

Climbing towards trust, privacy and identity management in emerging ICT-based scenarios

*** Second Endeavour: Technology & Architecture

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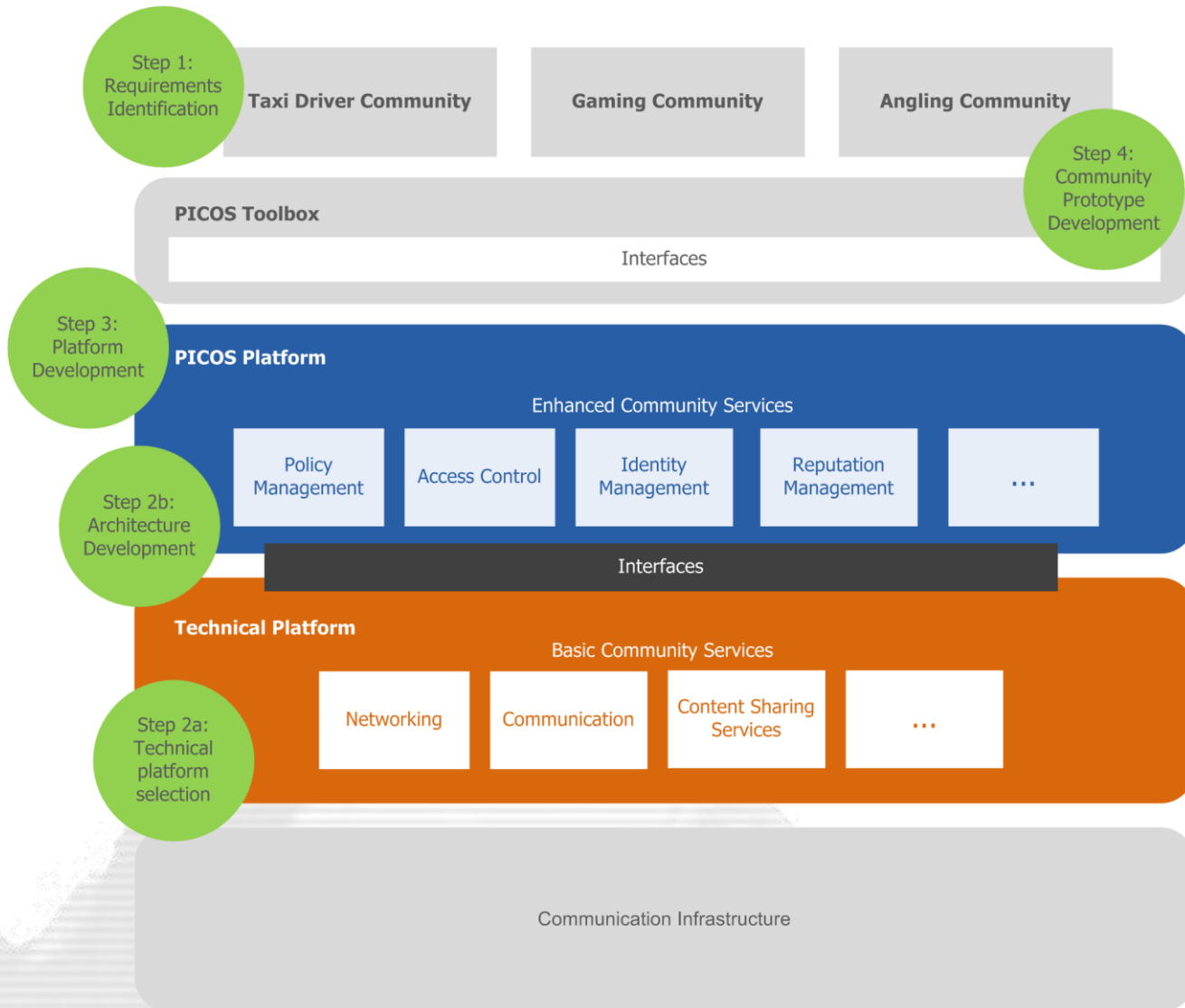
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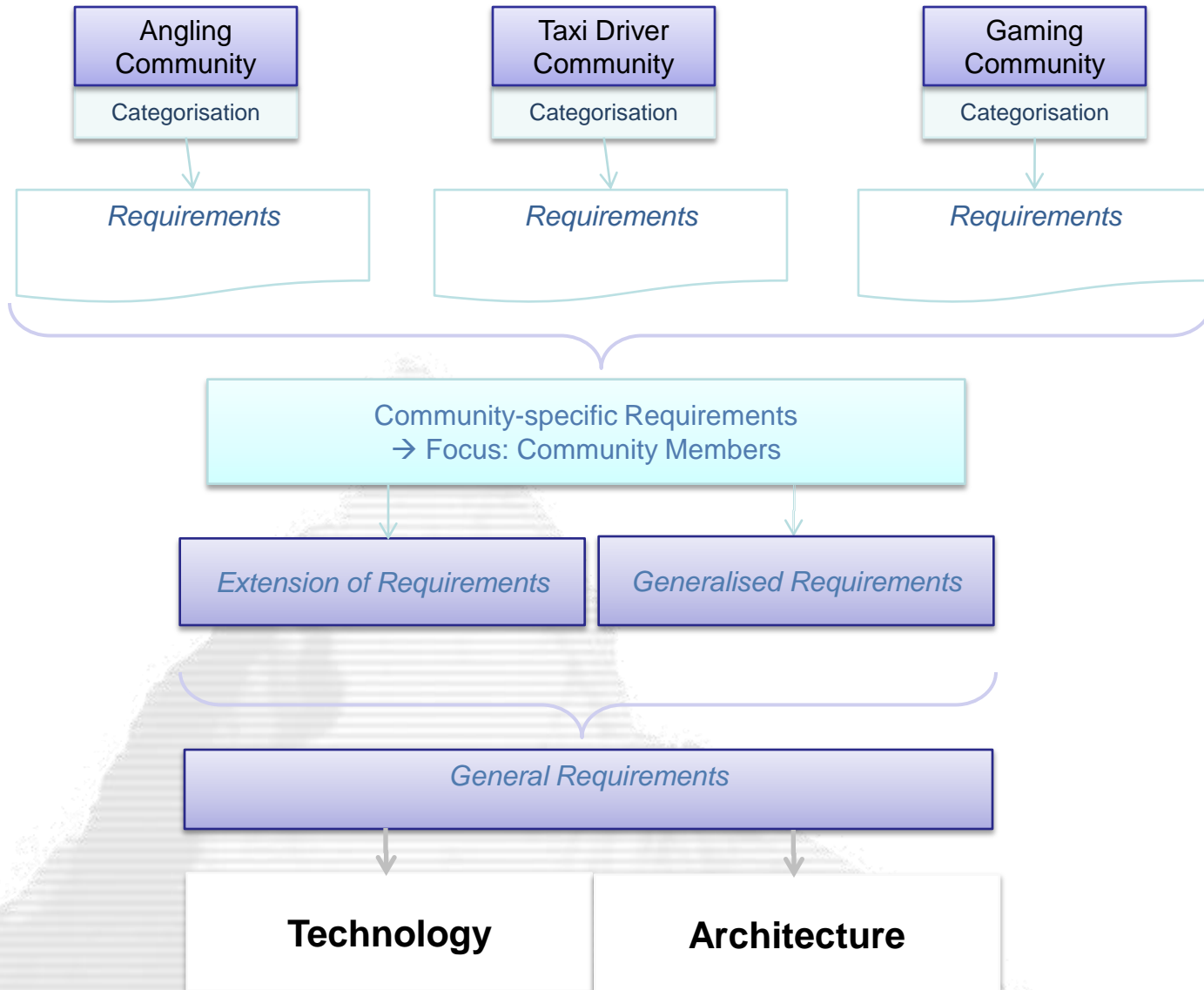




PICOS Core Elements



Step 1: Requirements



Step 2a: Technical Platform Selection

Selection Process

Identification of criteria

Based on the requirements. To evaluate a (server-side) technical platform.

Completion of criteria

Discussion and completion of the list by technical experts within PICOS.

Comparison of alternatives

Based on the completed list of criteria.

Evaluation and Decision



Step 2a: Technical Platform Selection

List of Criteria | Form



Criterion	Is supported - how?	Has to be developed - how?	Is not supported - why?
Community Layer			
...			
...			
...			
Platform Layer			
...			
...			
...			



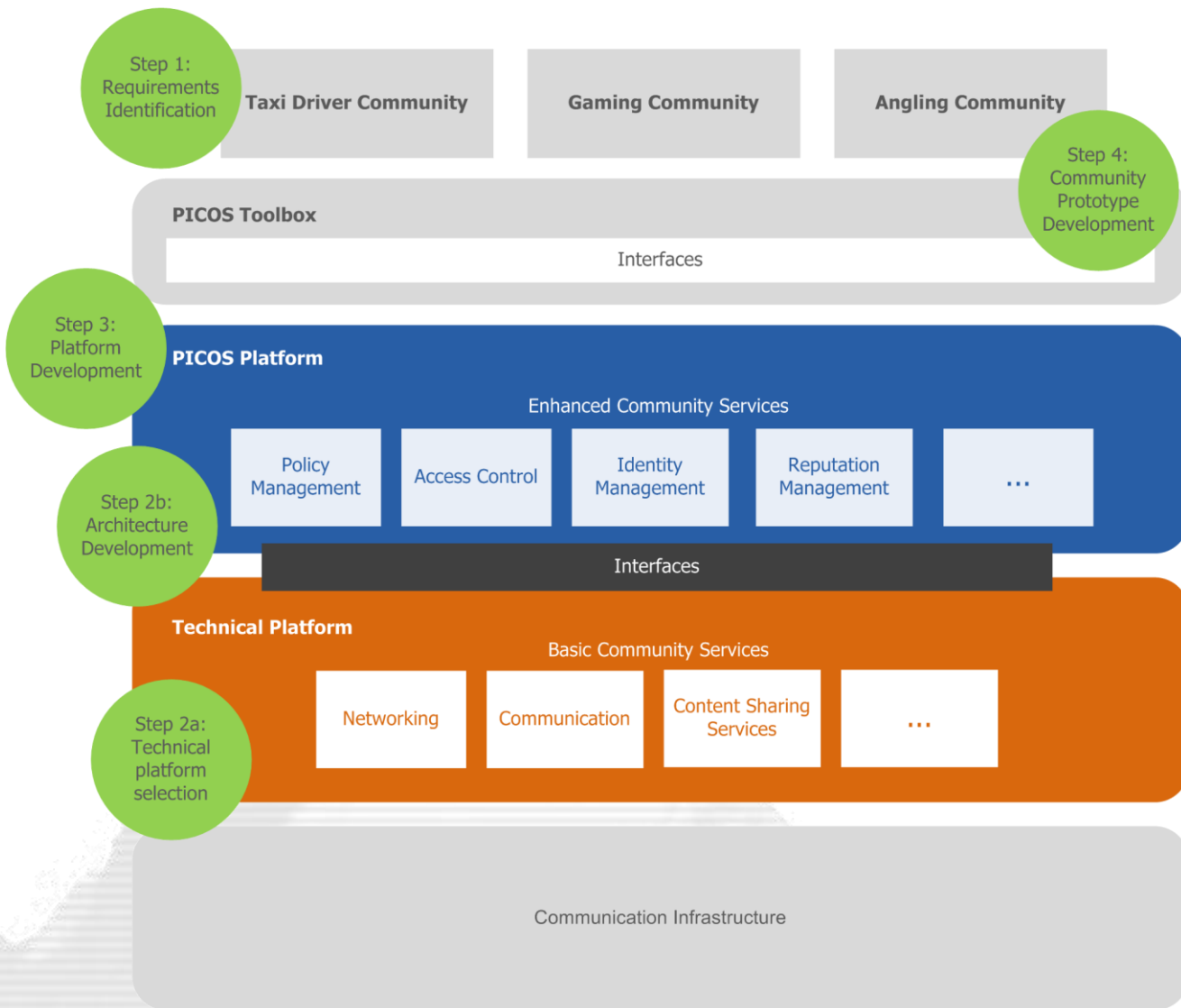


Step 2a: Technical Platform Selection

List of Criteria | Examples

- Community Layer
 - Support of Basic Community Management Functionalities (e.g. profiles, buddy list, communication, etc.)
 - Support of Privacy Management Functionalities
- Platform Layer
 - Support of Push/Pull Functionality
 - Support of Offline usage





- Basis: Generalised requirements
- Stepwise refinement of requirements
 - Structuring: Categorisation (Trust, Privacy, IdM, etc.)
 - (Verbal) Description
 - Reasoning
 - Further details: Priorities, implementation aspects, possible restrictions, etc.
 - Usage of various techniques (diagrams, tables, mind maps, etc.)



- Mapping of refined requirements to technical components
- Identified components:
 - Privacy Policy Management
 - Management of partial identities
 - Reputation Management
 - External Services Management
 - ...
- Components represent basic elements of the architecture



- Objective: Technical architecture of the PICOS platform
 - Based on the identified technical components
 - Specification of components
 - Specification of relationships, dependencies, data flows, interfaces, etc.
- Design Principles
 - Independence of technical platform
 - Flexible, open, scalable



- Further refinement and finalisation of the Architecture
 - Visualisation and description of the structure
 - Technical specification of the architecture elements
- => Design of the PICOS platform
- => Implementation of a platform prototype
- => Development of community prototypes

