

ENGINEUNITY TUTORIAL



Making Project Manager Decisions



Making Project Manager Decisions

Project managers are concerned with the overall planning and co-ordination of a project from inception to completion aimed at meeting the client's requirements and ensuring completion on time, within cost and to the required quality standards.

A project manager with well-matched experience for a particular type of job will handle available resources more efficiently, and improve the productivity of the labour on site, whilst a project manager with inappropriate experience will impair contract efficiency.

Project Managers employed by the company are either :-

- In the **idle pool** awaiting a placement on site; once a job finishes the project manager on site is placed in the idle pool. Idle project managers still have to be paid, so its far more cost-effective to have them working on site than doing nothing.
- Allocated to a **specific job in progress**.

Decisions need to be made about :-

- Which idle project managers to payoff.
- Allocating suitable project managers to jobs in progress, especially those that don't currently have one, or have a poorly performing one. The project manager can come from the idle pool, another job or from the market (a list of available ones who have registered with the recruitment agency).



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period			
				Name	Base	Name	Base	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	0
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK	No	0
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK	No	0
56	UK	Building & Commercial	1st period					No	0
69	UK	Energy	1st period					No	0

At the start of period 5 the company employs the following project managers :-

- Yi Zhou in the idle pool
- Gordon Simcoe on job 1
- Doug Fordham on job 25
- Lee Spencer on job 29



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period		
				Name	Base	Name	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon	No	0
25	US	Transport	2nd period	Doug Fordham	UK	Doug F		0
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee S		0
56	UK	Building & Commercial	1st period					0
69	UK	Energy	1st period					0

If possible the idle project manager, **Yi Zhou**, should be placed on a suitable job, and there are 2 jobs at the beginning of this period that do not have a project manager, both of which have just started :-

- Job 56, a Building and Commercial contract
- Job 69, an Energy contract

Is Yi Zhou suitable for either of the jobs ?

We can determine suitability by using the **Display details** option.



Making Project Manager Decisions

Project Manager Details

Gradings

YI ZHOU

Based in: United Kingdom

Age: 33

Profile: Yi's family settled in the East Midlands many years ago, and after graduating with an excellent degree from Leicester University, Yi moved abroad to work in Asia for 3 years on cartographic and setting-out work. He then changed continents to work for 6 years in Africa as a site engineer on a number of major water supply projects. Yi recently returned to the UK to work for a company specialising in building and maintaining dams, and has recently secured his first site management role on a water filtration plant scheme in the Lake District.



Yi is a very clever and competent individual whose easy manner makes friends everywhere. He still has a lot to learn, but is always willing to take on a new challenge, and is sure to go a long way in the Industry. Yi recently became engaged, and has a real passion for endangered animals, particularly exotic birds, and he is keen to open a sanctuary if the opportunity arises.

Qualifications: BSc Land Surveying

Salary: 46,000 per annum

Where used						Improvement factors					Deterioration factors			
Per	Status	Job	In	Sector	BIM	Basic grading	Affect of time with the company	%	Expectation level	Affect of bonus payment	Affect of job location	Affect of taking over from another	Overall grading	Reason for leaving
3	On Job	22	UK	Water & Sewage	No	good	none	3 %	History Level	small	none	none	very good	
4	On Job	22	UK	Water & Sewage	No	good	marginal	3 %	History Level	small	none	none	very good	

Yi Zhou's **profile and past history** with the company indicate project management experience in the Water & Sewage sector.

Yi Zhou is clearly not suitable for either job 56, the Building & Commercial contract, or job 69, the Energy contract.



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

JOBS IN PROGRESS

- Recruit from the agency
- Display details for Yi Zhou
- Payoff Yi Zhou from idle pool
- Transfer Yi Zhou to a job

As Yi Zhou is not suitable for either job 56 or 69, we can either :-

1. **Pay him off** from the company (**Payoff from idle pool** option).

OR

2. **Leave him in the idle pool** if we are bidding for jobs in the current period that he may be suitable for next period, in this case water & sewage contracts. Although this still incurs a salary cost each period, for the right people it may be a price worth paying because paying them off **may be risky** as there is no guarantee they will be available again in the following period.

The company's strategy is to target **Water & Sewage jobs** in the future, so we will leave him in the idle pool for now.

KEY POINTS

If an idle project manager is suitable for a job in progress, the **'Transfer ??? To a job'** option should be used to move the project manager from the idle pool to the appropriate job.



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period			
				Name	Base	Name	Base	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	0
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK	No	0
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK	No	0
56	UK	Building & Commercial	1st period					No	0
69	UK	Energy	1st period					No	0

Display details for job 69

Recruit from the agency onto job 69

We still need to find suitable project managers for jobs 56 and 69.

We will start with job 69, the Energy contract by using the **Recruit from the agency** option to find a suitable project manager from the **PROJECT MANAGER RECRUITMENT AGENCY**.



Making Project Manager Decisions

Project Manager Recruitment Agency


Display project managers where the profile contains the phrase:

Details					Status details
Name	Base country	Age	Qualifications	Annual salary	Status
Lenny Gravett	United Kingdom	38	HNC Mining Surveying/Civil Engineering	51,000	Available
Ralph Moran	United Kingdom	48	BSc Civil Engineering, FICE, CEng	64,000	Available
Reece Wilton	United Kingdom	31	BEng Civil Engineering	42,000	Available
Ron Garvey	United Kingdom	45	BEng Building Engineering, MCIOB	52,000	Available

LENNY GRAVETT

After gaining his HNC at a Further Education college in Wakefield, Lenny spent 6 years on a management traineeship with the National Coal Board. When the coal industry went into decline Lenny was unfortunately made redundant, but was able to obtain a site engineering position with a National Utility Company supplying electricity, but had to move to the South of England to take up the post. Since then, he has been promoted to senior engineer and has worked on numerous energy-related projects, in particular working on technically challenging sub station upgrades.

Lenny has received glowing reports for being able to sort out difficult problems. He pays great attention to detail and is a pleasure to manage. Managing difficult colleagues. Happily married for many years to his childhood sweetheart, Lenny is a keen quizmaster at his local pub. He has also appeared on a quiz show.



The **Status** column shows the availability of project managers in the agency.

Project managers may be **unavailable** for a number of reasons :-

- They may already be allocated to a job in progress
- They may be off work for personal reasons, such as illness.
- If they have previously resigned from the company, or have been paid off, they may bear a grudge and be unwilling to work for the company again for a while.

Bearing in mind that job 69 is an Energy contract in the UK, we **use the filters** to narrow down the list to find a suitable project manager whose profile indicates that they :-

- Work in the Energy sector
- Are based in the United Kingdom
- Are available



Making Project Manager Decisions

Project Manager Recruitment Agency

Display project managers where the profile contains the phrase:

Details					Status details
Name	Base country	Age	Qualifications	Annual salary	Status
Lenny Gravett	United Kingdom	38	HNC Mining Surveying/Civil Engineering	51,000	Available
Ralph Moran	United Kingdom	48	BSc Civil Engineering, FICE, CEng	64,000	Available
Reece Wilton	United Kingdom	31	BEng Civil Engineering	42,000	Available
Ron Garvey	United Kingdom	45	BEng Building Engineering, MCIOB	52,000	Available

Select

RON GARVEY

On graduating, Ron worked for a consultancy specialising in energy contracts. This was followed by 6 years as senior planning engineer on the Cumbria power plant in Cumbria, a project that earned numerous awards. Since then he has progressed into site management, working for a variety of clients in the UK, and recently on some wind farm projects on the East Coast.



Ron is very conscientious, and does not cut corners to get the job done, which resulted in disciplinary action a few years ago, and this has excluded him from some projects. He is married with two children, and still a keen rugby player, although he only turns out for the club on a few occasions.

The key to finding the right person is to review the profile (or curriculum vitae), which covers both work and personal details, both of which may be important.

As well as relevant experience for the job, **project manager location** is one of the other factors that affects project manager performance. There is an adverse impact on performance if the project manager is not based where the job is, although this is **only a minor consideration in relation to the expertise of the project manager**.

On closer examination **Ron Garvey** appears an ideal candidate, having extensive project management experience on Energy jobs, and also being based in the UK, where job 69 is located.

The **Select** option is used to choose Ron.

KEY POINTS

The list of project managers signed up to the **Project Manager Agency** is dynamic, and can change from period to period.



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period			
				Name	Base	Name	Base	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	0
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK	No	0
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK	No	0
56	UK	Building & Commercial	1st period			Scott Thomas	AUS	Yes	0
69	UK	Energy	1st period			Ron Garvey	UK	Yes	0

A suitable project manager is also recruited onto jobs 56 from the Project Manager Recruitment Agency.

Project managers newly recruited in the current period have a “**New**” status of “**Yes**”.

KEY POINTS

Although we have now allocated appropriate project managers to the jobs that did not already have one, it may be worth using the **Display details** option for the jobs that already have project managers to determine if they were the most suitable ones for the jobs. If not, they could be replaced.



Making Project Manager Decisions

Industry parameters

FINANCE **OVERHEADS** **PROCUREMENT** **JOB PROGRESSION**

PROJECT MANAGERS

- Recruiting costs: 10 % annual salary
- Paying off costs: 20 % annual salary
- Relocating costs: 6 % annual salary

OVERMANNING LIMITS

	Effective labour limit above the planned level
al	35 %
al	35 %
rt	45 %
gy	18 %
ge	25 %

OWN LABOUR

- Recruits limited to: 70 this period
- Each new recruit: 2,500 per person
- Recruit payoff rate: 750 per person
- Recruiter costs: 6,000 per annum

SUBCONTRACTOR

- Recruits per subcontractor each period:
- Recruiter costs: 22,500 per annum

As well as recruiting project managers from the agency, there are a **number of options** available for moving project managers between the idle pool and jobs in progress.

In addition, there are a number of **charges** incurred for :-

- Recruiting a project manager from the agency
- Paying off a project manager from either the idle pool or a job in progress
- Relocating a project manager from one job to another

The costs are shown in the **Industry parameters**.



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period			
				Name	Base	Name	Base	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	0
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK		0
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK		0
56	UK	Building & Commercial	1st period			Scott Thomas			0
69	UK	Energy	1st period			Ron Garvey			0

PROJECT MANAGER BONUS

The performance level of project managers can be improved by paying them a **bonus**. This is a % of their salary for the period (quarterly salary).

KEY POINTS

Project manager **expectations** can change as the operating performance of the company changes, and may be higher or lower than the History level. This will affect the affect bonus levels have on performance.



Making Project Manager Decisions

Project Manager Hist

Navigate to "Main menu/Making decisions/Job Progression Decisions (Project Managers)/Key information/Project manager history"

Gradings

Name	Where used							Improvement factors				Deterioration factors				
	Base	Per	Status	Job	In	Sector	BIM	Basic grading	Affect of time with the company	Bonus payments in the period		Affect of bonus payment	Affect of job location	Affect of taking over from another	Overall grading	Reason for leaving
										%	Expectation level					
Doug Fordham	UK	4	On Job	25	US	Transport	No	above avg	none	3 %	History Level	small	noticeable	none	above avg	
Gordon Simcoe	UK	3	On Job	1	UK	Building & Commercial	Yes	very good	none	4 %	History Level	reasonable	none	none	excellent	
		4	On Job	1	UK	Building & Commercial	Yes	very good	marginal	4 %	History Level	reasonable	none	none	excellent	
Lee Spencer	UK	4	On Job	29	UK	Industrial	Yes	very good	none	4 %	History Level	reasonable	none	none	excellent	
Yi Zhou	UK	3	On Job	22	UK	Water & Sewage	No	good	none	3 %	History Level	small	none	none	very good	
		4	On Job	22	UK	Water & Sewage	No	good	marginal	3 %	History Level	small	none	none	very good	

GORDON SIMCOE

Age: 40

Profile: After graduation from Loughborough University, Gordon



But how do we know the affects that different levels of bonus have on performance ?

The clues lie in the **Project manager history**, which shows the level of bonus paid for each period a project manager has worked for the company (on site), and the affects.

We will try and boost the performance of Gordon Simcoe considerably by paying him an 8% bonus, double the previous amount paid that produced a reasonable improvement in performance.

We will also review the performance of the other project managers, and pay appropriate bonuses to boost performance, and keep them happy.

KEY POINTS

- If too much bonus is paid it, it may be money down the drain, because there comes a point when the performance does not improve no matter how much bonus is paid; **the trick is to find the level.**
- **The affects of bonus payments** are the same for all project managers.



Making Project Manager Decisions

PROJECT MANAGER RESIGNATIONS

Project managers can **resign** from the company for a number of reasons :-

- Good project managers whose **average bonus over the time** they are working on a particular job is below a certain level may resign because they do not feel they are being **adequately rewarded**, and the average level can vary for each project manager. In such a case the project manager may bear a grudge, and may not be available again for some time in the future.
- The top performing project managers can be **poached** by rival companies regardless of the level of bonus they are paid, although paying a good bonus will help to lesson the chance of this happening. Once poached, a project manager will not be available again.

Project managers resign from a job at the end of the period, providing that the job is still in progress.

KEY POINTS

Project managers never resign in their first period on a job.

JOBS IN PROGRESS										
				Last period		This period				
Job	Country	Sector	Status	Name	Base	Name	Base	New	% bonus	
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	8	
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK	No	6	
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK	No	8	
56	UK	Building & Commercial	1st period			Scott Thomas	AUS	Yes	5	
69	UK	Energy	1st period			Ron Garvey	UK	Yes	5	
<input type="button" value="Display details for job 69"/>						Recruit from the agency onto job 69 Display details for Ron Garvey Payoff Ron Garvey from the job Transfer Ron Garvey to the idle pool Transfer Ron Garvey to another job				



Making Project Manager Decisions

MAKING Job progression decisions (Project managers) for period 5 in the Early Years

Change period Key information Help

IDLE PROJECT MANAGER POOL

Last period		This period		
Name	Base	Name	Base	New
Yi Zhou	UK	Yi Zhou	UK	No

Recruit from the agency
 Display details for Yi Zhou
 Payoff Yi Zhou from idle pool
 Transfer Yi Zhou to a job

JOBS IN PROGRESS

Job	Country	Sector	Status	Last period		This period			
				Name	Base	Name	Base	New	% bonus
1	UK	Building & Commercial	3rd period	Gordon Simcoe	UK	Gordon Simcoe	UK	No	8
25	US	Transport	2nd period	Doug Fordham	UK	Doug Fordham	UK	No	6
29	UK	Industrial	2nd period	Lee Spencer	UK	Lee Spencer	UK	No	8
56	UK	Building & Commercial	1st period			Scott Thomas	AUS	Yes	5
69	UK	Energy	1st period			Ron Garvey	UK	Yes	5

Appropriate project managers have now been allocated to all the company's jobs in progress, and next period the **Project manager history** can be used to review the performance of each project manager.

The **Project manager recruitment agency** is dynamic, and project managers can come and go from the agency. This makes it essential that it is reviewed each period to ensure that the best possible project managers are being used by the company.