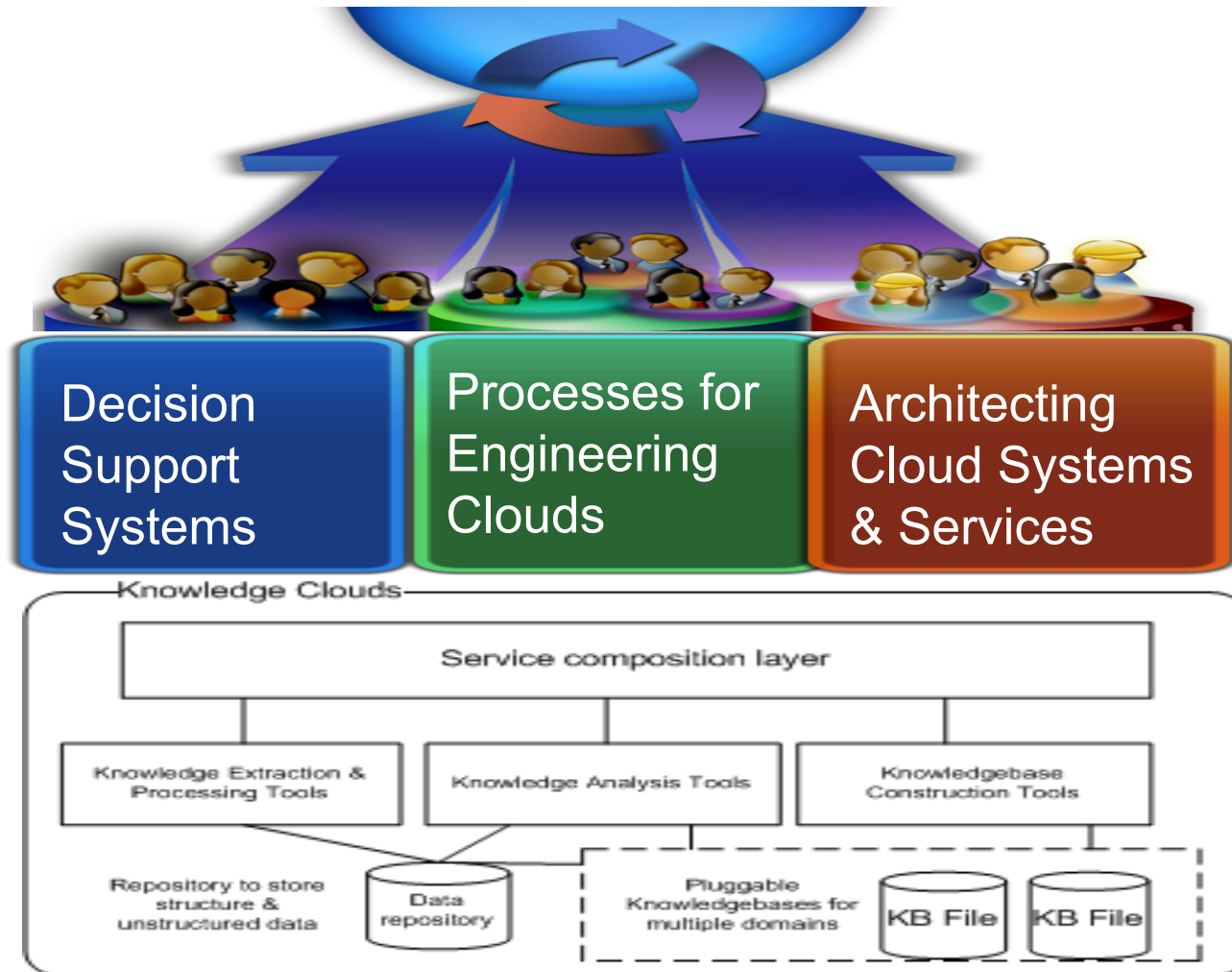

Research on Software Engineering for Sustainable Systems

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Briefing @ IT University of Copenhagen, Denmark
September, 20 2012

Cloud Computing Research Threads



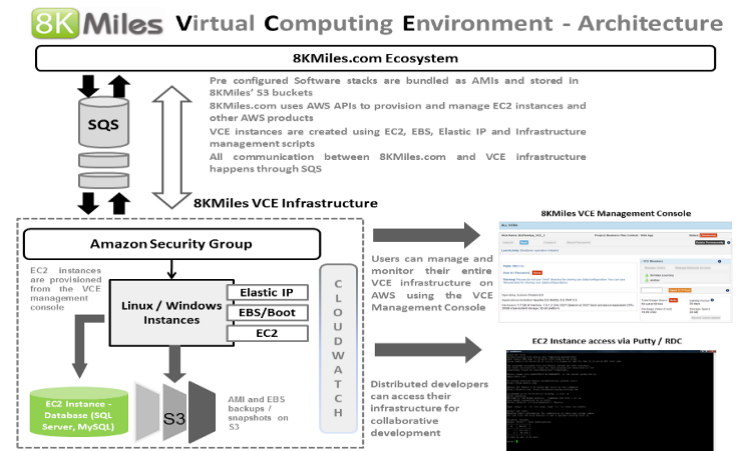
Leveraging Cloud Computing for GSE



Why Cloud Computing Matters for GSE?

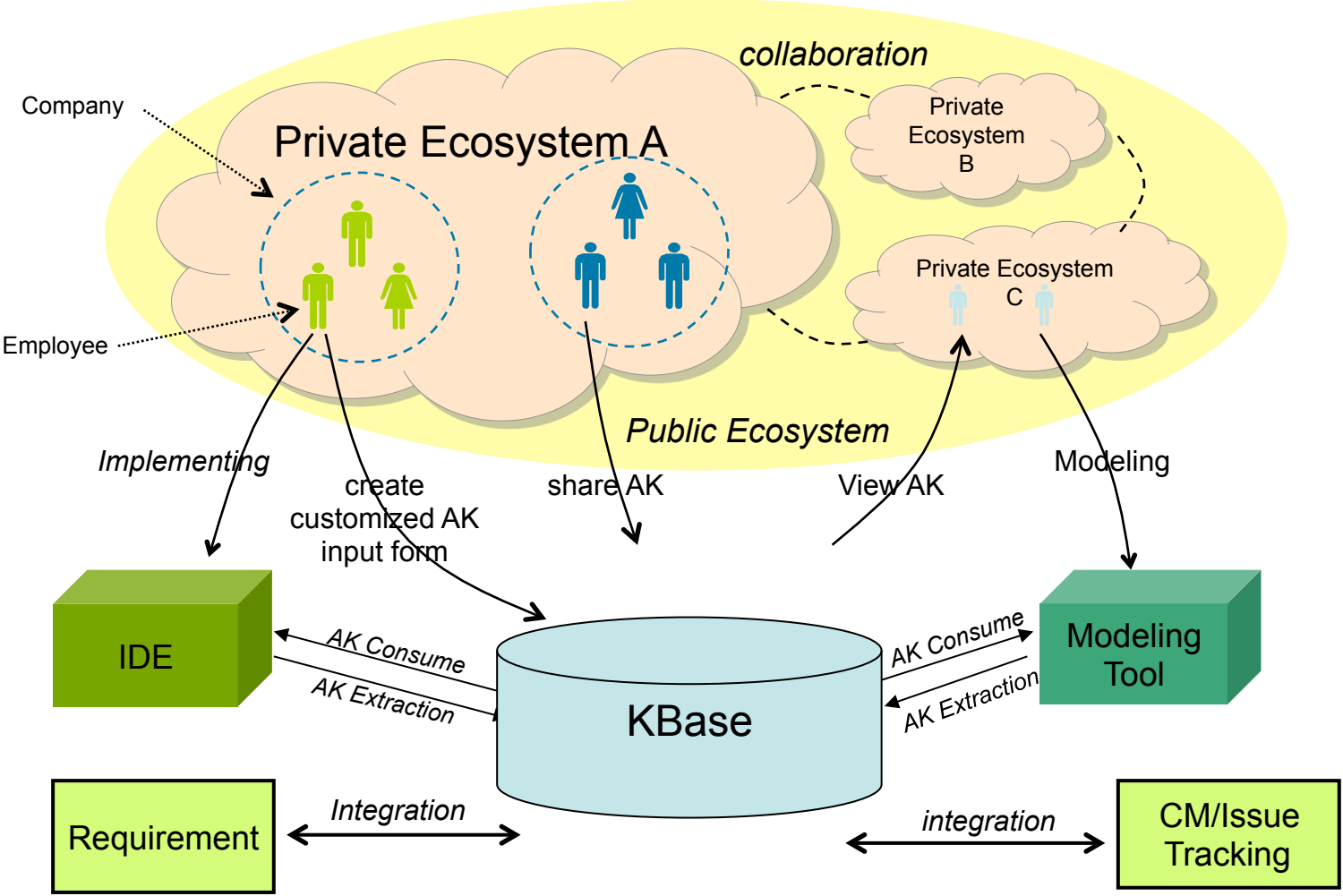
- Testing as a Service (TaaS)
 - Stress testing with cloud-based infrastructure
 - Enabling testing of application for sensitive data by offshore testers
- Collaborative environments in Clouds

- Just-in-Time (JIT) tool composition
- Processes, tools, & context aligned

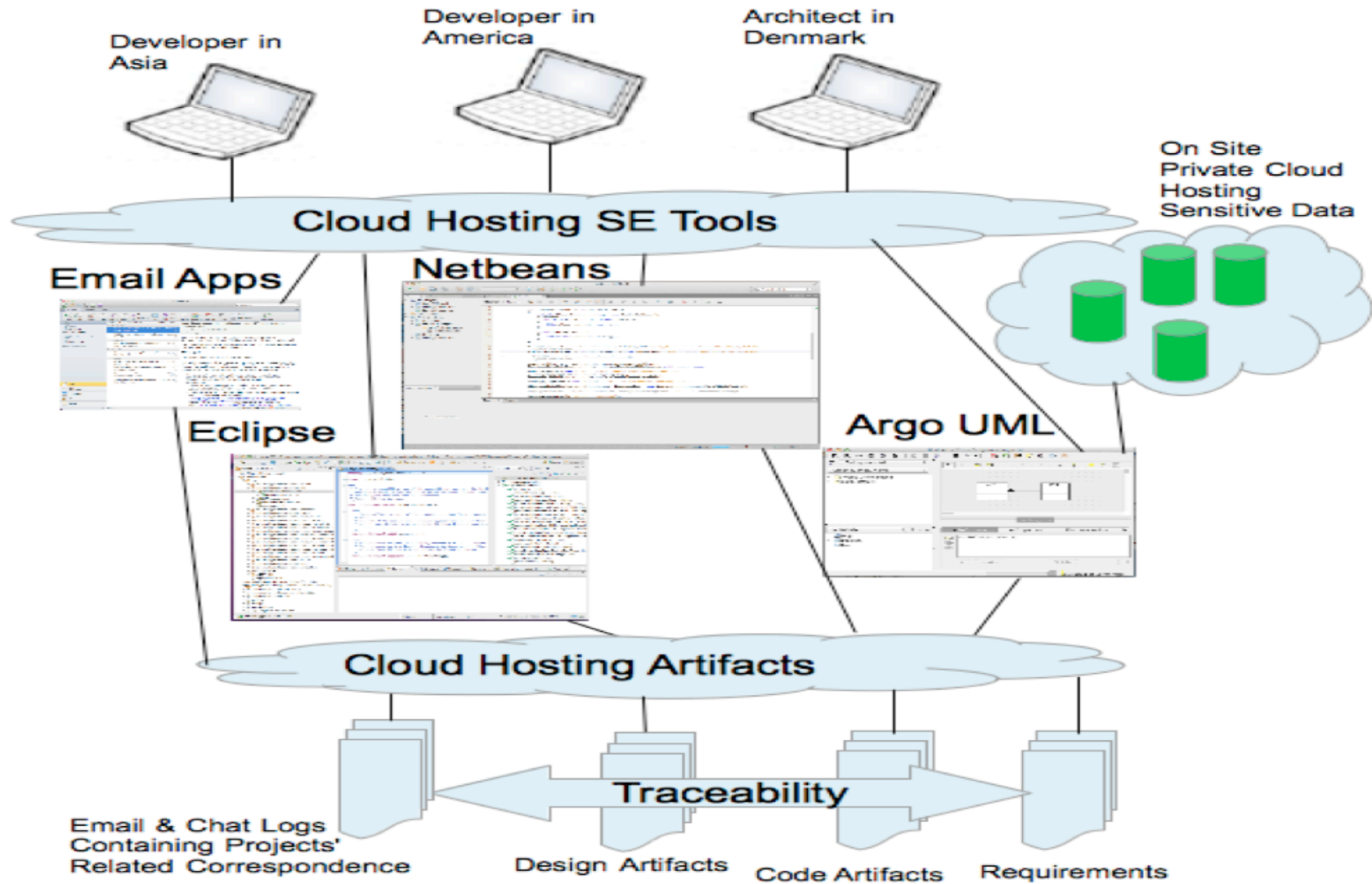


Source: <http://aws.amazon.com/solutions/case-studies/8kmiles/>

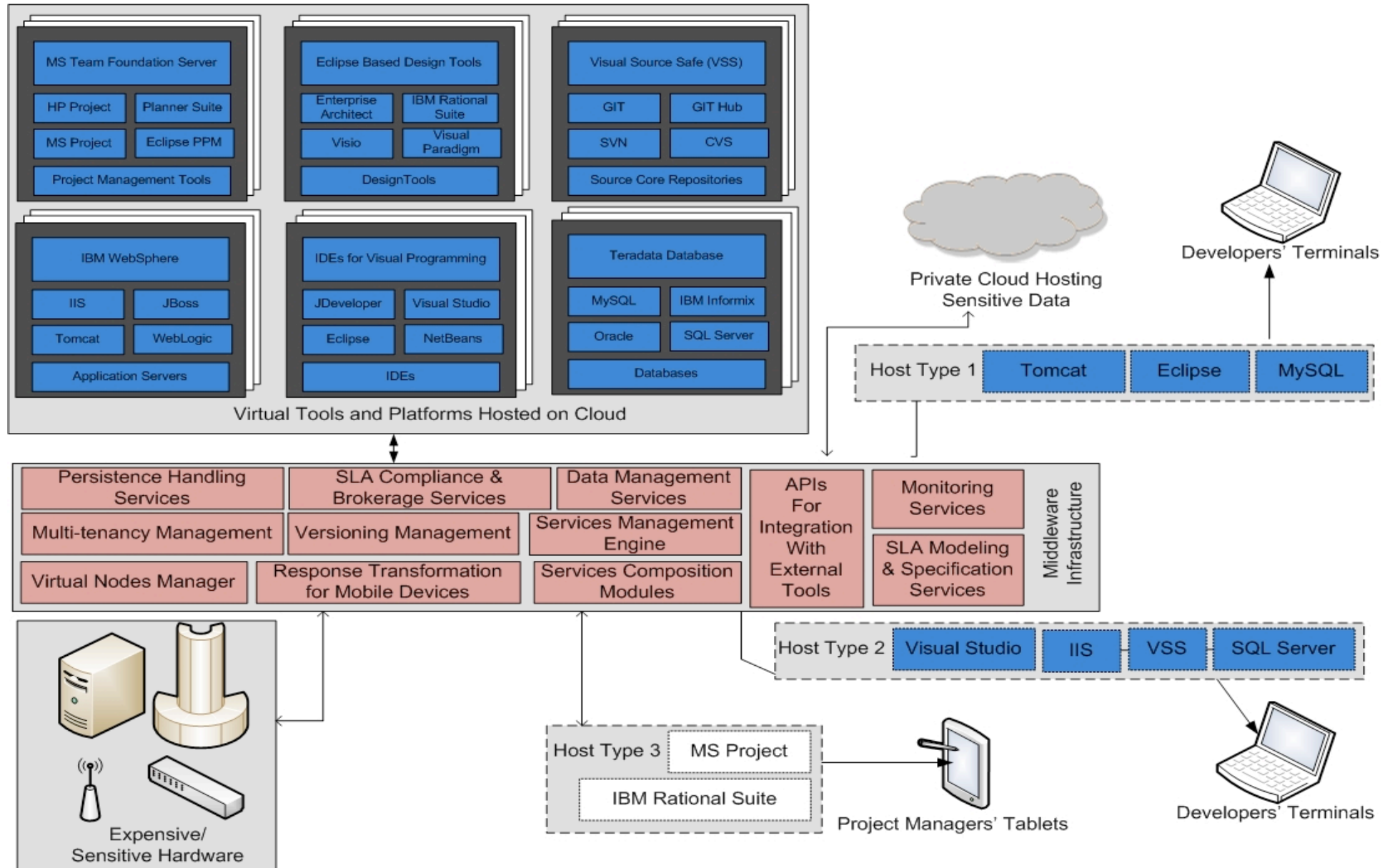
Software Development Ecosystem



Tools as a Service (TaaS) - Advantages



An Overview of Reference Architecture



Migrating to Cloud Computing



Migrating to Cloud Computing

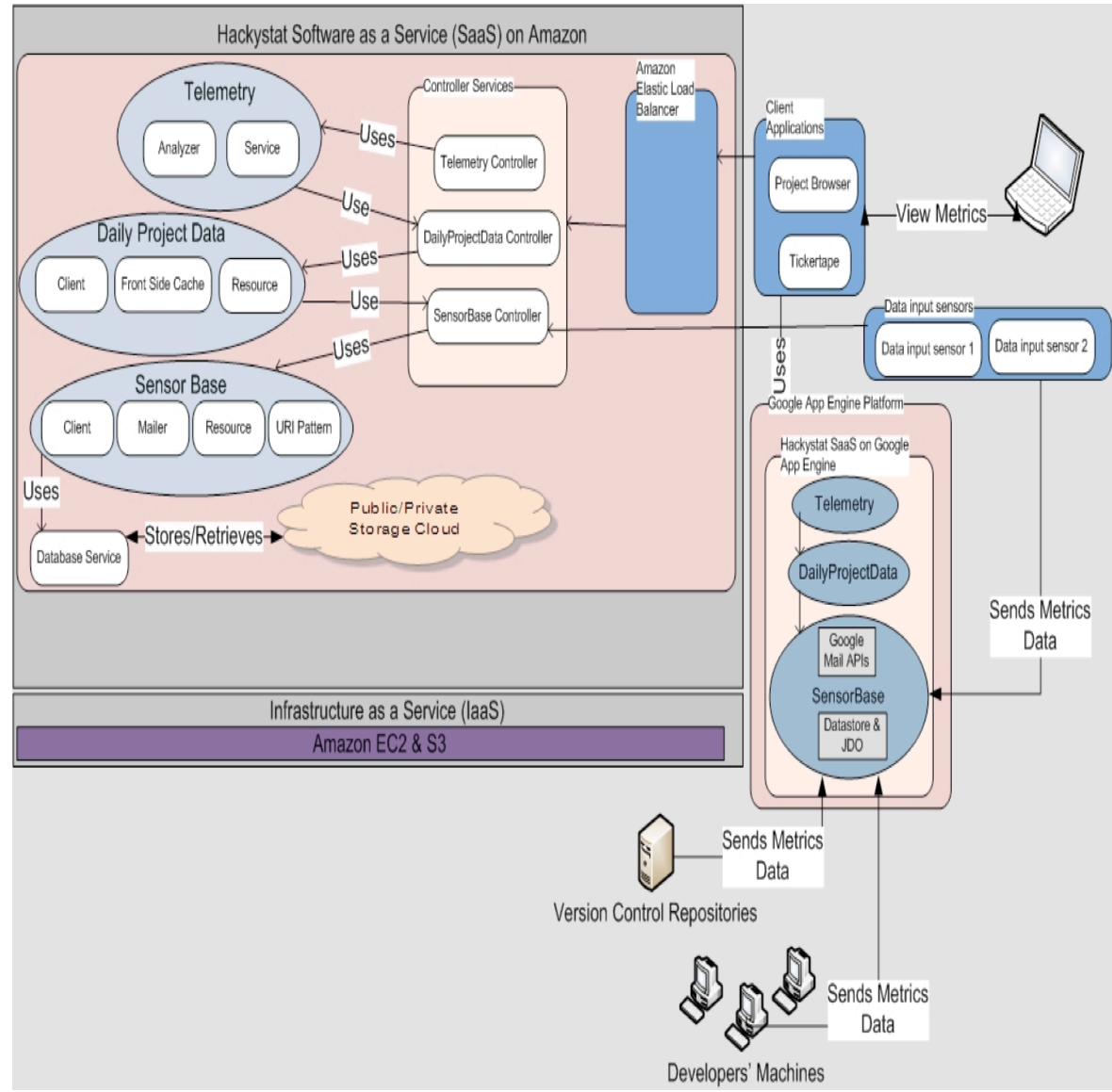
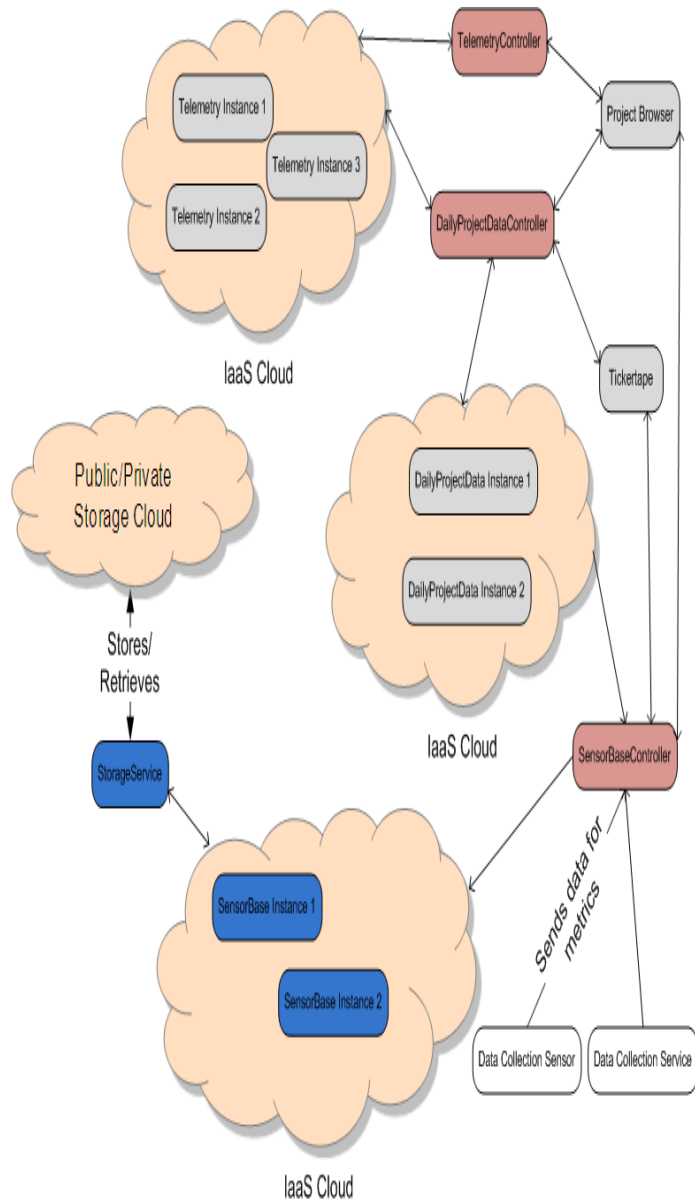
- Methods, processes, and tools are required
- Supporting migration by providing process framework and guidelines
- Migrating a software engineering tool to clouds
 - Supporting large number of organizations for process and product metrics in GSE
 - Leveraging elastic computing and storage resources
 - SaaS on IaaS (Amazon) or SaaS on PaaS (Google)



Features & resources



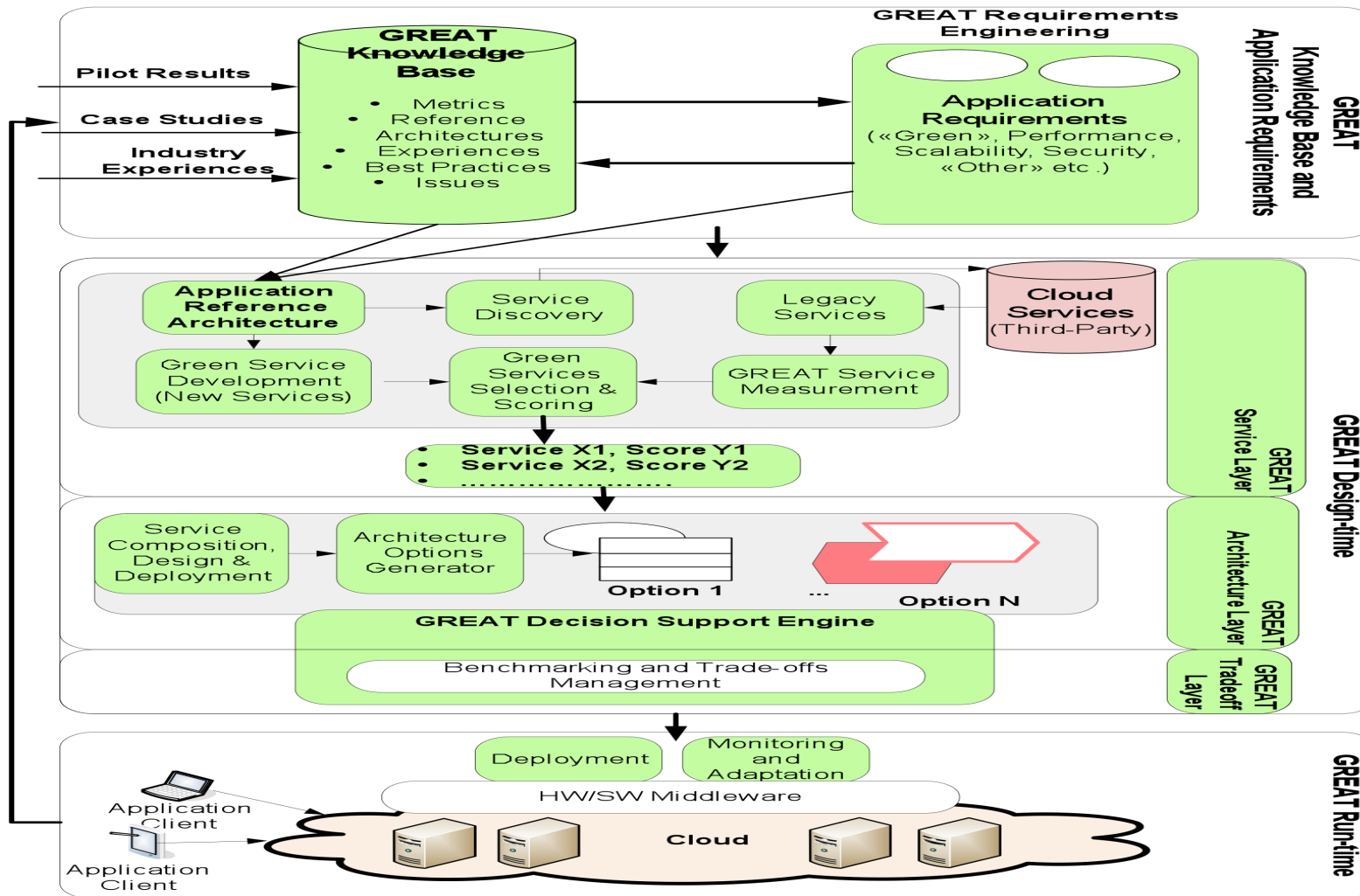
Architectural Options in Clouds



NordiCloud - Research Directions



Software Services for Sustainability



Source: Consortium partners of the GREAT project proposal, 2012.

Thank You!

Questions

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