Notes on HE reference architecture

The SOA survey is revealing that SOA maturity is simply one dimension of a wider issue of EA maturity in HE. One way to measure EA maturity in HE would be to have a reference architecture as a yardstick. This is predicated on the assumption that HE is sufficiently different to warrant its own special reference architecture.

Introduction: Why have a reference architecture for Higher Education?

Higher Education is a unique vertical (This drives the enterprise data model designs):

- 1. The product:
 - a. Learning
 - b. Research
- 2. Porous and complex boundaries between communities (within the campus and outside). This drives identity and access management designs
- 3. The demographic (young, educated)
 - This drives UX architecture designs

Business architecture

Core business processes can be expressed as lifecycles. Each lifecycle has a customer facing aspect and an inward, administrative facing aspect. Each lifecycle can be viewed as a value chain. Lifecycles include:

- 1. Student lifecycle
- 2. Researcher lifecycle
- 3. Faculty lifecycle
- 4. Advisor lifecycle
- 5. Administrator lifecycle
- The lifecycles reveal the capabilities that are required. Services implement capabilities.

Data architecture

The entire enterprise data architecture is built on 3 fundamental entities:

- 1. Person
- 2. Learning unit
- 3. Research project

Service architecture

Service architecture implements the capabilities that are unique to Higher Education

User Experience (UX) architecture