

CENTER FOR INTEGRATED FACILITY ENGINEERING, STANFORD UNIVERSITY
Potential Benefits of Internet-Based Project Control Systems –
A Study On Time Card Processing - Appendix A
By Alex Barrón, Martin Fischer

CIFE Technical Report #125A
 March, 2001
S41 Manage Time Cards

IDEF0	Action	Document	Information Name	Source	Info. Type	Org.
S411 Manage Time Cards (Field Office)						
S4111 Prepare Time Card						
S41111 Create Time Card						
S411111	Instantiate	Time Card				S
S411112	Enter	Document Information				
S4111121	Enter	Time Card	Document ID	AUTO!	ID	S
S4111122	Enter	Time Card	Document Title	AUTO!	Text	S
S4111123	Enter	Time Card	Document Date	AUTO!	Date	S
S411113	Enter	Sub Company Information				
S4111131	Enter	Time Card	Sub Company Name	S1112	Text	S
S4111132	Enter	Time Card	Sub Co. Home Office Address	S1121	Text	S
S411114	Enter	Project Information				
S4111141	Enter	Time Card	Project Name	S1312	Text	S
S4111142	Enter	Time Card	Sub Project No.	S1313	Number	S
S4111143	Select	Time Card	Building Name	S1322	Text	S
S41112 Edit Time Card						
S411121	Enter	Time Card Information				
S4111211	Enter	Employee Information				
S41112111	Select	Time Card	Employee ID	S1211	Number	S
S41112112	Enter	Time Card	Employee Name	S1212	Text	S
S4111212	Enter	Cost Code Information				
S41112121	Select	Time Card	Cost Code ID	S21132	ID	S
S41112122	Enter	Time Card	Cost Code Description	S21133	Text	S
S4111213	Enter	Work Date Information				
S41112131	Select	Time Card	Date Work Performed	DATA!	Date	S
S41112132	Enter	Time Card	Day of Week Work Performed	AUTO!	Text	S
S4111214	Enter	Resource Use Information				
S41112141	Select	Time Card	Shift (RT, OT, DT)	DATA!	Text	S
S41112142	Enter	Time Card	No. Hours Worked /CostCode/day	DATA!	Number	S
S4111215	Enter	Additional Information				
S41112151	Enter	Time Card	Comments	DATA!	Text	S
S41112152	Enter	Time Card	Reference to other Document(s)	DATA!	Hyperlink	S
S411122	Calculate	Time Card Totals				
S4111221	Calculate	Totals per Cost Code				
S41112211	Enter	Time Card	Cost Code ID	S41112121	ID	S
S41112212	Calculate	Time Card	Total RT Hours / CostCode	=Σ(2142)	Number	S
S41112213	Calculate	Time Card	Total OT Hours / CostCode	=Σ(2142)	Number	S
S41112214	Calculate	Time Card	Total DT Hours / CostCode	=Σ(2142)	Number	S
S4111222	Calculate	Totals per Day				
S41112221	Enter	Time Card	Date Work Performed	S41112131	Date	S
S41112222	Calculate	Time Card	Total RT Hours / Day	=Σ(2142)	Number	S
S41112223	Calculate	Time Card	Total OT Hours / Day	=Σ(2142)	Number	S
S41112224	Calculate	Time Card	Total DT Hours / Day	=Σ(2142)	Number	S
S4111223	Calculate	Totals per Week				
S41112231	Calculate	Time Card	Total RT Hours / Week	=Σ(2222)	Number	S
S41112232	Calculate	Time Card	Total OT Hours / Week	=Σ(2223)	Number	S
S41112233	Calculate	Time Card	Total DT Hours / Week	=Σ(2224)	Number	S
S4112 Authorize Time Card						
S41121 Review and Approve Time Card						
S411211	Review	Time Card			Document	S
S411212	Approve	Time Card			Document	S
S41122 Sign Time Card						
S411221	Enter	Time Card	Foreman Signature	DATA!	Signature	S
S411222	Enter	Time Card	Date Signed	AUTO!	Date	S
S4113 Send Time Card to Sub Accounting						
S41131	Place	Time Card			Document	S
S41132	Enter	Fax Machine	Sub Home Office Fax	S1123	Number	S
S41133	Send	Time Card			Document	S
S41134	Enter	Time Card	Date Sent	AUTO!	Date	S
S41135	Enter	Time Card	Time Sent	AUTO!	Time	S
S4114 Archive Time Cards						
S41141 Retrieve Time Card Folder						
S411411	Open	File Cabinet			Drive	S
S411412	Find	Time Card Folder	File Path		Folder	S
S411413	Select	Time Card Folder	Folder Name		Folder	S
S411414	Open	Time Card Folder			Document	S
S41142 File Time Card in Folder						
S411421	Determine	Time Card	Document Date	S4111123	Date	S
S411422	Find	Time Card Folder	Month	S411421	Date	S
S411423	File	Time Card Folder	Time Card		Document	S
S41143	Save	Time Card Folder			Folder	S

CENTER FOR INTEGRATED FACILITY ENGINEERING, STANFORD UNIVERSITY
Potential Benefits of Internet-Based Project Control Systems –
A Study On Time Card Processing - Appendix A
By Alex Barrón, Martin Fischer

CIFE Technical Report #125A
 March, 2001
S41 Manage Time Cards

IDEF0	Action	Document	Information Name	Source	Info. Type	Org.
S41144		Archive Time Card Folder				
S411441	Close	Time Card Folder			Folder	S
S411442	Close	File Cabinet			Drive	S
S412 Manage Time Cards (Home Office)						
S4121		Receive Time Card (in Acct Dept.)				
S41211	Print	Time Card			Document	S
S41212	Enter	Time Card	Date Received	AUTO!	Date	S
S41213	Enter	Time Card	Time Received	AUTO!	Time	S
S41214	Deliver	Time Card			Document	S
S4122		Access Sub Acct DB				
S41221	Retrieve	Time Card			Document	S
S41222		Retrieve Accounting DB				
S412221	Open	Sub->Accounting DB			Document	S
S412222	Enter	Sub->Accounting DB	Accounting Entry Person No.	DATA!	Number	S
S412223	Enter	Sub->Accounting DB	Date Time Card Posted	AUTO!	Date	S
S412224	Enter	Sub->Accounting DB	Sub Project No.	S4111142	Number	S
S4123		Post Time Card Information in Sub Acct DB				
S41231		Enter Time Card Information				
S412311	Enter	Sub->Accounting DB	Employee ID	S41121111	ID	S
S412312	Enter	Sub->Accounting DB	Date Work Performed	S41112131	Date	S
S412313	Enter	Sub->Accounting DB	Cost Code ID	S41112121	ID	S
S412314	Enter	Sub->Accounting DB	Shift (RT, OT, DT)	S41112141	Text	S
S412315	Enter	Sub->Accounting DB	No. Hours Worked /CostCode/day	S41112142	Number	S
S4124		Update Accounting DB				
S41241	Review	Sub->Accounting DB			Document	S
S41242	Save	Sub->Accounting DB			Document	S
S41243	Close	Sub->Accounting DB			Document	S
S4125		Archive Time Cards				
S41251		Retrieve Time Card Folder				
S412511	Open	File Cabinet			Drive	S
S412512	Find	Time Card Folder	File Path		Folder	S
S412513	Select	Time Card Folder	Folder Name		Folder	S
S412514	Open	Time Card Folder			Document	S
S41252		File Time Card in Folder				
S412521	Determine	Time Card	Document Date	S4111123	Date	S
S412522	Find	Time Card Folder	Month	S412521	Date	S
S412523	File	Time Card Folder	Time Card		Document	S
S41253	Save	Time Card Folder			Folder	S
S41254		Archive Time Card Folder				
S412541	Close	Time Card Folder			Folder	S
S412542	Close	File Cabinet			Drive	S

CENTER FOR INTEGRATED FACILITY ENGINEERING, STANFORD UNIVERSITY

Potential Benefits of Internet-Based Project Control Systems – A Study On Time Card Processing - Appendix A

By Alex Barrón, Martin Fischer

Position	Task Level	Task Type	Task Classification	Skill	Paper					Internet													
					H	G	F	E	D	C	H	G	F	E	D	C							
					Time (sec)					Time (sec)													
									10														
Foreman		Close Folder	Locate Document	Clerical					5						0								
Foreman		Close Storage	Locate Document	Clerical					5						0								
													160										0
																							0
Clerk		Receive Documer	Process Document	Clerical					10						0								0
Clerk	Enter Informatior	Timestamp Docur	Process Document	Clerical					0						0								0
Clerk	Enter Informatior	Timestamp Docur	Process Document	Clerical					0						0								0
Clerk		Deliver Document	Process Document	Clerical					5						0								0
																							0
Accounting Entry		Retrieve Documer	Process Document	Clerical					20						0								0
									25						0								0
Accounting Entry		Open Database	Update Database	Clerical					10						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
																							0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
Accounting Entry	Enter Informatior	Edit Database	Update Database	Clerical					5						0								0
																							0
Accounting Entry		Review Database	Update Database	Managerial					5						0								0
Accounting Entry		Save Database	Update Database	Managerial					5						0								0
Accounting Entry		Close Database	Update Database	Clerical					5						0								0
																							0
																							0
Accounting Entry		Open Storage	Locate Document	Clerical					5						0								0
Accounting Entry		Find Folder	Locate Document	Clerical					5						0								0
Accounting Entry		Select Folder	Locate Document	Clerical					15						0								0
Accounting Entry		Open Folder	Locate Document	Clerical					5						0								0
																							0
Accounting Entry	Read Informatior	Search Document	Locate Document	Clerical					5						0								0
Accounting Entry	Read Informatior	Find Folder	Locate Document	Clerical					5						0								0
Accounting Entry		Archive Documen	Locate Document	Clerical					5						0								0
Accounting Entry		Save Folder	Locate Document	Clerical					5						0								0
																							0
Accounting Entry		Close Folder	Locate Document	Clerical					5						0								0
Accounting Entry		Close Storage	Locate Document	Clerical					5						0								0