Mobile Development Services
Business Plan

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Purpose of the Mobile Development Services group

There is a growing demand to provide applications and services through mobile devices to student, faculty, and staff at the University of Illinois. AITS has launched a number of successful initiatives over the last two years to build applications specifically for mobile devices or make applications mobile aware. The experience and expertise gained through these efforts has resulted in numerous requests from various departments and organizations, including Housing, the Office of Technology Management, and the Board of Trustees, to assist with mobile development as well educate and do R&D.

With the rapid rise of mobile devices being used, organizations are struggling to learn the new technologies or find resources that have this expertise. With the experience AITS has developed, there is an opportunity to assist the university to grow in this area by becoming a university resource that departments can look to for assistance and information. The formation of the Mobile Development Services team (MDS) will help create a university asset that will help move university IT forward.

What would the Mobile Development Services do?

The Mobile Development Services will be a full service development shop offering a variety of application development and testing services that follow AITS methodologies. As part of AITS, the MDS would build and support mobile enterprise systems the same way that traditional enterprise applications are built today. In addition, the MDS would expand its scope to work on solutions that are beneficial to the university as a whole. The university and departments can leverage the products and knowledge gained from these initiatives. Finally, the MDS can work directly with departments on specific edge or department solutions or provide specific services such as device testing that the department may not be able to do themselves.

The following diagram shows the core areas where the MDS would operate and provide services with examples of types of projects within these areas.
What are the services would be offered?

The Mobile Development Services team will provide a variety of services both for AITS in support of enterprise systems as well as advancing mobile development within the university and assisting departments with specific needs. The following is a breakdown of the services that would be offered.

**Full Development Service:**

1. Provide end-to-end solution delivery of mobile applications and responsive web applications.
2. Provide life-cycle of development activities including analysis, design, construction, testing, deployment, and monitoring.
On Request Services:

1. Fix problems with apps that are broken
2. Augment department staff
3. Do specific things such as enhancements or build integrations
4. Quality Assurance testing of mobile applications and web apps

Enterprise Services:

1. Build enterprise apps / UA apps (grades, schedule, etc.)
2. Manage enterprise accounts
3. Perform iOS / Android deployments and readiness evaluation of applications being deployed in Google Play and the App Store under the University of Illinois name.
4. Build an enterprise store for apps not suited or desired for commercial distribution
5. R&D for new trends in mobile (iBeacon, Passport, authentication, credit card payments, etc.)
6. Facilitate the growth of the mobile development community at UI
7. Build apps that make life better (e.g., UI Dining)

How do we fund this?

The Mobile Development Services department will be funded through both traditional funds such as ITPC, work requests, and internal projects, as well as cost recovery funds through Service Level Agreements for specific services. The types of funds used would be based upon the type of service being performed.

- For enterprise systems that are part of the traditional purview of AITS, the funding mechanisms used today such as ITPC and work requests would still be used.

- For services provided to units for department specific solutions, service level agreements would be established and AITS resources would be billed to the department on a cost recovery basis.

- For solutions, that benefit both the university as well as specific departments, a blending of funds may be used where AITS will donate MDS time and departments may fund a portion of that time through SLA’s as well.
The goal of the MDS team would be to eventually generate enough funds through SLA’s and hourly services that a portion of the funds would help support initiatives that benefit the university and can be leveraged by campus departments. The following diagram depicts the funding model for initiatives supported through the MDS area.

**Figure 2: Mobile Development Services funding**

A process would have to be built to evaluate the request from a department for services to determine where they fit in the funding model. This process would evaluate the benefits of the project and if we should request full funding from the requesting department or if we would subsidize the project with partial or full funds.

**Who would be our competition?**

1. External consulting firms
2. Grad students / in-house

**What advantages do we bring?**

1. Mobile development knowledge
2. Access to enterprise data and resources not otherwise available
3. Knowledge of university systems, resources, and practices
4. Team approach instead of individual – reduce risk for long-term support
5. Cheaper cost than going elsewhere  
6. Use existing infrastructure – servers, tools, databases, skilled resources  
7. Someone to support the application for the life of the app

**Why do we want to do this?**

1. Generate enough funding to allow MDS to work on solutions beneficial to the university  
2. Fulfill needs within the university for mobile help, expertise, and collaboration  
3. Position AITS as a leader in the mobile development area in the university  
4. Stay ahead of the learning curve as enterprise systems become more mobile oriented  
5. Produce higher quality enterprise solutions  
6. Attract and retain highly skilled developers

**What are the risks of doing this?**

1. What if the funding model not able to support the staff. Is there a fallback or let people go?  

   **MITIGATION STRATEGY:** Do not extend staffing levels beyond what AITS is comfortable funding entirely. As the MDS grows and funding becomes more predictable, expand MDS to match revenue projections.

2. There are indirect resource costs that are difficult to measure (DBA’s, modelers, testers, analysts, admins, etc.) which are already stretched thin. This could place an even higher burden on them.  

   **MITIGATION STRATEGY:** Time tracking needs to be done to assess the impact and potentially funds from the MDS could be used to fund support positions outside of the MDS.

3. Reputation – AITS seen as a “For Profit” organization looking for money.  

   **MITIGATION STRATEGY:** A services request and review process with well-defined and documented criteria must be in place for organizations to see how projects are selected and funded. A substantial proportion of enterprise and university beneficial projects should also be maintained in accordance with the MDS mission.
4. AITS could assume long-term support for a number of applications that consume resources and limits the amount of new development work that can be taken on by the MDS team.

**MITIGATION STRATEGY:** When a new application is initiated, the long-term support model must be defined up front. Organizations will have to fund the support based on an SLA or we turn over the application to them or place it in open source. The Chicago Water Walk application followed the open source model.

**What resources are needed to get this started?**

The MDS team would be another department within Application Development and Support. Two new positions would be created. The first is a full-time coordinator position that would manage the projects and staff. Jim Caputo has been acting in this capacity and would be a recommended choice for this opportunity. The second position would be a Senior Developer position that would have a full-time developer focused on only mobile initiatives. William Seemann would be a recommended choice for this position.

The remaining members of the MDS group would be virtual members that would come from the other development and QA groups within ADS. Others from AITS could also work in the MDS if there is a need, desire, and capacity to do so. The virtualization of the team provides the opportunity for developers to work on mobile projects.

**Funding requirements:**

- **Recurring:**
  - Promote Sr. System Engineer to Coordinator: $5K salary increase
  - Promote Software Engineer to Sr. Software Engineer: $7K salary increase
  - Backfill Senior System Engineer on TAM: $90K salary estimate
  - Backfill Software Engineer: $85K salary estimate
  - Hardware refresh for test devices: $3K
  - **TOTAL RECURRING:** $190K

- **One Time:**
  - Development Mac’s and test devices: $15K
  - **TOTAL ONE TIME:** $15K