Enterprise Architecture Principles
05 – Build For Reuse and Reduce Complexity

**Statement**

In an effort to reduce complexity Loyola will build common modular components and services that can be reused across systems.

**Rationale**

- Many departments and schools share common functions. These common functions will be identified and considered for future design.
- When common functions are reused, costs decrease and effectiveness increases.
- It is generally more efficient to reuse existing solutions rather than acquire and customize an external or new solution.
- Modular components have well-defined inputs and outputs. Assumptions about the qualities of the inputs and the usage of the outputs are minimal.
- Loosely coupled components interoperate well; they are not dependent on each other’s implementation specifics.
- Loose coupling is critical to achieve a flexible and sustainable system function over time.

**Implications**

- The Enterprise Architecture process will include an incremental effort to identify common functions that may be reused. This effort should include examining licensing and ongoing support costs.
- An examination of the application services layer will focus on business process to minimize duplicated logic within applications.
- Existing solutions, available functional components and business services will be cataloged in such a fashion that makes it easier to determine their reusability. A thorough review of the catalog may justify an internal build.
- Component relationships will be carefully planned early in the design to ensure integration objectives are met.