Sautter Award Nomination

Online Timesheet System ("Timesheets")

Submitter's name, title, and contact information
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A summary paragraph that highlights the significance of the project (about 100 words)
The Online Timesheet System saves hundreds of hours per month of employee time by automating and improving upon what had been a cumbersome, paper-based process. "Timesheets" streamlines the business process of collecting timesheets from employees, routing them to supervisors for approval, and calculating the data for input into OPTRS. Furthermore, the system audits employee timesheets against leave balances, warns employees and supervisors when they are approaching their leave maximums, and tracks furlough hours and student work study compliance. One department, which has over 500 employees, claims that payroll processing which used to take over a week now takes less than a day.

A project description (not to exceed 5 pages), including relevant URLs
The Online Timesheet System ("Timesheets") was developed in response to the challenges of time reporting. The system has proven to be such an effective time-saver that it has grown to be used campus-wide, serving nearly 6,000 employees in over 150 departments. Moreover, Timesheets has become a model for how applications development for inter-department use can be extended to campus-wide use--a model that is currently driving many application development efforts at UC Davis.

Problem
The previous paper based time reporting process was very time consuming and error-prone. Employees were required to submit paper slips for any leave time/time worked (depending on the employee's exemption code) to their supervisor for approval. It was then manually routed to the departmental payroll managers for them to calculate total hours worked and overtime before entering it into OTPRS. Because payroll calculations require an in-depth knowledge of policies and union contracts, there were many inconsistencies between different units. In addition, payroll managers were also tasked with the job of manually tracking and notifying employees who were approaching their vacation maximums and work study balances for student employees. In our increasingly mobile workforce, it is often difficult to get timesheets submitted by employees who are frequently not in the office.

Goals

The goals for the Timesheets system include:
• Timesheets are always accessible via the web – from work, home, etc.
• Timesheets / leave times can be entered throughout the pay period, as they occur
• Employees can see their approximated leave balances as recorded in PPS
• Employees are automatically sent email reminders when timesheets are due
• Employees are warned via email when they are approaching their maximum vacation
• Payroll calculations are done based on UC Policy, UCD Procedures and bargaining union contracts
• Payroll managers can override any calculation
• The system audits OPTRS for data entry errors
• Intuitive user interface that requires no training for users or supervisors
• A single system that can be used by 90% or more of the employees on campus

User Interface
The following descriptions and screenshots highlight the user interface for the application.

Main Page
The main page provides the user with a list of options based on the user's roles (timesheet submitter, supervisor, timesheet manager). Important items are color coded in red. At the bottom of the page is a box that summarizes the user's leave balances (vacation accrual, vacation maximum, sick leave accrual, comp time balance, and furlough). In addition, the system estimates the amount of sick and vacation a user will accrue for the next pay period. By presenting this information to the user, the user can better manage his or her leave usage.

Enter Timesheet

The "Enter Timesheet" page is optimized to each employee based on the employee's pay period and exemption code. The employee reports leave time via a drop down menu (See May 20th in the screen shot below). The drop down menu only lists leave codes that are relevant to that particular employee. For example, an exempted employee does not report hours worked, so the option for "hours worked" is not available.   Employees are able to enter multiple leave codes in a single day (e.g., May 17th in the screenshot below).

Before a timesheet system can be saved, the system checks for common errors and provides explanatory warnings. Errors are considered fatal, so the timesheet cannot be saved until errors are corrected. For example, if an employee tries to enter more than 24 hours of leave in a day, the system will prevent the employee from saving the data. Warnings are non-fatal problems of which the employee should be aware. For example, the employee will be warned if he/she is using more vacation than he/she has accrued. Under some circumstances (such as in December) policy does permit of the user to use vacation hours before accrual.

Non-work days (as defined by each user) are greyed out, and University holidays and campus closure dates are highlighted to make it easier for the user.

Users can enter leave or hours worked throughout the pay period. At the end of the pay period, the users can "final submit" which locks the timesheet and routes the timesheet to the manager for approval.

Review Timesheets – Not covered due to space limitation.

Supervisor Screen

The supervisor screen is where supervisors go to review and approve or deny timesheets. The supervisor can quickly approve or cancel an employee's timesheet by clicking a single button. If the supervisor would like to review the timesheet in more detail, the supervisor can click on the user's name. The supervisor can then approve or deny the timesheet from the detail view, as well. If a supervisor cancels a timesheet, the supervisor is required provide a note for the employee explaining why the timesheet was cancelled. The employee receives an email with the note, and the timesheet is unlocked so that the employee can make any necessary changes and resubmit.

| Current Timesheets | Past Timesheets | Employee Leave Balances | | | | | | |

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Monthly Exception Employees (Apr 16 - May 15 ➡) - Approval due by Thursday, May 20, 2010   Past Timesheets

Employee Name	Totals		Notes	Date Submitted	Status		Approve	Cancel
	Furlough	16.00		5/14/2010 8:31:48 AM	Approved		✔ 🗎	☐ 🗎
	No entries			5/14/2010 1:33:07 PM	Approved		✔ 🗎	☐ 🗎
	No entries		🗎	5/17/2010 11:47:05 AM	Awaiting Approval		☐ 🗎	↩ 🗎

Please provide a brief comment as to why this timesheet is being cancelled. (466 characters left)

Please submit vacation hours used.

[Submit]   [Cancel]

	Vacation	4.00		5/14/2010 11:43:26 AM	Approved		✔ 🗎	☐ 🗎
	Sick Leave	4.00						
	Family Care (SKL)	8.00						

In the "Employee Leave Balances" tab, the supervisor can review the leave balances of all of employees that he/she supervises. In addition, the supervisor can review leave balances of all subordinate employees.

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Employee Name	Vacation	Vacation Max	Vacation Accrual **	Sick Leave	Sick Accrual ***	Comp. Time	Furlough	Furlough Accrual ****	
	147.02	240	9.69 hrs (Approx. @ 100 %)	822.06	7.75 hrs (Approx. @ 100 %)	0.00	64.36	(Unknown)	
	240.00	240	9.69 hrs (Approx. @ 100 %)	804.02	7.75 hrs (Approx. @ 100 %)	0.00	16.36	(Unknown)	At Max Vacation
	152.85	240	9.69 hrs (Approx. @ 100 %)	478.27	7.75 hrs (Approx. @ 100 %)	0.00	43.36	(Unknown)	
	221.38	240	9.69 hrs (Approx. @ 100 %)	473.40	7.75 hrs (Approx. @ 100 %)	0.00	0.00	(Unknown)	Approaching Max Vacation

Timesheet Management

The timesheet Management screen is the heart of the system.   It is where payroll mangers (AKA timesheet managers) manage employees, review system calculations, print reports, manage student work study, and perform other management functions.   The screen is customized to the job function of each manager. The initial screen displays a summary of important information such as the next payroll calculation date, any audits that need to be addressed, etc. The managers are able to view the leave balances of all the employees they manage. The "Staff Management" tab allows the manger to add new employees to the timesheet system, suspend employees from the timesheet system, and manage supervisors (such as a bulk replacement for a supervisor).

The Management page is too complex to discuss fully in this short proposal, so only one feature will be highlighted. One of the most complex parts of the payroll manager's job is trying to understand and apply all UC/UCD payroll policies and bargaining unit contracts. For example, some bargaining units define a work week as Monday through Sunday while others define it as Sunday through Sunday. Knowing that piece of information can determine whether an employee who worked extra hours during the week should be given premium overtime or straight overtime. Other issues include the fact that some CX employees should be treated as non-union employees. Because of the complex HR and Payroll rules, many payroll managers initially believed that the Timesheet system was making incorrect calculations; however, in the past three years, all of these "calculation errors" have turned out to be misunderstandings and misapplications of policies and contracts by the payroll managers. Consequently, adopting Timesheets has significantly increased compliance with UC/UCD policies and bargaining unit contracts.

All calculations are clearly documented (see screenshot below). Next to each calculation there is an ⓘ icon. Clicking on that icon will link the user to a FAQ page that—in plain English—describes how and why the calculation was made with links to the relevant policies and contracts. A list of calculation rules can be found at http://timesheets.ucdavis.edu/ucd-access/help/RuleDescriptions.aspx .

Edit Timesheet Totals ✕ Close

| Timesheet Totals | Calculation Logs | Employee Info | ⓘ - More Info |

REG - Hours Worked	Change	Total
• REG Total initialized to the sum of Hours Worked entries on the current timesheet ⓘ		204.00
• Deduct overtime hours for week (9/28/2009 - 10/4/2009) from REG Total because it will be paid as OTS/OTP/CTA (based on employee) ⓘ	(-) 16.00	188.00
• Deduct overtime hours for week (10/5/2009 - 10/11/2009) from REG Total because it will be paid as OTS/OTP/CTA (based on employee) ⓘ	(-) 1.75	186.25
• Deduct overtime hours for week (10/12/2009 - 10/18/2009) from REG Total because it will be paid as OTS/OTP/CTA (based on employee) ⓘ	(-) 6.25	180.00
• Deduct overtime hours for week (10/19/2009 - 10/25/2009) from REG Total because it will be paid as OTS/OTP/CTA (based on employee) ⓘ	(-) 2.00	178.00
• Set REG Total to the max hours in period; additional(overflow) hours have been shifted ⓘ	(-) 2.00	176.00

VAC - Vacation	Change	Total
No log entries	0.00	0.00

SKL - Sick Leave	Change	Total
No log entries	0.00	0.00

CTO - Compensatory Time Off	Change	Total
No log entries	0.00	0.00

CTA - Compensatory Time Accrued	Change	Total
• Add premium overtime hours to CTA Total at 1.5 rate for the week of 9/28/2009 to 10/4/2009 ⓘ		24.00
• Add premium overtime hours to CTA Total at 1.5 rate for the week of 10/5/2009 to 10/11/2009 ⓘ	(+) 2.63	26.63
• Add premium overtime hours to CTA Total at 1.5 rate for the week of 10/12/2009 to 10/18/2009 ⓘ	(+) 9.37	36.00
• Add premium overtime hours to CTA Total at 1.5 rate for the week of 10/19/2009 to 10/25/2009 ⓘ	(+) 3.00	39.00
• Add straight overtime hours to CTA Total ⓘ	(+) 2.00	41.00

Audits
In addition to streamlining the payroll reporting process the system also audits OPTRS to make sure that data in OPTRS is in agreement with data in Timesheets. If there are discrepancies, the system will create audit warnings, allowing managers to proactively resolve problems before employees receive incorrect paychecks.

Lesson Learned
Beyond the utility and time-savings that the Timesheets application provides to the campus, the development process holds a number of lessons. Earlier time reporting systems required that each department have the technical expertise and infrastructure to run their own instances of the application. Due to lack of campus-wide programming and data standards, only one other department was able to run the original system. The Timesheets application was the first non-centralized application that used the hosted model, where one instance of the software can host multiple departments.

Another lesson learned was finding a sustainable support model. Clearly, the originating unit cannot provide ongoing support to a growing number of users outside of the unit. This challenge was met by developing a partnership for distributed support: each participating organization designated a set of local support contacts. These contacts are members of a mailing list (timesheethelp@ucdavis.edu). Questions from users are sent to this list, and the members of the list answers the questions. If a question cannot be answered by this group, the question can be escalated to the development team. In addition to technical support, the Timesheets developers are working with various campus units to find a model for funding future development efforts, including system maintenance, feature requests, and updates to policies.

The technology utilized in the project
The current iteration of the Timesheets system is coded in Microsoft's ASP.Net C# running on an Internet Information Server (IIS) with a Microsoft SQL Server database. The user interface is entirely web-based. The system uses emailed notifications for timesheet due dates, timesheets awaiting approval, approval of timesheets, vacation maximums, low or depleted work study funds, etc. Emails do not contain confidential information, but rather a link back to the web application.

The timeframe of implementation
The first four months of system development were devoted to understanding payroll policies and bargaining unit contracts. The programming team worked closely with HR, Payroll, UCOP, Student Employment Services, and Internal Audit to ensure that policies and bargaining unit contracts were followed. The actual coding process took three months of two developers' time.

The review of payroll policies and union contracts started in March 2005 and ended in June 2005. The application coding was done from July through September 2005. The system was initially piloted by the Letters and Science Deans' Office (the developing programmers' home department) for about a year. In June of 2006, the pilot was opened up to departments within the College of Letters and Science. In late 2006, some non-L&S departments were allowed to join the pilot. In 2007, the pilot was further expanded to many additional departments.   In 2009, in a collaboration between the College of Letters and Science, Information & Educational Technology (IET), and Office of Administration, Timesheets became a campus-wide system.

The table below shows the current usage statistics by user and by department as of April 2010:

Users:
- Employees who submit timesheets: 5471 and growing daily
- Supervisors: 1200
- Managers: 282

Departments
- Total Departments: 153

Objective customer satisfaction data (not to exceed 2 pages)

This information was collected at the end of the first pilot via a web-based survey with a total of 594 responses. Additional survey data is available upon request.

How easy/difficult was it to learn how to use the Online Timesheet System to review timesheets?
- Very easy – 111 responses
- Somewhat easy – 34 responses
- Neither easy nor difficult – 5 responses
- Somewhat difficult – 1 response
- Very difficult – 0 responses

How easy/difficult was it to learn how to use the Online Timesheet System to submit timesheets?
- Very easy – 411 responses
- Somewhat easy – 70 responses
- Neither easy nor difficult – 16 responses
- Somewhat difficult – 11 responses
- Very difficult – 0 responses

Given the choice, would you prefer to go back to a paper based time reporting method, or continuing to use the Online Timesheet System?
- Return to paper based method – 16 responses
- Continue using Online Timesheet System – 567 responses