The set-up of Teams

- **D&D**
  - The Virtual Team

- **C&C**
  - The Classic Team

**CONTEXT**

- Diverse
- Same

**LOCATION**

- One
- Multiple

(Source: Santos, On Virtual Teams)
(Global) Virtual Teams – R&D; Finance; Procurement; Supply; KAM
The top of a multi-dimensional organisation: a (global) virtual team
The value proposition of Virtual Teams

- Only codified, universal knowledge can be shared
- Coordination and control very hard to manage
- Reciprocal interdependence ineffective
  + Access to distant capabilities effective
  + Understanding distant customers effective
  + Competing with distant competitors effective

- Tacit, context-specific knowledge easily shared
- Coordination and control easy to manage
- Reciprocal interdependence effective
  - Access to distant capabilities ineffective
  - Understanding distant customers ineffective
  - Competing with distant competitors ineffective
Articulate the *knowledge architecture* of the team task: which pieces of knowledge are involved (technologies, user experience, market/business knowledge) and how they are to be melded:

- Discover which site (local or foreign, internal or external) has which pieces of knowledge
- Consider how “situated” (messy, sticky) each piece of knowledge is

(Source: Santos, *On Virtual Teams*)
Articulate the contextual differences between the various sites in the virtual team. Make team members aware of such differences. Discuss the implications for team design and teamwork.
$K_B$ and $K_U$ are usually more messy and sticky then $K_{Ti}$

Scientists have done distributed work for hundreds of years … as scientific knowledge is codified and universal (explicit).

Technical knowledge (sciences, technologies, skills) is relatively easy to transfer and meld across borders

Business/market knowledge and user knowledge are local context-specific and very hard to move across borders

For more on this: “From Global to Metanational, Chapter 5”
A Knowledge-based view of Teamwork

(SOURCE: Santos, On Virtual Teams)
Interdependence

- Pooled

- Sequential

- Reciprocal

(Source: Thomson, 1967)

For the SFs at MIT Sloan - © Jose Santos, 2012
“CEN-FOR-MA”
How do we coordinate [control] our actions?

Contextual Knowledge → CEN

Shared Language → FOR

Trust → MA

- **Centralisation** [Supervision]
- **Formalisation** [Accounting]
- **Mutual Adjustment** [Peer Pressure]

During the course of any normal day, managers will use all the mechanisms of coordination and control above. We are not equally proficient nor do we enjoy each of them equally.

(Source: Santos, On Virtual Teams)
Allocate tasks according to the situated knowledge or capabilities of each site (context), while minimizing the amount of reciprocal interdependencies across sites

- Resolve reciprocal interdependencies (feedback loops) with *temporary* co-location of selected team members
- Identify pooled and sequential interdependencies and formalize modules, interfaces, and protocols

(Source: Santos, On Virtual Teams)
“CEN-FOR-MA”
How we coordinate & control when we “work together”

“Real Team”
- CEN
- FOR
- MA

“Virtual Team”
- CEN
- FOR
- MA

- Centralisation
- Formalisation
- Mutual Adjustment

(Source: Santos, On Virtual Teams)
Managing “Virtual Teams” (IV)

- Turn some reciprocal interdependencies into sequential and pooled interdependencies.
- Formalization and accounting are much higher than in classic teams (a VT is more of a “bureaucracy”).
- Centralization and supervision are much higher than in classic teams (a VT is more of an “hierarchy”).
- A team is a structure, but teamwork is a process. Make the process explicit.

(Source: Santos, On Virtual Teams)
Managing “Virtual Teams” (V)

• Include elements with a history of multiple contexts in the team, namely as *team leader* and as “*bridges*” across sites (sub-teams)

• Make sure virtual team is not unbalanced: no dominant site/context

• Make team members experience the various locations/contexts involved (visits, rotating meetings)

• Make team members aware of the danger of “false attribution”

• Identify time and deadlines *as* absolutely critical in virtual teamwork

• Enable “random encounters” (namely in innovation teams)

(Source: Santos, On Virtual Teams)
... remember that human beings are “local beings”: proximity and local context will *always* matter to each person or sub-team of a virtual team...
15.229 Managing Global Integration
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