



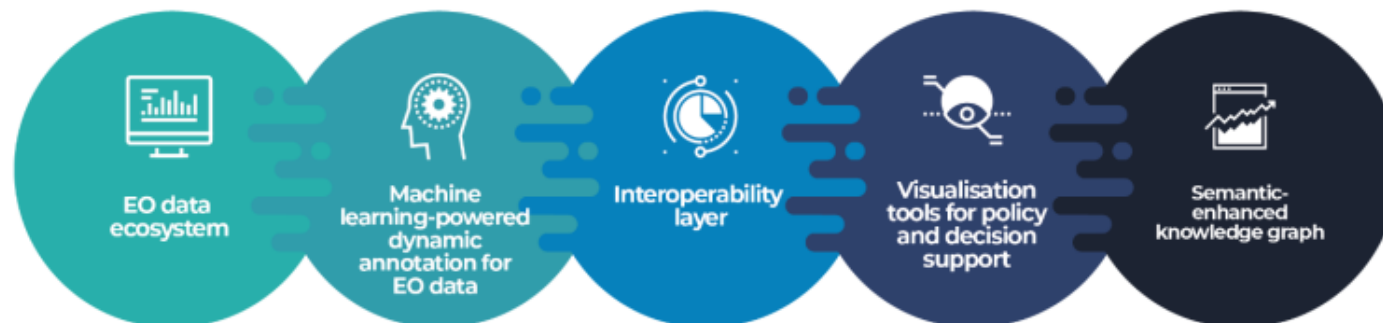
# E04EU: AI-augmented ecosystem for EO data accessibility with XR User Interfaces for Service and Data Exploitation













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For more information:





 <h3>Services</h3> <ul style="list-style-type: none"> <li>Machine learning for Semantic Annotation</li> <li>Semantic enhanced Knowledge Graphs</li> <li>Data Fusion</li> <li>Augmented and Virtual Reality</li> <li>Data Analytics Visualization</li> </ul>	 <h3>Data</h3> <p>Access at least <b>10</b> major EO data sources</p>	 <h3>Use Cases</h3> <p><b>7</b> Innovative Use Cases</p>	
 <h3>Policy Priorities</h3> <ul style="list-style-type: none"> <li>Support the EU Digital Single Market by lowering the barriers for EO services development</li> <li>Contribute to the Europe 2020:</li> <li>Blend a socio-economical, and data driven framework facilitating Sustainable Development</li> </ul>	 <h3>Target Groups</h3> <ul style="list-style-type: none"> <li>EO Data Providers</li> <li>Private Sector</li> <li>Policy Makers and Actors</li> <li>Research and Academia</li> <li>Citizen Scientists / General Public</li> <li>Standards Development Organisations</li> </ul>	 <h3>Collaboration Landscape</h3> <ul style="list-style-type: none"> <li>Collaboration Landscape</li> <li>R&amp;I funded projects</li> <li>Large Enterprise &amp; SMEs</li> <li>EO Data Providers</li> <li>EO Providers</li> <li>EOSC</li> <li>Destination Earth</li> <li>Multipliers (see section 2.2)</li> <li>Results-exploiting 3rd-party organisations</li> <li>Environmental Organisations</li> </ul>	
 <h3>Community and Communication</h3> <ul style="list-style-type: none"> <li><b>1500</b> engaged community members from relevant Stakeholder groups with global coverage</li> <li><b>2400</b> Social Media followers</li> <li><b>7</b> original videos with over <b>3500</b> total views</li> <li><b>2</b> podcasts</li> <li><b>8+</b> journal papers and <b>12+</b> conference papers</li> </ul>	 <h3>Events</h3> <ul style="list-style-type: none"> <li><b>4</b> End-user use case workshops</li> <li><b>2</b> EO4EU Impact events</li> <li><b>2</b> EO Innovation Contests: one for industry and one for research/academia</li> <li><b>14</b> dedicated webinars</li> <li>Presence at <b>20+</b> third party events</li> </ul>	 <h3>Insights</h3> <ul style="list-style-type: none"> <li>External Advisory Group</li> <li>Grant committee to evaluate the EO Innovation Contests</li> <li>Policy Brief</li> <li>Exploitation &amp; Sustainability Plan</li> <li>Revision or contribution of new standards</li> </ul>	



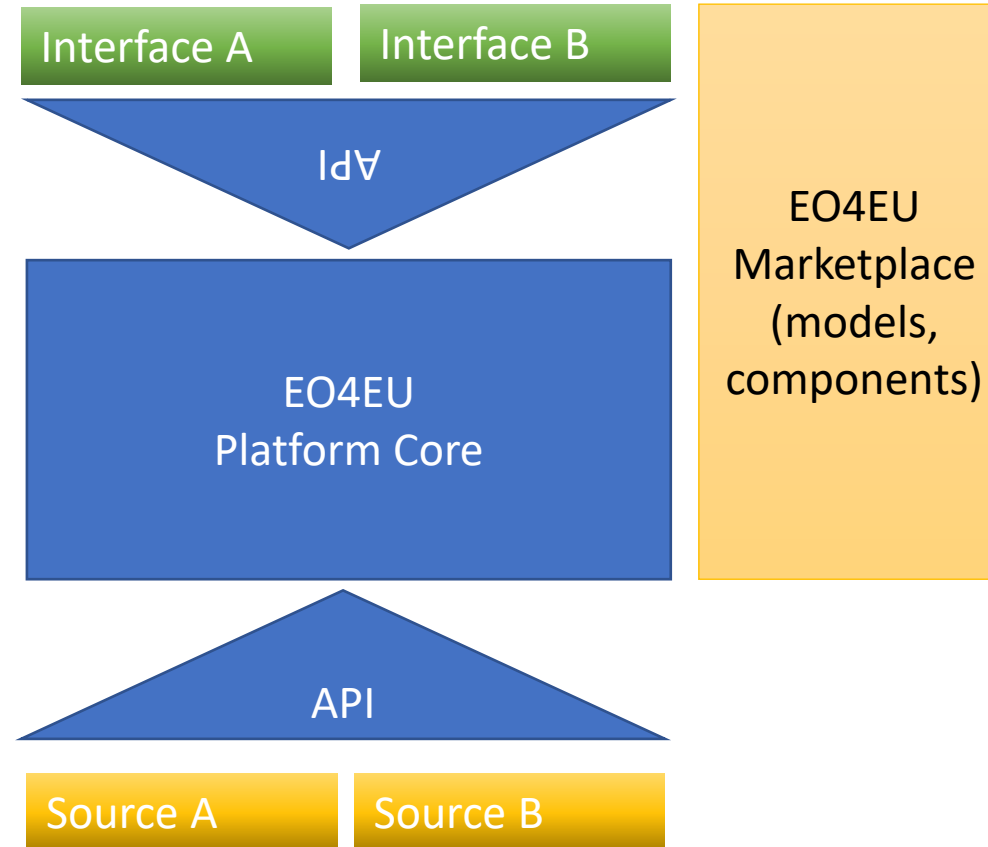
## Objectives:

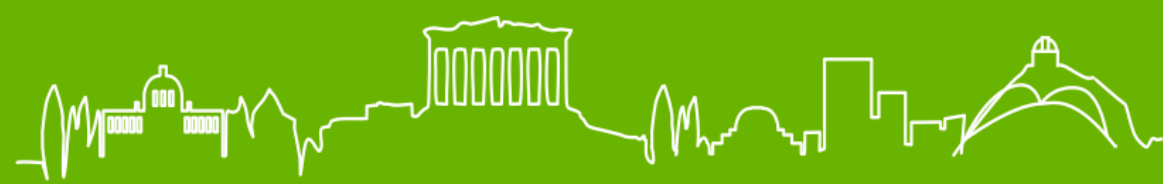
- Develop/integrate a truly generic platform to allow a wide spectrum of users to benefit from EO data.
- Interface different EO data sources to the platform
- Implement a number of use cases to demonstrate platform's versatility and ease of use (& programming)

Technology items: ML, Fusion, Semantic Annotation, Cloud computing, HPC, Domain Specific Languages, XR Interfaces, API, Application Marketplace

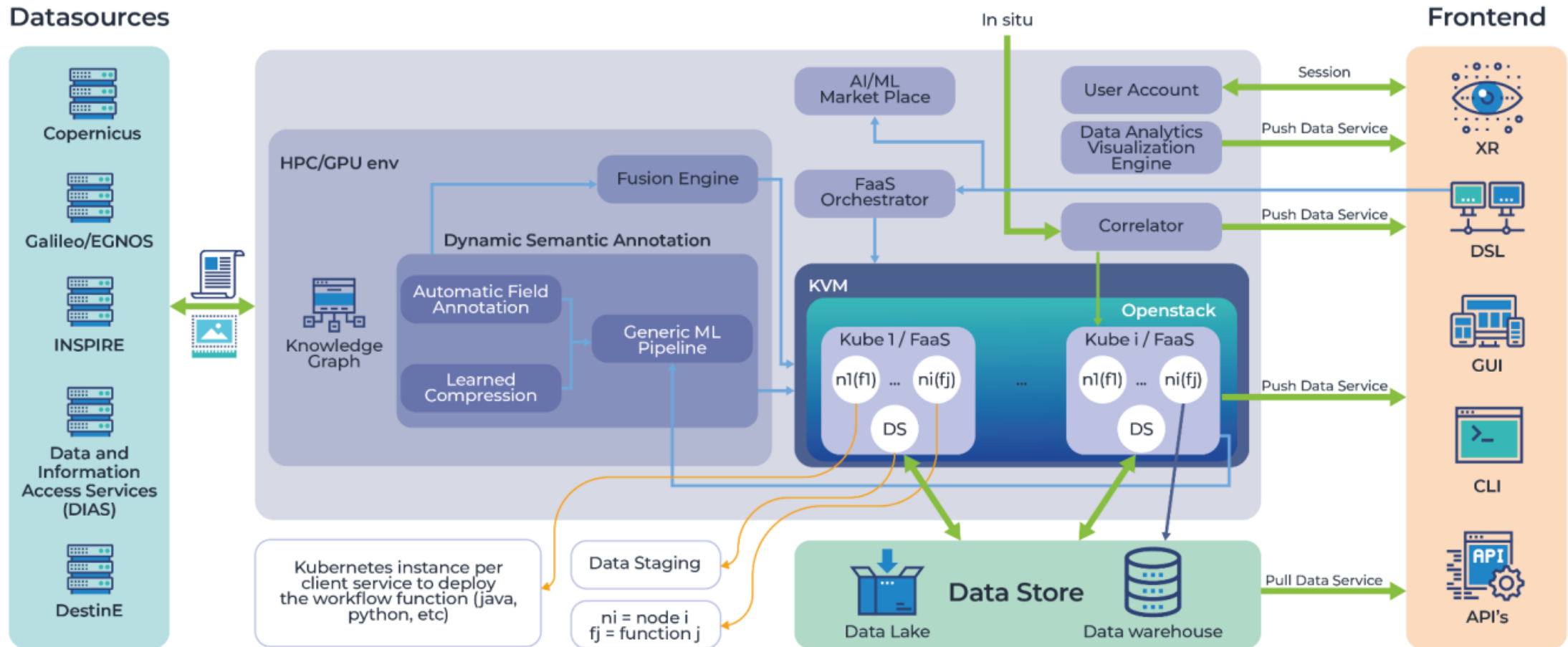


## Layered Architecture (logical)





## Layered Architecture

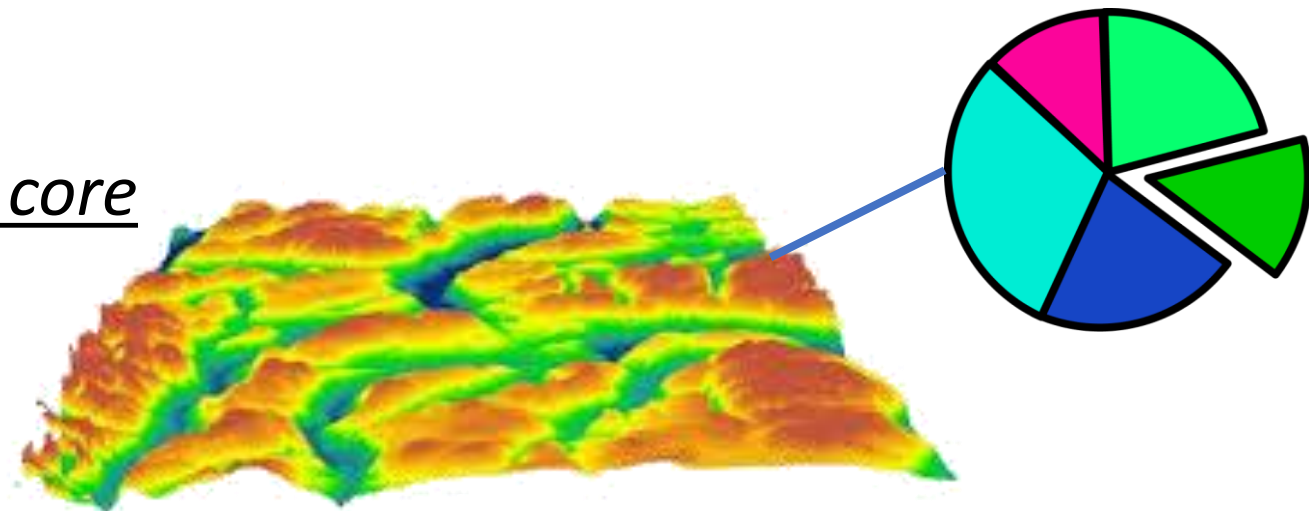


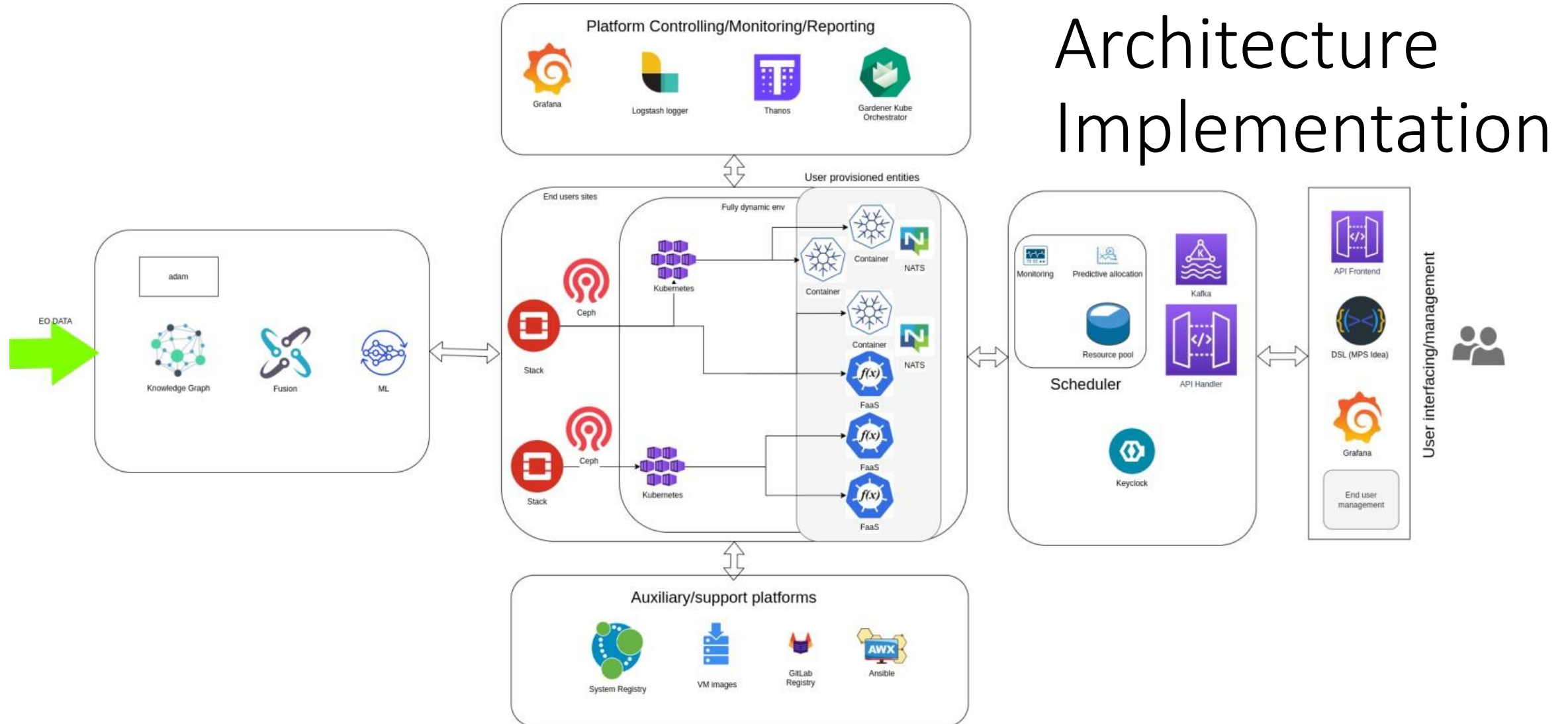


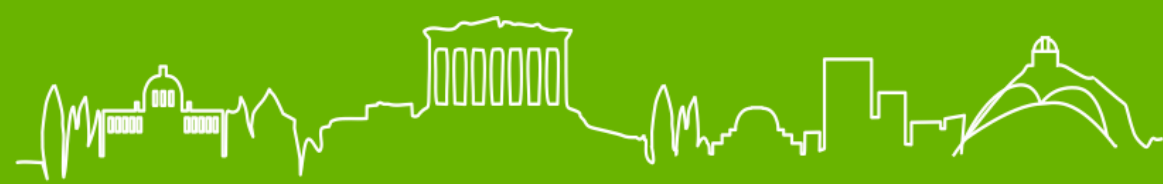
## Customer facing services

- Dashboards with analytic capabilities
- CLI
- XR/AR
- Customized Applications
- Domain Specific Language Editor

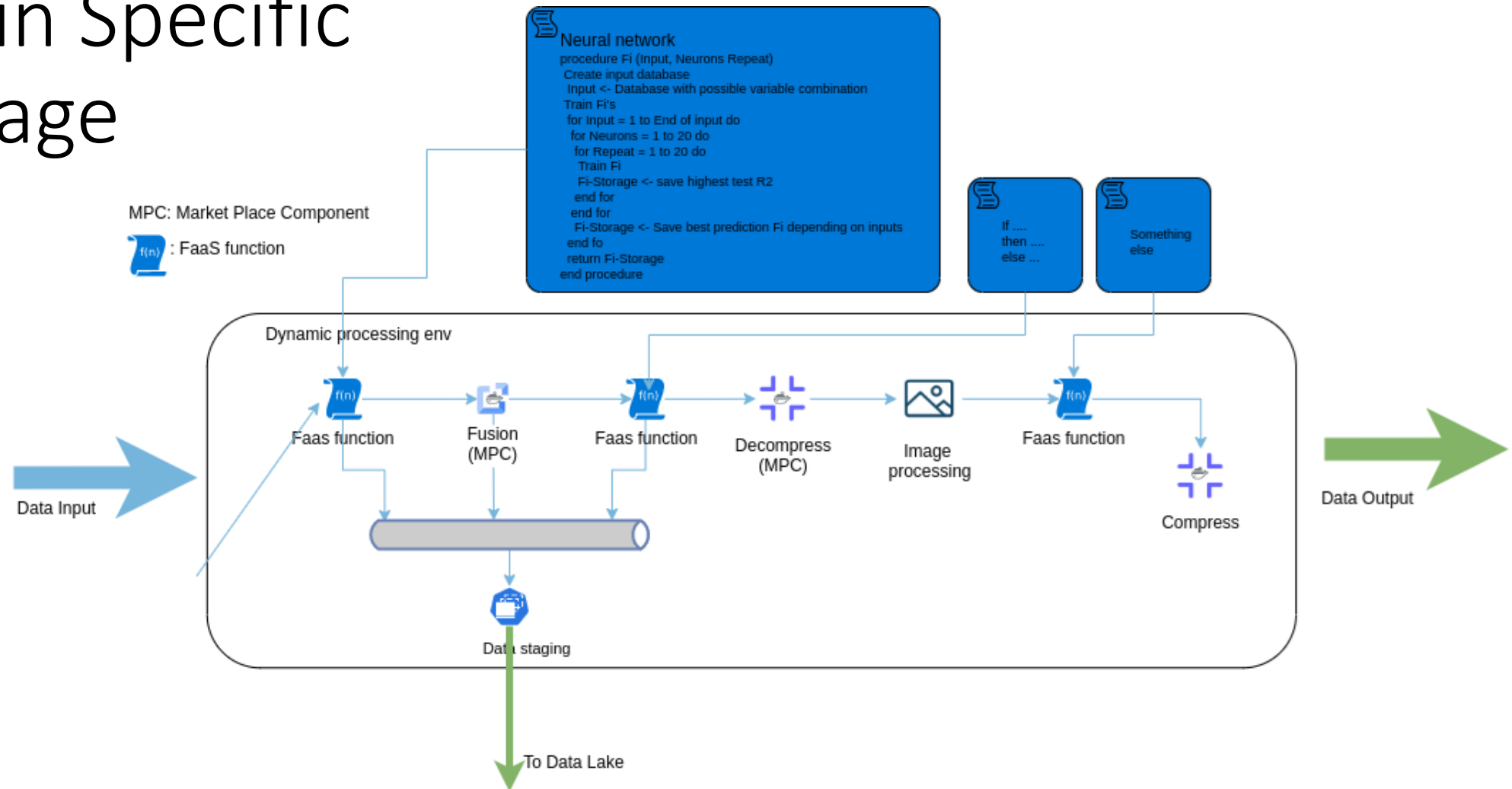
Uniform API towards the platform core







## Domain Specific Language







## Users



Simple  
end-  
users



Advanced  
end-users



Application  
Developers &  
Service Providers



## Pilot Use Cases

- Personalized health care,
- Sea route planning,
- Ocean monitoring,
- Food security,
- Food ecosystems,
- Soil erosion,
- Environmental pest, and
- Crisis (responders) management.