



# Experience-based social and collaborative performance in an 'electronic village' of local interest: The eKoNEΣ framework

## Authors

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# *Presentation Plan*

- Rationale and context of the work
- The Virtual Organization
  - ▣ eKONEΣ as an experience factory
    - eKONEΣ squad organization
    - eKONEΣ experience organization
  - ▣ eKONEΣ architecture
- eKONEΣ village through a case study
  - ▣ Package Development workflow
  - ▣ Squad's collaboration
- Ongoing work
- Summary & Questions



# *Objective & research question*

- Local electronic villages as unified collaborative spaces for managing electronic services of local interest / scale
- Rationale
  - ❖ Electronic villages
    - offer static information
    - Do not include collaboration between members
    - Do not allow the members to perform tasks
  - ❖ eKoNEΣ seeks to extend the conventional connotation of an electronic village so as to provide
    - an operational model of a virtual organization with strong social links between members and
    - focus on performing tasks to yield added-value products and services.



# Objective & research question

## ■ Related work

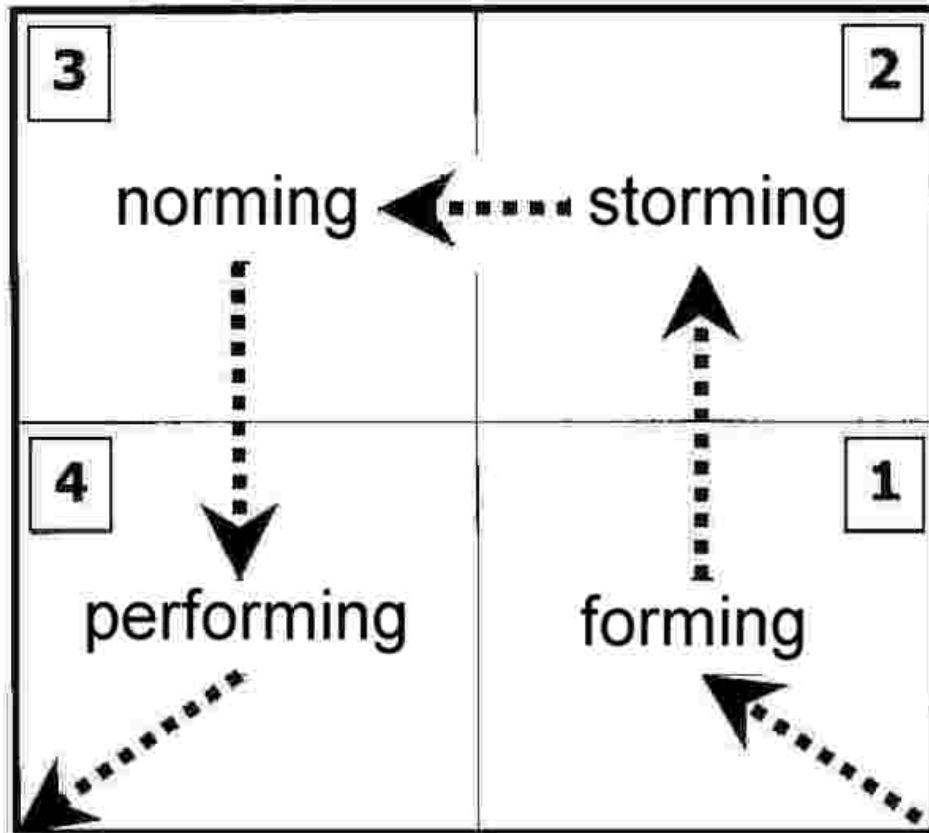
### ▣ Electronic Villages

- BEV: Blacksburg Electronic Village (*One of the most popular Electronic Villages of local Interest which served as guide for different R&D projects*) <http://www.bev.net/>
- EVA: The Electronic Village of Abingdon (*Gives an example of virtual network for the construction of an electronic village*) <http://www.eva.org/>
- SEV: The Sylvania Electronic Village (*graphical representation of an electronic Village through an ideogram*) <http://www.sev.org>
- DCEV: Dickenson County Electronic Village (*classical paradigm of electronic village development by using its know how*) <http://www.dcev.net/>
- etc.



# *The Virtual Organization*

- eKONEΣ as an experience factory

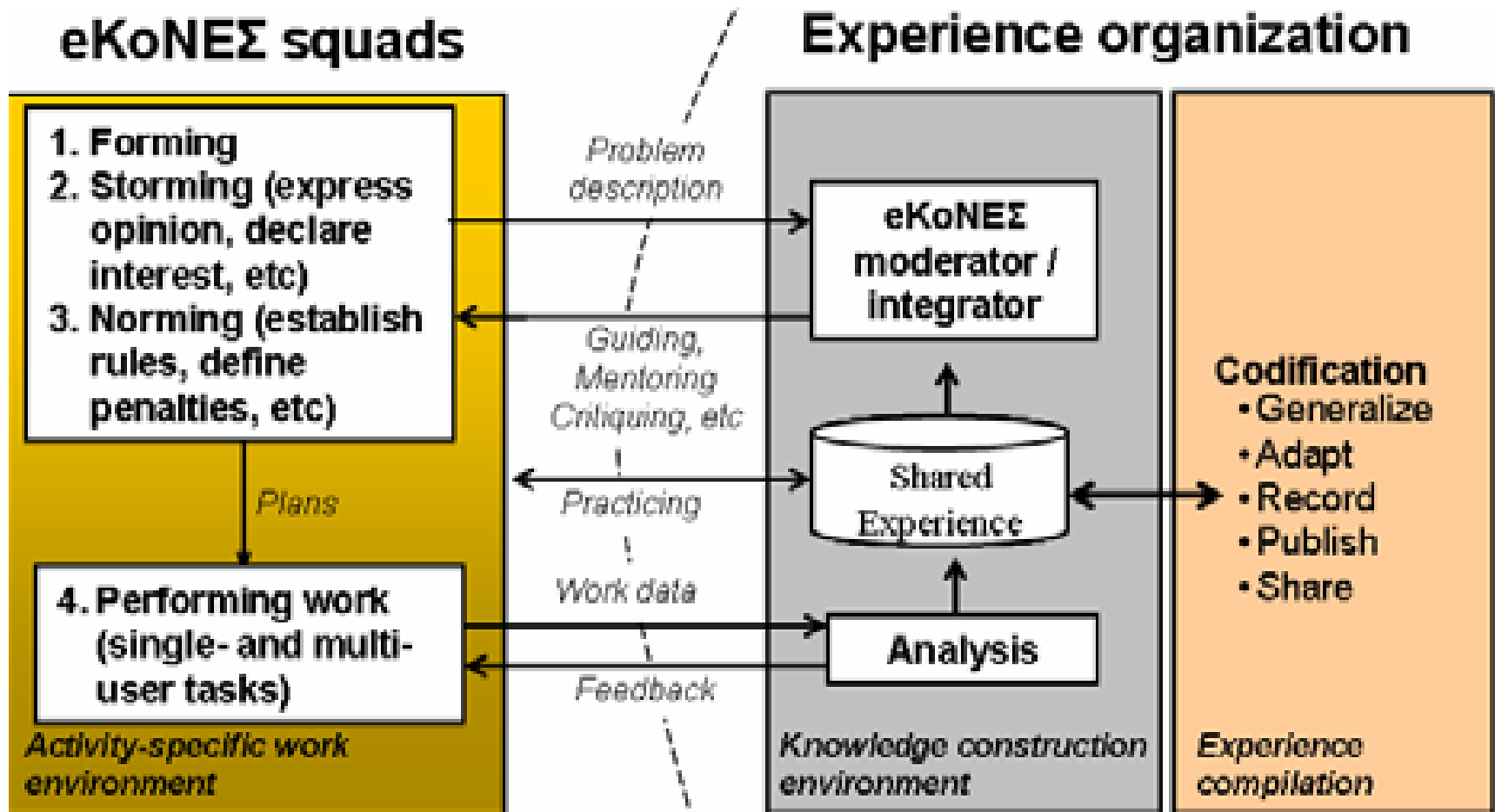


Tuckman 1965



# The Virtual Organization

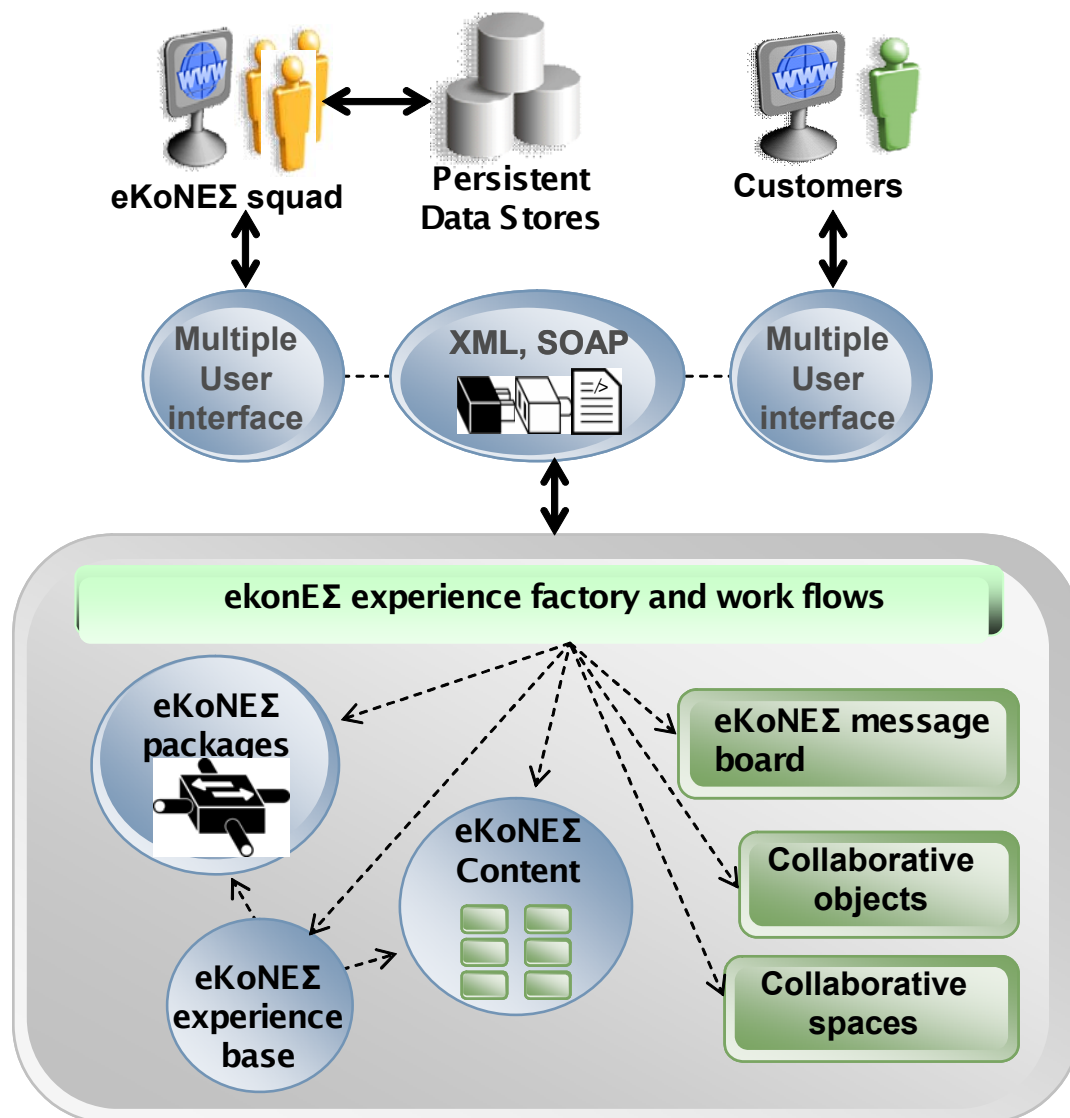
- eKONEΣ as an experience factory





# The Virtual Organization

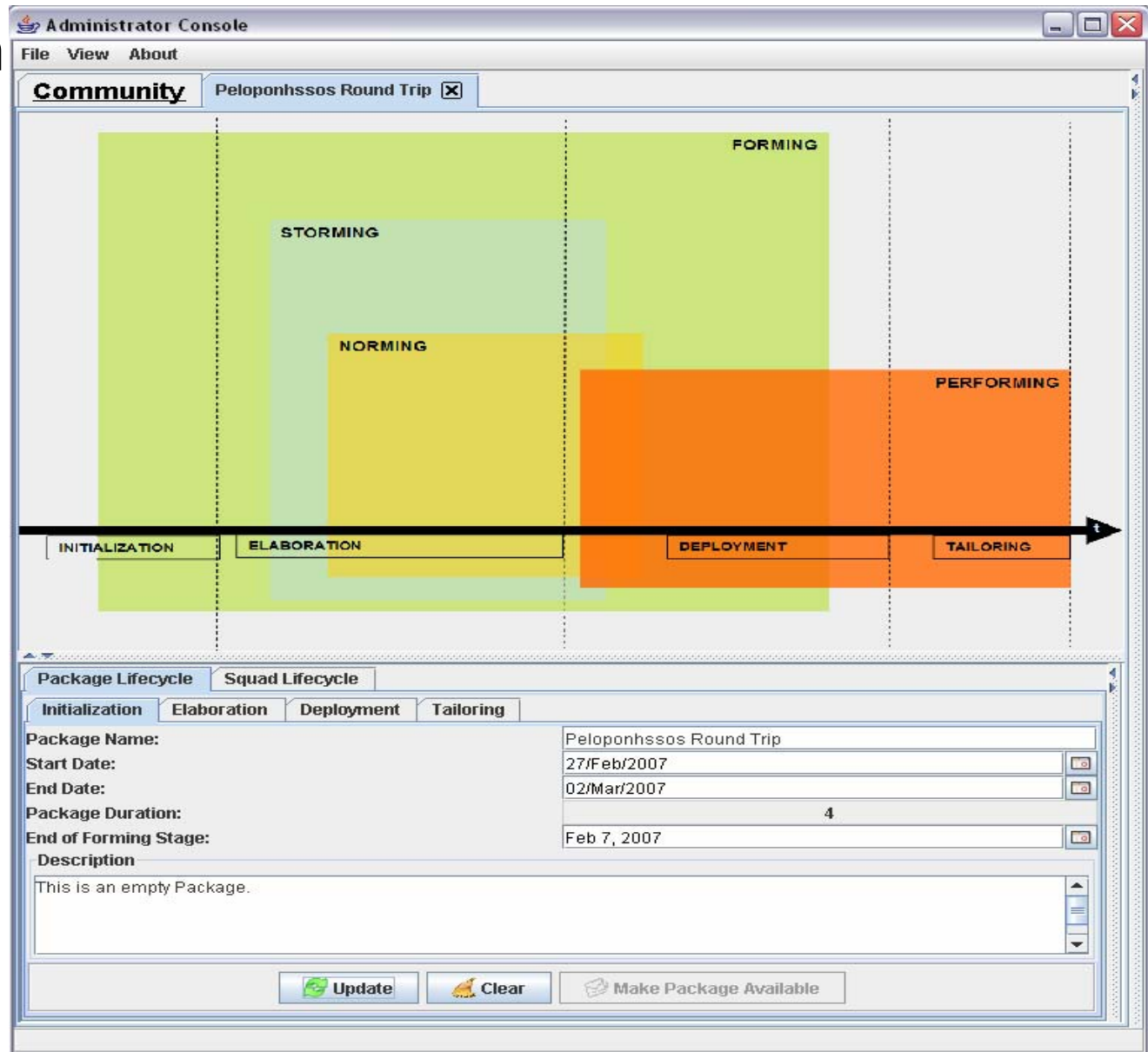
## ■ eKONEΣ architecture





# eKONEΣ Package Development Workflow

- Initiation stage







# eKONEΣ Package Development Workflow

- Elaboration stage

The screenshot displays the Administrator Console interface, specifically the 'Elaboration' stage of a package development workflow. The main window is titled 'Administrator Console' and contains a 'Community' tab for a 'Peloponhssos Round Trip'.

The central part of the interface shows a Gantt chart for three days (Day 1 to Day 3) with a time scale from 00:00 to 04:00. The chart is divided into columns for 'Accommodation', 'Food and Beverage', 'Entertainment', and 'Transportation'. Activities are represented by colored bars:

- Day 1 (27/02/2007):** Accommodation (10:30 - 16:30), Food and Beverage (11:30 - 20:30, From: Patra), Entertainment (15:30 - 23:30, From: Patra).
- Day 2 (28/02/2007):** Accommodation (15:30 - 23:30, From: Patra).
- Day 3 (01/03/2007):** Accommodation (12:30 - 19:30, From: Patra).

The bottom section of the console is titled 'Package Lifecycle' and 'Squad Lifecycle'. It includes tabs for 'Initialization', 'Elaboration', 'Deployment', and 'Tailoring'. The 'Elaboration' tab is active, showing a list of categories with checkboxes:

- Accommodation
- Transportation
- Food and Beverage
- Taverns
- Fast Foods
- Entertainment

Additional fields include 'Start: 28/Feb/2007 15:30', 'End: 28/Feb/2007 23:30', and 'From: Patra To: Patra'. A 'Description' field contains the text 'This is an activity description'. At the bottom, there are four buttons: '+ Add', '- Remove', 'Update', and 'Reset'.



# eKONEΣ Package Development Workflow

- End of Elaboration start of Deployment stage

The screenshot displays the Administrator Console interface. The top window, titled "Community", shows a network diagram for the "Peloponissos Round Trip" project. The diagram is a hierarchical tree structure with nodes representing different service categories and their sub-components. The root node is "Transportation", which branches into "Public Busses", "Rent A Car", and "Caffeterias". "Public Busses" includes sub-nodes like XaniaBus, AgiosBus, HeraklionBus, RethimnonBus, and DiaBus. "Rent A Car" includes Rethimnon Rent a Car, Heraklion Rent a Car, Xania Rent a Car, Hot Wheels, and Sixt Rent a Car. "Caffeterias" includes Thalassa, Cafe Breeze, Cafe Del'Mare, Cafe De-tax, Iridanos, Nostos Bar, and Aeras Bar. Other categories shown include "Food and Beverage" (with sub-nodes Taverns and Fast Foods) and "Taverns" (with sub-nodes like Petoyslis and Smyrnh).

The bottom window, titled "Package Lifecycle", shows the "Squad Lifecycle" view. It has tabs for "Forming", "Storming", "Norming", and "Performing". The "Performing" tab is active, showing a list of packages and their status. The packages listed are:

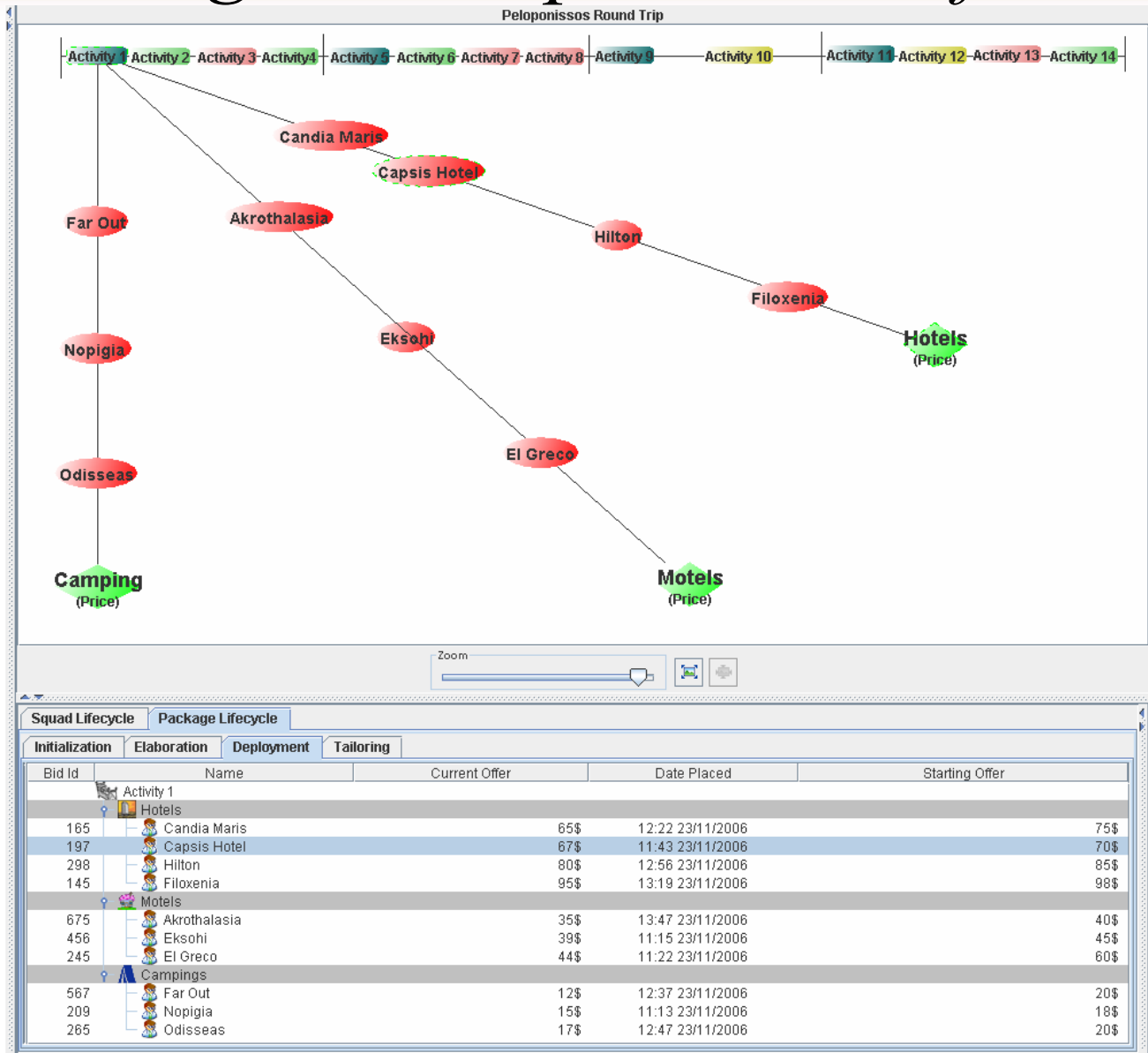
- Agios Camping
- Dia Camping
- Transportation
  - Public Busses
    - HeraklionBus
    - RethimnonBus
    - XaniaBus
    - AgiosBus
    - DiaBus
  - Rent A Car
    - Hot Wheels
    - Heraklion Rent a Car
    - Rethimnon Rent a Car
    - Sixt Rent a Car

At the bottom of the console, there is an "Info:" section with the following text: "Address: Trikoupi Avenue(Patra), Tel: 2610235467, Fax: 2610345423, Site: www.hotwheels-rent.com".



# eKONEΣ Package Development Workflow

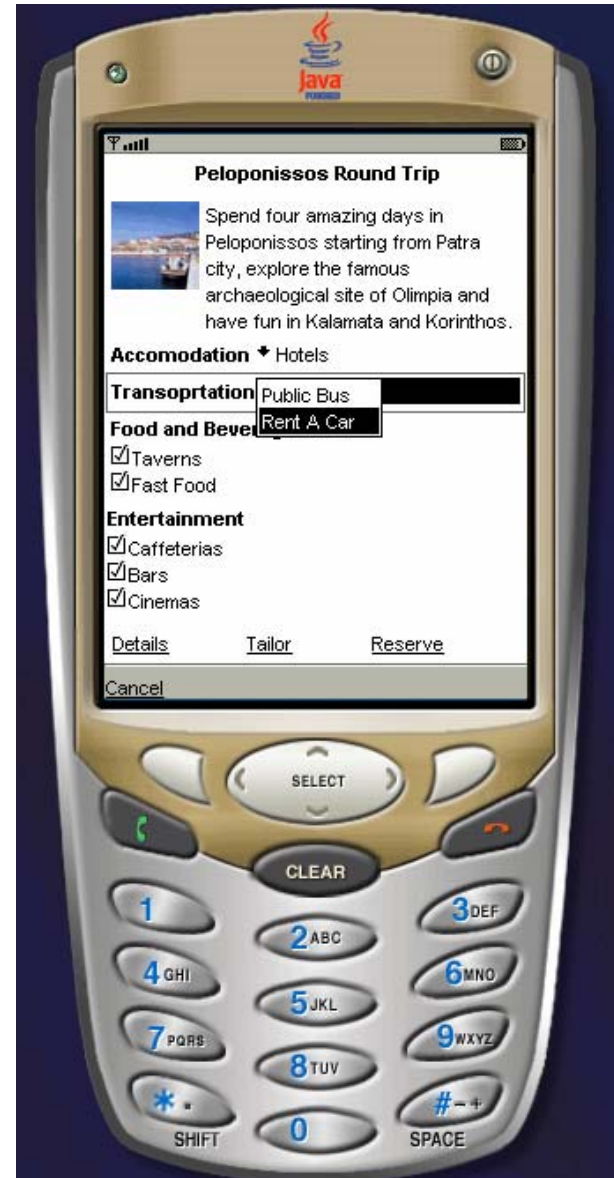
- Deployment stage





# *eKONEΣ Package Development Workflow*

- Tailoring & personalizing





# *eKONEΣ Squad's collaboration*

**Squad Lifecycle** | **Package Lifecycle**

**Forming** | **Storming** | **Norming** | **Performing**

- Pending (11)
- Commitments (34)
- Withdrawals (7)
- Issues (1)

**Transportation**

- Public Busses
  - Kifissos Bus**
  - Helios Buses
  - Hellas Busses
  - KTEL Patra
  - KTEL Thes/niki
- Rent A Car
  - Hot Wheels
  - Caravan Rent a Car
  - Avis Rent a Car
  - Sixt Rent a Car
  - Hertz Rent a Car
- Food and Beverage

**Info**

Address: Kifissou Avenue(Athens), Tel: 210646665, Fax: 210382382, Site: [www.kifissos-bus.gr](http://www.kifissos-bus.gr)



# Summary & contributions

In this paper we have attempted to:

- Sketch the organizational underpinnings of eKoNEΣ-Tourism – a pilot effort aiming to build a local electronic village on tourism.
- Our primary design target is:
  - ❖ to set up an operational model for carrying out mission-specific social and collaborative activities and
  - ❖ to support this model with appropriate software platform and tools.
- In this effort, we have drawn upon sociological theory describing small group activities to understand the social dynamics in virtual teams and recent models for experience-based and reuse-oriented organizational engineering.
- On going work covers a variety of issues of both technological and organizational engineering character.
  - ❖ scaling up of collaborative exchanges across different platforms (i.e. mapping schemes for platform-specific presentation),
  - ❖ improved visualizations for activity awareness,
  - ❖ development of multiple user interfaces to allow concurrent access and review of shared resources using different devices.
- On the organizational engineering front, the issues pending attention include operational aspects of eKoNEΣ-Tourism such as
  - ❖ extensions in the basic collaboration model to establish on-line quality manuals,
  - ❖ mentoring,
  - ❖ support for negotiation, etc.



# Questions!!

# Thank you for your attention!

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