

# Investing in Better Time & Expense Gathering



## INTRODUCTION

Despite budget restraints, modern, practical time management and productivity tools must be incorporated in work environments to gain knowledge and achieve improved resource performance. Software such as DOVICO Timesheet™ allows automatic data classification and analysis to be used for improved time management and productivity practices.

With business survival increasingly tied to technology performance, CIO's and their IT organizations must stay ahead of the curve on industry metric news and current trends in IT performance and costs, technology infrastructure, and personnel. They should be able to map, relate, and articulate IT spending and productivity to business revenue and income to support their value proposition. Implementing an IT value management process (communicating the captured and categorized value of IT) is crucial to optimizing corporate investments.

*META Group Research, 13 October 2004*

Reducing cost is still a top business strategy. Industries use different ways to reduce cost... focus on effectiveness, efficiency, and the ability to close the gap between different business functions.

*IDC, April 14, 2005*

These articles show that companies worldwide are now focused on optimizing the value obtained from IT investments through increased productivity and performance. When dealing with corporate spending related to technology, it is important to align business objectives with IT spending. This can be achieved through cost-benefit analysis. In the past, measures of increased productivity were often not considered in traditional cost-benefit analysis because manual or spreadsheet based time recording methods are labor-intensive. The ever-increasing emphasis however relating to optimizing corporate investment through improved performance, productivity and efficiency are indications that it must now be included in the calculation of ROI. Automated tools such as DOVICO Timesheet™ can easily measure productivity gains to be included in the calculation of traditional cost-benefit analysis.

DOVICO Software has also been used to study job-related tasks to achieve desired productivity and improve performance. A federal department, a telecommunications company, an insurance company and an industrial engineering class are four such instances:

- A government department wanted to review internal processes and task assignments to determine if too much time was spent on low-priority tasks. DOVICO Software helped employees determine whether they were spending their time on the right priorities.
- Software and product development departments of a telecommunication company used DOVICO Software to automate the manual data entry of their time reporting system.
- A study in an insurance company identified and quantified time spent signing on and off various computer systems, as well as the time spent redoing tasks.
- DOVICO Software was used in the industrial engineering classroom environment over a period of 3 years. The reports submitted included a summary of participants' activities for the two week study period making use of qualitative and quantitative interpretation of the data.

Each of these applications incorporates DOVICO Software to measure and quantify fundamental time measurement for productivity gain.

Ways in which a company may seek to reduce or avoid different types of costs when implementing a new system is also important in the calculation of the ROI. The following case study demonstrates how certain tangible benefits can be quantified to include in the calculation of the ROI. It evaluates cost savings through the purchase of DOVICO Timesheet™ compared to using a spreadsheet application such as Excel to record and maintain time and expense information for a small organization. This smaller company example is used for ease of understanding the ROI, as the figures below would be greatly magnified for larger organizations.

## **CASE STUDY FOR COST SAVINGS**

This case study considers the ways in which a company may seek to reduce or avoid different types of costs associated with time and expense entry. Different ways of achieving this are discussed, with examples used to illustrate points raised. It clearly demonstrates the rate of return, payback period and annual cost avoidance based on certain tangible benefits through the use of DOVICO Timesheet™.

For ease of understanding, a small company of two managers, and 12 employees using Microsoft Excel® spreadsheet program is used to record time manually. The following are documented savings which resulted when DOVICO Software was purchased.

Although DOVICO Timesheet™ has a live link to Excel for additional reporting and data manipulation capability, this case study shows the cost savings when timesheet data entry is done using spreadsheet software instead of DOVICO Timesheet™.

### **Quantifying Cost Savings**

#### **1. Easy Setup & Quick Deployment**

Most time and expense gathering applications require a great deal of initial setup, maintenance and training. Even in a small company, it is often recommended that a period of 3 days or more be set aside for installation, deployment and training. In the case where Excel is used, additional time is required to properly format the spreadsheet, develop the training material and continually update the information. In larger organizations, several files are required to keep the process simple however; consolidating the information across multiple departments and locations is labor-intensive.

DOVICO Timesheet™ provides easy deployment because of the quick install at the server location only. Population of the database can easily be migrated from existing systems using the import function or integration. It can be used, for example, to quickly bring HR, project, and other data into DOVICO Timesheet™.

Training can be done quickly using existing materials (e-Learning, manuals, guides, help files, etc.), which are provided with the purchase.

In this case, the one-time savings for this process is 31 hours which includes:

Number of effort hours required		
	Excel	DOVICO Timesheet™
Develop/prepare training material		
Server & deployment installation		
Employee access setup		
Data setup		
Employee training		
Manager training		
Maintenance/update		
<b>Total</b>	<b>45 hours</b>	<b>14 hours</b>

2. Supervise Expenses and Administrative Effort

The effort for managers in verifying and consolidating the information can also be quantified. In this particular case, a time savings of 240 hours per year was achieved when DOVICO Software was used.

Number of effort hours required	
<b><i>Manual effort required using Excel</i></b>	<b>Time saved per week per manager = 2.5 hours x 2 managers = 240 hours per year<sup>1</sup></b>
Approve/clarify time entries	
Prepare & sign timesheets & documents	
Consolidate remote time & expense entries	
Total manual timesheets	
Follow manual approval process	
Manually apply overtime	
Calculate overtime	
Compile weekly time, expenses & project accomplishments	

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<sup>1</sup> Based on 48 weeks

3. Compile Weekly Time, Expense and Project Accomplishments

A time savings of 96 hours per year is recorded based on existing integrated reporting capabilities and automatic transmission to clients and staff members on a regular basis. DOVICO Timesheet™ includes over 135 reports with new reports available on-line free of charge, which are published regularly. The system includes the ability to automatically send reports to clients and staff members.

Number of effort hours required	
<b>Manual effort required using Excel</b>	<b>Time saved per week per manager = 1 hour x 2 managers = 96 hours per year<sup>1</sup></b>
Create weekly reports by project/employee/task	
Send reports to clients and/or selected staff	

4. Easy integration

DOVICO Timesheet™ includes advanced integration architecture allowing for easy integration of data with existing payroll, billing, ERP, CRM, accounting, project management or other software. In this case, a time savings of 48 hours per year was recorded.

Number of effort hours required	
<b>Manual effort required using Excel</b>	<b>Time saved per week per managers = 0.5 hours x 2 managers = 48 hours per year<sup>1</sup></b>
Export data to the payroll software	

5. Reduced labor effort

A workflow process establishes which manager(s) must approve an employee's timesheet and/or expense submissions before they can be processed for project costs, billing, reports, etc. When multiple approvals are required for the same submission (e.g. project manager then HR manager), the workflow controls which manager approves first, second, and so on.

DOVICO Timesheet™ has integrated multi-level security, approval/workflow processes, error detection and easy time and expense submission, which are not present in other systems such as Excel.

A time savings of 576 hours per year was recorded to eliminate these unnecessary labor costs.

<b>Number of effort hours required</b>	
<b><i>Manual effort required using Excel</i></b>	<b>Time saved per week per employee = 1 hour x 12 employees = 576 hours per year<sup>1</sup></b>
Increase resource productivity	
Manual data entry	
Manual time calculation (7 min./employee)	
Accuracy errors in reading time cards	
Error detection & correction	
Track daily time & expenses	
Submit time & expenses for approval	

6. Projects delivered on time and on budget

Knowledge based on past accurate information helps in the ability to deliver projects on time and on budget. This knowledge is critical in applying sound project management practices. A cost savings of 240 hours per year can be quantified for this purpose.

<b>Number of effort hours required</b>	
<b><i>Manual effort required using Excel</i></b>	<b>Time saved per week = 5 hours = 240 hours per year<sup>1</sup></b>
Evaluate if projects are on budget	
Calculate additional hours to complete project	
Improve quotes with what-if reports/scenarios	
Accurate project projections	
Better project monitoring	
Better project management	

### Operational Cost Avoidance

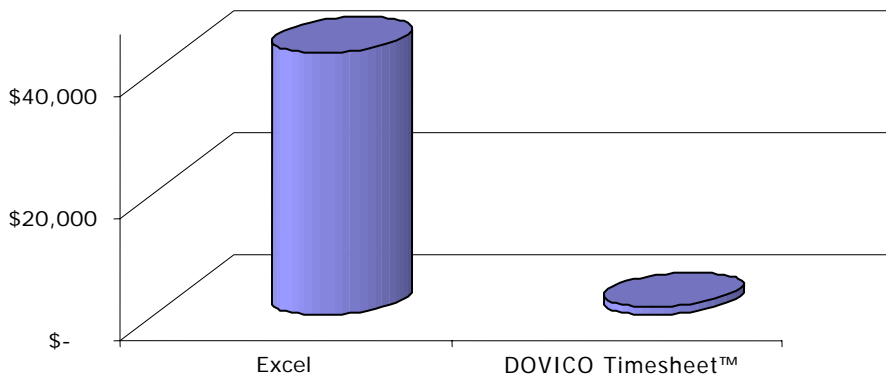
The following table summarizes the total time and costs to show that the payback period or ROI to purchasing DOVICO Timesheet™.

<b>Time and costs (US\$) avoided using DOVICO Timesheet™ in comparison to using Excel</b>			
	<i>One-time savings using DOVICO Timesheet™</i>	<i>Annual savings using DOVICO Timesheet™</i>	<i>Total cost (@ \$35/hr)</i>
Easy setup & quick deployment	31 hours		<b>\$1,085</b>
Supervise expenses & administrative effort		240 hours	<b>\$8,400</b>
Compile weekly time, expense & project accomplishments		96 hours	<b>\$3,360</b>
Easy integration		48 hours	<b>\$1,680</b>
Reduced labor effort		576 hours	<b>\$20,160</b>
Projects delivered on time & on budget		240 hours	<b>\$8,400</b>
<b>Total</b>	31 hours	1,200 hours	<b>\$43,085</b>
<b>One-time cost to purchase DOVICO Timesheet™ for 12 users</b>			<b>\$1,380</b>

### CONCLUSION

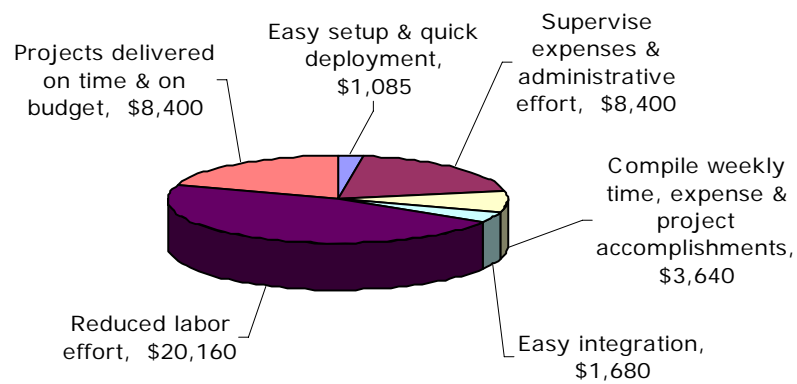
Based on the above analysis, a 12 employee company will save \$41,705 (US\$) (or 1,231 hours) in the first year following the implementation of DOVICO Timesheet™. With just 12 employees, DOVICO Timesheet™ **pays for itself in less than one month!**

### Cost Analysis



The economic cost in delaying the deployment of DOVICO Timesheet™ is over \$800 US per week without considering the ability of staff members to work on more productive issues. The economic cost is magnified significantly for larger organizations. The cost may be higher if no timekeeping system is in place or the current system is based on hand written time sheets.

### Operational Cost Avoidance (in US\$)



## REFERENCES

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- PARKER, Marilyn M. and Robert J. Benson, Information Economics. Linking Business Performance to Information technology, Chapter 11, pp 122-133, Prentice-Hall, Inc., New Jersey, 1988.

ABOUT DOVICO Software: DOVICO Timesheet is a powerful time management software solution that monitors project costs, employee timesheets, and expenses. This performance management software has been tested and proven globally by successful companies for workforce automation. DOVICO Timesheet can help increase your profits and provide improved project control and timesheet management. Integration to Intuit QuickBooks, Microsoft Office Project and compliancy with SOX and DCAA are included.

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