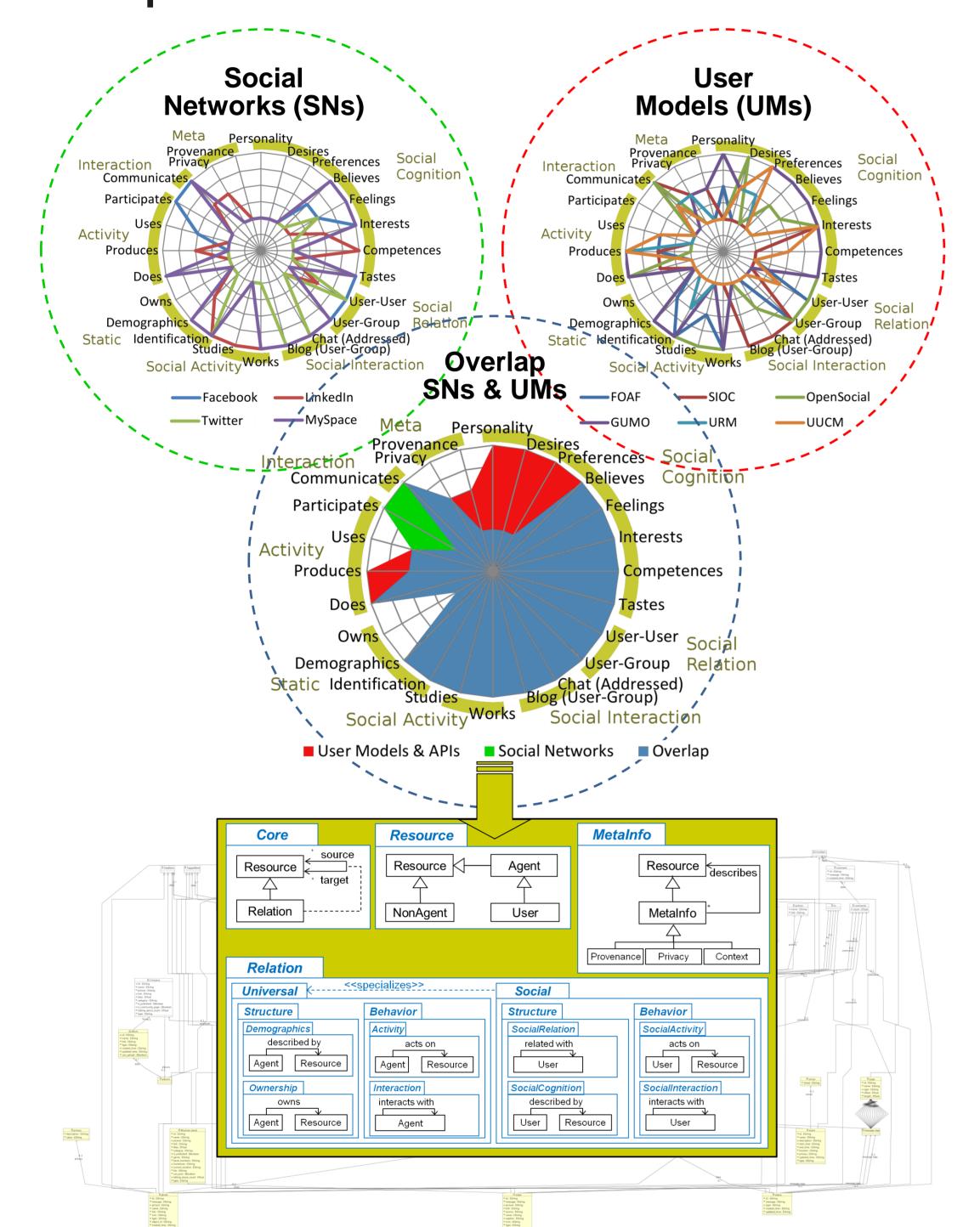
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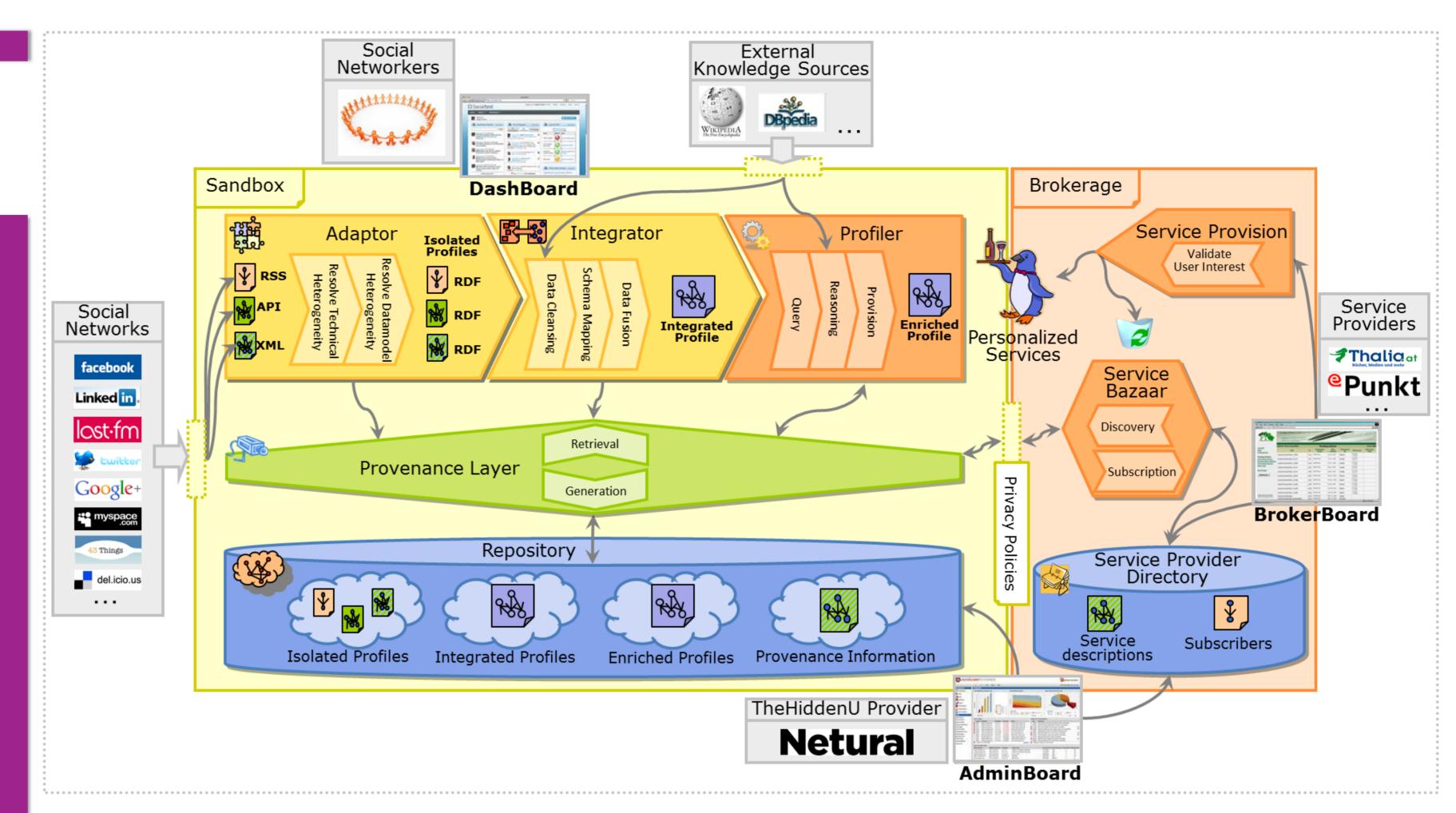


A Social Nexus for Privacy-Assured Personalization Brokerage

Problems & Goals

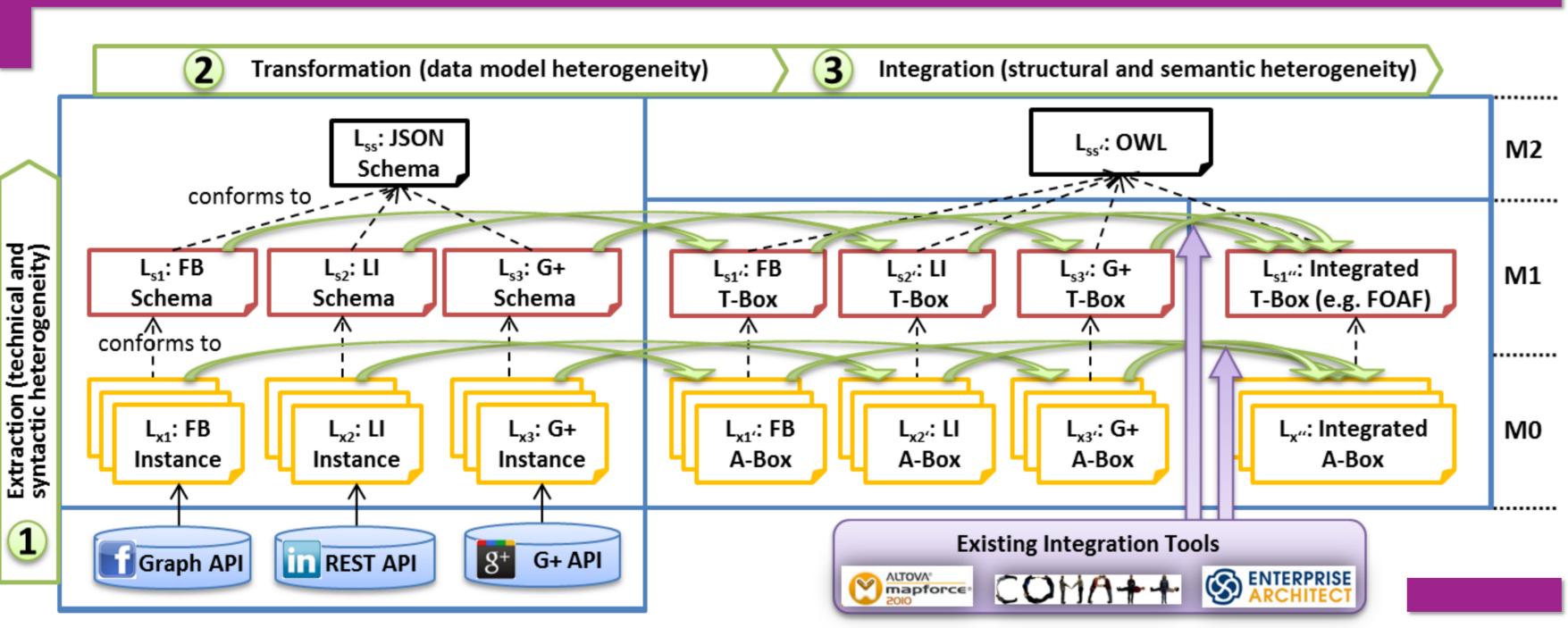
- Content Scattered Over Different Social Networks
 - Integration heterogeneities, redundancies & contradictions
- **Untargeted Service Provision**
 - Profiling & brokerage for highly personalized services
- **Obscure Social Content Usage**
 - Privacy control and awareness through provenance to achieve trust





Approach

- Integration
 - Model-driven techniques for automatic social schema & instance extraction and integration from Social Network APIs
 - Generic social core ontology acting as "stable" mediator between Social Networks & service providers
 - **Profiling & Brokerage**
 - Extensible profiler library & mashup-based language for reasoning about the integrated social content
 - Semantic-based brokerage infrastructure for publishing, discovering & provisioning of services
- **Privacy**
 - Aspect-based provenance generator & Web-based viewer
 - Adaptable privacy policies ensured by runtime environment



Profile Enrichment BasicCharacteristics ApplicationArea: eShopping Activities ApplicationArea: eTourism **Self Profiling** ApplicationArea: eRecruitment Entertainmen Theater JobChangeWillingness Wealth AgeImpactOnJCW Opera Salary RecentlyCompletedEdu... **Service-Oriented Profiling** Personality + RecentJobChangesOfCol... - BigFive RecentlyGraduated Extraversion SatisfactionWithCurrentJ. NrOfFriendsImpactO. Increased Demand For Cash NrOfUserPhotosImp.. **JobHopperPersonality** Network Density Imp. JobHomeDistanceImpact... Conscientiousness OnParentalLeave AgeImpactOnConsc.. UnemploymentState EngagedInVoluntary.. eRecruitmentProfiler PersonalityProfiler RecentlyCompletedEducation PersonalityDistribution Spatial(Extraversion) BigFiveMusicTaste (Extraversion) [RecentJobChangesOfColleagues JCW_Gender -NrOfFriendsImpactOnExtraversion IncreasedDemandForCash BigFiveWordUsage(Extraversion) Personality_JobHopper NrOfUserPhotosImpactOnExtraversion JCW_JobHomeDistance NetworkDensityImpactOnExtraversio PersonalityDistribution_Spatial SatisfactionWithJobFacebook <u>ırrentTown==null]</u> GetStandardDistribution ├ RecentJobChangesOfColleagues [currentTown==null] GetPersDistrFromLookup [else] GetPersDistrAllTowns

Profiler Library

Evaluation:

- **Experimental evaluation** of the model-driven extraction & integration for three different Social Networks
- Empirical study-based evaluation of profiler library & mashup-based reasoning language
- Case-study-based evaluation of adequacy of brokerage and privacy functionality





Schwinger





Pröll



Mitsch



Kusel



Wimmer





Schönböck



Wischenbart

Information

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http://www.social-nexus.net

Kapsammer



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