

The background of the slide features a collage of globes and a large Roman numeral 'X' on a yellow and orange background. The globes are depicted with wireframe and solid surface textures, showing different parts of the world. The Roman numeral 'X' is prominent on the left side. The title text is overlaid on this background.

Experiences on **the International** Engineering Market Survey

Dr. Edward Wang

Outlines

- Introduction
- International Market Overview
針對國際市場特性加以介紹
- Opportunities and Threats
針對市場機會、威脅進行分析
- Trends and Future Strategies
進行市場趨勢預測

Background Information

- Past Experience and Personal Network
- Experts and Leaders Interview
- A Visit to U.S. (5-13 March)
- Trips to Singapore, Turkey and Indonesia (14-20 April)
- A Trip to Bangkok Thailand (6-8 June)
- A Trip to Mongolia (14-19 June)
- A Trip to Myanmar (11-13 July)
- A Trip to Singapore (26-31 August)
- A Trip to Seoul (9-13 September)

Experts and Leaders Interview

No.	Time	Name of Expert
1	21 March	廖年毅副董事長(互助)
2	30 March	潘冀建築師
3	2 April	曾景琮副董事長(榮工)
4	5 April	吳文雅副董事長(外貿協會)
5	7 April	余德銓執行長
6	10 April	周黎民總經理(大陸)
7	13 April	管長青副總(世曦)
8	26 April	廖文忠顧問(中鼎)
9	30 April	楊文騫副總(台塑)
10	2 May	謝致德博士(大陸)
11	3 May	張正芬處長(外貿協會)
12	9 May	高鑽錠總經理(新加坡集團)
13	15 May	駱水順副董事長(鼎台)
14	17 May	濱松俊偉(日商海壓克)
15	18 May	王明德教授

Experts and Leaders Interview

No.	Time	Name of Expert
16	20 May	朱文亮總經理(泛亞)
17	22 May	黃洪才執行長(中華顧問)
18	6 June	陳谷海主任(外貿協會)
19	19 June	棕田浩樹(日商海壓克)
20	22 June	王詩清博士(整廠輸出)
21	26 June	陳振川政委
22	29 June	林柏俊總經理(整廠輸出)
23	2 July	黃兆龍教授(台科大)
24	2 July	周禮良顧問(遠東企業)
25	3 July	曾惠明顧問(中華顧問)
26	5 July	朱梅君高專(外貿協會)
27	9 July	Shuji Tsujigami(日商清水)
28	10 July	廖銘洋顧問(榮工)
29	18 July	林進忠司長(外交部)
30	20 July	王鍾淪理事長(國經會)

Basic Business Resources

- Asian Development Bank (ADB), World Bank (WB), European Bank for Reconstruction and Development (EBRD)
- Government Officials
 - Ministry of Foreign Affairs
 - Overseas Compatriot Affairs Commission
 - Taiwan External Trade Development Council vs. Chinese International Economic Cooperation Association
- Taiwanese Overseas Business Entity, Chamber of Commerce
- Local Agencies, brokers and Website Information
- NGO (Professional Societies, Education Programs)
- International Students & Universities
- Local business entities & International Networks

International Market Overview

- World Economy and Globalization
- Global Construction Industry
- Market Segments
- Market Competition
- Clients and Procurement Methods

Opportunities and Threats

- Infrastructural Development Experience
- Taiwan Higher Education System (Manpower)
- Past Experience on Multi-hazard Disasters
- Advantageous Location and Raising China
- Soft Skills
- World Perspective (after Japanese Disaster)
- Tolerance and Acceptance of Cultural Differences
- Ethics and Diligent Working Attitude
- Freedom and Democracies

Opportunities and Threats



Opportunities and Threats

- Lack of Diplomatic Angle
- Weak Communication Skill
- Engineering Tradition and Mentality
- Lack of Track Records
- Conservatism
- Severe Local Competition
- Insufficient on Legal and Financial Training
- Long Term Investment
- Lack of teamwork spirit
- Lack of Marketing strategies

Critical Issues Entering Market(1/4)

Nation's Perspective

- Lack of incentives – no tax reduction or immediate return in investment
- Political stability and Protection Issues
- No mutual agreement on trades
- Complex corruption and networking
- Mature Market – Severe Competition, Licensure
- Developing Countries – Financial constraints
- Undeveloped Countries – Cultural impact, language barrier, communication.

Critical Issues Entering Market(2/4)

Corporate Perspective

- Understanding local procurement methods, legal systems, and corruption – risk management
- Visas, Work Permits, Professional Licensure and Corporate Registration
- Firm Business models – Consortium, J.V., Sub-contract, outsourcing, etc.
- Company policies, incentives, relocation packages, IT support, knowledge management, training, and logistics.
- Profitability and Promising Future

Critical Issues Entering Market(3/4)

System Perspective

- Continue Training on management - related subjects
- social sciences and liberal arts
- Mentor and Mentees
- methods of learning, and life long learning
- Legal, contract administration, liability, and Insurance
- Progress monitoring, Project finance and Quality Control
- ERP

Critical Issues Entering Market(4/4)

Individual Perspective

- Proper level of skill sets, effective communication
- Projects duration and compensation
- “individuals mobility” taking into account interpersonal skills, age, emotional deprivation, location, and family concerns
- Motivation

Trends and Future Strategies

- Alliance
- Multi-disciplinary integration
- Flexibility in work places and Mobility
- Research & Development
 - Sustainability
 - Environmental Concerns
 - Green Energy
- Design/Build
- Capital Investment, BOT, Public - Private – Partnership, PPP

Trends and Future Strategies (1/5)

(1) Through **mergers** and **acquisitions** of local companies or enterprises with great potentials. Taking advantage of existing company's original name brand, technical capability, management and marketing experience, only a minimum capital injection is required. However, the controlling factors are incidental, depending on timing.

(2) Through a **joint venture** with major local companies, joint contracting projects and continuing to draw on local expertise and manpower to perform works in that area. After the foundations is lay, gradually seeking to play major role as more knowledge built and more operating space becomes available.

Trends and Future Strategies (2/5)

(3) Establish **niche market** strength through selling special or unique patent works or methods. Serving clients as expert consultants, building a brand image, through solving specific problems, or creating unique market needs. Recruit free lancers and senior engineers, retirees to serve as independent consultants for clients. Tailor made or chartering a team of experts in case of special investigations.

(4) **Strategic hiring** senior engineers (or a team) from major competitors. Provide business expansion incentive/bonuses to local engineers to grow a local office as a "profit center". A team of management expert and well-trained administrative staff can foster the local firm.

Trends and Future Strategies (3/5)

(5) Using **equity acquisition**, to intervene company policy and business decision gradually. At final stage, take control of the majority shareholders to dominate company business.

(6) With the assistance of diplomatic ties or **funding**/loans agencies (ADB, EBRD & WB) to foreign entities, take advantage of the process of project management, building relationships and word of mouth to enter the market.

Trends and Future Strategies (4/5)

(7) Partner with **local investors**, developers, system suppliers or heavy industry, to form strategic alliance in developing business investment model. Trust is the key. It takes time.

(8) Cultivate different nationalities who wish to enter the market as long term employee of the company. With sufficient training in basic communication skill and for company training, well-trained staff can be deployed to the target market at a right timing.

Trends and Future Strategies (5/5)

(9) Play a role as a **sub-consultant** to major players while building up capacity. Gradually after establishing sufficient experience in certain area and then expanding range of service for a low price. The company will be able to enter the market after establishment of relevant qualifications.

(10) Send a **pioneer team** with sufficient number of employees. The critical mass demonstrates a firm's commitment to local projects. While stepping in, the team can help local partners or becoming sub-consultants to other project team such as contractors. Build up relationships between government and private sectors gradually establishing trust and word of mouth.

Trends and Future Strategies

Selling Points:

- Creativity
- Technology Transfer, IT and services
- added value in culture, education, and humanity
- Planning and one-stop solution (upstream and downstream integration)
- Branding
- Long term Partnering with locals and developers, investors
- Quality and culture

Trends and Future Strategies

Early in the Process

- What does our client think about us?
- Do we know the client's real needs?
- Will we be able to negotiate a good contract?
- What are the political issues?
- *Do we want to work for this client?*

Trends and Future Strategies

Early in the Process

- Does this project fit our marketing plan/ mission statement?
- Any new market opportunities?
- Any follow on work?
- Any conflicts of interest? Now or in the future?
- If we do not respond, will this hinder us from further client positioning?
- *Is this a project we really want to do?*
- *Is this a project we can really do?*

Trends and Future Strategies

Competitive Position

- Who is the competition? How many?
- How do we stack up against the competition?
- What are the politics of selection?
- Do we really understand the selection process?
- Local firm requirements?
- Any difficult requirements?
- *What are our realistic odds of being selected?*
- *How can we change the rules to aid our selection?*

Trends and Future Strategies

Technical Issues

- Do we have the right capabilities and experience?
- Are we comfortable with the scope?
- Do we understand the site, project objectives and deliverables?
- Do we offer anything unique to the project, such as experience, approach, or strategy?
- Any high risk or potential liabilities?
- *How far are we sticking our necks out?*
- *How do we resolve or reallocate the identified risks?*

Trends and Future Strategies

Financial Considerations

- Will we make a profit?
- Will the client pay their bills?
- Is cost a major component of selection criteria?
- Is our overhead or hourly rate an issue?
- Is the reward in line with the Business Development investment and the potential risks?
- *What does the margin analysis tell us?*

Trends and Future Strategies

Project Execution

- Do we have the right PM and staff?
- Is the PM and staff available for the assignment?
- Will we meet and exceed the client's needs?
- Will we deliver on time?
- What's the long-term impact if we do not perform?
- *Will we have a delighted client?*

A collage of globes and a clock face on a yellow and green background. The text "Q & A" is centered in the middle of the collage.

Q & A