

The FollowMe Architecture

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Objectives

- To produce a coherent articulation of the FollowMe architecture
 - for the review
 - to promote the use of common solutions to problems within the project
 - to capture our understanding and experience so that it doesn't die with the project



Why Architecture?

- “If builders build buildings they programmers write programs then civilisation would be destroyed by the first woodpecker.”
 - Gerald M. Wienberg
- “The purpose of architectural plan is to create an elegant building not an elegant piece of paper”



Patterns

- “Each pattern is a three-part rule, which expresses a relation between a certain context, a problem, and a solution” [*Christopher Alexander*]. Moreover each pattern:-
- “...is the **abstraction** from a concrete form which keeps recurring in specific non-arbitrary contexts” [*Dirk Riehle and Heinz Zullighoven*],



Properties of Patterns

- expresses an **encapsulation** of a separable aspect of an overall design task,
- expresses a balance or **equilibrium** between opposing requirements,
- is **open** to extension and modification,
- is **composable** with other design patterns,



Describing a Pattern

- **Name**
- **Context** A description of context for the use of the pattern.
- **Problem:** A description of the conflicting forces to be resolved and constraints placed upon the resolution, and how these interact with one another.
- **Solution**

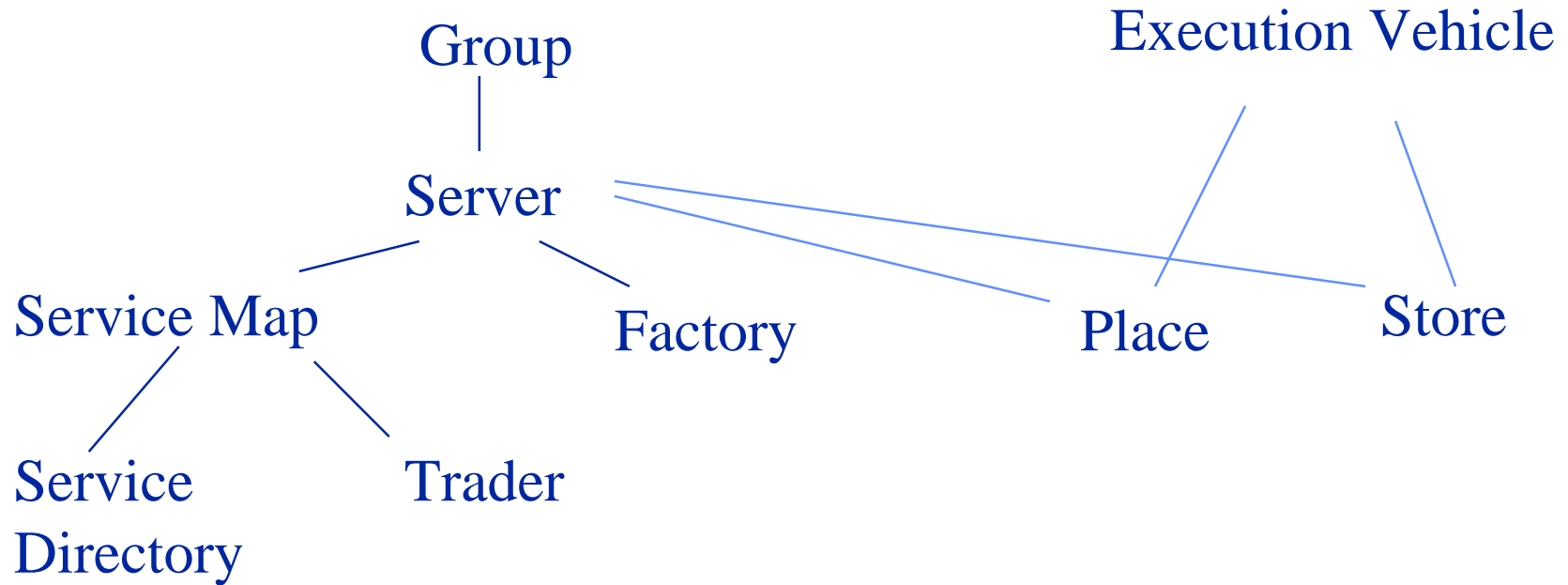


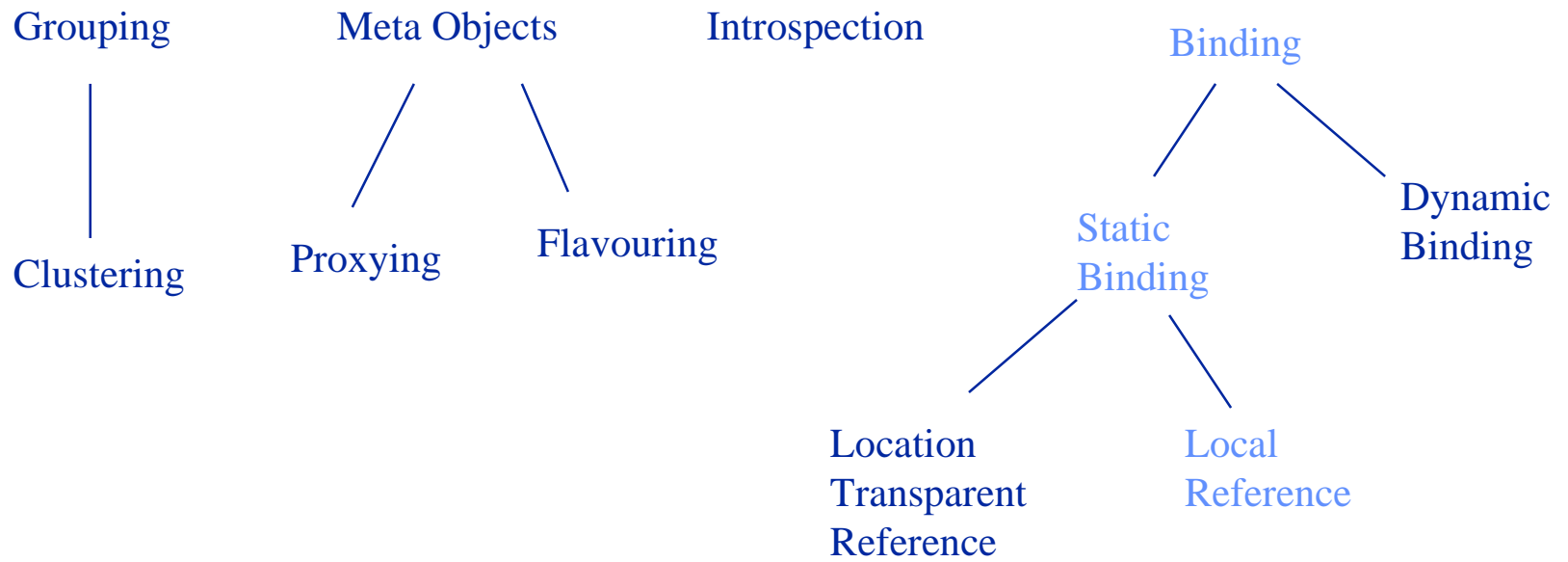
Two Pattern Hierarchies

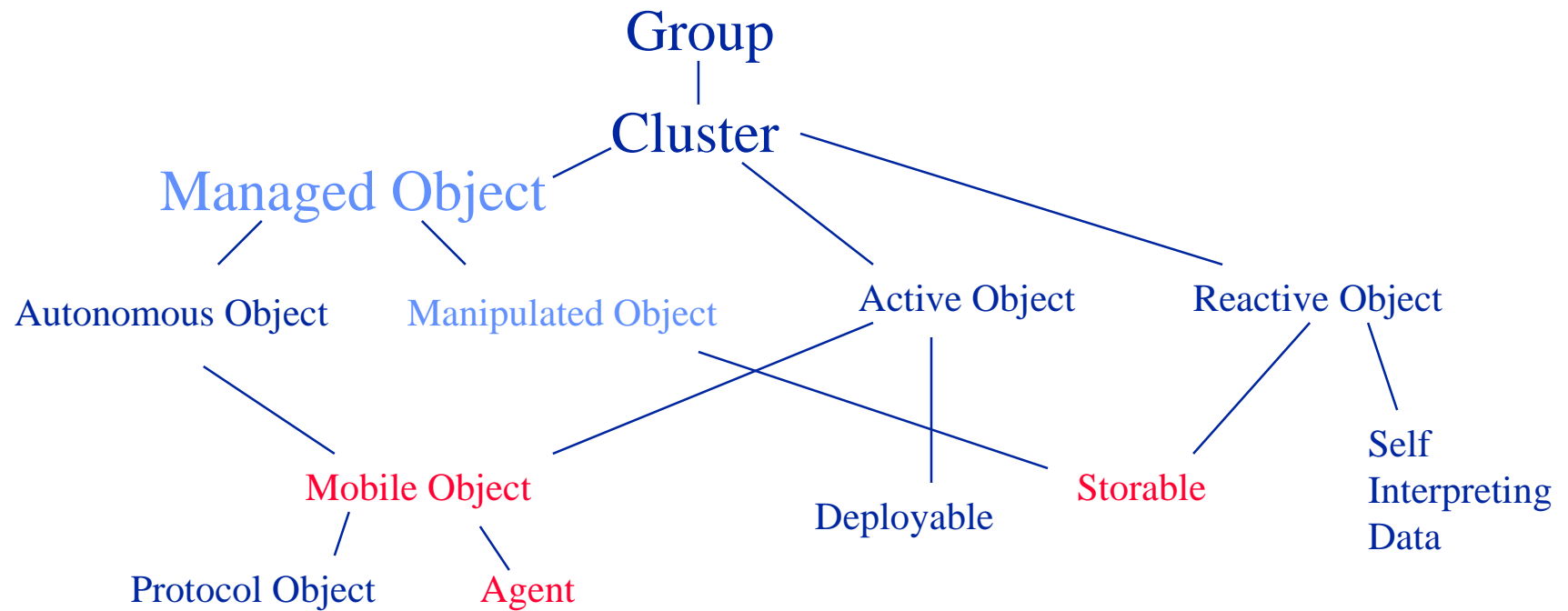
- Patterns may **refine** other patterns
 - Patterns may multiply inherent
- Patterns may **use** other patterns



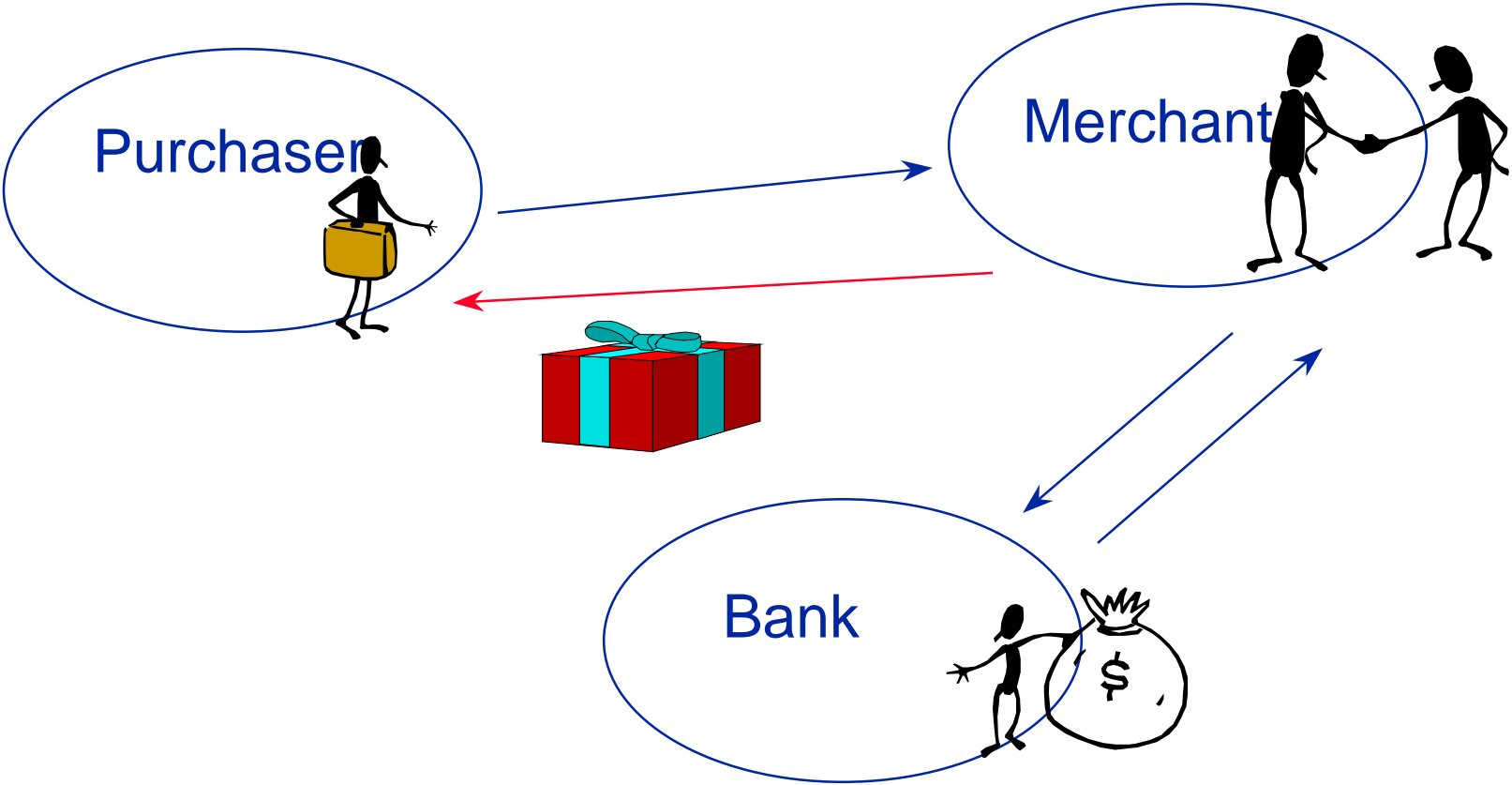
Refinements vs. Components



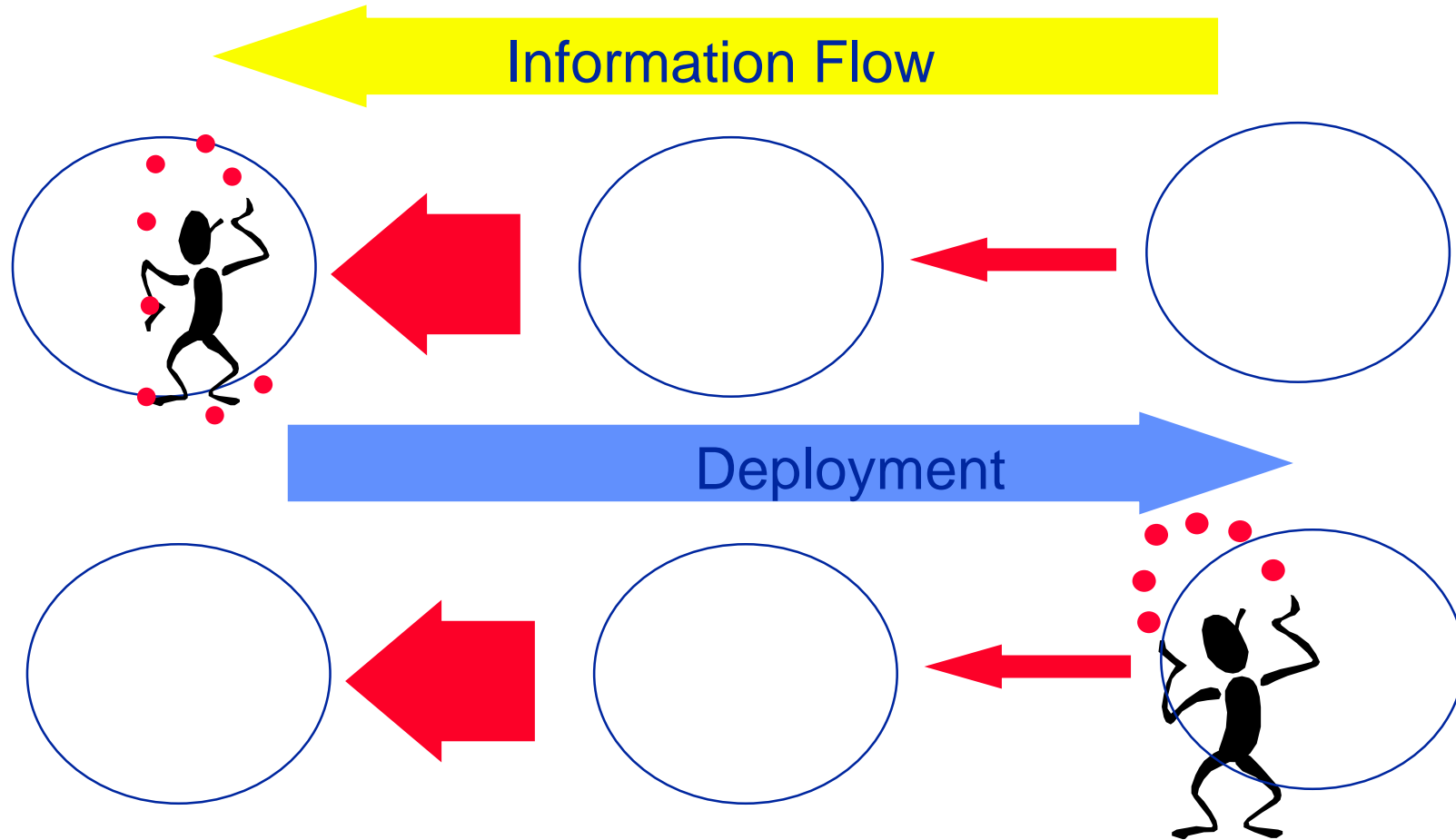




Protocol Objects

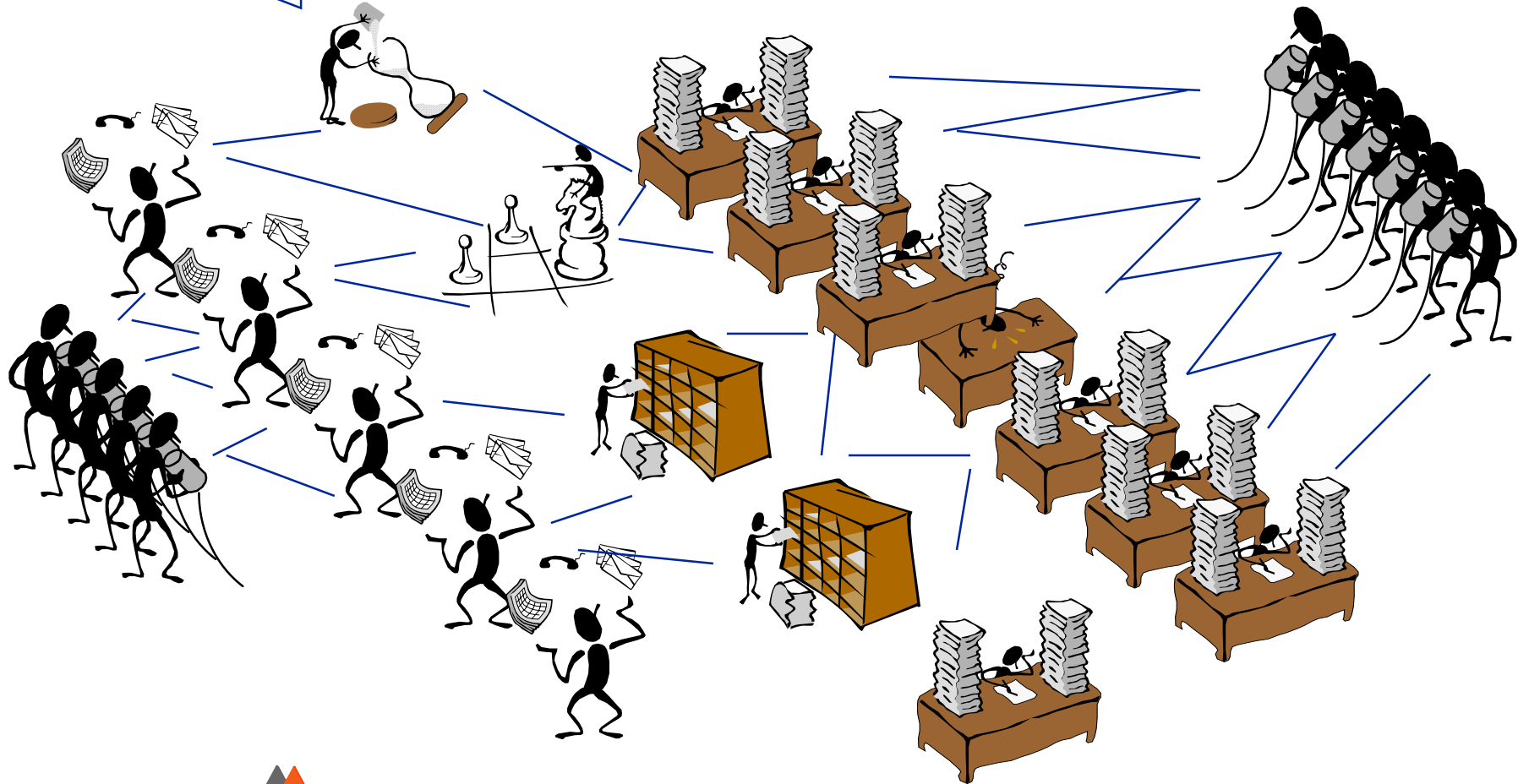


Deployables



Information Latticework

Information Flow



Information Funnel

