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Teaching case

IT project governance at Worthington Health-Care System

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This case describes a real corporation and situation but the names, dates and other information have been changed to protect the privacy of the corporation. Thanks go to the IT professionals at WHCS that participated in the interviews that undergirded this case narrative, and to Phoebe Leigh Todd who anonymized the case. This teaching case was developed as a basis for class discussion and is not designed to illustrate effective or ineffective handling of an administrative situation.

Abstract
In 2012, the Chief Information Officer (CIO) of Worthington Health-Care System (WHCS), a St. Louis company with 27 health-care facilities, is considering how to improve IT project governance. Over the previous 7 years, three approaches to developing project oversight had been attempted, including a Project Management Office, a project Portfolio Management application (PlanView), and more recently, an incremental approach to process improvement, which was meeting with increasing resistance. The CIO's challenge is to find an effective solution to IT project work and oversight at WHCS. This teaching case was prepared to support a Business Process Consulting course, but it may also be suitable in an IT Management, IS Project Management, Business Process Improvement and IT-Enabled Change, and Accounting Information Systems class.
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Introduction

On a sweltering hot Friday evening in July 2012 Henry Richmond, Senior Vice President and Chief Information Officer (CIO) of Worthington Health-Care System (WHCS), was preparing to leave his downtown St. Louis office for the weekend. As he gathered a few documents to review over the weekend, Richmond contemplated the many conversations during the past week about the future of the Enterprise Project Management Services (EPMS) unit of Worthington Information Systems (WIS).

Since Richmond's appointment as CIO in late 2007, the WIS budget had increased from 3% to 4% of Worthington's revenue. WIS head count had grown from 475 to 675 full time equivalents (FTEs), supporting about 21,000 users and 16,000 PCs. WIS operations were funded primarily by a cost allocation based on factors such as the number of PCs, ports, and software licenses in use at each WHCS facility.

Richmond felt that under his leadership WIS had steadily improved its project discipline and that customers' confidence in WIS had been restored. The IT organization now had more projects to work on than ever before, supporting about 600 applications. Still, Richmond had concerns about EPMS, which for the past 5 years had developed and enhanced project governance incrementally. Whereas Richmond wanted EPMS to be a 'funnel' that helped WIS draw in and complete more project requests from customers, many WIS staff increasingly saw it as a 'bottleneck.' Richmond was particularly concerned that the large and influential WIS Application Services group was quite vocally resisting further changes in IT project oversight (See Figure 1 for WIS's organization chart).

Application Services wanted EPMS to be reduced to a *Project Office* – a unit that would collect data on resources used in projects and that would manage the meetings and documentation needed to satisfy WIS's project governance requirements. In this approach, project managers would be distributed across various WIS units. It was argued that, embedded in different parts of the business, project managers could build stronger long-term relationships with customers and vendors, and adapt project management methodologies to the peculiarities of each use domain. In contrast, Charles King (Director of EPMS) and his boss, the VP of Customer Services and Governance, proposed that EPMS should become a full *Project Management Office* (PMO). In order for EPMS to define and maintain WIS project management standards, they argued that all project managers – 25 of whom were currently located in Application Services – should report to EPMS.

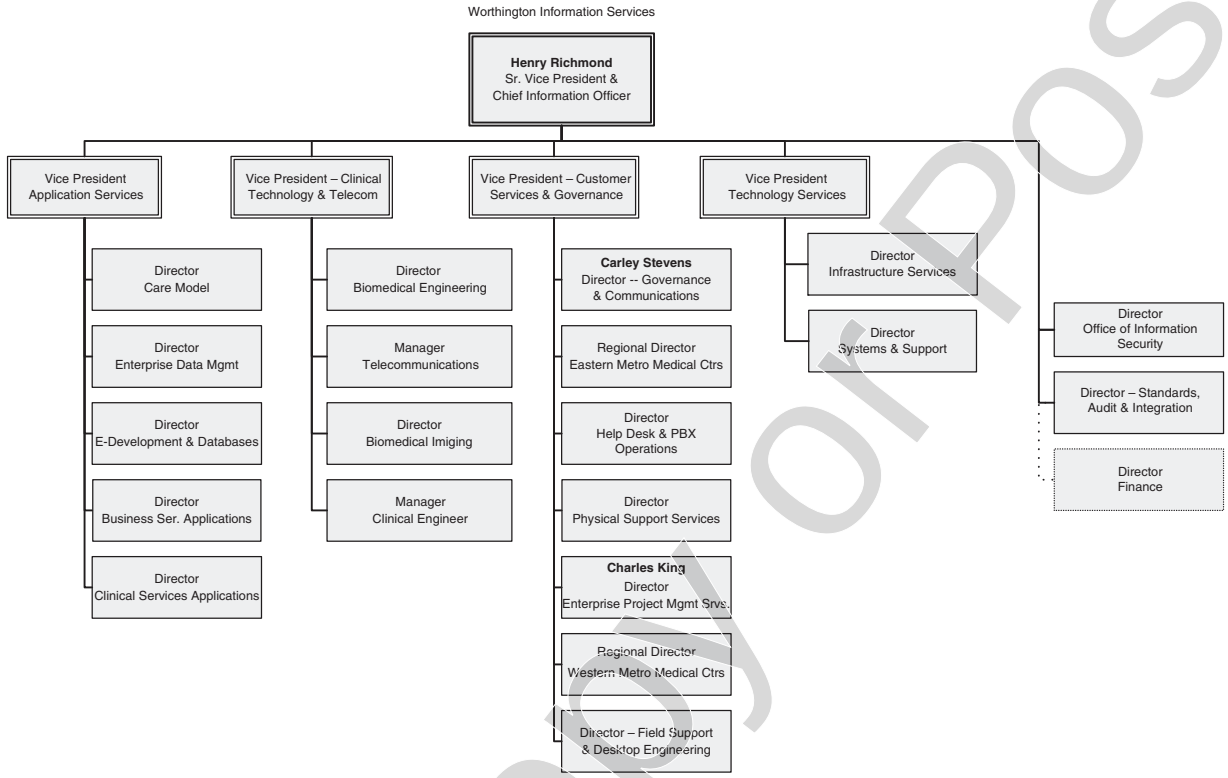

Figure 1 Organization chart (December 2011).

As Henry Richmond stepped into the elevator he wondered: was it time to reorganize?

Worthington Health-Care System and Worthington Information Systems

With US$3.9 million in revenues, WHCS managed 27 hospital facilities in the St. Louis Metro area (3500 beds), including full-service hospitals and specialty service centers focused on heart and cardiovascular care, cancer and diabetes treatment, women's health, and pediatrics among others. Each year Worthington handled about 125,000 admissions, 343,000 emergency care cases, and 558,000 other outpatient cases (excluding home care). About 23,000 babies were delivered in Worthington facilities each year. The system employed 21,000 staff, with 4800 physicians on active medical duty.

Traditionally, when WHCS acquired hospitals, it allowed them to retain their own data centers and servers, biomedical equipment, help desks, field support (for PCs), telecom, and applications support. However, in 1995 Worthington hired its first CIO to build a centralized IT organization. By 1999 servers were consolidated into two data centers. IT staff were assigned to a centralized reporting structure and shared IT services organization, WIS. Yet, WHCS hospitals continued to hire external vendors to implement many solutions. The non-standardized, 'spaghetti' architecture created became apparent when a 3-month mapping exercise in 2004 revealed more than 500 applications used at WHSC's largest facility. WIS had been completely unaware that many of these existed. WIS did not know how many projects were in progress, who was working on them and how close they were to completion, and how each project or application related to WHCS's or WIS's strategy. The application mapping exercise had highlighted just how little control WIS had over WHCS IT. In 2005, WIS embarked on the first of three attempts to implement IT project governance.

2005–2006: project management office and project portfolio software

Henry Richmond's predecessor viewed the WIS time-reporting process as an avenue for generating insights into WIS projects. WIS employees recorded their timesheets in Word documents and spreadsheets, which were then aggregated and summarized at the manager and director levels. Observing that this process was time consuming, unstandardized and error prone, the CIO decided that timesheet reporting was the first process to tackle in his effort to institute project governance.

In March 2005, a new VP of project management, a military man, was hired, and PlanView (Table 1), a 'best in class' project Portfolio Management tool (according to Gartner Group), was purchased. Soon a PMO with a staff of five was in place. A key goal for the PMO was to support (and control) the 'Clinical Renewal' team, which was working on a $250 million process improvement and technology integration project, whose goal was to redesign clinical processes and seamlessly link clinical information throughout the WHCS network, using a new electronic health record (HER). The Clinical Renewal team comprising clinical IT staff reported to the hospitals. It included no WIS staff and did not fall under WIS's control.

The new VP and his staff had considerable expertise in project management, but lacked prior experience in health care. In developing PlanView templates, the PMO did not

Table 1 Overview of PlanView

PlanView is a *Project Portfolio Management* tool that integrates functionality for managing project work at the enterprise and individual project levels. PlanView functionality includes:

- *Integration with Microsoft Project* – Ensure seamless data transfer between PlanView and Microsoft Project through fully supported, two-way integration
- *Request Management* – Provide a single, centralized location where users can request work, check status, delegate requests, and review lifecycles
- *Project Management* – Scope, schedule, execute work, and manage projects more effectively. Project management features address time reporting and billing, risk and issue management, work slippage, and resource capacity issues
- *Resource Management* – Assign work efficiently, develop a skills pipeline, develop staff areas of interest and keep staff productive
- *Portfolio Intelligence* – Track and display performance and trend analysis information on work, resources and key performance indicators
- *Time and Expenses* – Better understand actual cost and value by tracking time and expenses against specific applications or projects. Quickly report time on multiple work items
- *Changes, Risks, and Issues* – Track and manage issues to discover the possible impact on schedule and cost, and generate an approval cycle for any necessary changes
- *Baselines* – Leverage planned effort data to perform variances reporting as part of an earned value estimate
- *Best Practices* – Support Project Management Body of Knowledge (PMBOK) standards with PlanView PRISMS best practices

Source: www.planview.com

seek input from WIS project managers; instead, believed that IT project 'best practices' were baked into PlanView. They apparently believed that the tool's adoption would instill the necessary project discipline. The PMO team used a 'keep it simple' approach (such as limiting the number of fields an employee needed to fill in for a new project and to log hours worked against it). Although they provided extensive training and garnered management support for the initiative, their efforts failed to convince either WIS staff or the Clinical Renewal team to use PlanView.

The PMO was disbanded in 2006. One WIS Director believed that the PMO's 'militaristic' style was partly to blame for this failure:

> *We have a consensus culture; every single person wants to be involved in the conversation. Everybody wants their finger in the cookie jar. Trying to gain consensus and move something forward at the same time, it's always baby steps; very incremental.*

A PMO analyst felt top management involvement had been lacking:

> *We did have the support of the executive staff, but we didn't have their involvement. They just said 'yeah, that's a great idea; go do it,' but when it came to implementation and enforcement, we were the enforcers; they were not. When people asked 'why do we have to do this time-reporting in PlanView?' managers were saying 'I don't know; beats me.' Directors were saying, 'I don't know; beats me.' So it failed.*

In December 2006, a few months after it was disbanded, the PMO was reconstituted under a new director. The group made another attempt to persuade WIS staff to use PlanView for time reporting, but their efforts were cut short by a management shake-up in February 2007: of the approximately 470 WIS employees, about 90, most of them in management positions, were relieved of their duties. An interim management consulting group was then brought in to begin rebuilding WIS.

Mid-2007: project inventory and project governance process

PlanView remained Worthington's project Portfolio Management tool. The new PMO, led by the interim management consulting group, set about identifying WIS projects and conducting interviews with WIS colleagues to generate a comprehensive project inventory: what projects they were working on, who they were for, who worked on each project, its current status and so on. Their objective was to paint as complete a picture as possible of the WIS project landscape.

The consultants then outlined a complete IT governance process: the steps and approval gates a project should go through during its lifecycle. Charles King, who took over the PMO's directorship after the consultants left, described their proposed project methodology as follows:

> *They had a fantastic project management methodology; kudos to them. …. What the consulting firm had produced was absolutely fabulous, and we will probably revisit it some day, when we're about a solid level-4 maturity organization. … At the time, we were a level-1 organization.*[1] *There were some project managers who could function at a higher level of maturity, but on the whole, there wasn't that strength there. The methodology was so intricate that people were frustrated by it. They didn't understand it; they did not know how everything tied together; they did not know the value of it.*

In September 2007, Henry Richmond, CIO of BJC Health Care – Worthington's foremost competitor – and a 30-year veteran in health-care IT, was hired as WHCS' second CIO. During his first year on the job, Richmond built a team of experienced IT staff, many of whom had worked with him at BJC, where they had successfully implemented an Electronic Health Record.

In October, the first PlanView-generated project summary report was published, about two and a half years after the tool had been introduced to WHCS. Vital Surujan, a newly hired Portfolio Manager, ensured that project data was captured into PlanView. Surujan still held this post in 2012.

2008: Enterprise Project Management Services

Even though Richmond was briefed on WIS's many challenges while he was interviewing for the position, once he started his tenure he was shocked at how many problems he had to tackle at once. He learned that WIS was viewed as unresponsive to customer needs, autocratic and non-transparent. For instance, the IT HelpDesk was staffed only from 7 am to 7 pm with employees trained in health care and application support; after hours, computer operators answered phones. Some Worthington hospitals complained that they were 'forced' to use certain IT vendors and that IT requests were reviewed by a handful of WIS staff who did not seek input from the user community.

Richmond observed that many WHCS hospitals continued to operate independently, with their own management structures and IT funding mechanisms for all but the largest projects. Some hospitals' functional departments pursued their own, siloed IT solutions without consulting WIS. The Clinical Renewal project was one example of hospitals' efforts to bypass WIS. When it came to IT projects, there was little coordination; each hospital interacted with WIS as a discrete customer. As a result, WHCS supported nine different laboratory systems (all used the same vendor solution, but each was implemented on a different platform). One radiology system operated on 17 different platforms.[2] A 'spaghetti' IT architecture persisted. Moreover, despite prior attempts to implement PlanView, there was no complete accounting of all IT projects currently under way at WHCS.

Thus, one of Richmond's top priorities was to develop a fully functioning PMO. He hired Charles King to run the group. Observing that WIS had failed twice to implement a PMO, King rebranded it EPMS. Although EPMS was located within WIS and only dealt with IT projects, King contended that it nevertheless served the entire enterprise by educating people throughout WHCS about project management and project governance. A day-long 'Project Management Basics' class was offered every month at one of 13 facilities; any Worthington employee could attend and it regularly drew an average of 17 attendees, including nurses, purchasing specialists, and managers. The terminology and methodology associated with the EPMS governance process was introduced in this course. The course also reinforced project managers' use of the EPMS methodology, as informed customers would ask project managers for copies of specific documents that had to be completed for various project milestones.

EPMS oversaw two organizational units: Enterprise Project Management (EPM) and Portfolio Management (see Figure 2). A total of 10 EPM project managers ran about 3–5 projects at a time, ranging from managing patient flow to managing air conditioners and emergency power supply systems at hospitals. EPM project managers were also responsible for developing standardized project management practices. This entailed codifying their experience into document templates and methodologies, which they then taught in the Project Management Basics class.

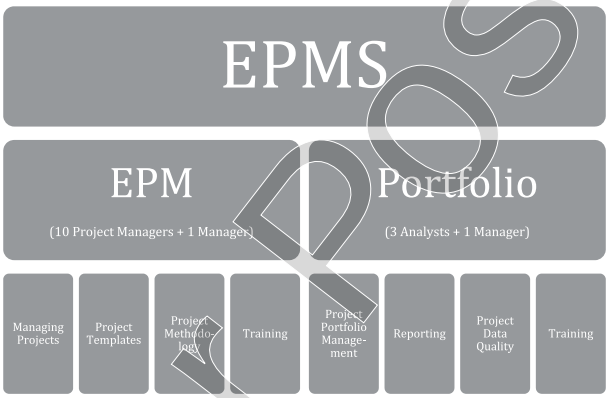

Figure 2 EPMS's organizational structure (June 2012).

The Portfolio Management team focused on data management and reporting. Its existence served as an acknowledgment of the complexity of PlanView and the centrality of data integration and reporting in effective project governance. The team consisted of one manager and three analysts, who were tasked with identifying and managing information about all active projects within WIS.

Charles King stressed two project governance principles: 'Start simple' and 'Add improvements in semi-annual increments.' By starting simple, he believed he was meeting the organization at its maturity level. The Portfolio Management group thus minimized the number of fields users had to populate in PlanView (many fields were pre-filled with default values to guide users and simplify data entry). King also sought to minimize 'administrivia' (non-value adding tasks). Moreover, by adopting a 6-month improvement cycle, King gave people time to get comfortable with a new practice before changing it again. With these principles in mind, the EPMS team moved from the consultants' elaborate project governance process to a simpler, two-gate approach (Figure 3):

- *Gate 0 – Request*: Customers submitted a Project Request (Figure 4) to the Portfolio Management team, who determined whether the request constituted a project or a work assignment (a 'project' was defined as an effort that would exceed 40 hours). Work assignments were approved and entered into PlanView immediately by the Portfolio Management team. A project required a Project Charter (Figure 5). The charter, reviewed in the next stage gate, described the project and estimated material costs and labor hours.
- *Gate 1 – Initiation*: Project Charters were evaluated by a Project Review Board, comprising all WIS directors, who met weekly. This body was later renamed 'Information Systems Communication Council' (ISCC) to stress its function as a body that 'communicated' rather than 'directed.' The outcome of Gate 1 was project approval, denial or pending resubmission (about 90% of projects were approved; denied projects could be resubmitted). All involved WIS departments were required to estimate the hours for their portion of the project. In addition, the Portfolio Management group would typically add 40 or more hours to a project's budget to account for time it spent monitoring and reporting on the project throughout its lifecycle. In this

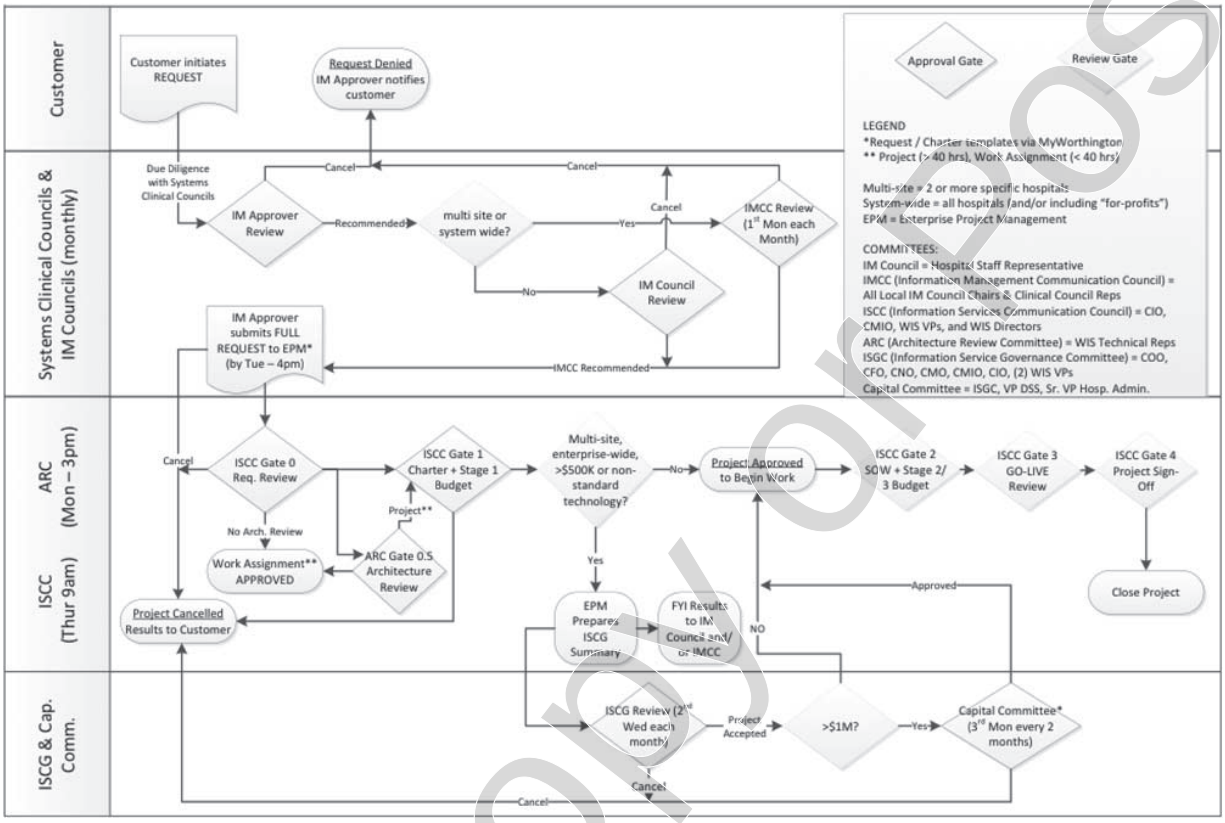

Figure 3 WIS governance process (June 2012).

wway, each project's budgeted labor hours were built. If the overall project budget exceeded $500,000, representing an enterprise-wide solution or involving non-standard technology, the project charter had to go through an additional review by the Information Services Governance Committee (ISGC), which consisted of c-level executives (Chief Operations Officer (COO), Chief Financial Officer (CFO), Chief Marketing Officer (CMO), CIO and so on).

EPMS pushed toward mandatory timesheet reporting in PlanView[3] by March 2008. WIS staff, as well as the Clinical Renewal Team, would need to use PlanView to record their activities, in three broad categories: administrative (e.g., meetings, sick time, jury duty), support (e.g., maintaining existing systems and infrastructure), and project work. As employees could only allocate time to projects previously captured in PlanView and that their director had requested time on, accurate reporting relied on all projects being accounted for in the system. PlanView thus enforced the new policy: no hours could be recorded against projects that bypassed the project governance process.

Mandatory timesheet reporting in PlanView was met with considerable resistance. Many IT professionals complained that 'Big Brother' now had visibility into their day-to-day work, and that the system was cumbersome and ran slowly. This time, senior management held firm on the policy, largely because the WIS Director of Finance recognized that PlanView captured the data needed for accurate cost accounting.

After 3 months, only a third of WIS employees reported their activities on PlanView, but after 6 months, 95% compliance was achieved. Instead of relying on threats of disciplinary action or dismissal, Henry Richmond had merely reiterated the new time reporting policy at the 3 and 6-months mark. He believed that he could earn people's cooperation by seeking their input on how to improve a given process (i.e., 'being responsive') but remaining 'unapologetic.' Moreover, reports of delinquent timecards were generated every Tuesday,[4] distributed through email to the WIS management team and displayed in a conference room where the ISCC met every Thursday morning to discuss new project requests. This 'naming and shaming' of directors whose staff did not comply with the time-reporting policy formed part of EPMS's enforcement strategy. The EPMS team also met with managers and staff to share the value proposition of time reporting in PlanView in an effort to increase compliance.

The time card data began to be used to generate reports that WIS staff found useful, such as reports that highlighted individuals and departments who logged a lot of overtime. It was calculated that WIS had 5 years worth of projects on its books. WIS time projections for support and projects over a 6-month window revealed a load that would put them over capacity. Reports like these gave Richmond the ammunition he needed to increase WIS's budget.

In early 2009, EPMS made incremental improvements, such as deciding on key project tracking metrics. Summary reports detailed project costs, estimated effort (in hours), scheduled

Customer Request for WIS Resources & Services

1 Instructions

- Please utilize this form to describe the nature of your WIS request.
- Complete sections 2 through 5.
- Save the file with the nomenclature: "yyyy-mm-dd – REQUEST - *Project Name*.doc"
- Email form to EPM@Worthingtonhealth.edu.

2 Customer Information

Name		*First Name Last Name*
Department		
Contact Number		*xxx-xxx-xxxx*
Date Submitted		*mm-dd-yyyy*

3 General Information

Executive Sponsor (e.g. Area VP)	First Name Last Name	
Priority	☐ Low ☐ Medium ☐ High ☐ Emergency	
Regulatory Requirement?	☐ Yes ☐ No	
Regulatory Requirement Source		
Requested Start Date		*mm-dd-yyyy*
Requested Finish Date		*mm-dd-yyyy*
Does your department have a system council that has reviewed/approved your solution? (e.g. Pharmacy or Radiology)	Name of Council ☐ Yes, and approved. ☐ Yes, but not reviewed. ☐ No, a council does not exist.	
Has anyone in WIS been helping you with this request?	☐ Yes. WIS Contact Name: ☐ No	*First Name* *Last Name*
Impact on Patient Safety?	☐ No ☐ Yes, explain impact:	
Impacted Personnel	☐ WHCS Corporate ☐ Physicians ☐ Research ☐ Clinical Staff ☐ Hospital Administration ☐ Other	

4 Request Summary

Description/Problem Statement <State the problem triggering this request and provide a detailed description of the request>

Select one WHCS PILLAR that this request primarily aligns with:
People – *Be the best place to work*
Quality – *Deliver safe, timely, effective, efficient, equitable and patient-centered care supported by education and research*
Service – *To both our patients and our community*
Finance – *Be responsible financial stewards*

Describe the benefits of this request as it relates to the pillar:

5 Budget

Funding Source <Provide funding information for this project>

Is your request Budgeted?	☐ Yes ☐ No ☐ Unknown
Funding Source	☐ Operations ☐ Capital ☐ Leasing ☐ Philanthropy / Foundation ☐ Grant ☐ Other:

NOTES: Email form to EPM@Worthingtonhealth.edu.

Figure 4 Project request (2012 Version).

finish date, percent completed. More detailed reports were developed for directors, facilities and projects.

The new project approval process was also streamlined:

- Tuesdays, 4 pm: deadline for new project request submission via email.
- Tuesday, 6 pm: deadline to email a 3–4 page meeting agenda to ISCC, outlining all projects and work assignments the council was to discuss on Thursday (25–40 items).
- Thursday, 9 am: ISCC meeting.
- Thursday, 12 pm: deadline to email results of ISCC meeting to ISCC members, all WIS Project Managers and project request submitters.

King told Richmond that EPMS found it difficult to maintain the planned 6 months pace of change, because IT project manager and leads were dispersed throughout the organization. 'Project managers,' who had earned the Project Management Professional (PMP) certification, appreciated the importance of documentation, and stage gates. This was not necessarily true for non-certified 'project leads' in Applications Support, some of whom supported up to 10 existing applications in addition to managing new projects. Application Services integrated project implementation and ongoing maintenance into the project lead role so that the leads could develop deep knowledge of specific use domains. King further explained that Application Services felt that by having to live with the user community, vendor and application in the long term, a project lead was likely to make better decisions than a project manager who walked away, leaving others to deal with the aftermath of an implementation. Coupling project management with application

Project Charter Project Name

1 Purpose & Instructions

The purpose of this form is to gather project information for the WIS Project Governance Process.

- Save the file as with nomenclature: "yyyy-mm-dd – CHARTER – *Project Name*.doc.
- Email both the completed Charter (WORD DOC) and Stage 1 Budget (PDF) to EPM@Worthingtonhealth.edu by 4:00pm CST Tuesdays for weekly IS Communications Council Review.

2 Customer Information

<combination of Customer and General Information from Project Request Form>

3 General Information

Project Name		*LIMIT to 50 Characters*
IM Approval Date		*mm-dd-yyyy*
WIS Project Manager		
WIS Functional Group / Director		
WIS Estimated Start Date		
WIS Estimated Finish Date		
Project Type		
Nature of the Project	☐ Enhancement / Modification ☐ New Implementation ☐ Infrastructure ☐ Replacement ☐ Safety / Code Compliance	
Impacted Personnel	☐ WHCS Corporate ☐ Physicians ☐ Research ☐ Clinical Staff ☐ Hospital Administration ☐ Other	
# of End Users Impacted	*Enter number*	
Will any existing applications be replaced?	☐ No ☐ Yes, Name of application to be replaced: Date of maintenance expiration:	
WHCS Enterprise Solution?	☐ Yes ☐ No, explain facility/specific need:	

4 Clinical Information

Does project involve Health Data / Health Insurance Data?	☐ No ☐ Yes, explain how HIPAA will be addressed:
Will HIPAA Compliance Officer be involved?	☐ No ☐ Yes, provide name:
What clinical process (problem) is this request addressing?	
What impact does this have on current clinical practices?	
Impact on Patient Safety?	☐ No ☐ Yes, explain impact:

5 Project Summary

5.1 Description
<State a high-level overview description of the project (typically 2-3 sentences)>

5.2 Problem Statement (Current State)
<State the problem triggering this request and provide a detailed description of the problem>

5.3 Proposed Solution (Future State)
<State the solution and how this will correct the current problem>

5.4 Risks of Project Non-approval
<Identify what will occur if Project is not approved>

6 Project Charter Details

6.1 High Level Requirements
<A description of an expected outcome of the project. Requirements should be S.M.A.R.T.(Specific, Measurable, Achievable, Realistic, Time-bound) >

6.2 In Scope / Out-of-Scope
<Provide an outline of what the project involves and highlight the limitations (basis for the detailed Statement of Work Document produced later in the Planning phase >
In Scope: Out of Scope:

6.3 Project Deliverables
<The items to be delivered for a project. This may include organization attributes, reports and plans, as well as physical products or objects.>

6.4 Known Project Risks & Issues
<Please provide high level risks for project> Detailed project risks should be captured in PlanView.

6.5 Alternative Solutions
<List other technology solutions considered and method used to arrive at the proposed solution>
Were any other solutions considered?
☐ Yes: Comments: ☐ No: Comments:

6.6 Assumptions
<There may be external circumstances or events that must occur for the project to be successful. If you believe such an event is likely to happen, then it would be an assumption>

6.7 Constraints
<Restrictions or boundaries impacting overall capability, priority, and resources>

6.8 Customer Stakeholders
<Please identify the key customer stakeholders responsible for overall project governance; example Chief Nursing Officer, Council Members, Hospital Administration, etc.>

Stakeholder	Role	Department

7 Project Cost & Resource Information

7.1 Funding Source
<Provide funding information for this project>

---------- END ----------

Figure 5 Project charter (2012 Version).

maintenance was also expected to generate a more committed relationship among the project lead, customer, and vendor.

Application Services also tended to favor project leads with clinical backgrounds; their customers were nurses and doctors who complained that IS professionals did not understand clinical work. However, one WIS manager noted that the typical project lead profile presented a challenge:

> *Clinicians want to fix the problem now. If a patient codes, they are not going to plan that out: 'I'm going to do this, I am going to do that.' Instead, they take immediate action: 'let's save the patient and move on to the next one.' Digging deeply is not really what they're trained to do. A project manager really needs to dig in: 'let's plan this out; let's scope it out.' I think clinicians struggle with being thrust into the role of a project manager; they don't have the training or inclination for it. They just know 'I make this much money in nursing, … I can make this much in IS. This is a career ladder, so I'm gonna kind of follow this path.*

Project leads tended to prioritize maintenance requests over documentation. They decried EPMS's evolving project governance process as complex and counterproductive; they felt it hampered their ability to deliver solutions to their customers in a timely manner.

The VP of Application Services stressed very different aspects of project management than EPMS did:

> *EPMS think about getting the project up through the governance structure starting with Carley; getting it approved; getting the project charter; getting it budgeted; getting it planned, and then getting an estimate on time. We think about: what is it that made the customer request this? What did our executives think about when they approved the funding for it? And how is it really going to affect the business of patient care? What is it that justifies us spending money on it to our business of taking care of patients? These questions are not what the EMPS folks generally think about.*

For her, it was most important that executives who signed off on a project, and managers and end users who would be affected by it, be aligned on their objectives. Ongoing involvement of the user community and senior management support were essential for successful implementation of system solutions. Thus, while EPMS advanced a project management process that held project managers or leads accountable for providing the right documentation at the right time, Application Services advocated a framework that held executive sponsors accountable for the success of the systems they requested and to which resources had been committed.

In September 2009, Information Management Councils (IMC) were set up at each facility, three new gates were added to the project oversight process, and the WIS Director of Finance required projects to provide detailed budget in order to pass the first gate. Previously only a single project budget estimate (total cost) was required; now a spreadsheet was to identify various cost buckets (labor, material, maintenance costs and so on), and distinguish between capital items and operating expenses.

Richmond saw the IMCs as a way to change WIS's culture and external reputation: 'Our number one priority is to earn the trust of the people who previously thought their money

was not invested well.' He believed a 'democratic' approach would help WIS achieve his goal and help create an organization where 'candor rules' and 'meritorious ideas succeed':

> *A benevolent dictatorship can work if you're brilliant and intuitive and if your organization is small and you understand every one of your customers. But I just can't see how democracy isn't more effective in healthcare because this is a large and complex system.*

Being 'democratic' implied operating transparently and relinquishing some power by giving decision rights to WIS stakeholders, especially end users in the 14 Worthington facilities that WIS was serving. IMCs were hospital-specific advisory councils, comprising directors representing administrative and clinical departments in each hospital (e.g., HR, marketing, laboratory, radiology, and emergency department). These councils met monthly to vet and prioritize IT project requests from their facilities' functional areas. All administrative work associated with these meetings (scheduling, creating agendas, taking minutes and so on) was managed by a new Director of Governance and Communication, Carley Stevens.

Requests that affected multiple hospitals were discussed in monthly meetings of the Information Management Communication Council (IMCC), comprising IMC chairs from each facility and system-wide clinical council representatives from radiology, laboratory, emergency medicine, and other departments. Like the IMCs, the IMCC vetted and prioritized WHCS-wide application requests. However, one WIS director felt it was very difficult for the councils to prioritize project requests:

> *The facility-level councils and, probably more so, the IMCC, struggled – especially in the infancy of our governance program – to understand that they have the ability and permission to say 'no' to requests deemed unnecessary, unaffordable, or outside our standard business model, architecture or application suite. Although our program has matured significantly in the last 3 years, and IM Council members understand their role better now, folks still seem to occasionally feel uncomfortable denying requests at the initial review.*

The two-gate governance process tracked a project through initiation, but not through completion. Three new review gates were added (unlike approval gates, these review gates did not prevent a project from moving forward if some requirements were missing):

- *Gate 2 – Planning*: required a statement of work, detailed work breakdown and an updated budget. For large projects, communication, training and test plans were also expected.
- *Gate 3 – Execution:* required documentation of completed user acceptance testing, and a plan to transition an application from development and testing into the production environment (e.g., the HelpDesk would need to be notified that a new application was going live).
- *Gate 4: – Closing:* Once project sign off was received from its executive sponsor, the Portfolio Management staff closed the project in PlanView.

In August 2010, the Director of Finance added a new requirement: instead of submitting project budgets as individual spreadsheets, project managers were to complete a standardized PlanView template. In April 2011, EPMS started generating Data Quality Issues reports, which summarized missing, incomplete or inaccurate information in PlanView. Among them was a 'naughty list,' which highlighted projects that either had no finish date, whose finish date was past due or whose reported time exceeded 150% of estimated effort, as well as projects against which time had not been recorded for some time.

In early 2012, at the urging of the VP of Technical Services, a new approval gate, Gate 0.5, was added, to require a review of a proposed system's architecture (Figure 6). The VP explained that Technical Services frequently received last minute requests to install servers overnight. By reviewing the system architecture early in a project's life cycle, a more cost-effective, standardized infrastructure could be developed. EPMS anticipated resistance to this new gate, which was likely to delay project approvals. For this reason, EPMS proceeded in a participatory fashion, as Vital Surujan explained:

> Before adding Gate 0.5, we spoke to all stakeholders. We took two or three months to design the new gate and related processes and committees. We asked different WIS departments 'What's the best way to handle this? What makes sense? What would be the least amount of pain?' We knew we were about to create potentially more work for the project managers; and were creating a more structured process that could slow down the overall approval process.

In mid 2012, average project overruns were at 60 days. By adding structure to the project planning process, it was hoped that Gate 0.5 would cut this number in half by mid-2013. EPMS tracked and reported on 90% of all IT projects in progress, indicating that some WIS-led projects, as well as some project led by 'shadow IS organizations' located in HR, laboratory and materials management among others, were still circumventing WIS's project governance process.

Next steps

In an attempt to respond to the criticism that the project governance process was onerous and non-value adding – particularly as most projects were approved – King was thinking about creating different project management methodologies based on project risk: projects that were similar to ones WIS had done before and that used familiar technologies would require less documentation than higher-risk projects. King also wanted to incorporate resource demand management into the governance process. Currently, managers had to estimate the number of hours their group would need on a given project, but an estimated completion date was not required. This made it impossible to tell customers where a given project was in the queue. Even though King estimated that WIS was 2 years away from implementing a fully fledged resource demand management solution, he planned to have EPMS soon activate a feature in PlanView that allowed project managers to reserve resource for a specific time period.

King was also planning to implement an intranet-based dashboard that would provide customers and project managers quick insights into a project's status. The

1 General Information

Project Name / PlanView ID	
Project Manager	
Customer Executive Sponsor	

2 Instructions

- Save the file as with nomenclature: "yyyy-mm-dd – ARCHITECTURE – *Project Name*.doc
- *Please SEND the completed Architecture Overview document and Project Charter to the "EPM - WIS Project Effort Validation" EMAIL distribution list to assist in effort validation.*

3 Overview

Solutions require either new technology or a change to technology. The structure of this technology is referred to as Architecture. It is crucial to define the elements of the architecture to ensure all groups and personnel are aware of the effort involved.

4 Architecture Questions

1.0 Office of Information Security (OIS)

☐ Yes	☐ No	Has an OIS Pre Assessment been completed?
☐ Yes	☐ No	Will existing data be converted with the system? If No, answer question below.
☐ Yes	☐ No	Has a long term storage solution been considered for legacy data?
☐ Yes	☐ No	…

2.0 Data Centers/Operations

☐ Yes	☐ No	Will resources from this group be required? (If No, skip to next section)
☐ Yes	☐ No	Will Operations duties be impacted by this project?
☐ Yes	☐ No	…

3.0 Desktop Management

☐ Yes	☐ No	Will resources from this group be required? (If No, skip to next section)
☐ Yes	☐ No	Will new desktop hardware be required?
☐ Yes	☐ No	…

4.0 Network Requirements

☐ Yes	☐ No	Will resources from this group be required? (If No, skip to next section)
☐ Yes	☐ No	Does your solution involve Network Infrastructure? (LAN, WAN, etc)
☐ Yes	☐ No	…

5.0 Telecom Requirements

☐ Yes	☐ No	Will resources from this group be required? (If No, skip to next section)
☐ Yes	☐ No	Will your solution require involvement of desktop telephones?
☐ Yes	☐ No	…

6.0 Data Management …

---------- **END** ----------

Figure 6 Project charter (2012 Version).

dashboard might include project start and end dates, percentage completion overall and for each milestone, the project manager's executive summary, and an overall assessment by means of red-yellow-green indicators. The added visibility such a dashboard would generate was expected to reinforce the best practices that EPMS sought to instill. Charles King explained:

> Say I am the president of a hospital. I log into the dashboard. There is no finish date or the finish date is past; no narrative status; it says 'green' but yet our finish date is already past … I follow up with the project manager to find out what is going on. If project managers know their customers look at this information, they will comply more with our process.

Another area of concern was that project priorities, which Carley Stevens had worked hard to elicit, were not stored in PlanView. Stevens was frustrated that this customer input failed to guide IT decisions consistently; she felt WIS still selected projects based on 'who screamed the loudest.'

Decisions ahead

In recent discussions, King had proposed that EPMS adopt a full-fledged PMO solution: all project managers

(including Application Services' project leads) would belong to EPMS's Enterprise Project Management (EPM) group. In contrast, Application Services managers proposed a Project Office structure, which would reduce EPMS to its Portfolio group and place all project managers and leads in customer organizations. Which alternative should Richmond pursue? Or, should EPMS' hybrid structure (project and Portfolio Management) stay intact? Richmond felt that recent collaboration between EPMS and Application Services highlighted the strengths of the hybrid structure. At times, project leads were so overwhelmed by the enormity and complexity of their jobs, that they were desperate for project discipline. This was when EPMS project managers were called in to help the project leads gain control over their projects again. However, EPM project managers complained that high-profile projects always went to the Applications group; EPMS was offered only 'left-overs' or 'at-risk' projects that were about to fail.

Richmond considered: should the entire governance process be re-thought? Recently, a project manager had characterized WIS's approach to project governance as 'document driven,' referring to the many templatized documents that were used to control projects. Richmond wondered to what extent this document-driven strategy was contributing to a 'check the box' mentality that an EPMS manager had remarked on:

> It's almost like when people walk through these doors, they shut their brains off and they want to be told 'here's step one, here's step two, here's step three.' And these are some bright people. We hire some really good people here in IT. I don't know why it's like that, but it's very frustrating. It's almost like, 'if I don't see it written and it's not step two and my name's not by it, I'm not going to do it. I'm just going to assume somebody else is taking care of it.' I don't know if it's apathy, I don't know what it is.

As he stepped out into the sweltering St. Louis heat, Henry Richmond pondered: Should he restructure EPMS? If so, how? If not, why not?

Notes

1 The Software Engineering Institute (SEI) Capability Maturity Model (CMM) outlines five levels of software development process maturity. This 5-stage maturity model can now be seen in other frameworks, including ITIL and CoBIT.
2 Eliminating these duplicative systems generated $9million in savings in 2010 alone.
3 A PlanView white paper, 'Seven Reasons to Use PlanView for Timesheets,' (freely available on the Internet), provides screenshots and an overview of the tool's timesheet management functionality.
4 Time cards were due Friday. Monday, resource managers approved them. Tuesday, the Portfolio Management group generated a delinquent timecard report, so there was time to complete them before cost allocations were due on Wednesdays.

About the Author

Ulrike Schultze is Associate Professor in Information Technology and Operations Management at Southern Methodist University (SMU) and visiting Associate Professor in Informatics at Lund University. Her research explores the work practice implications of Information technology. Her most recent projects examine identity performance in a world increasingly infused by virtual others through the use of social media. Her research into the avatar-self relationship in the virtual world Second Life received NSF funding. She currently serves on the editorial boards of EJIS, JIT, Information & Organizations, the *Scandinavian Journal of Information Systems* and the *International Journal of Qualitative Information Systems Research*. Schultze is also the secretary of IFIP 8.2.