

## Market Driven Training in Financial Economics Specifics for International Order Winners

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<sup>1</sup>**Abstract.** International project manager training being auxiliary is not available in tertiary institutions due to further specialization within sub-specialization of individual technical domain, inconsistent training demand and irregular supply of specialty trainers. Such training may be performed in-house by professional training providers. This paper seeks to narrow that gap between global industries' needs and academia with a fundamental schema of specific financial economic training designed with market driven intent onto winning orders. Training is specifically focused at answering three high value questions frequently asked at investment proposition for project management decisions. Substantial use of spreadsheet through cases with specific related concept maps seeks to condition learning capacity retention and to continuously engage adult learners. While aims are generic, manner of delivery is subjective to local factors. Adult learners' base levels are considered before training and when contemplating enhancement after quantitative evaluation.

**Keywords:** training, project managers, financial economics, engaging, case, concept mapping, cross-elastic, magnitude of risks, order winner.

### 1. Introduction and Needs Analysis

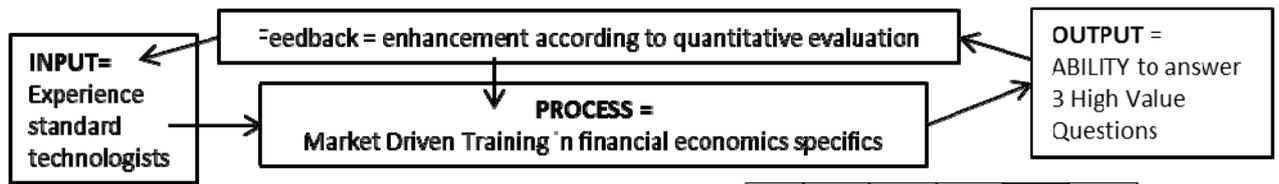
The international project manager's (IPM) function is to support major accounts without borders. This function branched out of necessity as both international trade and products technicalities grew complex that even marketing and sales managers need reinforcement from specialists such as IPMs. Technical graduate in accounting or the sciences may progress their careers from non-marketing-sales domains and along their progress may develop interest in business, receive training in international accounting and financial economics specifics to understand IPM functions so as to enhance co-existence among heads of each country's manufacturing and marketing [1]. Due to its auxiliary nature, training is almost always in-house as tertiary institutions conduct mainstream technical disciplines. Due to its auxiliary function, the expertise is not taught at tertiary levels and this paper attempts to fill that gap with a foundation schema for designing and delivering the training to fulfil the ability to address 3 high value questions (HVQ) of 'Why, how much and when' asked at high level proposition. With this analyzed need, designing instrument for training begin with the 3HVQ as the end in sight; identifying requirement to accurately fulfill the process of 3HVQ, design those requirement, deliver the design and further enhance the design and delivery after a quantitative evaluation process [2].

### 2. Design for Demand Driven With Order Winner

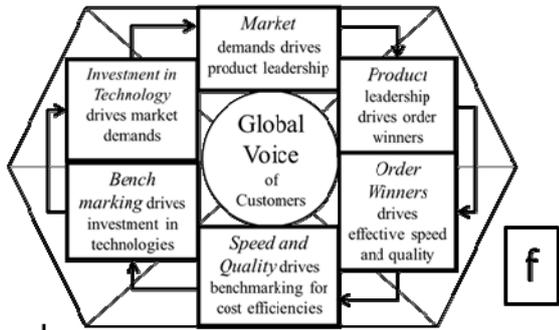
Market driven is a behavioral response to meet market demand. *Pari passu*, that behavior is best measurable by order winner ability [3] from pricing at market's affordability yet profitable with cost articulation according to reasons to revise products to meet market satisfaction; localization, recalls or tender specification. Having established that need to be market driven, the training design commences from identifying quantity demand; tender specification, market survey of satisfaction level or future requirements.

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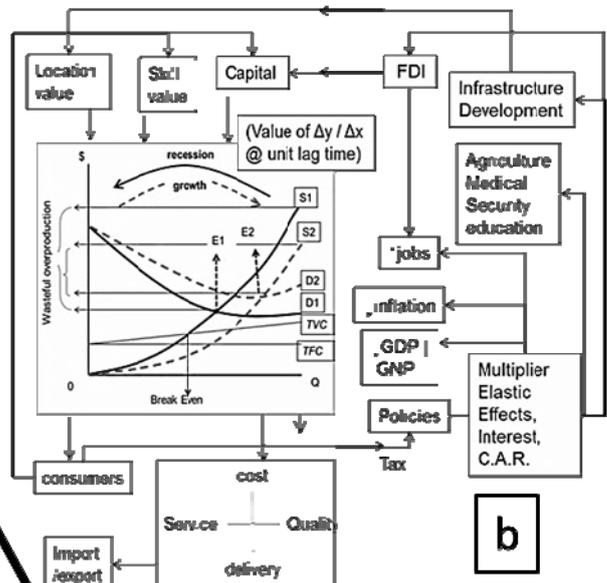
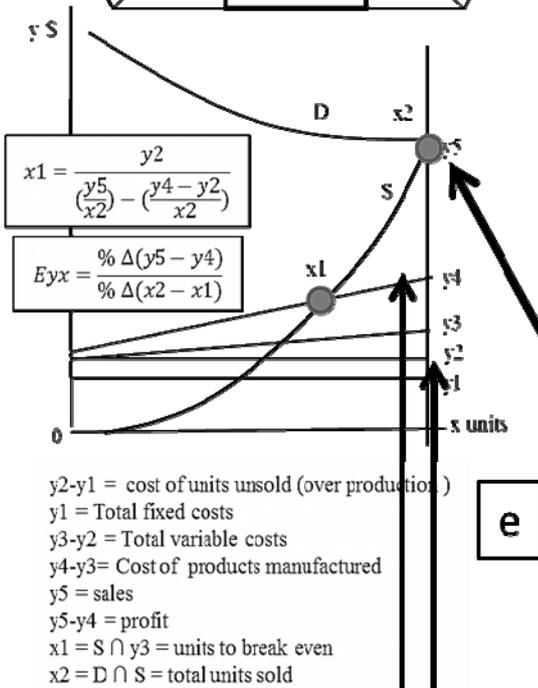
n	x <sup>1</sup>	x <sup>2</sup>	x <sup>3</sup>	x <sup>4</sup>	x <sup>5</sup>
1	4	2	1	2	4
2	1	4	3	1	?
999	1	1	1	5	1
1000	5	3	4	2	4
$\bar{x}$	3.02	3.08	3.05	2.97	2.98
$\frac{1}{H_v} = \frac{1}{n} \sum \frac{1}{y_j}$	2.22	2.23	2.21	2.14	2.19



Frequency of each class \* (harmonic mean / sample mean)

Total #	736	725	725	722	737	
No response	1	141	142	146	157	144
agree	2	146	138	132	136	147
neutral	3	156	129	140	142	164
disagree	4	146	154	154	148	147
most disagree	5	146	162	153	139	135
4+5	293	316	307	287	282	

	x <sup>1</sup>	x <sup>2</sup>	x <sup>3</sup>	x <sup>4</sup>	x <sup>5</sup>
(a) extra AMT cost % of goods manufactured	8.23%	7.63%	2.04%	1.62%	1.74%
extra AMT cost = (a) x production cost	2,468	2,289	612	497	523



SOP-->FC	1	2	3	4	5	6	7	8	9	10	11	12
Maintenance												
Measurement												
Machine												
Material												
Method												
Manpower												
Money												
Market												
SOP-->VC	1	2	3	4	5	6	7	8	9	10	11	12
Maintenance												
Measurement												
Machine												
Material												
Method												
Manpower												
Money												
Market												

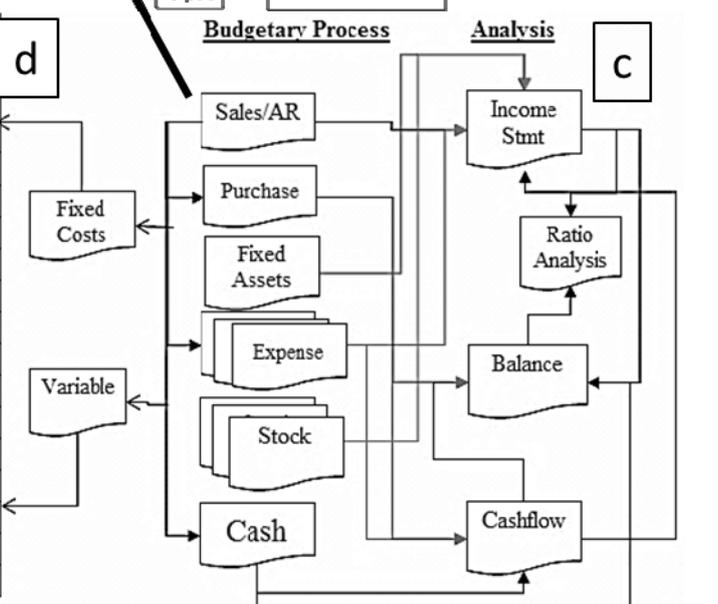


Figure 1

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Fig. 1a assumes contemporary mobile survey tools have collapsed much of cycle time from conventional paper survey method and information downloaded to a spreadsheet for almost immediate analysis. Some figures of Fig 1, from a separate paper [4] illustrate the flow in this paper. Training process is by demonstration concurrent with explanation for the theoretical procedures; quantity demand estimation. Confirmation of that training effectiveness is evaluated by short case exercises. Calculated quantity demand becomes the input to the next training of purposive business economics depicted in Fig. 1b concept map wherein theoretical built-up leading to equilibrium, GDP, GNP, fiscal and monetary policy are explained to support the initial case in Fig. 1b. To complete training, understanding of Fig. 1e, the crucial training of break-even analysis is necessary for later understanding of elastic magnitude of risk reward ratio between price equilibrium and break-even quantity depicted. In Fig. 1e.  $E_{yx}$  being the measurement of elasticity hold much of the key to knowing where risks are due to quantum algebraic nature of impute costs summaries deposited into the worksheet of Fig 1d which will require separate advance training base on zero and non-zero sum game theory design.

Moving into Fig. 1d, the design of that worksheet template has two purposes; holds cost summaries in each 8M (market.....maintenance) with their immediate details obtainable from respective financial accounting databases which already classified by chart of accounts according to costs characteristics; direct, indirect, fixed and variable. IPMs require less financial accounting system flow training. The second purpose is more important to demonstrate their impute basis due to individual IPM's algebraic ability to compensate balances of costs in the event of changes in quantity demand or/and cost components. Information from Fig. 1c and Fig. 1d comes together to form Fig. 1e and the ability to articulate imputed cost identifies an IPM's advance intrapreneurship in winning orders. The thought leadership in each figure is designed for continuous engagement just to complete one iteration of the hexagonal manufacturing paradigm [5], depicted in Fig. 1f, that with iterations using different cost variables follow by practices of short case scenarios is to condition the whole of Fig 1 as a one-page concept map with the prime objective function to manage learning capacity [6]. Understand Fig. 1a to Fig. 1d with case practices completes competency to answer the first 2 HVQ with the 3rd HVQ being time unit is derived on the x axis of Fig 1e ascertainable from time and risk cost of money i.e. M2 of the 8Ms. Insuring risks coverage in international order settlement perspectives includes currency translation, country risks and maritime transportation risks, would encompass currency hedge and insurances according to various risk management policies and availability of fund netting infrastructure.

## 2.1. Case Practices

Assume a class of untrained IPMs is assigned a case to answer the 3HVQ with a scenario of production line of 12 stations, each having even time and a cost in each 8Ms. The cost scenarios at each SOP can vary by demand; > estimate, = estimate or < estimate. A mini-max regret approach using spreadsheet [7] can ascertain the answer from Fig. 1b. Training begins training by elaborating objectives, outline, methods and scenarios to require evaluation at closing of each phase by check-listing survey directly related to case learning. Facilitator monitors progress with light hints through puzzles and prompt questions that direct to magnitude of change in  $E_{xy}$  of Fig 1e. On completion, IPMs evaluate their answers against that provided.

Work through phase-2 trains Fig. 1e using various spreadsheet graphic displays to exemplify each theory for 4 curves and 2 intersects in Fig 1e; fixed costs, variable costs, net sales (which is also the supply curve) and demand. The 2 intersects of break even and economic equilibrium which represents the risk factor [8] first base on static information then follows by a dynamic effect when cost values and demand change. Demonstration repeats with emphasis on BEEE magnitude of change in risks. Phase-2 is to case a scenario for driving in the market-driven response attitude to market demand follow with essential financial-economics theories directly relevant to project changes.

Advance training from Phase-3 onwards can be designed to be played as a zero sum case game and later as non-zero sum [9] to consider dynamics of demand shift and conditions to compensate costs' imputation to ascertain best combinatorial payoffs. On completion, conduct learning survey again, by evaluating IPMs on their competence with checklist survey and semi-structured discussion in using concept maps to retell case scenarios, update survey data into a database for quantitative analysis against initial survey to identify short comings. Localization is among key success criteria in training [10]. Although it's affirmative that adults are

increasingly self-directing, that context cannot be generalized because adults' willingness to learn and accept responsibilities varies according to situations, including behavior modifiers [11]. Understanding these theoretical fundamentals give a significant backdrop together with exposure to training adults abroad provide insightful confidence in designing expectation that can escalate training IPMs to achieve more with less [12].

## **2.2. Engaging Case Learning Along IPM's Existing Domains**

The aim to train IPMs' competency in addressing the 3HVQ is essentials in transforming a IPM's capital value. Game based training articulately engages learners [13] with the trainer checking progress and prompting questions. Cases can be repeated with different product types, production cycle time and new value sets to condition learning by impressing the same principles and concept maps onto different cases scenarios. Advancing the case further may include additional cost behaviors for more articulate answers. Even an answer with low payoff can be accepted should the cases recommend a competitive pricing with lower payoff in the absence of an alternate opportunity. As IPMs' domains may likely include appreciation aspects of CAD/PDM/PLM, production flow, Kaizen/ QC/QA, SCM/JIT, SOP, understanding of Pareto Laws/cause effects [14], therefore leveraging on building cases that have these familiar domains stand better chance to facilitate continuous engagement [15]. These domains are best reemphasized along with lateral thinking of both systematic and non-systematic financial risks explain in *Exy* of Fig. 1e. and 'BEEE' elasticity factor [16] as quantity demand and imputed costs associativities are subject to parts geometric and parametric perspectives when finding the best band of profitability within *Exy*. Keeping learners engaged, is largely an effective training method and the case method of engaging critical thinking popularized by Harvard University and many higher educationalists supports this best practice [17]. This criterion is among the prime considerations for designing case as games that consistently reminds *Exy* Fig. 1e serves to condition learning capacity retention onto those few concept maps.

## **2.3. Training for International Order Winning in China and Africa**

Beside contributing to knowledge and human capital development, propagating the market driven training to needy countries e.g. Africa's near 1b population, seeks to benefit a different scope of social factors as low-end products manufacturing from China seeking relocation can assist to transform African human resources in addition to China state-backed corporations that have already increased FDI into Africa's hard commodities [18]. While FDI from China state-backed corporations produces jobs for Africans, those jobs can buy low end domestic goods from Chinese SMEs in Africa which in turn generates jobs in Africa. Assuming 5% of Canton fair recent year's turnover at US\$74b [19] can be made-in-Africa, and the average African unemployment is 20%, a reduction in unemployment can be expected in Africa, extending that social benefit to increased children education and a likely reduced exploitation of child labor. In the African context, the market driven training enhances African human capital to serve potential low-end Chinese SMEs manufacturing in Africa for domestic consumption [20] and it does not compete with China's export markets.

As China's per capital income rose, its productivity's reliance had begun to move towards reliance on technologies including numeric control machineries which it develops and manufactures. More than just citing China's invention capability, the emphasis is its people's market driven attitude in responding to market demands. Some mid to low ends Chinese SMEs may relocate to inner provinces, both to avoid production cost increase and logistically nearer to domestic demands. With a population of 1.45b, most of China's inner provinces of minimum 500m population with lesser management skills can benefit from this training to improve their economic opportunities. China's increased domestic consumption alone is sufficient for Chinese SMEs decision to relocate to more economical production costs in inner provinces as has happened and social stability remained contained. This harmonization effort is both achievable and sustainable because it serves domestic production for domestic consumption without international market contentions while improving the bottom billion's from Africa and China with hope, dream and cause for existence, and in so doing brings some part of the world closer.

## **3. Conclusion**

While this paper schemes a foundation for designing and delivering training for IPMs, learning and training are subject to behavioral modifiers to one's market driven needs even when job opportunities exceed

demand. Designing cases with familiar products and costs may induce longer engagement in learning; an important aspect of training IPMs' abilities to respond correctly to the overarching aim to enhance human capital with abilities to competitively answer 3HVQ. While this training design attempts to narrow the knowledge gap between industries and academia, it offers to supplement existing technical intrapreneurship that tertiary institutions may consider providing to graduating students. On the global front, China's expanding FDI may see China companies increase FDI and one preferred criteria by China companies is availability of trained IPMs at their host countries failing which China companies going abroad will have to bring their own.

#### 4. Acknowledgements

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