

+ Good understanding of the team activity, concerns and obstacles

+ Projects' progress graphically displayed and available for every hierarchy levels during and after the project (improvement is obvious)

+ Healthy competition between projects and teams

# Q&A