PROJECT MANAGEMENT INFORMATION SYSTEM IN CV SRINANDAR MAKMUR ABADI

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ABSTRAC

CV. Srinandar Makmur Abadi is the company in procurement clothing of them procurement clothing company, uniforms army agency, uniforms for the police service and equipment attribute army and police. CV. Srinandar Makmur Abadi prosperous perennial often have a problem in project implementation the delay. This delay occurred because of some factors, namely schedule workmanship not conforming where a project not finished at the correct time, the absence of recording risk and the means of handling done by project manager, based on the problems that is it takes a analysis and system project by the application of method that can increase effectiveness in on the monitoring of the and control the project.

A method of critical path method (cpm) used to locate the critical method of earned value management (evm) used to perform the control of the time and money spent project , evm used because this method capable of integrating the time and money spent so that we can express the performance of activities .While for assessing by combining opportunities the emergence of the risk and the impact it had used method of a method of probability impact the matrix (pim) .

Based on the findings and analysis that has been done, expected information systems project management in CV. Srinandar Makmur Abadi can help project manager in controlling project it means the project can resolve timely warrant the cost of planned.

***Keyword**: Project Management, Critical Path Method, Earned Value Management, Probability Impact Matrix*

1. INTRODUCTION

CV .Srinandar Makmur Abadi is the company that moves in procurement clothing of them procurement clothing company, uniforms army agency, uniforms for the police service and equipment attribute army and police and have versed in do procurement project clothing for government or private institution .Based on the interviews conducted researchers with the andini as project manager, explained that CV. Srinandar Makmur Abadi often have a problem in project implementation the delay .This delay occurred because the schedule is not appropriate where a project not finished at the correct time it can be said project suffered a setback schedule because the employees hurt when of the project and why it causes this employees who performs work out its ability, resulting in production is not maximum. Project manager also did not do the risk that may be faced by and the way to handle it so they could not anticipate the worst just as, the defective machine production has delayed. It is also reservations raw materials sometimes not according to the specifications or contained defect resulted in time and surcharge expended.

CV. Srinandar Makmur Abadi, then needed a management information systems projects that can help project managers in project planning scheduling, set up costs and time of work projects and identify risks that may occur and determine mitigation.

Based on the above problems then the method used to solve the problem using the method of Critical Path Method (CPM) scheduling planning to help the project and determine the activities which cannot be delayed the work, methods of Earned Value Management (EVM) for the control of costs and time, as well as identify project risks to know the importance of a risk based on the likelihood and the impact that will occur by using the method of Probability and Impact Matrix (PIM).

The goal of the research is to help project managers in doing the making activities of project work, assist manager in analyzing and tackling the risks that may occur during the project progress and help the project manager in the planning time and cost of the project to find out the costs that will be incurred in the next

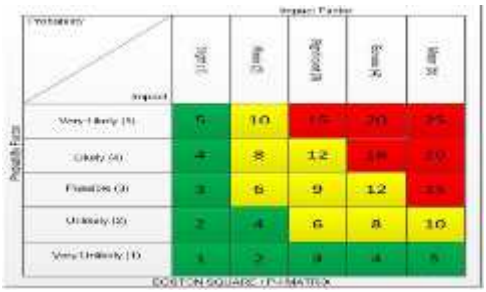
1.1 Risk management

The risk is activities or other conditions factors that if there is will increase the possibility of not the achievement of the aim of the project namely compatible with time, the cost and performance.Risk management is process that simantik of identification, analysis, responses and control over risk project.The purpose of risk management is maximize the prospect of and consequence of events

positive and minimize opportunities and consequences of events negative and project target

1.1.1 Probabilty and Impact Matrix

Risk can will be given priority for analysis further quantitatively and the act of (response) based on size (rating) risk.A measure undertaken to risk based on possibilities and its impact.Evaluation the risk for the importance and priorities consideration is with use some help table 5, as in a picture 1:



Picture 1 Boston Square Matrix

Table 1 Criteria

No	*Point*	*effect*
1	*(slight)*	*The impact of insignificant perceived a financial loss does not mean*
2	*(minor)*	*Need to direct handling where they are , a financial loss being the cost of additional spending*
3	*(significa nt)*	*Need to be handled by the manager, a financial loss significant*
4	*(severe)*	*The failure , productivity decline , a financial loss significant*
5	*(mayor)*	*The impact on other , need handling by the director , big losses , need to special handling*

Table 2 Probability

No	*Point*	*Probability*
1	*(very unlikely)*	*only on certain conditions*
2	*(unlikely)*	*Sometimes occurs on certain conditions*
3	*(possible)*	*Happened on certain conditions*
4	*(likely)*	*Often occurs in any condition*
5	*(very likely)*	*Always happens in any condition*

Table 3 Skala Risk

Skala	*Point*
1-5	*Low*
6-14	*Midle*
15-25	*High*

The importance risk is multiplication of the value of probability and value the impact of obtained from respondents.Value risk is multiplication of the value of probability and value the impact of, value risk obtained from respondents

*Risk Exsposure = Probability * Loss*

1.2 Metode Critical Path Method (CPM)

Critical Path Method A line having a series of components activities, with a total the amount of time the highest and indicated the past also expressed his appreciation of the fastest project. So, the critical consisting of a series of activities critical, started from the first activity until the work of the last project[6].The critical very important for contractor because it is on track in its activities to start on time and finished also on time.

There are two of calculations used in the methods of the critical, namely calculation forward and calculation backward. There are some things important that must be considered when calculation forward and calculation resign as the following:

1. Forward Calculation
Forward Calculation was determine the latest period of started and completion of any activity, and the latest the any activity.
EF = ES + D
EF(i-j) = ES(i-j) + D(i-j)

2. Backward Calculation
Backward Calculation is the latest period of started and completion of any activity, and the latest the any activity.
LS = LF – D
LS(i-j) = LF(i-j) - D(i-j)

3. Total Float (TF)
Total float is the amount of time allowed a activity is enabled, without affecting project schedule as a whol.Total float a activity equal to time is finished the last reduced time is finished the earliest , or when it started the last reduced when it started the earliestTF = LS – ES

1.3 Earned Value Method (EVM)

A method of value the result is a method of control performance project more progressive. Method to be able to provide information regarding the position progress projects in a certain period of time and can estimate that progress project in the period next both in terms of cost and period of completion project [1].
As for 3 indicators to inform progress project that is:

- *BCWS (Budgeted Cost of Work Shedule), Describing budget plan until at a particular period to volume the project plan to be undertaken.*

- *BCWP (Budgeted Cost of Work Performed), Describing budget the project plan at a particular period for that that has been done in the volume of work actual.*
- *ACWP (Actual Cost of Work Performed), Describing budget actual spent for the implementation of work on the state of the volume of work actual.*

Calculations used in in the methods EVM

- *BCWS = (%Plan Progress) x BAC*
- *BCWP = (%Actual Progress) x BAC*

Having calculated bcws and bcwp finished then done two analysis that can be used in measuring the performance of a work namely variance aimed at for measuring the performance of the job until the date of reporting. Variances who were analysed is schedule and costs.

- *Cost Variance (CV)*
  the difference between grades obtained after completing packet work by the actual cost occurring during of the project
  CV = BCWP - ACWP
- *Schedule Variance (SV)*
  Used to calculate deviation between bcwp with bcws
  SV = BCWP – BCWS

Table 4 Variance

Schedule Variance (SV)	*Cost Variance (CV)*	*Keterangan*
Positif	*Positif*	*Work done ahead of schedule at a cost of lower of the budget*
Nol	*Positif*	*The work had been completed according to schedule with the fees are low of the budget*
Positif	*Nol*	*Work done ahead of schedule at a cost of it on budget*
Nol	*Nol*	*Work done on schedule and budget*
Nol	*Negatif*	*Work done in accordance with the schedule with the fees are larger of the budget*
Negatif	*Nol*	*Work done longer of schedule at a cost of it on budget*
Positif	*Negatif*	*Work done ahead of schedule at a cost of greater of the budget*
Negatif	*Negatif*	*Work done longer of schedule at a cost of greater of the budget*

Having calculated cv and sv done then analysis index work to find cost efficiency and time by seeking value Schedule Performance Index (SPI) dan Cost Performance Index (CPI).

- *Cost Variance index (CPI)*
  A factor efficiency the money that has been issued
  CPI = BCWP/ACWP
- *Schedule Performance Index (SPI)*
  A factor efficiency performance in finish the job
  SPI = BCWS/BCWP

1. *Index performance < 1 (less than one), so expenditure greater of the budget or the implementation of longer of schedule planned.*
2. *Index performance > 1 (more than one) , so performance expenditure lower of the budget or the implementation of ahead of schedule .*

Analysis an estimate of the cost and period of completion done by seeking an estimate of the cost or estimate at completion (eac) and to approximate duration completion of projects or estimate to complete (etc)

- *EAC*
  EAC = BAC/CPI
- *ETC*
  ETC = OD/SPI

2. THE CONTENT OF RESEARCH

2.1 Analysis Of Project Planning

Analysis design project with analysis planning scheduling and analysis risk in procurement project dress uniform by cv .Srinandar Makmur Abadi .In this case planning scheduling project in a critical path method (cpm) and risk management uses the probability the matrix (pim).

2.1.1 Critical Path Method (CPM)

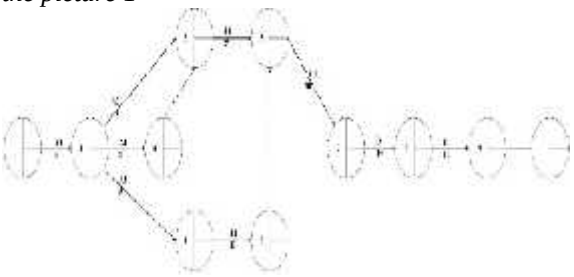
CPM (Critical Path Method) Is one of management technique that can be used to plan and implementation and shows the relationship between activities.Used to locate the fastest to work on a project, where each project including on a track it is not given time a pause / break the construction of the house

Table 5 Activity

No	***Activity***	***Code Activity***	***The predecessor***	***Time (t)***
1	*Pola*	*A1*	*-*	*3 Day*
2	*Potong Kain Baju*	*A2*	*A1*	*5 Day*
3	*Potong Kain Celana*	*A3*	*A1*	*5 Day*
4	*Potong Kain Puring*	*A4*	*A1*	*2 Day*

5	Jahit Baju	B1	A2,A4	25 Day
6	Jahit Celana	B2	A3	20 Day
7	Pasang Kancing Baju	C1	B1,B2	10 Day
8	Steam	D	C1	10 Day
9	Packing	E	D	10 Day

Based on a series of activities in procurement project dress uniform army in table 1 described in the form of a diagram tissue work produced such as the picture 1



Picture 1 network diagram

To determine period of completion in the methods of critical path method (cpm) consists of two phases forward computation and backward computation.

1. forward computation

$EF(i-j) = ES(i-j) + t\ (i-j)$

$EF0\text{-}1 = ES0\text{-}1 + t0\text{-}1 = 0 + 3 = 3$

$EF1\text{-}2 = ES1\text{-}2 + t1\text{-}2 = 3 + 5 = 8$

$EF1\text{-}3 = ES1\text{-}3 + t1\text{-}3 = 3 + 5 = 8$

$EF1\text{-}4 = ES1\text{-}4 + t1\text{-}4 = 3 + 2 = 5$

$EF2\text{-}5 = ES2\text{-}5 + t2\text{-}5 = 8 + 25 = 33$

$EF3\text{-}6 = ES3\text{-}6 + t3\text{-}6 = 8 + 20 = 28$

$EF5\text{-}7 = ES5\text{-}7 + t5\text{-}7 = 33 + 10 = 43$

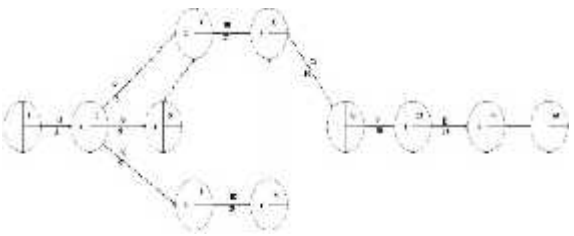
$EF7\text{-}8 = ES7\text{-}8 + t7\text{-}8 = 43 + 10 = 53$

$EF8\text{-}9 = ES8\text{-}9 + t8\text{-}9 = 53 + 10 = 63$

Table 6 Recapitulation forward computation

No	Kode Kegiatan	Kegiatan		Waktu (t) dalam hari	Paling awal	
		i-node	j-node		Mulai (ES)	Selesai (EF)
1	A1	0	1	3	0	3
2	A2	1	2	5	3	8
3	A3	1	3	5	3	8
4	A4	1	4	2	3	5
5	B1	2	5	25	8	33
6	B2	3	6	20	8	28
7	C1	5	7	10	33	43
8	D	7	8	10	43	53
9	E	8	9	10	53	63

The recapitulation result forward computation can be seen a diagram like in figure 2



Picture 2 Diagram forward computation

2. backward computation

$LS(i-j) = LF(i-j) - t$

$LS9\text{-}8 = LF8\text{-}9 - t8\text{-}9 = 63 - 10 = 53$

$LS8\text{-}7 = LF7\text{-}8 - t7\text{-}8 = 53 - 10 = 43$

$LS7\text{-}5 = LF5\text{-}7 - t5\text{-}7 = 43 - 10 = 33$

$LS6\text{-}3 = LF3\text{-}6 - t3\text{-}6 = 33 - 20 = 13$

$LS5\text{-}2 = LF2\text{-}5 - t2\text{-}5 = 33 - 25 = 8$

$LS4\text{-}1 = LF1\text{-}4 - t1\text{-}4 = 8 - 2 = 6$

$LS3\text{-}1 = LF1\text{-}3 - t1\text{-}3 = 13 - 5 = 8$

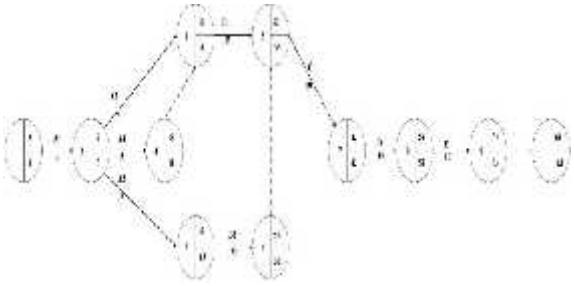
$LS2\text{-}1 = LF1\text{-}2 - t1\text{-}2 = 8 - 5 = 3$

$LS1\text{-}0 = LF0\text{-}1 - t0\text{-}1 = 3 - 3 = 0$

Table 7 Recapitulation backward computation

No	Kode Kegiatan	Kegiatan		Waktu (t) dalam hari	Paling awal	
		i-node	j-node		Selesai (LF)	Awal (LS)
1	E	9	8	10	63	53
2	D	8	7	10	53	43
3	C1	7	5	10	43	33
4	B2	6	3	20	33	13
5	B1	5	2	25	33	8
6	A4	4	1	2	8	6
7	A3	3	1	5	13	8
8	A2	2	1	5	8	3
9	A1	1	0	3	3	0

The recapitulation result backward computation can be seen a diagram like in figure 3



Picture 3 Diagram backward computation

3.computation Float

$TF0\text{-}1 = LF0\text{-}1 - EF0\text{-}1 = 3 - 3 = 0$

$TF1\text{-}2 = LF1\text{-}2 - EF1\text{-}2 = 8 - 8 = 0$

$TF1\text{-}3 = LF1\text{-}3 - EF1\text{-}3 = 13 - 8 = 5$

$TF1\text{-}4 = LF1\text{-}4 - EF1\text{-}4 = 8 - 5 = 3$

$TF2\text{-}5 = LF2\text{-}5 - EF2\text{-}5 = 33 - 33 = 0$

$TF3\text{-}6 = LF3\text{-}6 - EF3\text{-}6 = 33 - 28 = 5$

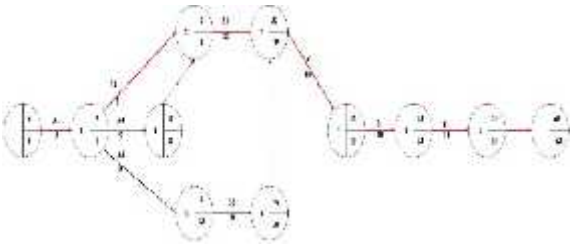
$TF5\text{-}7 = LF5\text{-}7 - EF5\text{-}7 = 43 - 43 = 0$

$TF7\text{-}8 = LF7\text{-}8 - EF7\text{-}8 = 53 - 53 = 0$

$TF8\text{-}9 = LF8\text{-}9 - EF8\text{-}9 = 63 - 63 = 0$

Table 8 Rekapitulasi Computation Float

No	Kode Kegiatan	Kegiatan		Waktu (t) dalam hari	Paling Awal		Paling Akhir		Total Float (TF)
		i-node	j-node		Mulai (ES)	Selesai (EF)	Mulai (LS)	Selesai (LF)	
1	A1	0	1	3	0	3	0	3	0
2	A2	1	2	5	3	8	3	8	0
3	A3	1	3	5	3	8	8	13	5
4	A4	1	4	2	3	5	6	8	3
5	B1	2	5	25	8	33	8	33	0
6	B2	3	6	20	8	28	13	33	5
7	C1	5	7	10	33	43	33	43	0
8	D	7	8	10	43	53	43	53	0
9	E	8	9	10	53	63	53	63	0



Picture 4 Diagram Critical Line

So can be concluded the A1, A2, B1, B2, D, E is the critical so work through the critical does not supposed to be delay work

2.1.2 Probability Impact Matrix

To identify risk, determine the value of possibilities and the impact of risk and handling of the risk

- *Identify Risk*

The process manajeman risk started by identification risk which aims to identify and make a list of risk that might happen

Table 9 Identify Risk

No	*Risk*	*Code Risk*
1.	***Resiko Alat***	
1.1	*Rusaknya mesin jahit*	*R1*
2	***Resiko Bahan Baku***	
2.1	*Rusaknya bahan baku*	*R2*
2.2	*Sulitnya bahan baku*	*R3*
2.3	*Bahan baku yang tidak sesuai*	*R4*
3	***Resiko pelaksanaan***	
3.1	*Sakitnya pegawai*	*R5*
3.2	*Matinya Listrik*	*R6*

- *Determine the value of possibilities and the impact*

After the risk the next will be assessed by giving scale value uses matrix quadrilateral boston (Boston Square Matrix)

Table 10 Pemberian nilai

No	*Risk*	*Code Risk*	*Probabbility*	*Imoact*
1.	***Resiko Alat***			
1.1	*Rusaknya mesin jahit*	*R1*	*3*	*4*
2	***Resiko Bahan Baku***			
2.1	*Rusaknya bahan baku*	*R2*	*2*	*3*
2.2	*Sulitnya bahan baku*	*R3*	*4*	*4*
2.3	*Bahan baku yang tidak sesuai*	*R4*	*2*	*1*
3	***Resiko pelaksanaan***			
3.1	*Sakitnya pegawai*	*R5*	*4*	*4*
3.2	*Matinya Listrik*	*R6*	*3*	*2*

- *Determine the importance risk*

After determine the value of the probability and the impact of risk, then just calculate the extent of the interest in a risk Probability Inpact and Matrix

Table 11 Hasil Perhitungan

No	***Code Risk***	***Probability***	***Impact***	***The importance risk***
1	*R1*	*3*	*4*	*12*
2	*R2*	*2*	*3*	*6*
3	*R3*	*4*	*4*	*16*
4	*R4*	*2*	*1*	*2*
5	*R5*	*4*	*4*	*16*
6	*R6*	*4*	*4*	*6*

- *Mitigation risk*

The assessment results of the interests of risk that has been done before we do handling mitigation risk or the act of controlling risk

Table 12 Pengendalian

Level Of Risk	***Code Risk***	***The act of controlling risk***
Resiko Tinggi	*R5*	*Memaksimalkan pegawai yang memiliki skill cepat*
Resiko Tinggi	*R3*	*Mencari bahan baku dtempat lain dan tetap mencari harga yang murah*
Resiko Sedang	*R1*	*Menaikan mesin jahit cadangan dan memanggil mekanik untuk segera memperbaiki mesin yang rusak*
Resiko Sedang	*R2*	*Simpan di tempat bagian untuk dijahit*
Resiko Sedang	*R6*	*Standbynya genset apabila terjadi matinya aliran listrik*
Resiko Rendah	*R4*	*Retur dengan segera*

2.2 Analisis Pengendalian Proyek

Analysis control project with eveluasi to time estimation and the money that has been issued in project financing uses the method Earned Value Method (EVM)

- *Perhitungan Bobot*

Weight work calculated berdasaran day on the work the percentage weight the work will be used in an analysis BCWS

*(Jumlah Hari * 100)/Total hari yang direncanakan*

1 Kegiatan pola
Jumlah Hari = 3 hari
Total Hari = 90 hari
*Bobot = (3 * 100)/90*
= 3.33

Table 13 Bobot

No	Nama Tugas	Durasi	Bobot
A	**Persiapan**	**15 Hari**	
A1	Pola	3 hari	3.33
A2	Potong Kain Baju	5 hari	5.56
A3	Potong Kain Celana	5 hari	5.56
A4	Potong Kain Puring	2 hari	2.22
B	**Penjahitan**	**45 hari**	
B1	Penjahitan Badan	25 hari	27.78
B2	Penjahitan Celana	20 hari	22.22
C	**Controling**	**10 hari**	
C1	Memasang Kancing	10 hari	11.11
D	**Steam**	**10 hari**	11.11
E	**Finishing**	**10 hari**	11.11

- *Analisis Budgeted Cost for Work Schedule (BCWS)*
  Is the cost of a plan that budgeted for do a project
  BAC = Rp 764.527.700,00.
  Bobot (progres rencana) = 1.11 %
  PV= (%progres rencana) X BAC
  = 1.11 % x 764.527.700,00.
  = 8.486.257
  8.486.257 Is the cost of a plan that would be provided to do a project calculation bcws conducted until the last day of the project

- *Analisis Budgeted Cost for Work Performed (BCWP)*
  The actual cost that should have out to do a project
  BAC = Rp 764.527.700,00.
  Bobot (progres rencana) = 1.11 %
  EV= (%progres rencana) X BAC
  = 1.11 % x 764.527.700,00.
  = 8.486.257
  8.486.257 Is the fees should be issued to do a project calculation bcwp done to the last the project

- *Analisis Actual Cost for Work Performed (ACWP)*
  The fee to do a project
- *Analisis Penyimpangan Jadwal/Waktu (SV)*
  Scheduling Variance (SV) Indicates a difference in time work exercised toward time work planned .Positive value of sv show that the work completed more quickly time dirancanakan , but if sv negative so work completed more long time planned.
  BCWP = Rp 8.486.257
  BCWS = Rp 8.486.257
  SV = BCWP – BCWS
  = 8.486.257- 8.486.257 = 0
  the first day the completed work to that on have made schedule

- *Analisis Penyimpangan Biaya (CV)*
  Cost variance (CV) shows the difference the value obtained after the completion of part of the work with the actual value of the implementation of the project. positive values of CV indicates that the benefit job begian instead if the value CV is negative shows that part of the work gives losses
  .
  BCWP = Rp 8,486,257
  ACWP = Rp 8,500,000
  CV = BCWP – ACWP
  = 8,486,257- 8,500,000
  = - 13.743
  the first day of the huge costs incurred

- *Analisis Schedule Performance Index(SPI)*
  To determine the index value of the performance time or schedule performance index (SPI) can be calculated with the following formula:
  schedule performance index (SPI) = BCWP/BCWS
  SPI > 1, actual Progress > plans: project acceleration occurs against plan
  SPI < 1, actual Progress < plans: project plan against delay occurs
  BCWP = Rp 8.486.260
  BCWS = Rp 8.486.2260
  SPI = BCWP/BCWS
  = 8.486.260/8.486.260
  = 1
  For the first day of the physical progress is being done in accordance with what was planned.

- *Analisis Cost Performance Index (CPI)*
  To determine the index value of the performance fee or Cost Performance Index (CPI) can be calculated with the following formula:
  Cost Performance Index (CPI) = BCWP/ACWP
  CPI > 1, the cost of the actual volume > actual cost (cost underrun)
  CPI <1, cost < actual volume < actual cost (cost overrun)
  BCWP = Rp 8,486,257
  ACWS = Rp 8,500,000
  SPI = BCWP/ACWP
  = 8,486,257/8,500,000

= 0.9984

the first day that the job was completed with a cost greater than planned

- *Analisa Perkiraan Waktu dan Biaya*

  1. To determine the estimated time to completion can be calculated with the following formula:

  OD (original duration) = 90 hari

  SPI = 1

  ETC = OD / SPI

  =90/1 = 90 hari

  2.To determine the cost estimate to the final cost of the project or Estimate at Completion (EAC), can be calculated with the following formula:

  EAC = (Total anggaran / CPI)

  = ((764.527.700,00/ 0.99)

  = 764,527,700/0.99

  = Rp 765,765,808

Table 14 Rekapitulasi EVM

Hari	Analisis Varians		Analisis Kerja		Analisis Estimasi	
	Waktu(SV)	Biaya(CV)	Waktu(SPI)	Biaya(CPI)	Waktu(ETC)	Biaya(EAC)
1	Rp 0	Rp -33,749	1	0.9984	90.00	Rp 765,732,905
2	Rp 0	Rp -27,489	1	0.9964	90.00	Rp 765,732,905
3	Rp 0	Rp -44,220	1	0.9984	90.00	Rp 765,732,905
4	Rp 1,619,550	Rp -220,120	1.0336	0.9939	85.42	Rp 769,219,842
5	Rp 1,421,990	Rp -338,150	1.0295	0.9874	87.08	Rp 766,570,654
6	Rp 947,980	Rp -588,990	1.0186	0.9888	88.36	Rp 773,187,399
7	Rp 473,970	Rp -560,030	1.008	0.9907	89.29	Rp 771,704,352
8	Rp -40	Rp -733,910	1	0.9893	90.00	Rp 773,706,614
9	Rp 1,619,510	Rp -412,410	1.0258	0.9948	87.91	Rp 768,325,025
10	Rp 1,345,500	Rp -384,870	1.0138	0.9936	88.80	Rp 767,906,488
11	Rp 871,490	Rp -837,510	1.0083	0.991	89.17	Rp 771,470,938
12	Rp 473,830	Rp -733,340	1.0046	0.9927	89.59	Rp 770,149,781
13	Rp -40	Rp -827,800	1	0.9917	90.00	Rp 770,926,389
14	Rp -7,720	Rp -839,340	0.9999	0.9912	90.01	Rp 770,937,896
15	Rp -7,720	Rp -953,280	0.9999	0.9926	90.01	Rp 770,327,361
16	Rp -7,720	Rp -957,830	0.9999	0.993	90.01	Rp 769,917,320
17	Rp -1,600	Rp -2,958,300	1	0.9799	90.00	Rp 780,209,919
18	Rp 4,520	Rp -2,454,750	1	0.9842	90.00	Rp 776,801,178
19	Rp 10,840	Rp -1,953,300	1.0001	0.988	89.99	Rp 773,813,462
20	Rp 16,780	Rp -1,451,850	1.0001	0.9915	89.99	Rp 771,081,896
21	Rp 22,880	Rp -1,450,100	1.0001	0.9919	89.99	Rp 770,770,945
22	Rp 51,850	Rp -927,620	1.0003	0.9951	89.97	Rp 768,292,335
23	Rp 99,270	Rp -383,830	1.0005	0.998	89.96	Rp 766,059,820
24	Rp 161,350	Rp -7,823,160	1.0008	0.9631	89.93	Rp 793,819,643
25	Rp 177,310	Rp -7,313,950	1.0008	0.966	89.93	Rp 790,865,451
26	Rp 166,940	Rp -4,827,600	1.0008	0.9786	89.93	Rp 781,246,372
27	Rp 158,970	Rp -8,341,430	1.0007	0.9649	89.94	Rp 792,338,785
28	Rp 142,150	Rp -8,962,820	1.0006	0.9661	89.95	Rp 791,274,627
29	Rp 129,160	Rp -5,380,580	1.0005	0.9844	89.96	Rp 776,833,166
30	Rp 112,940	Rp -7,401,770	1.0004	0.9718	89.96	Rp 786,715,907
31	Rp 82,530	Rp -5,936,150	1.0003	0.978	89.97	Rp 781,725,665
32	Rp 82,530	Rp -8,448,720	1.0003	0.9699	89.97	Rp 788,234,150
33	Rp 30,420	Rp -8,477,400	1.0002	0.9707	89.98	Rp 787,604,512
34	Rp 14,490	Rp -317,460	1.0001	0.9982	89.99	Rp 765,906,331
35	Rp -25,200	Rp -42,220	0.9999	0.9998	90.01	Rp 764,680,636
36	Rp -42,720	Rp 309,750	0.9998	1.0013	90.02	Rp 763,335,104
37	Rp -113,470	Rp 888,410	0.9996	1.0027	90.04	Rp 762,469,034
38	Rp -99,380	Rp 1,852,970	0.9997	1.0042	90.03	Rp 761,330,114
39	Rp -67,310	Rp 1,877,430	0.9998	1.0057	90.02	Rp 760,194,391
40	Rp -7,480	Rp 1,567,490	1	0.9896	90.00	Rp 772,562,348
41	Rp -16,820	Rp 1,581,230	1	0.9898	90.00	Rp 772,408,244
42	Rp -3,336,790	Rp -3,611,800	0.9801	0.9899	92.90	Rp 772,328,213
43	Rp -3,336,790	Rp -3,611,800	0.9801	0.9899	92.90	Rp 772,328,213
43	Rp -7,673,880	Rp -3,733,990	0.9790	0.9886	91.95	Rp 772,562,348
44	Rp -12,576,500	Rp -4,160,710	0.9684	0.9886	91.13	Rp 773,343,820
45	Rp -13,185,340	Rp -4,373,950	0.9603	0.9888	91.72	Rp 772,406,244
46	Rp -12,391,740	Rp -4,188,150	0.9678	0.989	92.99	Rp 773,031,041
47	Rp -13,038,300	Rp -4,196,860	0.9673	0.9893	93.04	Rp 772,798,624
48	Rp -13,524,440	Rp -4,133,070	0.9688	0.9898	93.09	Rp 772,562,348
49	Rp -12,461,780	Rp -4,078,470	0.9701	0.99	92.77	Rp 772,250,202
50	Rp -7,270,660	Rp -3,891,470	0.9829	0.9908	91.37	Rp 771,626,665
51	Rp -7,104,780	Rp -3,881,070	0.983	0.9907	91.36	Rp 771,704,352
52	Rp -10,802,780	Rp -3,931,790	0.9755	0.991	92.26	Rp 771,470,938
53	Rp -8,975,180	Rp -4,114,690	0.9801	0.9908	91.83	Rp 771,626,665
54	Rp -2,965,480	Rp -4,083,690	0.9936	0.9911	90.58	Rp 771,395,099
55	Rp -10,214,340	Rp -3,865,850	0.9781	0.9904	92.02	Rp 771,004,335
56	Rp -6,857,840	Rp -4,011,750	0.9856	0.9913	91.31	Rp 771,081,896
57	Rp -8,024,760	Rp -4,188,010	0.9838	0.9913	91.15	Rp 771,237,466
58	Rp 237,000	Rp -4,431,810	1.0003	0.9913	89.98	Rp 772,393,099
59	Rp 303,810	Rp -4,389,900	1.0008	0.9914	89.95	Rp 772,159,873
60	Rp -7,660	Rp -4,189,450	1	0.9918	90.00	Rp 771,848,659
61	Rp -15,200	Rp -4,203,190	1	0.992	90.00	Rp 771,693,748
62	Rp 1,047,420	Rp -4,640,390	1.002	0.9913	89.82	Rp 771,237,466
63	Rp 947,000	Rp -4,848,100	0.9982	0.9914	90.18	Rp 771,159,873
64	Rp 849,820	Rp -4,856,010	0.9988	0.9913	90.11	Rp 771,393,099
65	Rp -1,027,200	Rp -7,239,810	0.9945	0.99	90.50	Rp 774,397,487
66	Rp -8,322,810	Rp -7,043,020	0.9887	0.9875	91.03	Rp 774,205,266
67	Rp -4,418,910	Rp -7,043,420	0.9922	0.9882	90.71	Rp 767,443,987
68	Rp -4,120,740	Rp -7,331,450	0.9929	0.9859	90.64	Rp 767,675,168
69	Rp -2,981,390	Rp -7,218,300	0.9949	0.9862	90.46	Rp 767,443,987
70	Rp -7,590	Rp -7,250,450	1	0.9861	90.00	Rp 767,443,987
71	Rp 2,966,430	Rp -7,282,300	1.0049	0.9862	89.56	Rp 767,443,987
72	Rp 4,029,330	Rp -7,721,800	1.0066	0.9858	89.41	Rp 767,906,488
73	Rp 3,051,430	Rp -8,109,440	1.0027	0.985	89.76	Rp 768,289,548
74	Rp 1,946,890	Rp -8,817,610	1.0011	0.9836	89.92	Rp 767,906,488
75	Rp -40,810	Rp -8,819,120	0.9999	0.9836	90.01	Rp 767,368,488
76	Rp -1,340,860	Rp -8,630,310	0.9948	0.9849	90.47	Rp 767,813,168
77	Rp -1,457,350	Rp -7,727,770	0.9938	0.9848	90.50	Rp 767,737,749
78	Rp -1,139,950	Rp -8,460,660	0.9963	0.9843	90.15	Rp 767,366,658
79	Rp 190	Rp -8,797,610	1	0.9828	90.00	Rp 767,752,259
80	Rp -1,340	Rp -8,811,350	1	0.9829	90.00	Rp 767,813,168
81	Rp 1,263,190	Rp -7,764,130	1.0015	0.9835	89.87	Rp 767,368,692
82	Rp 1,096,190	Rp -7,788,810	1.0012	0.9831	89.93	Rp 767,368,692
83	Rp 1,651,480	Rp -8,670,630	1.0023	0.9812	89.79	Rp 767,443,987
84	Rp 1,948,850	Rp -8,818,360	1.0027	0.9795	89.76	Rp 767,368,692
85	Rp -40,180	Rp -8,860,840	0.9999	0.9795	90.01	Rp 767,368,692
86	Rp -1,340,820	Rp -8,881,780	0.9948	0.9795	90.47	Rp 767,921,673
87	Rp -1,457,170	Rp -7,985,480	0.9938	0.9795	90.50	Rp 767,368,692
88	Rp -1,444,810	Rp -8,097,420	0.9938	0.9795	90.50	Rp 767,368,692
89	Rp -903,860	Rp -8,894,340	0.9969	0.9802	90.30	Rp 767,443,987
90	Rp -8,841,595	Rp 11,452,106	0.9869	0.9903	90.10	Rp 776,170,254

The recapitulation result performance project uses the method earned value management we can conclude that projects that have worked for 90 days. That on the day to 1-7, 9-12,18-34,58 - 59,62 .71 -74,79,81-84 project work done more quickly in accordance with the timetable in the plan but on the tenth day 8,13-17,35-57,60-61,63-70,75-78,80,85-90 project work experience the delay of the planned schedule, so that the work of the project experienced a delay 1 day until the time of working of the project completed during 91 days to the cost is greater than that in in need and it can be said the project experienced a delay for 1 day so not in accordance with the planned costs. Rp 764,527,700 but the workmanship of the completed project at a cost of Rp 776,170 Rp,254 with a difference – 11,642,554 If the difference is worth negative then the company suffered losses due to the costs and disadvantages must be issued if the difference is positive then the company experienced gains and the rest of the excess of the cost can be kept for the purposes of the company.

3. FINAL

Based on the research and the results of tests have been done on the the information system project management in cv .Perennial srinandar prosperous, CV. Srinandar Makmur Abadi, can pull some conclusion as follows

1. Information system development project management in CV. Srinandar Makmur Abadi the manager could help make the planning in time and money project.

2. System that built can help project manager in managing the risk of the project, so problems arise during the project can be identified before the project project done and the risks project that appears could have been treated well by the company

3. The system can help project manager in the conduct of the manufacture of timetable ptoyek

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