

## Higher Education ERP Systems: Setting the Right Price

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**Abstract** The case is about NYSA, selling Education software, which is planning on moving into Education ERP software business. The firm's major concern is to how to price the software services and to justify the prices they charge from different clients depending on client's size, complexity of project, intensity of services and client's history and competition. They have observed that customizing the product as per the requirements of the client is never-ending and there is no solution available to this till date. NYSA's other concerns include how to reach the masses and since it is a mid-size organization, they have limited human resources which keep shifting from one project to another.

**Keywords** Education ERP - ERP solution - Education software - Education ERP software  
IT solution

### Introduction

It was a pleasant January morning, Yadwinder Mittal, GM Nysa, a small segment IT firm selling Education software in that Domain, collected all the relevant material to present a case to higher management to move into the Education ERP software business. It had more market potential as well as profitability.

But exploring into a new segment was not an easy task and he knew that challenges were aplenty. To present a case he has to cover a lot of ground in the coming three weeks and he was visibly worried. He is being preparing for this presentation for a while and collected a lot of data regarding the domain, client, competitor and financial details. He had concluded empirically that the most important factor will be pricing the software and services. With the given intense competition he had found a sweet spot in terms of firms positioning that educational institutes with low budget are not served properly by any of the competitor. He

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remembered a professor telling him about the bestselling book by C.K Prahlad, Fortune at the bottom of pyramid in his MBA course. He is now contemplating to buy that book to understand more about his customer their need and how to enter into the market but right pricing. He thought he would need to bundle the services with the actual ERP solution, he also needs to pitch in with value based pricing rather than a standard industry practice of pricing software and service differently.

Next three weeks are going to be very exciting as he would expand himself into a different horizon, he is hopeful and confident and thanking his decision to take up the pricing course during his MBA.

## **Company Background**

NYSA running successfully was into its 5th year in business, with turnover of RS 15 crore (Exhibit 1). It has grown from 5 employees to current strength of 105 employees and the CMD Puneet is talking to GM Yadwinder Mittal on how to take it forward.

It all started when Puneet an Indian Institute of Technology (IIT) alumni working in education sector and into IT hardware was joined by one of his friends Rajat, a consultant to the education board in the state Of Rajasthan.

At that time Rajat was working on a solution to manage admissions in engineering colleges. As this was the peak of IT boom in the country, engineering colleges were opening everywhere flooded with students most of whom were aspiring to get a job in IT and go to dreamland USA. The seats were limited and student had to go through entrance exam in getting admission to these colleges. Lacs of students were applying for engineering, out of which 30,000 students were shortlisted for 15000 seats across 135 colleges in the state. Since demand was high and 90 % of colleges were private and students were ready to bribe their way to get admissions, it became State government's responsibility of mange fair admissions such that only meritorious students should get the chance.

Rajat with experience of more than 15 years in government sector had worked with various state government bodies and helped them in implementing quality IT solutions. He was also known for his support in understanding of E-governance solutions across various departments. He was brought on board to manage the whole process.

When Rajat opened last year files to understand how the process was managed, he was shocked to see that all work was manual and to manage this it took more than 40 people working 75 days, 16 hours a day without any weekend to complete the tasks. On estimating the cost involved he could see that it was more than ten million. On top of this if he needed information he had to search in heaps and bundles of paper.

Rajat was also concerned with the process being followed. All the candidates who cleared the exam had to come at a central location to fill the form and opt for his choice of course. In most cases up to 1000 candidates were called in a day and on an average 90 % percent would be given a seat and confirmation. Most of the time candidate had to stay for 2 to 3 days for admission process to finish. Some being poor could not afford hotel accommodation and had to sleep on ground at the venue, making the whole place look very mismanaged. Politicians used this opportunity to market themselves and education mafia took the opportunity to misguide and lure student for their personal benefits.

Rajat was not happy and started searching for a resolution to the issue. He was looking for something which could transform the whole process but could not found any readymade solutions. He then called Puneet who had experience in similar territory to work out a solution for him. Puneet and Rajat discussed this over a period of 7 days understanding the problem and came out with a solution which was to take the whole process online.

They prepared proof of concept and same was presented to the CM of the state. The idea was appreciated and got a go ahead from the state and led to birth of NYSA, dedicated focus to provide solution to admission. NYSA performed the task to the satisfaction and earned accolades from all the sections of the government. For the first time students got admissions without even moving out of their home. State could save 50 % on the costs and valuable time of their employees.

Riding on the success of their venture Puneet and his team went to various places with their solution. The solution was readily accepted by various states in the country, providing solution to government education department. As time passed by NYSA came up with ERP solutions and services to various Universities across the country. Thus making ERP solutions a backbone for their success.

### **Industry: Market Now**

Over the Period of last 5 years markets have considerably changed. Though the market is flooded with many Engineering colleges but not many students want to take up the courses. Even after passing from the institutes the students fail to get good jobs because of global meltdown and reduced job opportunities. Because of Puneet was worried about future of this business but there was a ray of hope in their ERP solutions business which he expected to pick up in next few years. This was because government had relaxed norms for opening new universities and it was anticipated that most of them would require some kind of solutions to run this show.

They also had ERP solutions for which they were already giving services to their clients. The solutions were ready but then they were custom made as per the client requirements. The solutions were tailor made which were built in 6 to 1 year time frame. If they were to target a large volume of clients they need to have a standard solution which could be used as off the shelf and sold to customers.

They called a meeting with the sales to discuss this issue and most of them were not confident about the idea and felt it is not made for their kind of industry. Even one of the Sales managers quoted

*“Our work is like a heart surgeon you can estimate a problem but cannot give the disease a cure unless we open the heart although the problem might be same but the procedure to fix that problem is different. None of our client has same structure and processes. Then how we can create a standard solution “even we try to do so we are going to fail”*

Mittal was confident upon his boss idea and wanted to go ahead with the project so he sat with Mr. Ashish and discussed on what could be done and how the solutions could be developed. Ashish who was the project head (Exhibit 3) for one of the key ERP implementation jumped over the idea and found it to be exciting and was ready to take the challenge. He called his team for discussion. After an hour of discussion and brainstorming team came to a conclusion that a product can be created but it would have to be customized as per the client requirement and that can be a never ending activity and there is no resort visible to this issue till date. Hemant, the senior program manager had a point

“Most of our clients don’t have vision, they are completely dependent upon us for delivery, when we go to them for requirement they ask for something else and at the time of delivery they change requirement. Most of these requirements are not confirmed in written so every time we are stuck up in endless loop of customization. The big question was we can create product but how would change the client mindset to use that product.

Another challenge was how to take that project to masses. One of the other major aspects was the kind of solutions available with NYSA. The Education ERP roughly constitutes 25-30

modules and out of these only 5 to 6 modules were enough to serve 80 % of any client requirements, the clients still asked for most of the modules. On an average client would implement around 20 – 25 modules including 5-6 core modules. The requirement of other 15 to 20 modules was different from client to client and NYSA had to gain expertise in developing these modules which might take another 2 years and by that time market would saturate. Moreover at the time of presentation if NYSA was unable to present a desired module client would carry a negative image which might result in losing credibility and that account as well.

Another key concern creeping in Mittal's mind was that since it was a mid-size organization, small teams were working on various projects and resources were continuously shifting from one project to another. There were no bifurcation of projects to individual teams so it would be difficult to estimate the amount of effort spend upon each of clients. Moreover in the absence of activity based costing it was like finding a needle in the haystack if it was required to know the cost spent on each of the task.

Next day in the first half Mittal fixed up the meeting with Mr Das, who was the Vice president of the organization on implementing this idea. Das with his experience immediately agreed that this could be the future of industry but he shares some of his apprehensions related to consumer mindset, he quoted "you know the attitude of our typical Indian customer, when they buy a solution they think they have hired a slave and we have to get everything done for them, most of the time we have to deploy resources at the customer end even when we have not committed and we cannot do anything about it because our payments are linked to delivery." He continued "this is add on cost but how we would manage this when we are going for off the shelf product, he also cautioned that we cannot deny any service to a customer, mind it wrong feedback is like a fire that might burn the jungle faster than you can even think of and this is a small industry once something goes wrong it would be tough to rectify". He shared his experience of the industry and as per him there are two different types of customer one are private colleges and universities and other are government and both of these clients have a very different set of purchasing pattern and requirement . These need to be assessed before proposing any solutions. Government client may not pay you more than the amount they have committed, but they would ask you to provide everything they have asked in written. Everything that is in between the lines also goes into their favor, whereas the private client would like everything on the platter. They would be much more organized and would look forward for the service which is excellent and may ask for new services in the future like custom mobile app or a helpline. We would then have to be ready before approaching such customer.

After all this discussion Mitta sat with Sales General Manager Mr Matthew who was in this field for last 3 years and wanted to understand the other factors which can affect their strategy at national level as per Matthew the industry was quiet fragmented (Exhibit 5) and most of the market was captured by the regional players. As per him till date the industry was premature and the current market share was expected to be around 100 Cr and currently growing at a CAGR of 29.5 % and is expected to be triple in next 5 years. As per him people have just started accepting IT solutions and we may see lots of changes in the market.

He was not very positive on idea and had the same concern regarding endless changes asked by the customer and his concern was how would we handle customers who are not in northern India as most of our products and medium ticket value and average product cost is 35 to 50 lac and multiple visits and implementation team deployment would lead a cost to up to 20-55 % of revenue which might make the project unviable moreover if we pass on this cost to client how we could compete with other regional players. But more than this, the major concern was the variation in the ticket size because we had clients ranging from 2 to 30 million. The pricing is

dependent upon the size of the client, complexity of project, expected intensity of services and past history of client and competition. He exhaled “for the same services we are charging 30Rs. per student per month to one client and 90 Rs per student per month to another and if we have to quantify the difference in price we may not be able to justify then how can we standardize”.

Other Key focus was the government sector which was expected to be the key factor for growth in times to come. Government spending was at all-time high; Matthew shared some data and figures (Exhibit 4(a), (b) which seemed to be very compelling. But as per him standard pricing for government sector was next to impossible because of their purchasing pattern.

He was also worried about the fact that country one of the biggest IT company PCS systems also have established a new vertical for these solutions and they were taking it very seriously and was expected to huge junk off market in times to come moreover there was another player worth 500 Crore. Maniram group who were into education and printing has acquired a IT solutions firm and wanted to big time in education software so his mix views were that competition would educate the customer and increase willingness to pay but we need to have a plan to take on these giants.

Another Major upcoming expected of this Industry were support services in last few months clients have started asking for Call center support and Mobile based applications. Even in few cases heavy manpower was deployed at client side and there were instances where this cost went up to 25 % of the total project value. But this helped the organization in charging premium over the competitors and most of the High profile customer valued services.

With all the feedback gathered from the different source Yadwinder sat with Puneet to discuss on how to go forward with the project and they task which earlier seemed to be marketing challenge now seemed to be tilting toward the most unexpected factor Pricing which was again supported one of the marketing manager quoted

*“We are in B2B business we could hardly get any benefits from the marketing and we have to depend upon push and sales strategy or the leads through our sources or clients. Demo is the most important part of conversion for which we need to identify the key stake holder from the client side. But during discussion with most of the stake holders they want to know the cost of the product at the time of first meeting itself and in many instances client create an imagery about the product without even seeing the demo on listening about the costs of the project and they either think it to be too costly or too cheap and then it is a daunting task to convince them”*

Mr Puneet gave Yadwinder a week’s time to come back with solutions and with new role in hand it seems to be a mammoth task for him to justify his offering and what shall be cost and he needs to have an answer for all the issues raised by various stake holders and how can he club the services into the cost model. The Future of the organization lie on this decision as most of the time sales team have to take approvals from the senior management on pricing and closing the deal and this would save the effort and would empower the sales team in take instant decisions.

### Exhibit 1 Profit & Loss Statement of NYSA Communication for the year 2015 - 16

Particulars	Notes	31st March, 2013	31st March, 2012
<b>I</b> Revenue from operations	2.10	145,653,521	122,001,589
<b>II Total Revenue</b>		<b>145,653,521</b>	<b>122,001,589</b>

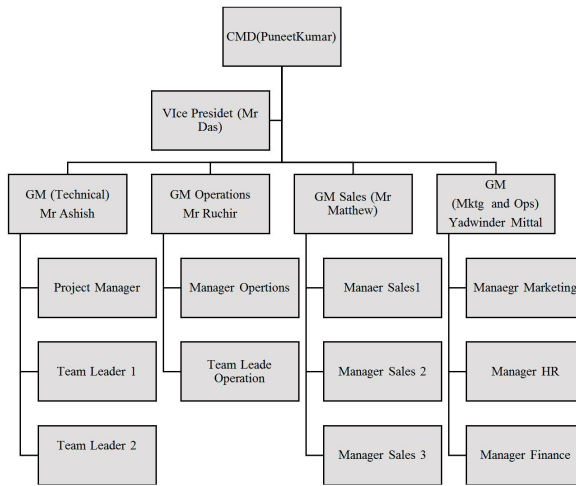
Particulars		Notes	31st March, 2013	31st March, 2012
<b>III</b>	Expenses:			
	Employee benefit expenses	2.11	69,592,015	64,592,015
	Financial Cost	2.12	3,103,867	2,703,867
	Depreciation Expense	2.7	7,517,453	6,513,341
	Other expenses	2.13	49,007,396	38,505,398
<b>IV</b>	<b>Total Expenses</b>		<b>129,220,731</b>	<b>112,314,621</b>
<b>V</b>	<b>Profit/(Loss) before taxation, extraordinary items and tax</b>		16,432,790	9,686,966
<b>VI</b>	<b>Tax Expense:</b>			
	Current tax		(4,998,541)	(1,975,540)
	Deferred Tax	2.4	(982,069)	(322,050)
<b>VII</b>	Profit(loss) after tax		10,452,180	7,389,376
<b>VIII</b>	Total Profit/(loss) Transferred to Balance Sheet		<b>10,452,180</b>	<b>7,389,376</b>
<b>IX</b>	<b>Earnings per Share</b>		<b>418.09</b>	<b>295.58</b>
	Basic / Earning /(loss) per share			

### Exhibit 2 Competitor Offering Analysis (Key Modules)

s.no.	Module name	NYSA COMM.	CAMPUS 123	SUNTRA Microsystems	BRNACH SOFTECH.	APP- MOB LANE	PCS Eion	Maniram Tech	FEDERER
1	Application management	✓	✓	✓	✗	✗	✓	✗	✗
2	Student registration	✓	✓	✓	✗	✗	✗	✓	✓
3	Student admission	✓	✓	✓	✗	✓	✓	✓	✓
4	Fees management	✓	✓	✓	✓	✓	✓	✓	✓
5	Examination management	✓	✓	✗	✓	✓	✓	✓	✓
6	Result analysis	✓	✓	✗	✓	✓	✓	✓	✓
7	Time table scheduling	✓	✓	✗	✓	✓	✓	✓	✓
8	Library management system	✓	✗	✗	✓	✓	✓	✓	✓

s.no.	Module name	NYSA COMM.	CAMPUS 123	SUNTRA Microsystems	BRNACH SOFTECH.	APP- MOB LANE	PCS Eion	Maniram Tech	FEDERER
9	Attendance management system	✓	✓	✓	✓	✓	✓	✓	✓
10	Vehicle management system	✗	✗	✗	✓	✓	✓	✓	✓
11	Hostel management	✓	✓	✗	✓	✓	✓	✓	✓
12	HR management	✓	✓	✓	✓	✓	✓	✓	✓
13	Assets management	✓	✓	✓	✓	✓	✓	✓	✓
14	Financial accounting	✗	✓	✓	✗	✓	✓	✓	✓
15	Alumni management system	✓	✓	✓	✗	✓	✗	✗	✗
16	Document management system	✓	✓	✓	✓	✓	✗	✓	✓
17	Mobile alerts	✗	✗	✓	✗	✗	✗	✓	✓
18	Smart card integration	✗	✗	✓	✗	✗	✓	✓	✗
19	E-homework	✓	✗	✗	✗	✗	✗	✗	✗
20	Cloud learning	✓	✗	✗	✗	✓	✓	✗	✗
21	Training and placement	✗	✓	✗	✗	✗	✗	✗	✗
22	GPRS	✓	✗	✗	✗	✗	✗	✓	✗

**Exhibit 3 Organization Chart**

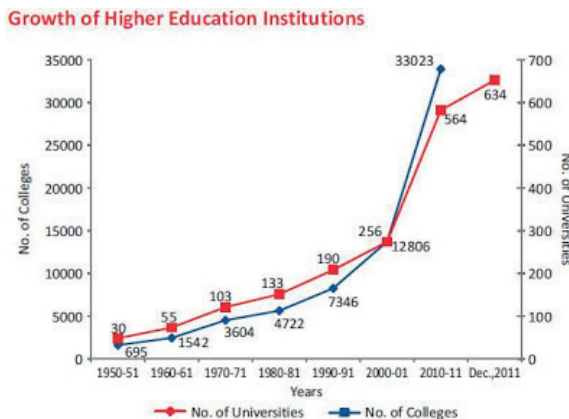


**Exhibit 4(a) Industry Growth from 2007 to 2012**

Category	2006-07		2011-12		Increase	Growth Rate (Per cent)
	Total	Per cent	Total	Per cent		
<b>By type of institutions</b>						
	63.38	45.8	89.63	41.1	26.25	7.2
Central	3.10	2.2	5.63	2.6	2.53	12.7
State	60.28	43.6	84.00	38.5	23.72	6.9
Private	75.12	54.2	128.23	58.9	53.11	11.3
<b>By degree/diploma</b>						
Degree	123.54	89.2	184.84	84.8	61.30	8.4
Diploma	14.96	10.8	33.02	15.2	18.06	10.8
<b>Total</b>	<b>138.50</b>	<b>100.00</b>	<b>217.86</b>	<b>100.00</b>	<b>79.36</b>	<b>9.5</b>

Source: University Grants Commission (UGC), All India Council for Technical Education (AICTE), NCTE, Indian Nursing Council (NCTE).

Adopted from Distance Education Council



Source : MHRD / UGC



## Exhibit 4(B) Government Spending

Table-4 Budgeted Expenditure on Education by Education Department of Central Government (Revenue Account)  
(Rs in thousands)

S.No.	Sectors	Actuals ( 2010-11)			Revised Estimates ( 2011-112)			Budget Estimates ( 2012 -13)		
		Plan	Non-Plan	total	Plan	Non-Plan	total	Plan	Non-Plan	total
	<b>University &amp; Higher Education</b>									
1	UGC	42225500	36035600	81261400	52445000	43706400	96151400	63511500	47941700	111453200
2	Establishment of Rural University	44600	10700	55300	50000	13700	63700	60000	14300	74300
3	AIU	6000	3200	9200	6000	3200	9200	6500	3200	9700
4	Zakir Hussain Memorial Trust Delhi	0	0	0	0	0	0	0	0	0
5	Setting up of Commonwealth University COL	0	40000	40000	0	40000	40000	0	50000	50000
6	Shastri Indo-Canadian Institute	0	27700	27700	0	27700	27700	0	27700	27700
7	IAS Simla	41945	54500	96445	48000	72500	120500	55000	77200	132200
8	National Research Professors Project of History of Indian Science,Philosophy & Culture Assistance to state govt of degree colleges	0	0	0	100000	0	100000	100000	0	100000
9	Education Loan Interest Subsidy	2032800	0	2032800	6400000	0	6400000	8000000	0	8000000
10	ICSSR	278788	571200	850988	340000	436800	776800	1000000	472400	1472400
11	ICHR	50999	62500	113499	70000	101800	171800	80000	107900	187800
12	ICPR	39214	33900	73114	50000	41500	91500	60000	44600	104600
13	Estib of Tribunals,NCHER,MFC etc National Mission on Teachers & Trn	0	0	0	0	0	0	20000	0	20000
14	Incentivising of States for expansion,inclusion & excellence	0	0	0	0	100	100	10000	100	10100
15	Refund of Income Tax Improvement in salary scales of University & Colleges	0	0	0	0	16400	16400	0	16400	16400
16	<b>TOTAL University &amp; Higher Education</b>	<b>44731856</b>	<b>39898100</b>	<b>84629956</b>	<b>59520000</b>	<b>44976100</b>	<b>104496100</b>	<b>72928000</b>	<b>71268500</b>	<b>144196500</b>

**Exhibit 5 Estimated Share of Major Players of the Industry**

### Market Share

