

Enginuity



**Using on Company Graduate/Management
Development Programmes**



Introduction



People are the key asset of any business, and their personal and professional development is essential to the success of the business.

In house and external training programmes, such as Graduate and Management Development Programmes, provide a means to equip people with the technical skills needed to undertake their own jobs, but how often do they have the opportunity to **acquire an understanding of the challenges and decisions that face their corporate management on a daily basis ?**

ENGINUITY competitions provide management and leadership training that is relevant and appropriate for today's construction professionals worldwide, particularly those in the early stages of their careers.

Using a sophisticated computer simulation, competing teams are given the task of managing a UK-based global construction business, with jobs, clients, competitors and people across different continents and countries, resulting in unique challenges and opportunities, which will require some special management skills to be successful.

Each team's progress against the other competing teams is based upon league tables based upon a number of Key Performance Indicators.

ENGINUITY competitions have already been integrated into the training programmes of a number of leading UK Construction Businesses.



www.macegroup.com

Mace is an international consultancy and construction company, offering integrated services across the full property and infrastructure life cycle

Graduate Development Programme



www.costain.com

Costain are one of the UK's leading engineering solutions providers, delivering integrated consulting, project delivery and maintenance services to major blue-chip customers.

Director 15 Programme

PLEASE VISIT THE WEBSITE FOR FURTHER DETAILS

www.enginuitycomp.co.uk



www.laingorourke.com

Laing O'Rourke is an international engineering enterprise, founded on 164 years of experience, and delivering a single-source solution for some of the world's most prestigious organisations.

Graduate Development Programme "Leading a Business" module



www.urs.com

With a global network of offices in nearly 50 countries, URS is one of the industry's largest and most diverse providers of fully integrated engineering, construction, and technical services.

Graduate Development Programme



The Task



A **new management team** are needed to run a **UK-based global construction business** that has only been in existence for one year.



Although based in the UK, **expansion into overseas markets** may be an attractive proposition, depending upon the economic climate in different parts of the world.

Working in other countries presents some **particular challenges** to overcome, such as environmental problems and specialised local competition for work.

However, the potential **rewards and opportunities** of operating globally may outweigh the risks.

To grow the business the new management team will need to devise an **effective business strategy**.

To implement the business strategy **decisions** will have to be made in a number of key areas :-

- Financial management
- Overhead management
- Procurement
- Job progression

Decisions are made for a quarter, or 3 months.





Business Strategy



The new management team need to develop a clear strategy to :-

- **Grow** the business and improve its **value**
- Enhance the company's **reputation** with clients
- Keep **shareholders** happy



The value of the company is measured by a number of assets, such as the company cash account, capital base and investments.

OBJECTIVES

Developing an effective strategy will involve acquiring a good understanding of :-

- The **economic environment** in which the company is operating
- The **strengths and weaknesses** of the business as it currently stands

The strategy will consist of **number of objectives** relating to :-

- Identifying new work in different sectors and locations (UK/Overseas)
- Expanding the infrastructure of the business to achieve growth
- Winning new work in a competitive bidding environment
- Improving profitability through effective job and overhead management

The company's strategy will need to be revised as performance changes.



Environment, Strengths & Weaknesses



ENVIRONMENT

Realistic scenario enabling participants to deal with business decisions and situations that are commonly encountered in real life.

The scenario is **based on the UK and World economies as they are today**, both from a financial viewpoint (interest rates, overdraft limits etc), and in terms of the characteristics of different locations worldwide :-

- Current and future availability of new work in the UK and Overseas
- Potential client base, and their expectations
- Rival competition for new work, and margins achievable

To add to the realism the environment is constantly changing to provide ongoing challenges.

COMPANY SETUP AT TAKEOVER

Detailed information is available to make an appraisal of the **strengths and weaknesses** of the business when it is taken over, including :-

- Share price
- Company value
- Profit figures (previous year)
- Market share
- Current work in progress
- Future profit





Making Decisions (Core)



IDENTIFYING NEW WORK

The company will not grow without new work.

The Marketing Department identify new jobs that the company can bid for in different :-

- Locations (UK/Overseas)
- Sectors
 - Industrial
 - Building & Commercial
 - Transport
 - Energy
 - Water & Sewage



WINNING NEW WORK

The Procurement Team bid for jobs identified by the Marketing Department, which involves :-

- Assessing the bidding strategies of rival competitors
- Identifying risks and costs, and setting margins to bid competitively



PROGRESSING JOBS

Jobs secured need to be successfully completed by the Construction Team.

This involves :-

- Allocating appropriate resources to progress jobs, such as project managers and labour
- Effective risk management
- Overcoming problems that occur during the construction, such as job delays



Making Decisions (Corporate)



SHAREHOLDERS

The company is owned by shareholders who expect a return on their investment in the form of a dividend.



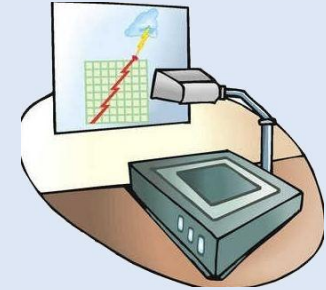
DIVERSIFYING

To reduce costs in the core business (build and risk costs), the management can invest in other companies.



INFRASTRUCTURE

To achieve enhanced growth the company's infrastructure (capital base), in the form of fixed assets such as plant, can be expanded.



OVERHEADS

Staffing the support services sufficiently will enable to company's strategy for identifying and progressing work to be carried out.

The support services departments are :-

- Marketing
- Head Office
- QHSE
- Measurement

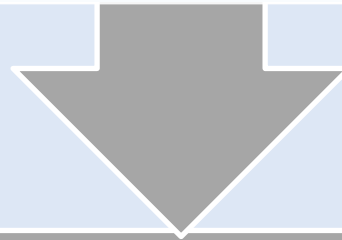


Each team starts the competition with the same company, which has already been operating for one year. They must manage their company through 2 possible stages.

Early Years

During the **Early Years** the management teams are competing for new work against simulated companies, based in particular countries, who may tender for work in their own country only, or worldwide.

Each rival company has their own unique profile and tendering history, which has to be carefully scrutinised in order to formulate an effective procurement strategy for competing against them.



Later Years (“Head to Head”)

During the **Later Years**, the teams compete ‘**Head to Head**’ against each other for both new contracts, and for the services of the same key personnel, in particular project managers.

This creates an even more uncertain environment in which the management skills, team dynamics, global market strategy and client relationships formed in the Early Years are put to the ultimate test.



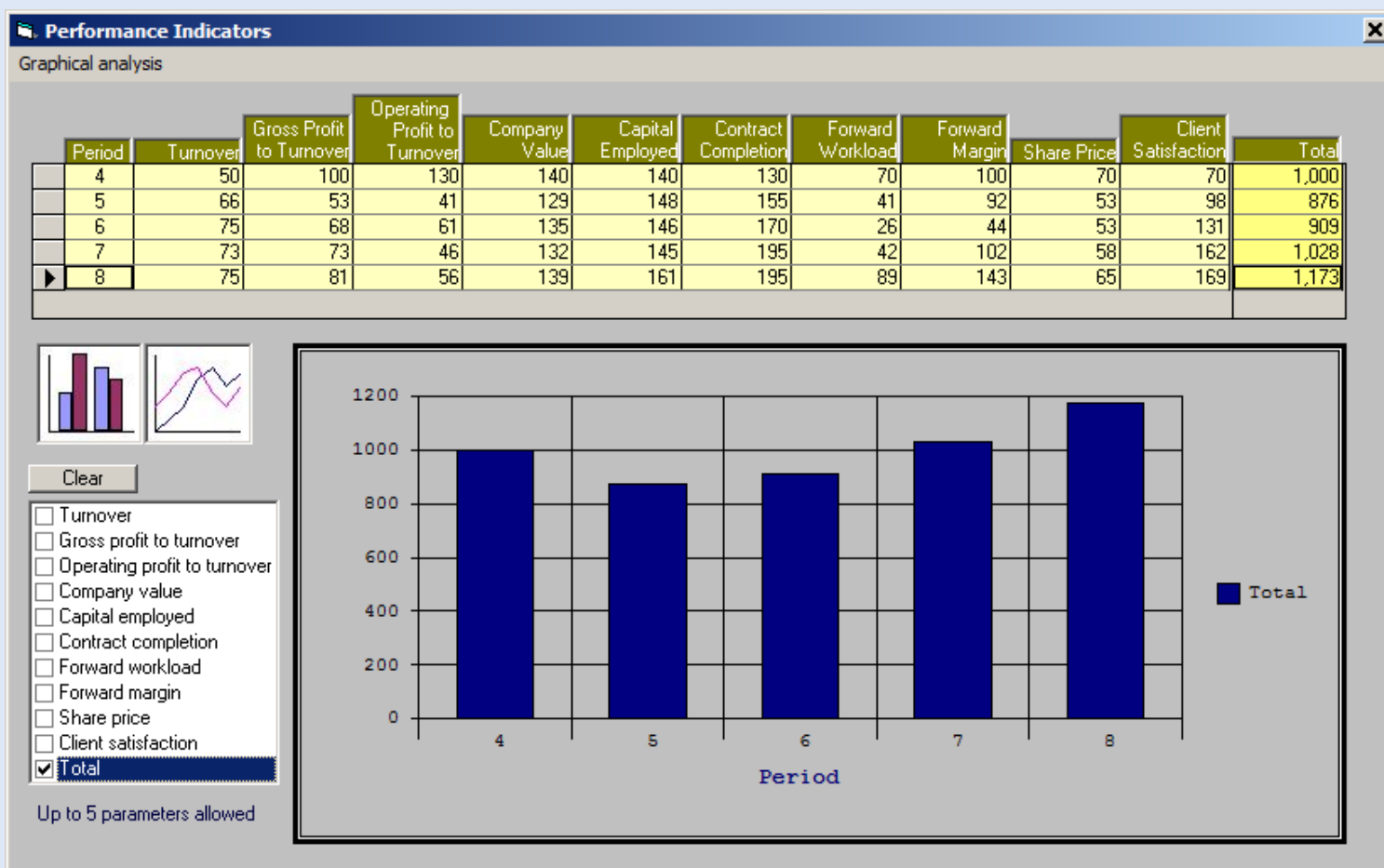
Measuring Performance



The success of the company is determined by 10 **key performance indicators**.

The indicators are all weighted at the start of the Early Years to reflect their variability, and initially sum to 1,000 at the end period 4.

Each company's progress against the other competing teams is based upon the total of the performance indicators using the **Enginuity League Table**, which is displayed on the **competition web page** at the end of each round.

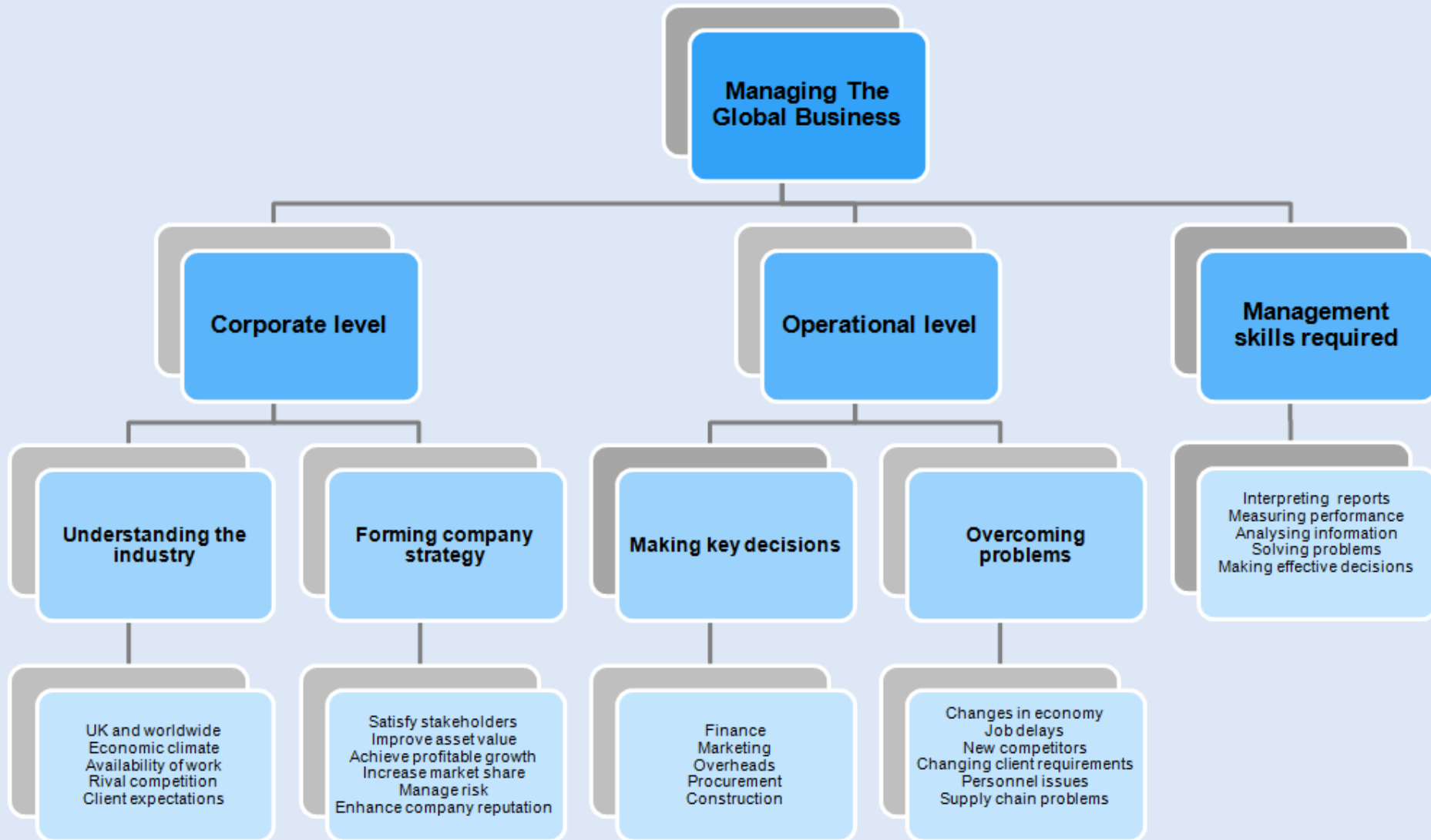




Key Features



ENGINUITY exposes participants to the key aspects of managing a global construction business.





Team Working



Effective **team working** will be vital to ensure that the company runs smoothly.



- Deciding upon the structure of the team, individual roles, and who should lead the team
- Identifying strengths and weaknesses
- Resolving conflicts as they arise



Assessment



Having taken part in an **ENGINEUNITY** Competition, it is **important to assess** what the teams have learnt from taken part.

The assessment can be delivered in a number of ways.



A written **Business Performance Report**



A slideshow **presentation**

Whatever form the assessment takes, each team will need to describe :-

- The initial state of the company when they took over
- Their strategy for running the company during the early and later years
- A review of their performance against the initial objectives
- How their strategy was changed according to their progress
- The lessons learnt, their strengths and weaknesses, team dynamics etc



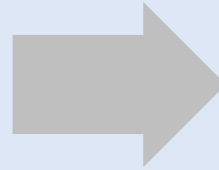
How It Works



Up and Running

(Pre Competition)

- Participants **split into teams**, and registered for the competition
- **Instructions, information and data** emailed to the teams to get them up and running
- Teams install the software, and have some time to practise learning how to play Enginuity, known as **trailing**
- Full **7-day support**, with detailed feedback given to the teams



The Competition

(Local or Remote)

- A number of rounds played against computer-simulated rival companies, known as the **Early Years**
- A number of rounds where the teams compete directly against each other, 'head to head', known as the **Later Years**
- **Assessment** in a number of ways, such as presentations or business performance reports
- **Feedback** to review progress, strengths and weaknesses, and what has been learnt



Further Information



Further detailed information can be obtained from the website at:

www.enginuitycomp.co.uk

or by e-mail

mike@enginuitycomp.co.uk

or by contacting in the first instance

Mike Fletcher

Tel/Fax No: +44 (0)1332 694351