

Distributed Finishing School

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Outline

- Why a Finishing School?
- What is the structure?
- Who are the faculty?
 - How many?
 - How many hours per faculty member?
 - Full time faculty?



Indian Engineering Education Dilemma

- 1500+ engineering colleges
 - 175K EE-CS-IT graduates every year
- Assumptions:
 - Most colleges do not have good teachers
 - Students are trainable
 - Somewhat de-motivated
- Industry needs large number of trained students



What will Finishing School do?

- Provide short specialized training for fresh graduates / about to graduate
 - Significant learning in short span of one month or two, bridge considerable gap
 - Provide high motivation, right atmosphere / infrastructure
 - Students must feel like working for long hours
 - It should appear as a path to a bright career
 - Lecture from top faculty for concepts: **QUALITY**
 - Specially designed practice akin to industrial work
 - hands-on exposure
- In some significant numbers



Emulate earlier experience

- IITM took initiative to set up Usha Martin Academy of Communication Technology (UACT)
 - finishing school for 1000 industry sponsored fresh graduates
 - One to two months
 - training by IIT faculty and experts and alumni
- IITM-ADI DSP Center is another initiative
 - Trains 700 non-IIT students every year on DSP programming
 - 100 hour course
- Demand for such schools in the areas like
 - System and Application Software, Telecom Technologies and Software and Management, DSP applications, VLSI Design

Putting High Quality teachers in front of students was the key to success



Distributed Finishing School

- Concurrent school at four campuses
 - IITM Chennai, IIIT Hyderabad, DAICT Ahmedabad and LNMIT, Jaipur
 - Quality Faculty from four institutes
 - Conceptual training
 - Capable of motivating students
 - 30% technical lectures
 - 50% lectures by local faculty
 - 50% lectures **delivered through video**
 - A 256 kbps VPN exclusively for DFS
 - 50% technical practice
 - 20% soft skills



Basic Course Module

Duration: One month, Hours: 200 **Residential**

- Soft Skills: 40 hours
- Technical lectures: 60 hours
- Lab: 100 hours

- Frequency: First six months: 3 modules
Next 12 months: 10 modules
Next 12 months: 16 modules
Next 12 months: 24 modules
- 100 students at each institute for each module
 - First 6 months: 1200 students
 - Next 12 months: 4000 students
 - Next 12 months: 6400 students
 - Next 12 months: 9600 students
- A fifth institute partner may be included later



Faculty Load...

(Quality faculty is the key)

- Preparation of course material
 - Lectures as well as Practice Labs
- Local teaching at each Campus: 30 hours for each module
 - with **10 participant faculty**, it works out 3 hours of load every alternate month initially
 - 3 hours every month per faculty when one module per month
 - 6 hours/ month for 10K students
 - Reducible if more faculty participates
- Practice session handled by Technical Assistants



Students

- **Eligibility:** Final Year / Fresh Graduates
 - B.Tech students from B Grade Schools
 - Selection thru on-line screening test
- **Fee:** Rs10000 /student + boarding/lodging (~Rs3500)
- Exit test to graduate
- Placement: Sponsoring company preference
 - Reimbursement of course fees by industry on joining
 - Remedial training free of cost for graduating students who do not get placed
- In first year, only industry sponsored batch



Course Curriculum

- Curriculum to be drawn in consultation with industry
 - Highly focused on concepts and practice rather than maths and theory
 - High quality practice modules to mirror what is done in industry
- Start with couple of modules and expand to about five
 - Most students will take one module; may come back for second one later



Proposed Management of DFS

- An independent Section 25 company under Nasscom
 - Augment infrastructure at four institutes for academics (lecture / labs) and Boarding / Lodging at four institute
 - Company hires technical staff, recruits students, manage show
 - Faculty involved only in course creation / updating and in teaching
 - Part of revenue goes to the participating institutes

- Board consist of Nasscom, rep from four institutes and four to five sponsoring industry
 - **Initial investment required: Rs 3 Crores**
 - Break-even after that



MANAGEMENT OF THE CENTERS

I. ACADEMIC CO-ORDINATOR:

- co-ordinates/supervises the course material preparation
- supervises the lab set-up
- schedules the faculty lectures

II. MARKETING PROFESSIONAL:

- markets the course / gets the students
- deals with the logistics for boarding & lodging of outstation students.
- helps in getting placements for students if required

Nasscom loans the first CEO of the company till we hire

Financials per course

REVENUES	
Fees	4,000,000
Revenue Total	4,000,000
EXPENSES	
Tea/Coffee	200,000
Fees for Lectures	330,000
Soft Skills Workshops	192,000
Consumables & Misc.	240,000
Overhead to Institutes (30%)	1,200,000
Expense Total	2,162,000
Profit before Depreciation and common expenses	1,838,000
CALCULATIONS FOR THE INSTITUTE	
HEADS	REVENUES
Overhead to Institutes	1,200,000
Faculty Lecture Fees	82500
Income from Hostel Accomodation & Food	1,400,000
Total	2,682,500
Percentage of Revenue	50

Financials

REVENUES	2006	2007	2008	2009
Fees	12,000,000	40,000,000	60,000,000	80,000,000
Placement fees	0	0	0	0
Total Revenues	12,000,000	40,000,000	60,000,000	80,000,000
EXPENSES				
Course Expenses	6,486,000	21,620,000	32,430,000	43,240,000
VPN Charges	400,000	400,000	400,000	400,000
Salary Costs	728,000	4,368,000	7,280,000	7,280,000
Marketing & Placement Costs	360,000	1,200,000	1,800,000	2,400,000
Total Expenses	7,974,000	27,588,000	41,910,000	53,320,000
Profit before Depreciation	4,026,000	12,412,000	18,090,000	26,680,000
Profit after Depreciation	4,026,000	9,088,000	15,139,200	23,990,440



To Sum Up

- DFS can train 10,000 students per year with four institutions
 - Quality can not be compromised
- If successful, model can be extended to three to four similar groupings one IIT and three / four other institutes
- Ultimately can aim to train 50,000 youngsters