Health Care Panel

OSU Project: Collaborative for Enterprise Transformation and Innovation (CETI)

Engagement Model – Last Mile Education and Research

Feedback based on Practice Research
Health Care Projects

Operational (Business Process) Improvement:
- Patient tracking (OSUMC - James)
- Knowledge Management: For service restoration (Ohio Health Group)
- Service Delivery: Reduce time to service move-add-change (OSUMC) through ITIL and Lean

Future:
- Personalized Health Records

CSE Goal: Interesting interdisciplinary problems, killer applications, ideally - common themes

Patient Tracking

Problem Themes
EE: RF interference
- Within application (multiple patients, caregivers, beds within range of scanners)
- With existing RF in OSUMC

ISE/SE: Tools for time and motion tracking, analysis and optimization
- PDA and patient must be associated with the OR
- Patient may change beds

SE: SOA - legacy integration

SE: Architecture evaluation
- Need for multiple modes
- Multiple functionally suitable architectures
- Application-level simulation

SE: Model-driven IDE for dual-use heterogeneous systems
Knowledge Management for Service Restoration

Problem Themes

Industry sharing of knowledge, incidents, and the solutions for them

- Incident categorization and configuration-based diagnosis to support ITIL processes
- Reference models for shared knowledge
- Service layer support for knowledge sharing and vendor participation (RSS feeds, XML standards)
- User interfaces
- Knowledge administration process
- Real time business activity monitoring to provide business-level insights
- Security and privacy models
Service Delivery

PC Deployment
- Hardware Move/Add/Change
- Utility Software Configuration
- Access Control/Security
- Engineered Services

Configuration Management

Request Process

Business: Over $1B in annual revenue
Business problem: Reduction from 17 days to 1 day, 100 PCs/month

Lean methodology to augment ITIL
Service Level Agreement to Operating Level Agreement
Automatic monitoring of compliance with SLA
Orchestration across heterogeneous systems

Personal Engagement and Cyber-Support Environment (PEaCE)

Information Sources
- Selects
- Feeds

PEaCE

PHR

Health & Wellness state

Assistance Network

Subject

Information Queries & Collaboration requests?

Provider Networks

Collaboration, Integrated Information and assistance

Queries

PHR views

Recommendations
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<th>Problem Themes</th>
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<tr>
<td>• Complex, dynamically customized data and workflow integration</td>
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<td>• Integrated on-demand memory bank</td>
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<td>• Integration with pervasive technology</td>
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<td>• HCI</td>
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<td>• Security and privacy models</td>
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<td>• Trust models</td>
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