

Introduction to

Product Design and Innovation

November 5th, 2014

Internal Communication & External Communication

Communication

In product design, communication is everything

- Company *communicates* a task to designers
- Designers *communicate* with each other in order to generate new ideas
- Sketches, models and prototypes *communicate* the key points to decision makers

Forms of Communication

THREE TYPES OF TECHNICAL COMMUNICATION

Type of Communication	Description
Coordination Type	<ul style="list-style-type: none">• technical information transfer• task coordination
Knowledge Type	<ul style="list-style-type: none">• consultation• instruction and skill development
Inspiration Type	<ul style="list-style-type: none">• motivation of individuals• managerial affirmation

* Morelli, Eppinger & Gulati, 1995

- Coordination
- Knowledge transfer
- Co-creation

Internal vs. External

Internal Communication

- Focus on *sharing & delivering*
- Inspiring
- Coordinative
- Real-time & spontaneous



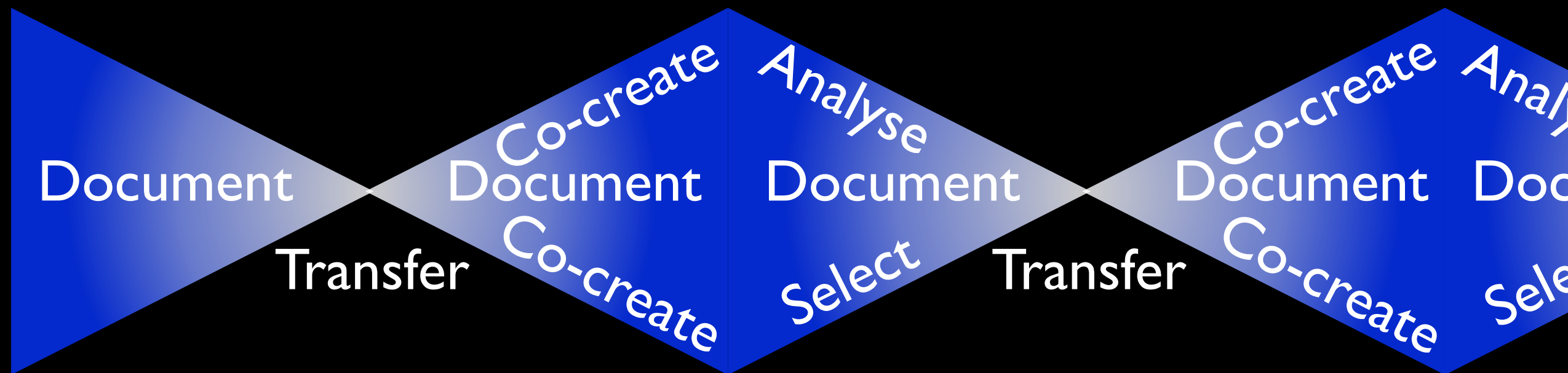
External Communication

- Focus on *message selection & clarity*
- Informative
- Well planned & deliberate

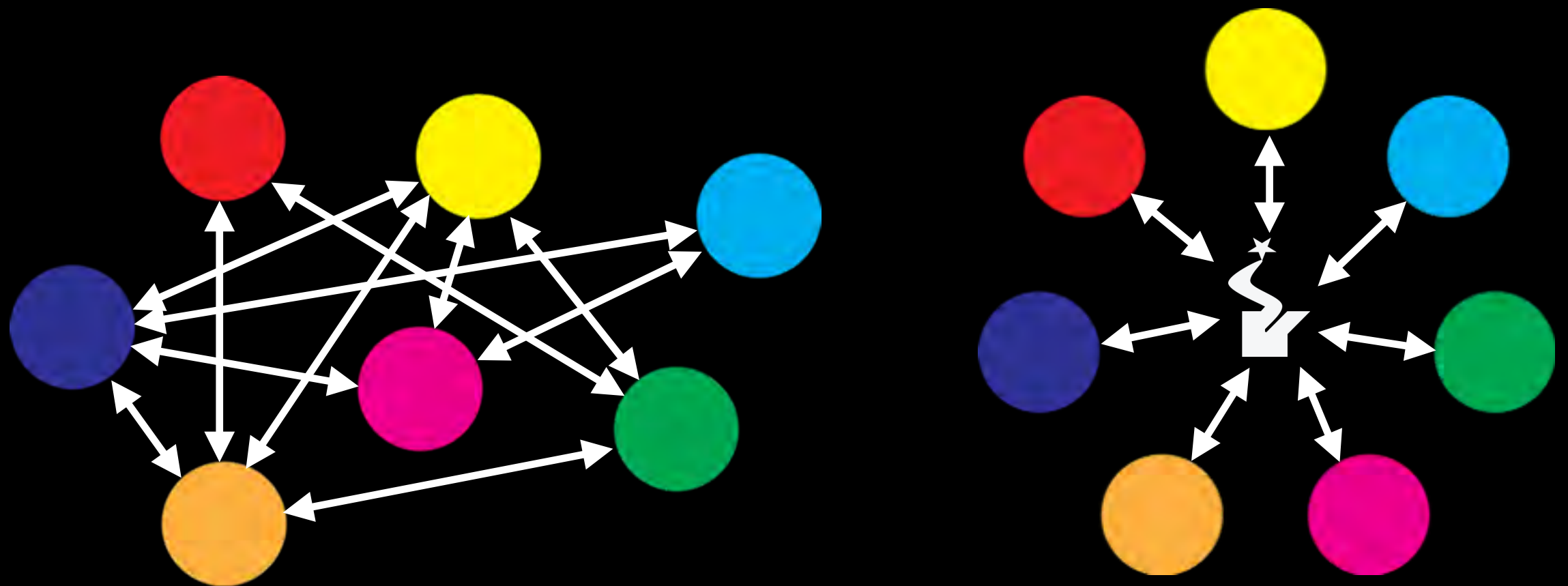


Communication within the process

Manage &
Coordinate



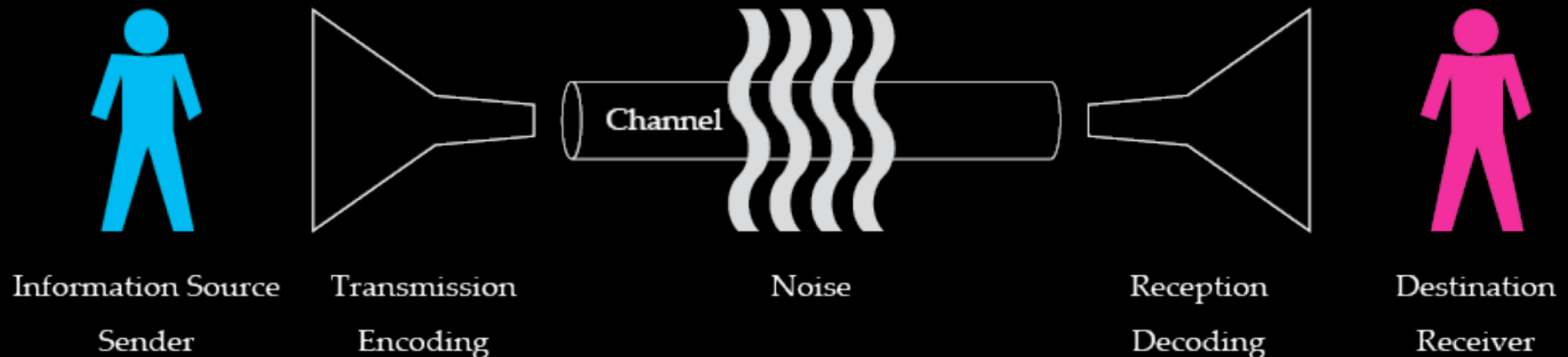
Team performance



*Prototypes align the team,
and give them something to collaborate on*

Communication

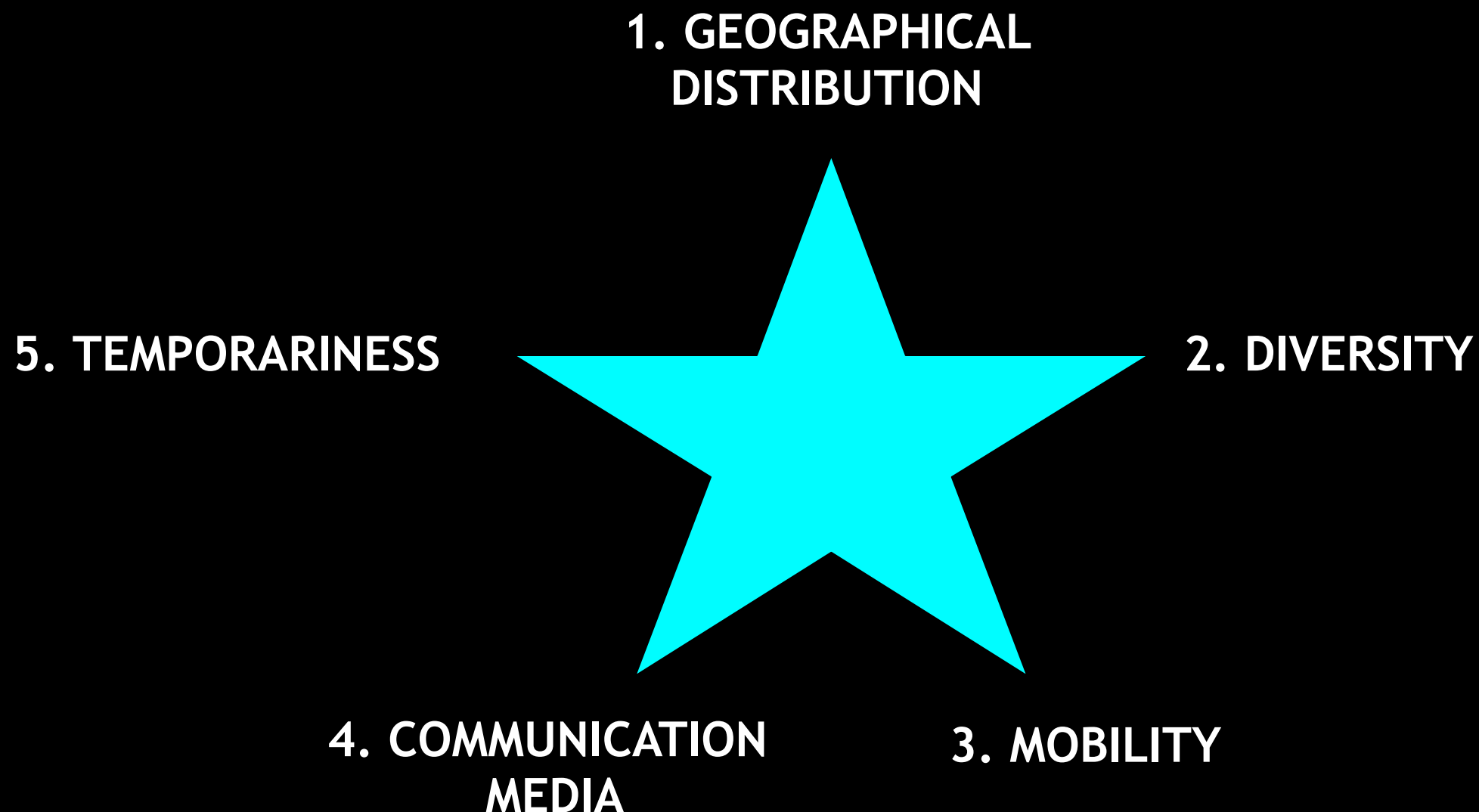
- Shannon–Weaver Model of Communication
- Source–Encoding–Noise–Decoding–Receiver



* Shannon & Weaver 1949

Communication Barriers in Distributed Project Work

Dimensions of distribution



Communication Barriers

- Groupthink
- ASK Problem
 - Anomalous State of Knowledge
 - People need to know quite a bit about a topic to be able to ask or search for relevant information
- NIH Syndrome
 - Not Invented Here
 - Typical for strong, well formed, teams
- Hidden Profile Problem
 - One doesn't know other people's background (=profile)
- Curse of Knowledge
 - One doesn't understand what others *don't* know

Communication Barriers

Groupthink



Stakeholder Communication

Stakeholder:

“Individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion” (PM BOK)

Stakeholder Communication Plan

- 1) Define **Project Stakeholders**
- 2) Evaluate the **Communication Needs** of Each Stakeholder
 - WHAT do **they** need to know?
- 3) Define the **Key messages** for Each Stakeholder
 - WHAT do **we** want them to know?
- 4) Determine **How to Fulfill** the Communication Needs of Each Stakeholder
 - HOW to communicate? What **channels** to use? How **often**?
- 5) Determine the **Effort** Required for communication
- 6) Define the **Communication Tactics** for each Stakeholder
 - PUSH: newsletter (past), advertisement (future); or
 - OFFER: web pages, blog, archives

Information that we need

- Stakeholder
- Priority
- Key message
- Needs
- Medium/channels
- Timing
- Responsible
- VOC

Guidelines for Project Team Communications

The distributed project team should agree on common guidelines for their communication:

- ✓ How the **communication network** of your project team is like? Is there a need for one-to-one communication or one-to-many communication or both?
- ✓ Which **communicative functions** are most important in your project team?
- ✓ Is there a need for constant **availability**? Or is it better if project members can be reached only at certain times and in certain ways?
- ✓ What are the **preferences and routines** of the project members related to communication and communication tools?
- ✓ Do you have specific needs for **vocal, audio and visual communication channels**?
- ✓ How long the **delay** for answering messages can be?
- ✓ How project members should **inform** one another of their **absence and holidays**?