

INGENUITY TUTORIAL



Investments



Investments

MAKING Financial decisions for period 5 in the Early Years

Change period Key information Help

ASSET BASE

	Before decisions	After decisions	
Cash account:	-249,890	-616,875	WARNING! Cash account exceeded overdraft limit of 600,000
Capital base:	4,383,088	4,646,073	
Investments:	719,767	719,767	
Company value:	4,852,965	4,748,965	

DIVIDEND

Amount to pay shareholders: (2% of Equity of 5,200,000)

CAPITAL BASE

Increase by: (limited to 262,985)

Reduce by: (limited to 876,618)

INVESTMENTS

Name	Description	Initial Value	Increase by	Reduce by	Required
Dubai Bank Ltd	Banking services	102,900	0	0	102,900
Emirate Solutions	Management consultants	208,067	0	0	208,067
HSC Cro...	Travel company	102,100	0	0	102,100
The JT...	Management consultants	102,700	0	0	102,700
The S...	Management consultants	102,000	0	0	102,000
Ther...	Suppliers	102,000	0	0	102,000

INVESTMENTS

The core business of the company is procuring and progressing contracts, and if done successfully the company will report a healthy operating profit, and increase the company's value. However, there are alternative ways of increasing the value of the company, such as by investing in other concerns, which may or may not be construction-related.

There are **two ways** of increasing the company's value through investments :-

- **Investment returns**; that change the value of the investments
- **Investment benefits**; that reduce costs on jobs in progress (build or risk costs)

We can examine the company's current 6 investments by using the **Display details** option.

We will first look at the investment in **Emirate Solutions**.



Investments

Investment Details

EMIRATE SOLUTIONS

Desc: Management consultants

Profile: Based in Ajman in the UAE, Emirate Solutions are one of the most influential and respected risk management companies serving serving clients across the world in the construction industry.

Since their inception in 2005, the company have made meteroic strides, establishing a network of offices across the Middle East and Internationally. They have a reputation for delivering effective risk management solutions to their clients in the energy sector, in which they specialise. Their advice recently saved a major client a fortune when constuction of a large oil well ran into difficulties, advice that won the company a prestigious risk management award from a global construction industry magazine.

PERFORMANCE HISTORY

PERIOD RETURNS

Period	% return to investors	Company investment		Information for investors
		Amount invested	Investment return	
1	2.5 %	0	0	Nothing to report
2	2.6 %	0	0	Nothing to report
3	2.4 %	100,000	2,400	Nothing to report
4	2.8 %	202,400	5,667	Nothing to report

BENEFITS - REDUCTION IN JOB COSTS

	Build cost	Risk cost	% of total
Industrial	0	0	0 %
Building & Commercial	0	0	0 %
Transport	0	0	0 %
Energy	0	0	0 %
Water & Sewage	0	0	0 %
	0	0	

INVESTMENT RETURNS

Cash returns vary each period depending upon the performance of an investment, and either increase or reduce the value of an investment.

Whether or not the investment has been a success, in terms of the cash return, and would be worth investing further in would depend upon looking deeper into the prevalent bank rates, both credit and overdraft rates (as defined in the **Industry parameters**) at the time the investments were made, as well as the balance of the cash account.

During periods 1 to 4 the returns from **Emirate Solutions** were very good, between 2.4 and 2.8% each period, and it is certainly worth considering further investment if the cash account will support it.



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BENEFITS - REDUCTION IN JOB COSTS

	Build cost	Risk cost	% of total
Material	0	0	0 %
Build	0	0	0 %
	0	0	0 %
	0	0	0 %
	0	0	0 %

INVESTMENT BENEFITS

As well as investing in other companies to yield a better return than can be obtained from the bank, there is **potentially an even more lucrative reason** for investing in other concerns.

If enough money is invested in particular concerns, **costs may be reduced** on work in progress in specific sectors :-

- **BUILD COST REDUCTIONS;** These are earned by investing in businesses that supply commodities that are used directly in the construction phase, such as materials and plant e.g., investing in an asphalt company would reduce build costs for any Transport work being undertaken.
- **RISK COST REDUCTIONS;** These are earned by investing in management consultants that offer risk management services to the construction industry.

If the investment profile indicates potential benefits to jobs in progress, the benefits are only accrued if enough money is invested.



Investments

Industry parameters

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

CASH ACCOUNT

Credit rate: 2 % per annum
 Overdraft rate: 6.6 % per annum
 Overdraft limit: 600,000

CAPITAL BASE

Increase limited to: 6 % this period
 Sold off limited to: 20 % this period
 Depreciation rate: 2.5 % per annum
 Capital writing down: 25 % per annum

INVESTMENTS

Restrictions

There cannot be more than: 6 investments at any point in time
 For each investment the maximum increase in the investment is limited to: 100000 each period

Benefits for jobs in progress

A minimum amount of: 200000 needs to have been invested to obtain any benefits for jobs in progress

For investments that deliver cost reductions, once the minimum amount has been invested to obtain benefits, and depending on how much has been invested, the build cost reductions are between: 0.3 and 0.5 %

For investments that deliver management services, once the minimum amount has been invested to obtain benefits, and depending on how much has been investment, for risks that strike the risk cost reductions are between: 30 and 40 %

For investments that deliver job delay reductions, once the minimum amount has been invested to obtain benefits, and depending on how much has been investment, job delay reductions are between: 25 and 30 %

Costs

The **Industry parameters** show that a **minimum amount of 200,000 needs to be invested** to obtain any benefits. This is the amount invested after the financial decisions have been made in the period.

As the **increase in an investment in a period is limited to 100,000**, it would take at least 2 periods to gain any cost reductions from an investment.

KEY POINTS

If an investment is not performing well, with negative investment returns, and the value of the investment falls, it may take longer than 2 periods for the investment value to reach the minimum level to gain any benefits.



Investments

Industry parameters



FINANCE

OVERHEADS

PROCUREMENT

JOB PROGRESSION

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For investments that deliver build cost reductions, once the minimum amount has been invested to obtain benefits, and depending upon how much has been invested, the build cost reductions are between: 0.3 and 0.5 %

For investments that provide risk management services, once the minimum amount has been invested to obtain benefits, and depending upon how much has been investment, for risks that strike the risk cost reductions are between: 30 and 40 %
 job delay reductions are between: 25 and 30 %

Cost reduction

Once the minimum investment threshold has been met, the cost reductions for each applicable job in progress are :-

- Build cost reductions of between 0.3 and 0.5%
- Risk cost reductions of between 30 and 40% for each risk that strikes

In the case of investing in risk management companies, as well as risk cost reductions, a further benefit is that if a risk strikes the potential job delay is also reduced, by between 25 and 30%.

KEY POINTS

There are 2 tiers of cost reductions, a lower and upper tier. You are not told the investment required to obtain the upper tier saving, and this knowledge can only be acquired as time progresses, but there is a linear increment between the two tiers as the investment increases.



Investments

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BENEFITS - REDUCTION IN JOB COSTS

	Build cost	Risk cost	% of total
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Building & Commercial	0	0	0 %
Transport	0	0	0 %
Energy	0	0	0 %
Water & Sewage	0	0	0 %
		0	

During period 4 the investment in Emirate Solutions was 202,400, just enough to obtain benefits, but were any benefits gained ?

The benefits from investing in **Emirate Solutions** are **reductions in risk costs in the energy sector**. This is clear from the phrase in the company's profile that states "... They have a reputation for delivering risk management solutions to their client in the energy sector, in which they specialise"

We can see that to date that no risk costs have been reduced on energy jobs, but this is not unexpected as the company have not yet progressed any energy jobs, although this is part of the long term strategy.

KEY POINTS

- If enough money is invested, benefits can be accrued even if the investment is performing badly. However, **poorly performing investments can cease trading**. This will be discussed further in due course.
- The **benefits are cumulative** e.g., a job can receive cost reductions from more than one investment each period.



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Reduce by: (limited to 876,618)

INVESTMENTS

Name	Description	Initial Value	Increase by	Reduce by	Required
Dubai Bank Ltd	Banking services	102,900	0	0	102,900
Emirate Solutions	Management consultants	208,067	0	0	208,067
HSC Crossing	Travel company	102,100	0	0	102,100
The JT Flower Partnership	Management consultants	102,700	0	0	102,700
The Saxon Group	Management consultants	102,000	0	0	102,000
Thermoguard	Suppliers	102,000	0	0	102,000

The company's long-term strategy is to target jobs in the Building and Commercial, Energy and Water & Sewage sectors, and bearing this in mind on close investigation of all the current investments the following decisions are made :-

1. To increase the **investment in Emirate Solutions by 50,000** to obtain even more benefits in the Energy sector.
2. Thermoguard provide build cost reductions for Building and Commercial jobs, so **the investment will be increased by 100,000 (the maximum allowed in one period)** to take it over the 200,000 so that benefits can be accrued (providing we are progressing some B&C jobs)
3. The JT Flower Partnership provide risk cost reductions for Building and Commercial jobs, so **the investment will be increased by 100,000** to take it over the 200,000 so that benefits can be accrued
4. To **reduce the investments in Dubai Bank Ltd, HSC Crossing and The Saxon Group to 0**, and remove them completely, as none of them on close examination provide any benefits to us as a contractor in the construction industry. We will be looking for other investments to take their place.



Investments

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INVESTMENTS

Name	Description	Initial Value	Increase by	Reduce by	Required
Dubai Bank Ltd	Banking services	102,900	0	102900	0
Emirate Solutions	Management consultants	208,067	50000	0	258,067
HSC Crossing	Travel company	102,100	0	102100	0
The JT Flower Partnership	Management consultants	102,700	100000	0	202,700
The Saxon Group	Management consultants	102,000	0	102000	0
Thermoguard	Suppliers	102,000	100000	0	202,000

Investments can be removed quickly using the **Remove investment for ...** option, which has the following affect :-

1. For **existing investments**, where the “Initial value” is > 0, the “Reduced by” level is set to the “Initial Value” to set the “Required” level to 0 to show that the investment has been removed, but it will not disappear from the investment list until the following period.
2. For **new investments**, where the “Initial value” is 0, the investment will be immediately removed from the investment list.



Investments

MAKING Financial decisions for period 5 in the Early Years

Change period Key information Help

ASSET BASE

Before decisions

Cash account: -249,890
 Capital base: 4,383,088
 Investments: 719,767
 Company value: 4,852,965

DIVIDEND

Amount to pay shareholders:

CAPITAL BASE

Increase by: 262985 (limited by...)
 Reduce by: 0 (limited by...)

INVESTMENTS Add investment

Name	Description	Initial Value	Increase by	Reduce by	Required
Dubai Bank Ltd	Banking services	102,900	0	102900	0
Emirate Solutions	Management consultants	208,067	50000	0	258,067
HSC Crossing	Travel company	102,100	0	102100	0
The JT Flower Partnership	Management consultants	102,700	100000	0	202,700
The Saxon Group	Management consultants	102,000	0	102000	0
Thermoguard	Suppliers	102,000	100000	0	202,000

Display details for Emirate Solutions
 Remove investment for Emirate Solutions

The company now has 3 current investments.

The **Industry parameters** show that there can be no more than 6 investments, so it is possible to invest in 3 further concerns.

The **Add investment** option can be used to review a selection of other companies that can be invested in.

INVESTMENTS

Restrictions

There cannot be more than: **6** investments at any point in time

For each investment the maximum increase in the investment is limited to: **100000** each period



Investments

Investment Opportunities

Display investments where the profile contains the phrase:

[All] ▼

Name	Description	Status
Drivedown Piling Ltd	Suppliers	Available
Dubai Bank Ltd	Banking services	Already investing in
Emirate Solutions	Management consultants	Already investing in
Enerstrom Nuclear Services Group	Nuclear energy services	Available
GG Global Fashion	Fashion retailer	Available
HSC Crossing	Travel company	Already investing in
Norfolk Consultants	Property consultants	Available
Perth Homes Plc	Specialist housebuilders	Available
Phoenix Horizons	Management consultants	Available
Retail Remedies	Management consultants	Available
The JT Flower Partnership	Management consultants	Already investing in
The Saxon Group	Management consultants	Already investing in
The Thistle Group	Management consultants	Available
Thermoguard	Suppliers	Already investing in
UK Crane Hire	Suppliers	Available
Zenor Group	Suppliers	Available

Select

DRIVEDOWN PILING LTD

Since the 1920's, UK based Drivedown Piling Ltd have been a leader in the piling industry, providing equipment to contractors working in all sectors of the global construction industry, except water & sewage, from their regional offices, and offering a diverse range of systems capable of solving the most complex foundation problems.

A recent leaked internal memo has revealed that a recent major investment in new, high performance plant has proved costly with operational issues coming under scrutiny, and shareholders are nervously awaiting the latest quarterly financial results.

PERIOD RETURNS

Period	% return to investors	Company investment		Information for investors
		Amount invested	Investment return	
1	-1.4 %	0	0	Nothing to report
2	-1.1 %	0	0	Nothing to report
3	-1.2 %	0	0	Nothing to report
4	-1.9 %	0	0	Nothing to report

For each available concern, the following information is given :-

- The **profile** describes the concern, and gives clues as to whether or not benefits may be accrued by investing in the business.
- The **period returns** gives the % return given in previous periods to all investors, and details any monies the company may have invested.
- The **information for investors** is news about the company that can highlight any issues that investors need to be aware of, such as if the company is having problems, and may cease trading.

Taking into account the current cash account balance, bank rates, potential returns and benefits from the concerns, a decision would now be made about whether or not its worth investing any cash in any of the available opportunities.



Investments

Investment Opportunities

Display investments where the profile contains the phrase:

[All] ▼

Name	Description	Status
Drivedown Piling Ltd	Suppliers	Available
Dubai Bank Ltd	Banking services	Already investing in
Emirate Solutions	Management consultants	Already investing in
Enerstrom Nuclear Services Group	Nuclear energy services	Available
GG Global Fashion	Fashion retailer	Available
HSC Crossing	Travel company	Already investing in
Norfolk Consultants	Property consultants	Available
Perth Homes Plc	Specialist housebuilders	Available
Phoenix Horizons	Management consultants	Available
Retail Remedies	Management consultants	Available
The JT Flower Partnership	Management consultants	Already investing in
The Saxon Group	Management consultants	Already investing in
The Thistle Group	Management consultants	Available
Thermoguard	Suppliers	Already investing in
UK Crane Hire	Suppliers	Available
Zenor Group	Suppliers	Available

Select

UK CRANE HIRE

From its base in Birmingham, and with depots throughout the UK, UK Crane Hire has emerged as one of the leading independent crane hirers to contractors working in all sectors of the Construction Industry, providing a diverse range of equipment such as crane barges, crawler cranes and tower cranes.

The company recently bought a stake in Best Cranes, a large American company that supplies special... contracts, a move which the present board of...

PERIOD RETURNS

Period	% return to investors	Company investment		Information for investors
		Amount invested	Investment return	
1	1.8 %	0	0	Nothing to report
2	1.5 %	0	0	Nothing to report
3	1.9 %	0	0	Nothing to report

At the moment the company is almost up to the 600,000 overdraft limit, and no further investments can be made.

However, for future reference a detailed examination of the investments that the company is not already investing, with a status of 'available' is made, and in the future the company would certainly look to invest in **UK Crane Hire**, whose profile indicates that they supply cranes and associated equipment to all sectors of the construction industry; an excellent choice to improve job and company profitability.

KEY POINTS

The list of available investments is not static, and can increase as time goes by, so the Financial Manager must be looking each period at potential new investments that are in line with the company's growth strategy.



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Finding an investment opportunity that offers good returns and benefits is not always possible, and often **key decisions have to be made balancing risk and reward**.

For example, an investment opportunity may arise that offers build cost savings in all sectors of the Construction Industry, but the investment returns may not be very good.

In this scenario, the **net gain from the build cost reductions would almost certainly outweigh the negative investment returns**, and it would be still be the most effective option to continue with the investment.

However, the Financial Manager must also bear in mind that the investment may run into difficulty, and **cease trading**, a decision that could impact on the profitability of the company as a proportion of the investment could be lost.



Investments

Investment Details

NATIONAL AGGREGATE PLC

Desc: **Suppliers**

Profile: Based in Swindon, but operating from locations all over the UK, National Aggregate Plc offer a diverse range of products and services, including aggregates, asphalt, concrete, mortars, bricks, specialist plasters, bagged aggregates, silica sands and an extensive range of industrial minerals and materials, which they supply to contractors working in the industrial, building & commercial and transport sectors of the construction industry, in both the UK and worldwide.

The company recently underwent a management shake up to try and reverse the fortunes from a number of their loss making quarries.

PERFORMANCE HISTORY

PERIOD RETURNS

Period	% return to investors	Company investment		Information for investors
		Amount invested	Investment return	
1	-1.3 %	0	0	Nothing to report
2	-1.5 %	0	0	Nothing to report
3	-1.6 %	0	0	Nothing to report
4	-2.0 %	0	0	Nothing to report
5	-1.2 %	100,000	-1,200	Nothing to report
6	-1.6 %	198,800	-3,181	Nothing to report
7	-1.4 %	295,619	-4,139	Directors call emergency board meeting
8	-1.7 %	291,480	-4,955	Threat of administration next period

BENEFITS - REDUCTION IN JOB COSTS

	Build cost	Risk cost	% of total
Industrial	12,263	0	18 %
Building & Commercial	32,145	0	47 %
Transport	23,617	0	35 %
Energy	0	0	0 %
Water & Sewage	0	0	0 %
Total	68,025	0	

INVESTMENTS THAT CEASE TRADING

How do we know if one of our investments may cease trading ?

The clues lie in the **information for investors**, which should be carefully monitored each period for signs that the company may be in trouble.

Consider the example of **National Aggregate PLC**. The directors called an emergency board meeting in period 7, and in period 8 it became obvious that there was a threat of administration in period 9.

Faced with this information, **at the beginning of period 9** the Financial Manager must decide whether to remove all the investment in National Aggregate PLC, or continue investing in the hope that the company does not go bust.

We will now look at what happens if the investment concern does go bust.



Investments

Industry parameters



FINANCE

OVERHEADS

PROCUREMENT

JOB PROGRESSION

CASH ACCOUNT

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 job delay reductions are between: 25 and 30 %

Cease trading

If an investment company ceases trading, the amount invested recovered is between: 25 and 85 %

If an investment concern ceases trading , a % of the current investment is recovered, as defined in the **Industry information**.

The **actual amount recovered** depends upon how badly the investment concern is performing, with the minimum % recovered from those performing the worst.

KEY POINTS

The money recovered when an investment ceases trading is paid into the cash account. The net value of the company will fall by the amount lost.