Deloitte RFID RFP Project

Team 10 Consulting

Kyle McBride
Patrick Weiler
Dervasha Buckery
Joseph DelliGatti
Thomas Wittman
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Letter of Intent for RFP for The Keystone Hospital RFID Project

Dear Deloitte,
Team 10 is pleased to submit this response to Deloitte’s Keystone Hospital RFID Project. We look forward to supporting the Keystone Hospital in this area. As you read our proposal, we are certain that you will conclude both that Team 10 has the talent required along with a thorough understanding of Deloitte’s objectives driving the project, making Team 10 the ideal choice to assist Deloitte with the proposed project.

Our proposal brings 4 core competencies together, including core consulting capabilities and the end-user computing practice.
We believe Team 10 can successfully assist Deloitte achieve its objectives based on our:

- Understanding of the project objectives
- Understand of the scope, time requirements, budget
- Technical knowledge of the systems involved
- Creative solutions
- Dedication to the client

We have composed a team that has never met before and believe that you will find our team is unmatched in adapting to this new environment. If selected for this project, we would find the most efficient and practical solution possible within the scope of the project. Until we have executed a SOW, neither party is obligated to the other for this project.

Thank you for inviting Team 10 to present you with this proposal. We are eager to earn your business and assist you in achieving your objectives.

Sincerely,
Kyle McBride and the Team 10 staff
Project Charter

Project Title: Keystone Hospital RFID Project
Project Start Date: 1/22/13                  Projected Finish Date: 2/1/15
Budget Information: $2 million

Project Manager: Kyle McBride, Phone: (814) 777-4214 kam5918@psu.edu

Project Objectives:
• To prevent the loss/theft of medical devices, thereby reducing replacement costs
• To implement RFID cards into major medical equipment
• Implement a tracking system for the RFID devices
• Train staff to use the devices
• Improve efficiency in hospitals

Main Project Success Criteria:
• Fulfilling all objectives in the time allotted and within the budget while creating a successful way to monitor and track hospital equipment.

Approach:
• Establish a contract with the stakeholder and a relationship with our client
• Any situations that we find are going against our standard procedures will first be approved by the client before acted on
• Plan on having a team member who is constantly monitoring and controlling this project throughout the duration
• The triple constraints will be evaluated on a regular basis to ensure the project stays on course.
• All situations pertaining to the project will be handled by a group with a unanimous decision to determine the outcome.
# Roles and Responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Organization/Position</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead</strong></td>
<td>Dan Welsh</td>
<td>Project Sponsor</td>
<td><a href="mailto:dwelsh@deloitte.com">dwelsh@deloitte.com</a></td>
</tr>
<tr>
<td><strong>Internal Consultant</strong></td>
<td>John Chen</td>
<td>Sponsors Liaison</td>
<td><a href="mailto:johnnychen2@deloitte.com">johnnychen2@deloitte.com</a></td>
</tr>
<tr>
<td><strong>Project manager</strong></td>
<td>Kyle McBride</td>
<td>Team Leader</td>
<td><a href="mailto:kam5918@psu.edu">kam5918@psu.edu</a></td>
</tr>
<tr>
<td><strong>Team member</strong></td>
<td>Joseph DelliGatti</td>
<td>RFID Expert</td>
<td><a href="mailto:jmd5631@psu.edu">jmd5631@psu.edu</a></td>
</tr>
<tr>
<td><strong>Team member</strong></td>
<td>Dervasha Buckery</td>
<td>IT Specialist</td>
<td><a href="mailto:dmb5485@psu.edu">dmb5485@psu.edu</a></td>
</tr>
<tr>
<td><strong>Team member</strong></td>
<td>Thomas Wittman</td>
<td>Financial Expert</td>
<td><a href="mailto:tew5093@psu.edu">tew5093@psu.edu</a></td>
</tr>
<tr>
<td><strong>Team member</strong></td>
<td>Patrick Weiler</td>
<td>HR Specialist</td>
<td><a href="mailto:pmw5093@psu.edu">pmw5093@psu.edu</a></td>
</tr>
</tbody>
</table>

Dan Welsh:______________________________________________ Kyle McBride:______________________________________________
(Project Sponsor) (Team Leader)

John Chen:______________________________________________
(Sponsor Liaison)
## Work Breakdown Structure

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<thead>
<tr>
<th>ID</th>
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<th>Task Name</th>
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<th>Finish</th>
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<td>Thu 2/21/13</td>
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<td>3</td>
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<td>1.2 Identify project stakeholders</td>
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<td>1.3 Develop project charter</td>
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<td>6</td>
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<tr>
<td>7</td>
<td></td>
<td>2.2 Develop WBS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>2.3 Construct Gantt chart</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>2.4 Estimate project costs</td>
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<tr>
<td>10</td>
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<tr>
<td>13</td>
<td></td>
<td>3.1.2 Purchase scanners</td>
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</tr>
<tr>
<td>14</td>
<td></td>
<td>3.1.3 Purchase antenna</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>3.2 Implement RFID tags on medical eq</td>
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<tr>
<td>16</td>
<td></td>
<td>3.3 Develop quality assurance plan</td>
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<td>17</td>
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<td>4 Monitoring and Controlling</td>
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<td>4.3 Draft issue log</td>
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<td>21</td>
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<td>5 Closing</td>
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<td>Thu 2/21/13</td>
<td>Thu 2/21/13</td>
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<td>22</td>
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<td>5.1 Develop lessons-learned report</td>
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<tr>
<td>23</td>
<td></td>
<td>5.2 Draft final report</td>
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</tr>
<tr>
<td>24</td>
<td></td>
<td>5.3 Prepare final presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>5.4 Present final presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>6 Project completed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Proposed Personnel

Position Title 1: Team 10 Consulting.

- Team 10 consulting will be responsible for research, design, and planning pertaining to the project.
- Kyle McBride will be the team project manager.
- Dervasha Buckery will be the IT specialist.
- Joseph DelliGatti will handle RFID technology
- Thomas Wittman will be the financial expert.
- Patrick Weiler will be the Human Resources expert.
- Team 10 will require to be paid by hour (project staff-$35/hr)
- The team will need 2 years total, with flexible hours based on the timeline (min.40hr/person).
- Team 10 is skilled in the fields of consulting and project organization.

Position Title 2: 3rd Party security firm.

- This team will provide security analysis and consulting for servers/network.
- 15yrs of experience is required, and a project resume will be needed.
- This group will be paid by hour ($35/hr).
- The private security firm will be needed for 1 month of security testing and server probing.
- Relevant experience based off of project resume in Network and server security, knowledge pertaining to RFID security is a bonus.

Position Title 3: Keystone supplied staff

- Project manager liaison to meet monthly and staff assistants for constant project work.
- Staff needed for this position will be determined by Keystone
- Payment is also determined by keystone for its selected staff.
- This team will be working as liaison during project meetings and as assistants throughout the length of the project.
- A good background in IT, Project management, and Network and Server administration
# List of Prioritized Risks for Project Name

Prepared by: Team 10 Consulting  
Date: 2/18/2013

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Potential Risk</th>
<th>Impact on Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cannot meet budget</td>
<td>Costs exceed budget, project scope is not met due to cost constraints</td>
</tr>
<tr>
<td>2</td>
<td>Fail to meet scope</td>
<td>Change of critical path, project milestones are not met or are changed</td>
</tr>
<tr>
<td>3</td>
<td>Schedule conflicts between Project Management and Keystone</td>
<td>Delays project, Scope misalignment</td>
</tr>
<tr>
<td>4</td>
<td>The RIO is less than 10%</td>
<td>Doesn’t meet project goal for payback, project is not worth investment</td>
</tr>
<tr>
<td>5</td>
<td>A negative NPV</td>
<td>Project exceeds cost capital, project is not worth investment</td>
</tr>
<tr>
<td>6</td>
<td>Strain on Keystone Hospital IT infrastructure</td>
<td>Overwhelm servers, Keystone has internal communication issues due to high traffic</td>
</tr>
<tr>
<td>7</td>
<td>RFID tag security risk</td>
<td>Information leak on inventory, personal information leak</td>
</tr>
<tr>
<td>8</td>
<td>RFID transferring virus</td>
<td>Delays project, potential loss of information</td>
</tr>
</tbody>
</table>
1.0 Introduction/ Background

Team 10 Consulting is a recently composed team capable of a wide variety skills, we are unmatched in our ability to adapt to new environments. We find the most efficient and practical solutions possible within the scope of the project. We base our success solely on the satisfaction of the client.

2.0 Business Objective

Team 10 Consulting is company that strives on ethical behavior and respect to customers in all environments. Our profitability comes second to our outstanding performance and quality in the IT world. We focus on technological advances in the work place on a wide variety and scale; networking, infrastructure, intranet and more, are specialties of Team 10 Consulting.

3.0 Current Situation and Problem/Opportunity Statement

Keystone Hospital is suffering financially from lost and stolen devices within the facility. Team 10 Consulting has the opportunity to reduce costs created by lost equipment within the facility by implementing a technologically advanced system that will use RFID Tags to efficiently track equipment and reproduce their locations on a convenient database accessible by staff.

4.0 Critical Assumption and Constraints

Our proposal suggests installing brand new hardware and software throughout the facility to facilitate for the new system. Our staff must actively upkeep the system until we can effectively train and transition it onto the Keystone Hospital staff. The system will require cooperation among the Hospital staff.

5.0 Analysis of Option and Recommendation
There are 3 options for addressing the situation:

1. Take no action, the hospital is still profitable and will continue to be so if the situation is not addressed.
2. Outsource the issue to an external company, which would handle the issue within their own hardware, software and staff.
3. Purchase new hardware and software which would be installed within the Hospital and train the current staff to operate it.

Giving the acceptance criteria we find Option 3 to be the most logical.

6.0 Preliminary Project Requirements

1. Asset Loss Management: By adding a wireless tag to the asset and inserting wireless readers at critical locations, e.g. the trash chute, laundry chute, etc. an alarm can be generated when a tagged medical device is detected in one of these locations, preventing the loss of the high value asset. The same high value assets can also be the target of theft, similar reader-alarms could be stationed at exits if equipment is taken outside without authorization.

2. Asset Utilization Management & Real-time Location Reporting: Medical staff routinely hoard critically needed medical devices that are in short supply, thereby exacerbating the very equipment shortage they are trying to compensate for, and creating frequent but artificial “out of stock” situations. There is also a productivity loss due to time spent searching for a working piece of equipment. Equipment shortages are most often a consequence of broken equipment left sitting in a corner indefinitely, reducing the pool of available assets, or unused equipment in the wrong closet, sitting there indefinitely and further reducing the pool of available assets.

3. Equipment Calibration and Maintenance: An RFID tag on the asset and a wireless network of readers could be used to instantly locate any piece of diagnostic equipment. A database containing asset information, tag number and next calibration date can be used to automatically generate a report showing which pieces of diagnostic equipment are now due or past due for re-calibration and can automatically pinpoint the asset’s location in the facility.

4. Asset Cleaning: By adding a wireless tag to the asset, a management report can be
generated that identifies the current location of every asset. This helps technicians instantly identify the location of a desired piece of equipment. Alarms can be generated when a piece of equipment has been stationary for more than ~48 hours, indicating potential need for sterilization. Alerts from idle, dirty or broken assets can be used to trigger a work order and automatically populate work order request forms.

5. Inventory: Health care facilities must periodically inventory physical assets for accounting purposes. In some cases, the ability to electronically locate an asset and count how many exist eliminates the need to physically walk through the entire facility and do a manual count. This significantly reduces the time and labor required to perform an asset inventory.

7.0 Budget Estimate and Financial Analysis

The proposed budget is $2 Million with 5% of that going directly to the Hospital Support Staff. See Exhibit A.

8.0 Schedule Estimate

The project is to be completed within 2 years with a transition period throughout the last six months between our staff and the Keystone Hospital Staff. The life of the system is indefinite with the exception of any lost of broken equipment.

9.0 Potential Risks

Cannot meet budget leading to project scope not being met due to cost constraints. Fail to meet scope leading to change of critical path, project milestones are not met or are changed. Schedule conflicts between Project Management and Keystone leading to delays project and scope misalignment. The RIO is less than 10% not meeting the project goal for payback, project is not worth investment.

10.0 Exhibits

Exhibit A: Financial Analysis
### Discount Rate: 8%

<table>
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<tr>
<th>Period</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
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<td>$40,000.00</td>
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<tr>
<td>Discount Factor</td>
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<td>0.86</td>
<td>0.79</td>
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<td>Discount Factor</td>
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<td>0.93</td>
<td>0.86</td>
<td>0.79</td>
<td>0.74</td>
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<td>$1,010,359.00</td>
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| Discounted Benefits - Discounted Costs | $ (1,900,000.00) | $1,232,575.50 | $1,139,801.00 | $1,047,026.50 | $980,759.00 | $980,759.00 | $2,500,162.00 |
| Cumulative Discounted Benefits - Discounted Costs | $ (1,900,000.00) | $677,424.50 | $472,376.50 | $1,519,403.00 | $2,500,162.00 | $2,500,162.00 | $1,924,517.00 |

**ROI:** 12.3%

**NPV:** $2,500,162.00

**Payback Year:** 2

**Assumptions/Facts**

- Total available budget is used (assumption)
- 1,000 RFID tags need purchased per year (assumption)
- Active RFID tags are ~520 (fact)
- 5% of devices are lost ($1,353,000/yr. in benefits with no losses) (assumption)
- 8% discount rate

**Notes (costs/benefits)**

- $20,000 spent per year in RFID tags (cost)
- $80,000 in savings from downsizing due to efficiency (benefit)
- $20,000 spent per year in server upkeep and maintenance (cost)
Additional Exceptions

1. **Project success criteria (acceptance Criteria)**
   - Completing the project on budget
   - Maintaining good scheduling among team
   - Retaining scope
   - Successfully tracking the devices
   - ROI has met client expectations
   - NPV is in the positive
   - IT infrastructure remains stable
   - Effectively train the hospital staff to properly utilize the implemented systems

2. **Termination – Protection if the client tries to pull out of the project**
   - Early termination from the client will result in said client compensating the team and company for loss of time, labor, and resources. Any resources purchased will fall under the possession of the clients, following compensation.
   - Additional fees will be charged at a monthly basis, starting at $50,000 for the clients’ involvement with the company.
   - If clients terminate the contract, they are required to forfeit all knowledge of the company’s procedures/strategies.

3. **Business Conduct Information**
   - We will have monthly conference calls with the clients throughout each stage of the project. Upon request from the client, we will try to dedicate additional times for meetings, whether via phone, email, or in person, depending on the situation.
   - The client will be expected to deliver any additional information to the team that is not currently available to the company, if said information pertains to and is valuable to the project.
   - During monthly meetings, budgets for the next month will be announced and payment will be requested preceding any further evaluations from the client.
   - Respond to any initialized communication, emails, calls, etc. within 24 hours
   - Team 10 Consulting will provide client meeting agenda at least 48 hours before any conference
   - Team 10 Consulting will provide the client with meeting minutes within 24 hours following a conference

4. **Confidentiality**
   - Under contract, any information about the company’s business strategies will be kept under confidentiality.
   - Any information requested by Team 10 consulting will be used solely during the scope of the project and will be destroyed upon project completion or termination.
   - Any information requested by Team 10 with regards to sensitive information pertaining to the functions of the hospital will not be divulged in any way that does not benefit the project or hurt the hospital.