

# FIDIC 2005 Management Training Programme for Young Professionals

## Summary Report



TORCH

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# 1. Introduction

This paper summarises the work of TORCH in the FIDIC 2005 Young Professionals Management Training Programme. Throughout the programme TORCH has discussed issues relating to management of consulting engineering companies from a variety of cultural, technical and company backgrounds.

Sustainability and Globalisation have been consistent themes throughout TORCH's discussions. Our understanding of sustainability and globalisation, along with the challenges these present to the consulting engineering industry are presented in Section 2 of this paper. The following sections then present our key findings on:

- Organisational Structures;
- Ownership Structures;
- Human Resources;
- Marketing; and
- The Future Role of FIDIC

The question for each of these topics is how they are affected by the challenge of sustainability and globalisation and how these areas need to change to meet the challenges facing the engineering consulting industry now and in to the future.

## 2. The Challenge of Sustainability and Globalisation

### 2.1. Sustainability

Whilst the phrase "sustainable development" became popular in the 1970s, the concept behind the phrase has a longer history. Prof. Dr. Klaus M. Leisinger<sup>1</sup> highlighted this history by summarising the evolution of sustainability from earlier this century when social scientists like Thorstein Veblen and economists such as A.C. Pigou drew attention to external costs of **economic activities**; to The United Nations Conference on the Human Environment, Stockholm 1972, which was the first major international discussion of **environmental issues**; and since the early 1990s, the concept of sustainable development has been widened to include the **social dimension**.

TORCH considered that sustainability has, during the last decade, emerged as a new paradigm of development and it is increasingly becoming one of the most important criteria of project acceptability. It integrates economic growth, social development and environmental protection as interdependent and mutually supportive elements of long term development. It also emphasizes a participatory, multi-stakeholder approach to policy, mobilizing public and private resources for development and making use of the knowledge, skills and energy of all social groups concerned with the future of the planet.

Sustainable thinking implies that everyone is working together and everything is being considered. This is an ideal solution and the challenge for consultants is to move closer to this ideal. The particular challenges facing engineering consultants include:

- The need to take a multi-disciplinary, participatory approach to our work
- Ensuring clients are aware of, and buy in to, the need to take a sustainable approach.
- Identifying the receptivity of the market (and particular clients) to sustainability and leading the way.
- Assigning a cost or benefit to environmental and social aspects of projects

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<sup>1</sup> Prof. Dr. Klaus M. Leisinger is President and CEO of the Novartis Foundation for Sustainable Development and Professor for Development Sociology at the University of Basel.

- Becoming involved very early and having a continual presence throughout the project.

## 2.2. Globalisation

TORCH identified two levels of the concept of globalisation. At one level, it is a "primarily economic phenomenon, involving the increasing interaction, or integration, of national economic systems through the growth in international trade, investment and capital flows"<sup>2</sup>. Companies in every nation can now reach customers around the world and cut operational costs through global scales of production and distribution. The catalyst for this type of globalization includes low cost communication via internet and telephone, the opening up of former closed countries, and increased cooperation between countries. At this level, globalization has the effect of making the world seem a smaller place.

However, globalization is also defined as a "worldwide drive toward a globalised economic system dominated by supranational corporate trade and banking institutions that are not accountable to democratic processes or national governments"<sup>3</sup>. At this level, globalisation implies political and economic restructuring on local economies, human welfare and environment. Whether or not this is a positive trend is the subject of an open debate among international organizations, governmental institutions and the academic world.

In the discussions of TORCH, the following challenges to the consulting engineering industry were identified:

- The need to identify and respond to changing international markets
- The need to remain competitive while satisfying increasing customer expectations
- The need to deliver products and services as if it is a routine job just around the corner from the client. While modern communications provide the tools for this, the challenge is that 'Global' projects are often large-scale, diverse, risky, operations (i.e. anything but a routine job just around the corner).

## 3. Organisational Structure

Through considering the history and trends in our respective countries, TORCH members identified a worldwide trend towards consolidation and internationalisation of engineering consultancies. Due to a client demand for a "one stop shop" approach and the multidisciplinary nature of sustainability development, the large multi-disciplinary organisation was considered to be the predominant structure in the engineering consultancy field in the future. As well as offering a "one stop shop" approach, the strengths of this structure include the ability to accommodate global expansion; the ability to maintain profits by seeking larger projects abroad; and the ability to take advantage of the company's size to expand and extend the company's scope and competencies. However, the challenge for the large multi-disciplinary companies will be to maintain an excellent quality of product and services across all disciplines. It was considered to be worse to provide an average service in all areas than a highly specialised service in one area.

Perhaps because of this challenge, TORCH also considered that the place of the small specialist company in the industry would remain. Size is not everything and it is the quality of a company's products and services that is more important. The small specialist company would have a strong future if it is able to leverage the necessary profits through its specialisation and niche market.

Large specialised companies were expected to find it increasingly difficult to find sufficiently large markets. This may lead to diversification and a trend towards the large multi-disciplinary type of company.

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<sup>2</sup> [www.globalisationguide.org](http://www.globalisationguide.org)

<sup>3</sup> [www.globalisationguide.org](http://www.globalisationguide.org)

Regardless of the structure and size of the organisation, the quality and professionalism of the services provided was considered to be the key factor for success of any company.

A flexible organisational structure was also considered to be vital for addressing the challenges of sustainability and globalisation presented in section 2. By definition, the flexible organisation is one which specialises in being able to draw together the appropriate resources, expertise and information. The flexible organisation is able to:

- Optimise communication technology to draw together staff, resources and information as and when necessary.
- Access the global market as a result of having numerous geographical locations as well as being able to access expertise irrespective of location.
- Allow operational units to be relatively independent thereby reaping the benefits of globalisation while maintaining a local level of autonomy and identity.
- Provide the structure to allow human resources development to focus on developing and nurturing leadership skills. Whether or not the organisation was able to focus its human resources development in this area was seen as key factor in the strength of the organisation.
- Deliver a quality project at a competitive price.

To improve the present organizational standards to address the challenges of globalisation and sustainability, TORCH recommended that:-

- 1- Expertise centers be established and developed in cooperation with large firms, practitioners, academics, research centers and universities. Expertise centres are to be considered a company resource and need not to be in a common location. They can be virtual centers with members spread throughout the world by making full use of IT – communication and highly specialized expertise. This notwithstanding, the need for face-to-face meetings is recognised.
- 2- Profit Centers concepts recognize the trend towards decentralized and flat organizational structures. They must be flexible to respond to financial performance demand and market, open stock shares among employees.
- 3- Project delivery make use of outsourcing to a reliable partner or office where it can contribute to the efficiency of the project delivery
- 4- A minimum of three career paths – technical expert/specialist, project manager, and line manger –be accommodated in the structure.
- 5- The following elements be built into the organisation structure:
  - Clarity and flexibility
  - A well organised communication system
  - Standardisation of procedures and handling of work
  - Development of a network of outsource partners and associate offices
  - Accountability of the firms and individuals
  - Integration among multi-disciplines
  - Diversification.

## 4. Ownership Structure

Until recently, the main assets of a consulting firm were the staff and consequently the key staff were also considered the owners of the consultancy. For practical reasons, decision making, and legal formalities, it became necessary to define a form of leadership. In most cases, this became the "partner" concept of ownership. Share holding companies can be similar, but include the concept of limitation of financial responsibility. Today, the assets of firms are not only their staff but also their name or "brand" and their track record.

Share holding structures fall in to four main categories:

1. Shares are held by management and key staff. Shares are sold internally only based on an internally assessed value.
2. Shares are held by a foundation linked to the company and with its main purpose being supporting the company's activities.
3. Shares are held by institutional investors.
4. Shares are quoted on the stock exchange.

Some companies may combine two or more of the above mentioned models. All models have their inherent strengths and difficulties.

**Internal share holding** with management by key staff was seen as a common ownership structure for the initial phases of the life of a consulting company. The initial phases can be eased by not being accountable to outside shareholders who may have unrealistic expectations of profit and return and may not be understanding of the challenges and difficulties facing the company in its early stages. However, whether continued ownership is necessary for the future development of the company was considered less clear.

Generally management and key staff ownership was not seen as a necessary condition for successful development. While the motivational factor of shareholding was acknowledged, it was recognised that staff motivation, dedication and success can be achieved without ownership coming into play (motivational factors are discussed in section 5).

The benefit of having the employees as share holders is that there is a greater incentive for hard work paying off in dividends. However, it is necessary to distinguish between shares offered to regular employees as opposed to managers. If employees are given the opportunity to buy shares, they should be offered at favourable prices. Giving company shares as a bonus on top of the salaries of regular employees is a good idea, where shares are given based on performance. In this case if the value of the shares decreases, employees lose bonuses and not financial investment like in the case of selling shares to employees.

One of the main weaknesses of internal share holding was the difficulty in raising capital for expansion as well as the potential for the company to be affected by personal disagreements between shareholders.

**Foundation ownership** solves the succession problem and maintains independence of the company from the "Owner" but it also makes it difficult to raise capital for expansion and acquisition and provides less incentive for management and staff. One of the strengths of foundation ownership is that it focuses on the longer term survival and development of the company. While this model has been criticised for having too little focus on the business part of the company, studies show that the financial performance of foundation owned companies compares favourably with other models.

**Institutional investors** can make additional investment easily and the investors can absorb the ups and downs of the profit and market changes. But the drawback is that this type of investors can be short term. They may end up floating the shares on the stock exchange.

Many large consulting firms have chosen to be **publicly listed** on the stock exchange. The main benefits are that value of shares is known at any time and buying and selling shares is easy. It is also easy to raise capital for expansion and acquisition. The drawbacks are that the share price may fluctuate and that the company may be subject to hostile takeover. One of the weaknesses of the institutional investor and publicly listed models is that the staff may feel detached from the performance of the company.

TORCH was asked to consider the ideal ownership model for a hypothetical consultancy of 3-400 employees. Given the lack of other information about the company, our discussion focused on the pros and cons of the above-mentioned ownership models.

It was considered that, while internal ownership might not be the ideal for the continued growth of the company, this model seems to leave the most doors open for the future of the company allowing it to be flexible enough to grow towards any of the other models. Foundation ownership may limit the other possibilities of development while institutional ownership will bring the necessary capital investment but is a short term ownership model. Also in the case of medium size company (3-400), it was not seen as being attractive to list the shares on a stock market. Companies must have a substantial size so that it is at the same time attractive to the stock market but also has the strength to withstand hostile take over attempts.

## **5. Human Resource**

The situation regarding human resources varied between countries represented by the TORCH team. In some countries, there is a scarcity of human resources and attraction and retention of qualified, experienced staff is becoming increasingly difficult. In contrast, other team members came from countries where there is an over-supply of qualified, experienced staff. Irrespective of this difference, it was agreed that an engineering consultancies greatest asset is the one, which is not reflected in the balance sheets – that is, the quality, commitment and loyalty of their staff. Developing and growing the company's skills and expertise means developing the employees' skills and expertise.

### **5.1. Attractive Employment – Attracting and Retaining Staff**

Companies need to be able to attract and retain the staff that they want in terms of skills and expertise but also in terms of attitude and workplace culture. In countries where there is a shortage of staff, workplace culture is becoming a key factor for prospective employees when considering employment offers. The best way to attract and retain staff is to continue to offer attractive employment conditions. However, it was agreed that what constitutes attractive employment conditions is changing, and is likely to continue to change. Some of the likely future scenarios were considered to be:

- Continuous development of new skills and the development of new competencies in learning. While some employers may see training and development as a cost, the fact that the success of the company is so closely linked to the success of the employees means that training and development should be considered an investment. Development of skills and technology will sustain the consulting firm and make it competitive. This development is an investment and management and owners need to take a long term view to ensure that development occurs.
- Flexible work environment and flexible funding arrangements of extracurricular activities. Companies will need to be able to offer flexibility to their employees allowing them to place emphasis not only on their job but on other aspects of their life, eg family.
- Outsourcing of work where it is practical and beneficial to the project/company.
- Greater emphasis on career planning and performance management. It was recognised that companies will need to provide a range of career development paths and provide a clear pathway for career progression. Examples of such career development paths were provided by group members and included providing success pathways that are not linked to the standard organisational management hierarchy. Career pathways are provided in terms of line management, project management and technical expertise.

- Succession planning will become more important in order to groom younger staff for leadership roles, inject greater vitality and ensure continuity of the company.
- Creation of a common, shared mission, through developing a shared sense of purpose and corporate culture and through management development practices to create a cadre of corporate resources.
- All employees will have to be the 'client activist' to create better values for the company. This will mean being: service oriented; the best you can be; supportive of others; willing to learning new things; and expectant of changes.

In addition to all of the above points, additional financial incentives (other than salary) are likely to be necessary to attract and retain key staff. TORCH's discussions included the question as to whether or not employee shareholding was seen as of benefit. While employee shareholding may provide an incentive, it was necessary to distinguish between shares offered to regular employees as opposed to managers. For non-managerial staff, shareholding means that their personal economy suddenly becomes attached to the economy of the company, however, they have little opportunity to influence company performance beyond the scope of their position. On the other hand, managers have the possibility of influencing the direction in which the company is going and hence the company's financial performance. For managers, it therefore seems a good motivation factor to be able to buy employee shares. This notwithstanding, it was recognised that employee shareholding is only one means of providing financial reward and motivating staff. The merits of employee shareholding would need to be assessed for each company.

Providing attractive employment situations was also seen as the best way for a company to safeguard their knowledge, skills and technology. Trying to retain key staff by contractual ties was seen as far less constructive than providing an attractive workplace. Loyalty comes from treating employees with respect and by giving employees the challenges, development possibilities and influence/positions they are seeking in their career progression.

## 5.2. The Change Process

Traditional engineering companies with highly structured jobs and rigid hierarchical structures are becoming a thing of the past. The need for employees to work in true partnership with others has become a critical competency. Today's professionals need to be comfortable in a changing world, with cutting edge skills, in charge of their careers, and prepared to take advantage of the transitions common in today's workplaces. It was recognised that some people live for the excitement and energy of new challenges, while, for others, change can feel overwhelming and terrifying.

The challenge of sustainability was seen as one, which will require significant changes for a number of employees and organisations. It is likely that there will be a diverse reaction from employees to being required to adopt a sustainable approach to their work. Some may think it is stimulating and challenging to work with people from different disciplines as well as interested or affected stakeholders. However, other employees may think otherwise. The achievement of sustainable solutions requires a certain mindset for both the employees and employers and there will be a need to create a common, shared mission through developing a shared sense of purpose of our environment and corporate culture.

TORCH discussed organisational change management and determined that managing change requires:

- A compelling vision,
- Committed leadership,
- Rigorous management at lower level implementing the vision,
- Mobilising stakeholders and getting them to think the vision is in fact compelling,

- Closing capability gaps considering existing assets (upgrading/training staff or firing/hiring the right staff), and
- Aligning company infrastructure/tools with the vision (e.g. change in organisational model, locations of offices, IT systems, products/services offered etc.).

Certainly, the process/implementation of change takes time and comprises denial; awareness; anger; acceptance; and finally; development. This implies that “things need to get worse before getting better”.

This change process was also discussed in terms of globalisation of an engineering company's operations. In developing a local presence in a new country, it was considered that it is very important to build up the local employees' affiliation with the company. Ultimately, the employees should associate/identify themselves with the company (to some extent at least). Culturally, it is always a challenge to implement company culture/identity in other countries, even between closely related countries. Careful thought needs to be paid to exactly what the company culture is in the first place, i.e. what is specific to the company and not just reflective of the society that the company was founded in.

## 6. Marketing

In relation to the future marketing of consultancy services branding and marketing of sustainable solutions have been identified as two highly important areas, where the challenges faced by the industry are not to be neglected. There is no doubt in our minds that if appropriate answers to these challenges can be found, the future marketing of consultancy services will look much brighter.

### 6.1. Branding – and beyond

We are on the cusp of a major shift in how we think about branding, from a promise of ‘reliability’ to a promise of ‘understanding’. Historically, a brand has been a promise confirming the attributes attached to the brand. This association is closely linked to the traditional brands like Coca Cola, Nike and McDonald's. For consulting services, we are likely to see a much more customer centred branding emerge, where the promise is one of understanding and the ability to assemble the right services to meet the needs of the particular client.

Some food for thought is the recognition that there is a future beyond brands and branding and how that will affect the branding of consulting businesses. Kevin Roberts (head of Saatchi & Saatchi) talks about ‘lovemarks’ as the next stage beyond brands:

*“...Lovemarks transcend brands. Lovemarks reach your heart as well as your mind, creating an intimate, emotional connection that you just can't live without. Ever. Take a brand away and people will find a replacement. Take a Lovemark away and people will protest its absence. Lovemarks are a relationship, not a mere transaction. You don't just buy Lovemarks, you embrace them passionately. That's why you never want to let go. Put simply, Lovemarks inspire 'Loyalty Beyond Reason'...”*

Branding of consulting services is very much in the line of displaying ‘understanding’, ‘knowledge’, and ‘solutions’. Perhaps the future branding of consulting services is not so far removed from the effects that ‘lovemarks’ could have.

### 6.2. Marketing and communicating sustainability

The marketing of consulting services is transforming and there is a shift from technology based marketing to marketing of sustainability solutions. Technology based marketing represents the traditional marketing of consulting services by simply fitting the solutions to the immediate problems without consideration of the environmental, economic and

social dimensions in the problem solving process. It is the marketing of 'black-box' services, where the client receives the end product without knowing how it was obtained.

Marketing of sustainable solutions takes on a different approach where the social, economic and environmental dimensions are all included in an integrated solution. Sustainability demands a better understanding between client and consultant meaning that:

- The client has to have a general understanding of sustainability as a concept. This could be achieved with the assistance of governmental authorities promoting sustainable development. At the same time though the industry itself also carries a responsibility to help the clients see the long term benefits of sustainability, e.g. through the presentation of cases, staging of seminars and conferences, etc.
- The consultant need to 'learn the language' of the client to become effective advocates of sustainable design. Sustainable solutions demand an interdisciplinary work process, where the traditional technical skills are supplemented by capabilities within environmental protection, social impact and acceptance and financing/economics.

Often the environmental and social aspects of a problem/solution are overshadowed by economics. To overcome this, it is important to move into an integrated operation, where all stakeholders work together for a realistic goal. It is important to make the client aware of all the latent problems in the early stages of client contact and conversation. When the client has realised the environmental and social as well as the economic sides of the problem, then help the client to think up a vision of a sustainable solution to the problem. This vision must of course be identical to the solution that we can market.

## **7. The Future Role of FIDIC**

The team foresees a very important future role for FIDIC in overcoming the barriers for globalisation and development of the consulting industry. At present some of the main barriers are:

- Protectionism through national codes and standards
- Lack of recognition of foreign engineers/consultants
- Favouring national companies in foreign aid projects
- Corruption

FIDIC and its member associations should pick up the torch and lead the way in overcoming these barriers through the following actions:

- Unification of codes and standards: Working for unification of codes and standards making consultant/design services independent of nationality and borders
- International recognition of engineers/consultants: Establishing some kind of international recognition/classification of engineers to practise globally
- Fair trade in the consulting industry: Working for fair trade in the consulting industry, particularly in foreign aid projects through e.g. changing the views of national and international donor agencies.
- Fighting corruption: Working for common Codes of Conduct, implying a zero tolerance attitude towards corruption, bribery, deception, fraud, extortion and payments of gratitude

In addition to the above mentioned the ongoing activities regarding coordination between member associations and companies, development of standard contracts and guidelines for operations, etc. should be continued.