Virtual Team at Technip: e-Collaboration approach

- Franco Concari – Project Management Systems – Business Owner
- Paola Venzi – Project Manager   **Picture**
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- Adel Trabelsi - Shell FLNG - Engineering Manager

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take it further

Contents

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1. Who we Are and What we Do

Franco Concari

[Short Video](#)

Technip Today

- One Group

- 36,500 people in 48 countries

- Industrial assets on all continents, a fleet of 32 vessels (4 of which under construction)

Several Operating Centers may cooperate in Mega Projects

Collaboration is a Must

Common Language and Tools are essential

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Project Chain in Complex EPC Projects (on-shore)

4,000,000 Mnh

40,000,000 Mnh

Detail Design → Procurement → Construction → **48 Months**

Vendor(s)

SubContractor(s)
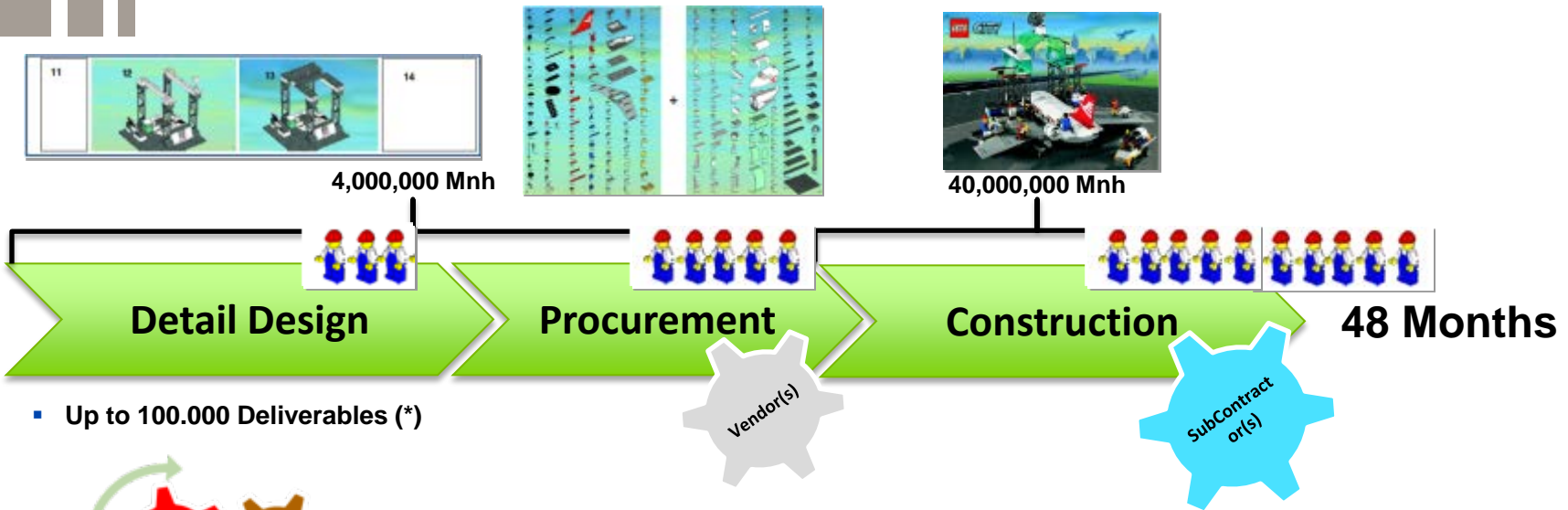
- Up to 100.000 Deliverables (*)

Technip — Client, PMC, Licensor, Local Content, EPC Contractor(s), Local Authorities, Technip Operating Center(s)

- 3,500 (PoE) (*)
- 200.000 m³ Concrete (*)
- 37.000 Tons Steel Structures (*)
- 77.000 Tons Piping (*)

(*) Q.ty relevant to a Mega Project

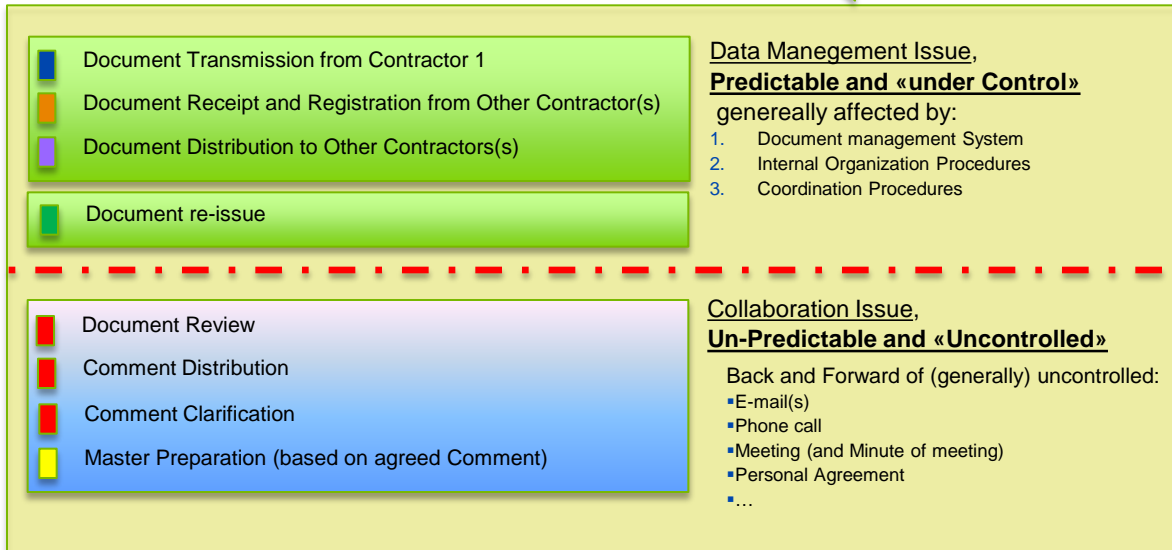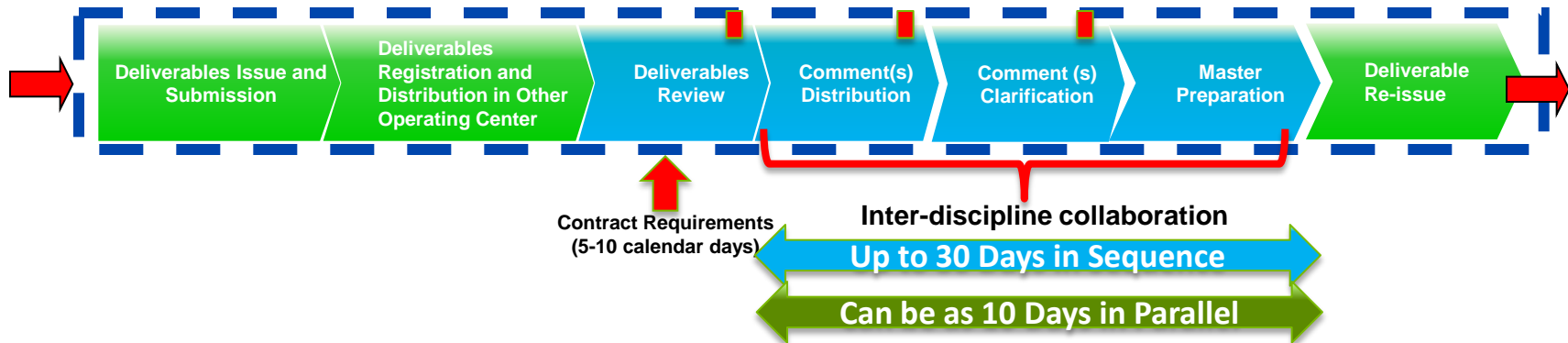|	Past	Present
Project		Mega Project
	Simple Project Organization One Operating Center One Client	Complex Project Organization Several Operating Centers Several Stakeholders
	Hard Copy Centric	3 D Model Centric
	Task Force	Geographically Distributed
	Single Productivity (more Sequential Processes)	**Global Productivity (more Parallel Processes)**

Needs ?

Working Environment: Common and Traceable

to share and syncronise communications, documents, activities

Operation: Simple – Effective - Reliable

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Deliverable Life Cycle (a Cultural issue)

| Deliverables Issue and Submission | Deliverables Registration and Distribution in Other Operating Center | Deliverables Review | Comment(s) Distribution | Comment (s) Clarification | Master Preparation | Deliverable Re-issue |

Contract Requirements (5-10 calendar days)

Inter-discipline collaboration

Up to 30 Days in Sequence

Can be as 10 Days in Parallel

Document Transmission from Contractor 1

Document Receipt and Registration from Other Contractor(s)

Document Distribution to Other Contractors(s)

Document re-issue

Data Manegement Issue,
Predictable and «under Control»
genereally affected by:
1. Document management System
2. Internal Organization Procedures
3. Coordination Procedures

- **Good Data transmission**
- **Good data Management**
- **Poor e-collaboration capability**

Document Review

Comment Distribution

Comment Clarification

Master Preparation (based on agreed Comment)

Collaboration Issue,
Un-Predictable and «Uncontrolled»
Back and Forward of (generally) uncontrolled:
- E-mail(s)
- Phone call
- Meeting (and Minute of meeting)
- Personal Agreement
- …

- **Poor e-collaboration capability**

Teams in remote locations cannot easily collaborate

«e-Collaboration» tools are mostly required for parallel operations

How can Virtual Teams work can be improved ?

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2. From Project to e-Collaboration Technology
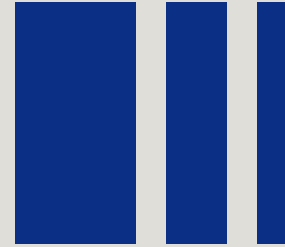
Roberto DeFelice

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What is a Virtual Team

"A virtual team (also known as a geographically dispersed team or distributed team) is a group of individuals who work across time, space and organizational boundaries with links strengthened by webs of communication technology."

"Small temporary groups of geographically, organizationally and/ or time dispersed knowledge workers who coordinate their work predominantly with electronic information and communication technologies in order to accomplish one or more organization tasks"

"Members of virtual teams communicate electronically and may never meet face-to-face"

"Virtual teams allow companies to procure the best talent without geographical restrictions"

"Virtual teams require new ways of working across boundaries through systems, processes, technology, and people, which requires effective leadership...despite the widespread increase in virtual teamwork, there has been relatively little focus on the role of virtual team leaders"

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Structure of a (Virtual) Team

Structured approach to a team based on Powell, Piccoli and Ives studies: four main focus areas.
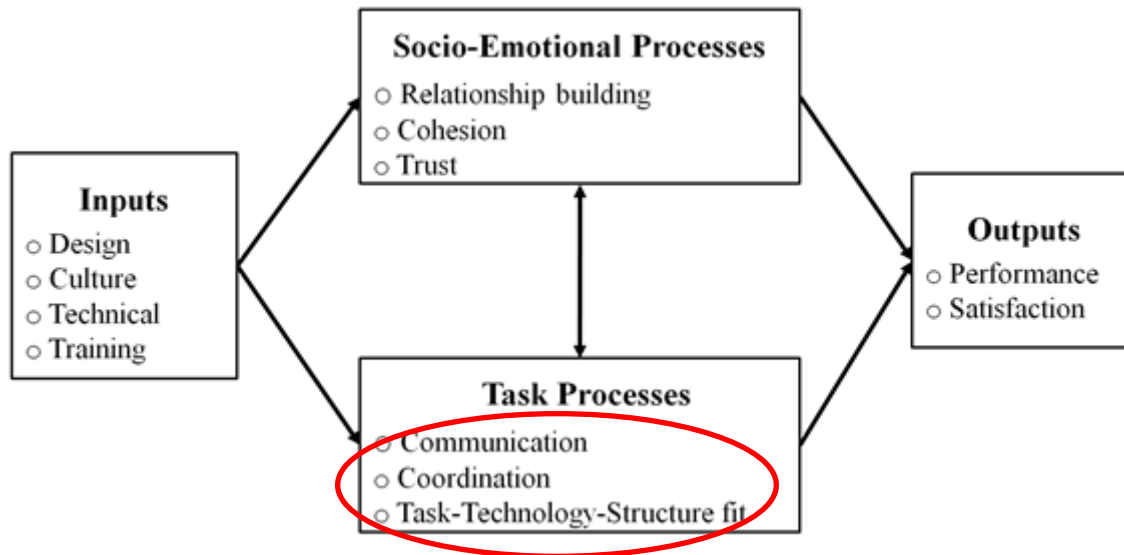
A virtual team has its focus on the technological aspects to fit the **links** between members.

Usually the teams first adjust their organization to the technology at hand, but later also adjust the technology to their organization.

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Virtual Team: Main Concepts

Links - Purpose – People

The links are what distinguishes a virtual team from a conventional team

- Synchronous
- Asynchronous
- Face-to-face or phone call: for ambiguous tasks or, manage conflicts
- E-communication: structured tasks, review of documents

The purpose is the most critical aspect for virtual teams: purpose is what holds a virtual team together

- Common goals
- Individual tasks
- Results

People can belong to different organizations and cultures.

- Virtual teams do not have hierarchy.
- Each person could prefer a different communication channel

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Virtual Teams: Pros and Cons

Increased productivity
- Flexybility
- Extended global work time
- Fast communication

Low effectiveness of communication
- Media
- Inability of members

Extended market
- No geographic boundaries

Lack of Management and Governance
- No phisycal organization

Knowledge transfer
- Easy communication
- Sharing information

Global efficiency
- Skill
- Lack of good involvment

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Types of Virtual Teams

Networked teams

- Geographically distributed.
- Long term.
- Objective: sharing expertise.

Parallel teams

- Highly task oriented teams that usually consist of specialized professionals.
- Short term, linked to the task execution.
- Internal or external to the organization.

Project development teams

- Geographically distributed, may operate from different timezones.
- Focused on creating new products or services for users and/or customers.
- Terms longer than parallel teams.
- Ability to make decisions rather than just make recommendations.

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Types of Virtual Teams

Work, production or functional teams

- Totally function specific where they only work on within an organization.
- When operating from different geographical locations, they perform regular or ongoing tasks.
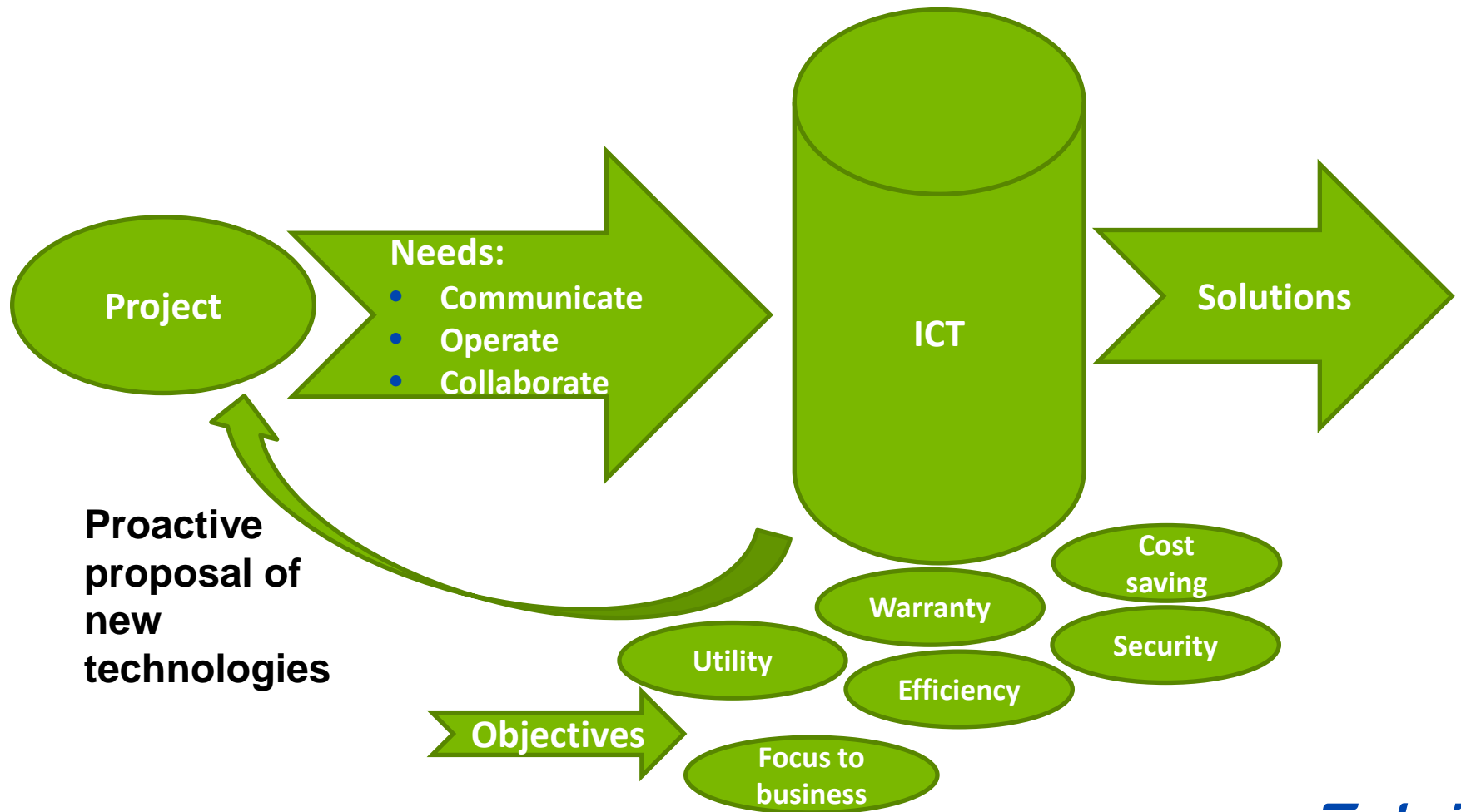
Service teams

- Geographically located in different timezones.
- Assigned to a particular service.
- Works on providing the particular service in their daylight hours.
- Follow-the-sun provided basing teams operating in a different timezone.

Offshore ISD teams

- Independent service provider teams.
- Subcontracted for portions of work,interfacing with an onshore team.
- Commonly used for software development or international R&D projects.

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What's in Technip

From Project to Technology

Project

Needs:
- Communicate
- Operate
- Collaborate

ICT

Solutions

Proactive proposal of new technologies

Objectives

Utility

Warranty

Efficiency

Cost saving

Security

Focus to business

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What's in Technip

People

Team work

Recording

Deliverable

Communication

Security

Information

What's in Technip

E-collaboration Solutions

Project mail box (communications delivery policies)

Portal to share information

Repository to share documents

Publishing of applications

Phone conference – Web conference - eMail

Video conference

Unified communication (eMail, Instant messaging, Desktop sharing, Presence)

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Virtual Teams in Technip

Work in Parallel Teams

E-collaboration solutions

- Portal to share information
- Repository to share documents
- Publishing of applications
- Phone conference – Web conference - eMail
- Video conference

Characteristics

- Objective: work on different sections of a global work
- Main aspects:
  - Deliverables
  - Security
- Communication: on demand
- Information: shared or spread
- Security: integrity and availability
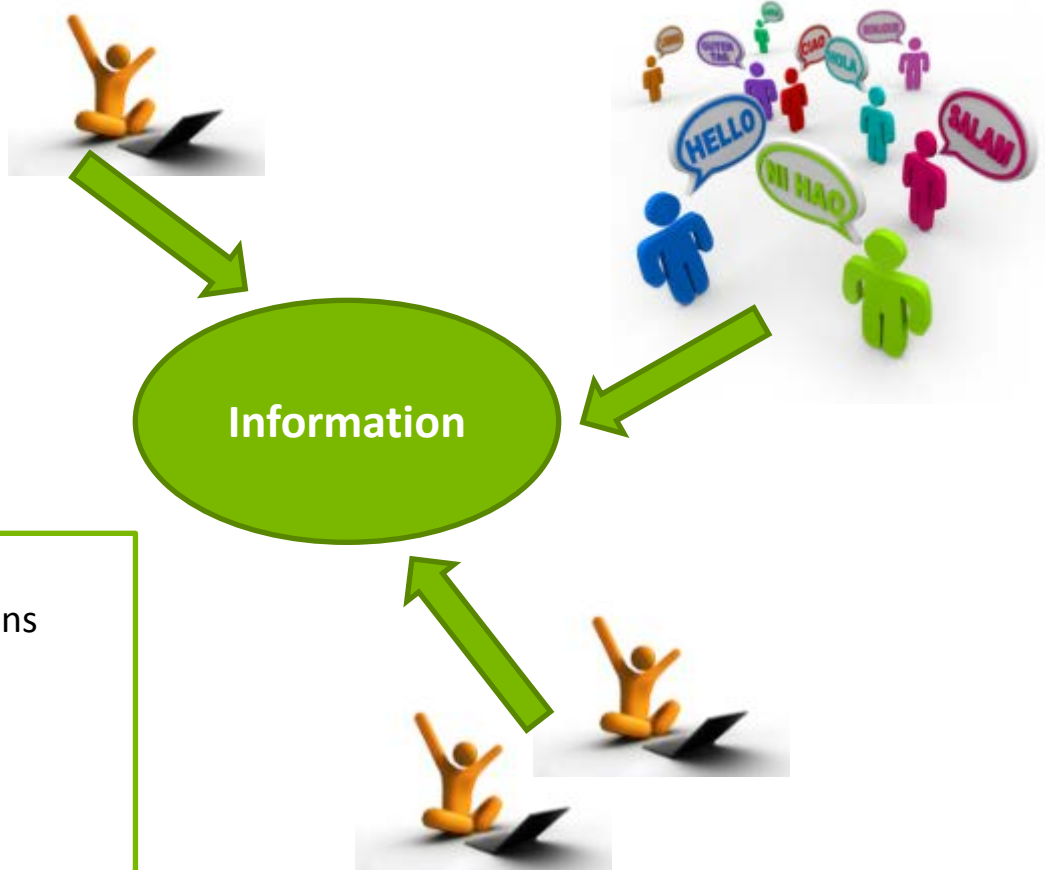
Information

Virtual Teams in Technip

Work in Project Teams

E-collaboration solutions

- Project mail box
- Portal to share information
- Repository to share documents
- Publishing of applications
- Phone conference – Web conference - eMail
- Video conference
- Unified communication

People working in project team

- Objective: share or collaborate on same project with a common purpose
- Main aspects:
  - Communication
  - Recording
  - Deliverables
  - Security
  - Team Work
- Communication: structured
- Information: shared or spread
- Security: availability, integrity, confidentiality

Information

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Virtual Teams in Technip

Work in Networked Teams

E-collaboration solutions

- Portal to share information
- Repository to share documents
- Phone conference – Web conference - eMail
- Video conference
- Unified communication

People working in networked team

- Objective: share knowledge and expertise
- Main aspects:
  - Communication
  - Security
  - Team Work
- Communication: open
- Information: shared or spread
- Security: availability

Information
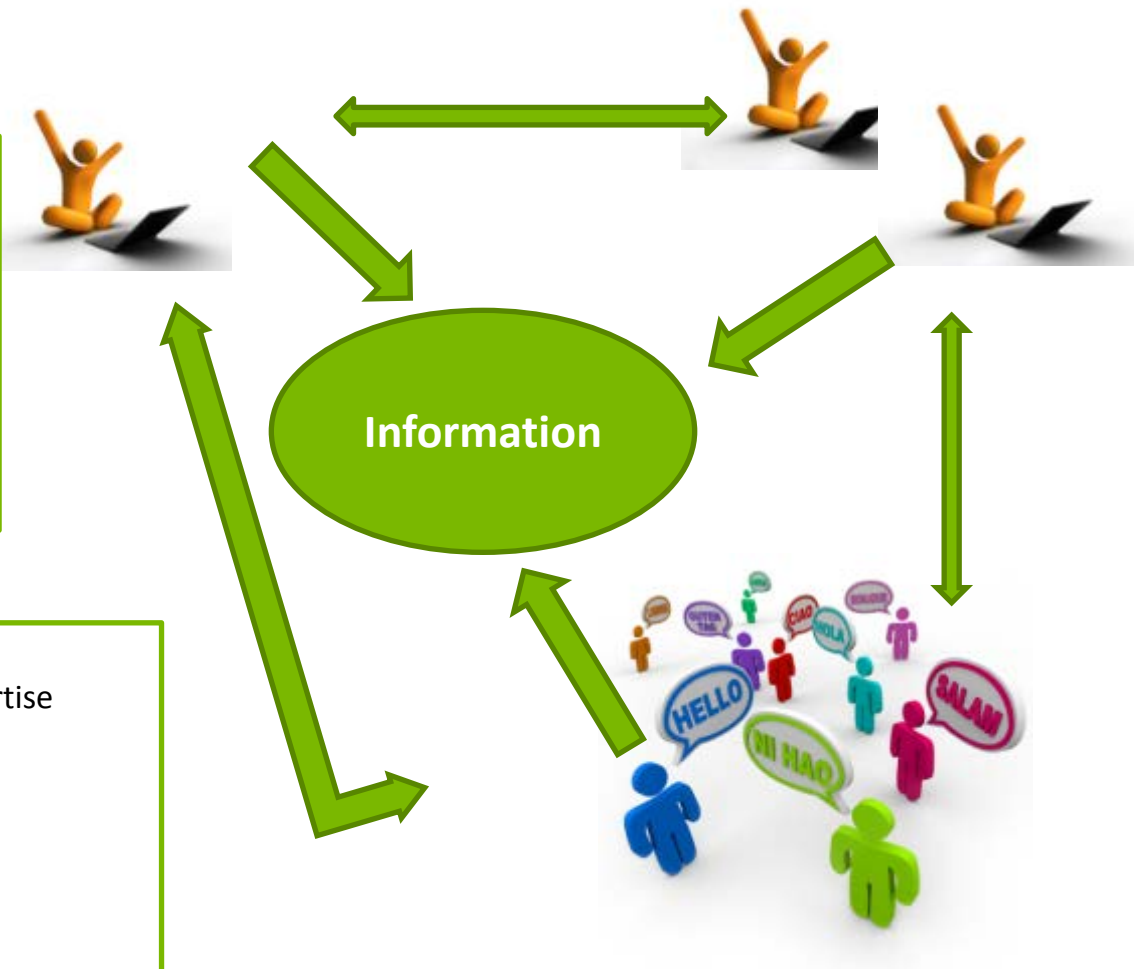
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What will be in Technip

New Needs of the Business

Going on and Coming soon

- Open and Smart meetings
- Visual management

Nice to have and Next future

- Real Unified Communication
- E-collaboration functionalities in Tansactional Applications

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Open and Smart meetings: new way to e-meet

Recording meeting session

Integrated booking system

Take snapshot for MOM and send via email

Interact with contents and modify it

Get digital signage and interact with it

Requirements

- Easy to use
- Integrated
- Available
- Effective

Attending by mobile device

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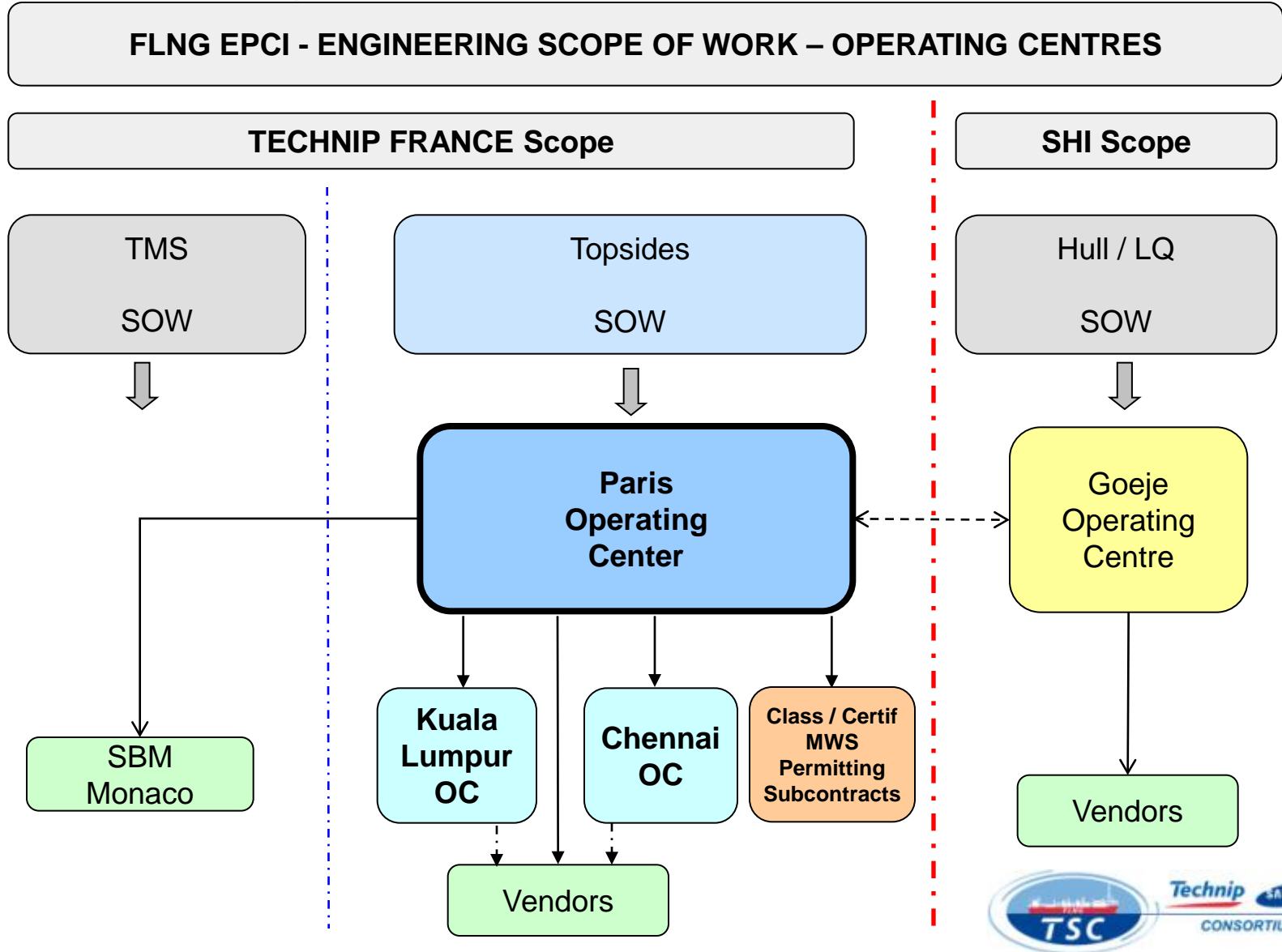# 3. Prelude FLNG Visual Management

Goal Zero- Robustness -No Change - Cost - Schedule

Adel Trabelsi

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1. Prelude FLNG

► **Turret moored floating LNG facility with liquefaction capacity of 3.5 MTY**

► **LNG (232,000m³), LPG (95,000 m³) and condensate (133,000m³) storage**

► **Facilities for exporting by Side by Side mooring**

► **Flexible risers routed to the turret**

► **All controls, subsea, processing, storage and loading from the FLNG**

► **On station for 25 years**

1. Prelude FLNG - Engineering SOW

Overall Organisation

FLNG EPCI - ENGINEERING SCOPE OF WORK – OPERATING CENTRES

TECHNIP FRANCE Scope	SHI Scope

TMS
SOW

Topsides
SOW

Hull / LQ
SOW

Paris Operating Center

Goeje Operating Centre

SBM Monaco

Kuala Lumpur OC

Chennai OC

Class / Certif MWS Permitting Subcontracts

Vendors

Vendors

2. What is Visual Management

- **Visual management is one of the lean management techniques designed so that any one entering in a work place, even those who are unfamiliar with the detail of the processes, can rapidly see what is going on, understand it and see what is under control and what isn't. Essentially, the current status of the operation can be assessed, at a glance.**

- **The significant gaps in comparison with the fixed objectives must give place to an analysis and to a corrective action plan.**

- **Terminology**
  - Lean Management : Do the thing right
  - Six Sigma : Do the right thing
  - Obeya : Japanese word meaning "Big meeting room"

2. What is Visual Management

Visual management helps you:

- Understand and indicate work priorities
- See whatever performance / objectives was met
- Identify the flow of work and what is being done
- Identify when something is going wrong or not happening
- Communicate to every one what performance measures are in place
- Demonstrate to all the elements required for safe and effective work
- Provide real time feedback to everyone involved in the whole process
- Cut down on meetings to discuss work issues
- **Make people talking to each other**
- Avoid «waiting others»
- **Save time**

3. Visual Management - Phase 1

Primavera

Visual Planning

Target : Secure the Engineering

4. Visual Management – Phase 2

A lot of white boards for visual management…

4. Visual Management - Phase 2

4 limitations of white boards for Visual Management:

- **Space**
  - One room for each project, locked as long as the project lasts
  - How to free up, share this space ?

- **Geography**
  - Multi-site teams across the world
  - How to gather every one in a single room ?

- **Animation**
  - Re-typing, annotations, time and speaking control,
  - How to do better, faster with more interactivity ?

- **Security**
  - Critical and confidential projects displayed on the wall
  - How to protect sensitive information ?

Visual Planning Obeya ➡ Smart Board + i-Obeya
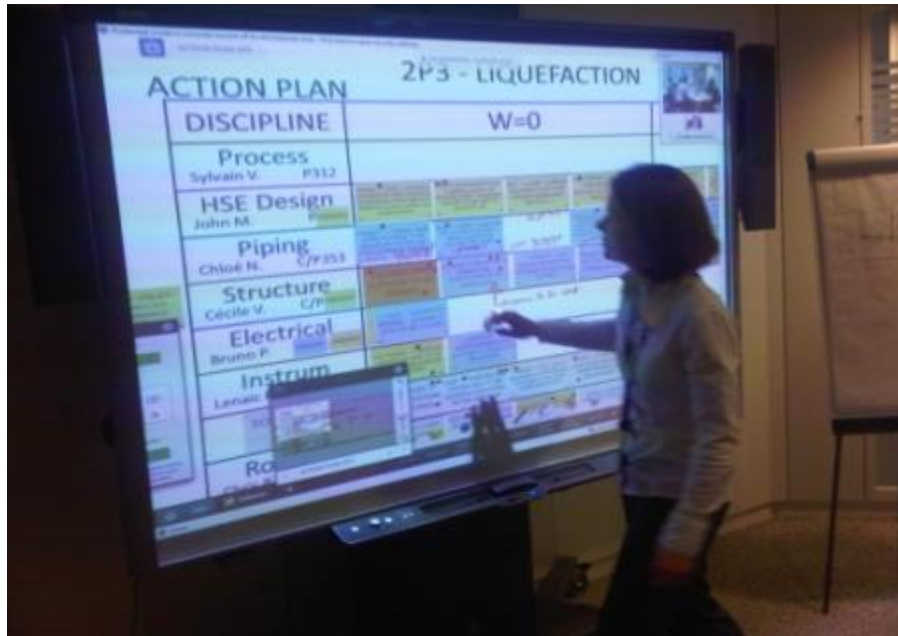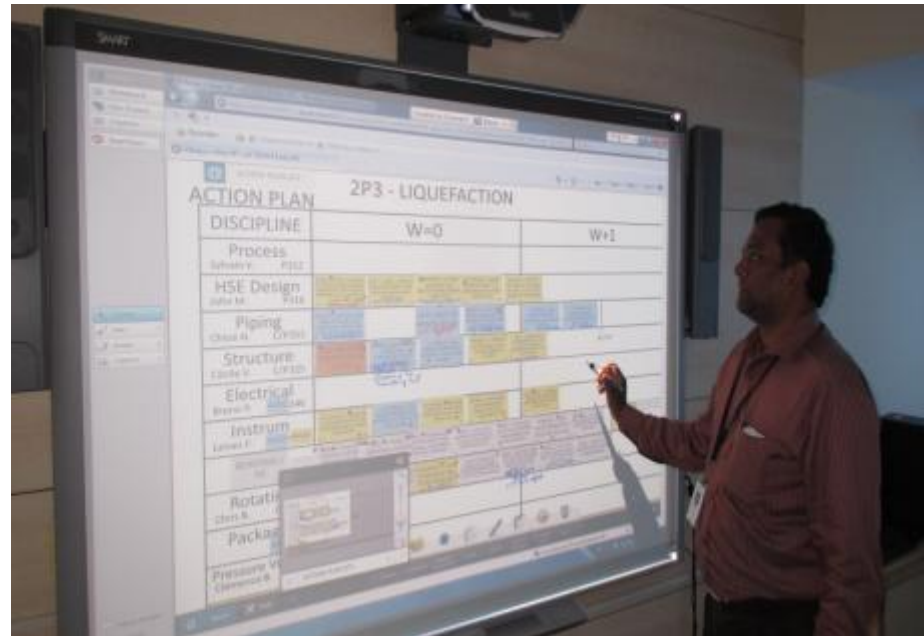
Paris

Chennai

4. Visual Management - Phase 2

Paris / France ⟷ **Chennai / India**

5. What's Next

On Prelude FLNG

- Install the Visual Management on site (Goeje, South Korea) to be used by the Field Engineering, Commissioning and Offshore teams

Within TECHNIP Group

- Promote the tool for other TECHNIP Projects in different operating centers

6. Conclusion

- **Distance won't be a barrier to collaboration. Instead, local and dispersed teams can come together to collaborate actively and exchange information in real time. Everyone can see and share information and contribute to discussions and decisions.**

- **A part from the overall outcomes of improving the Engineering progress, the introduction of visual management tends to have a number of benefits, which include greater employee involvement and motivation, as they feel more in control of what they are doing, better communication, raised quality and productivity of work, faster decision making process, and less waste in time.**

4. Conclusion

Franco Concari

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Conclusion

e-Collaboration Technology: extensive use in future

Risk

- Spamming
- Inefficiency: Doing the same things with complicated systems
- Security

Opportunity

- Efficiency
- Cost: Time reduction, Office Space, Travel
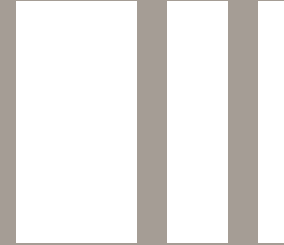- Quality
- Instant Reporting

Potential impacts

- Company Organization and Procedures: to be re-designed to fit with the new e-Collaboration abilities?
- Cultural gap of teams: can be a barrier? May need training and facilitation skills for proficient use?
- Security: access procedure-right to be «re-designed»?

Expectations

- Tools to be simple in operation: 3 click approach
- Deep SW Integration: 1 Project Cockpit and one access point for all Project Application (Planning, 3D Model, Document Managemement, Correspondence, Risk Management…)

Need to prepare Company and teams to the e-Collaboration Technology

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Thank you

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