INDIA – Inevitable Need of Dexterous Individuals for Analytics

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Abstract: With fluctuating undercurrents in employment market, expertise prerequisites (as mentioned in Job Specification) have stretched beyond function / department / operation centric to technology centric. Rarely employers look for individual who is only BE / MBA etc. Along with it, does he has analytical skills? Does he has ability to produce his dexterities at work place with restricted resources? Tons of Industry specific ERP systems exist in the market. If company plans to expand itself horizontally, will it need altogether different software, teams etc. or some of existing teammates can handle char with available technology? Through Primary data, researcher is trying to bring to notice rare approach of innovatively exhausting budget for organization development within and outside the organization. This can lead to industry as well as social welfare.

Images – Education Supply vs Industry Demands
***Index Terms* – MS Excel, Business Analytics, Qualification, ROI, Industry skill.**

1. INTRODUCTION

When INDIA is talking about Development, it is imperative to be world class in terms of infrastructure, transport, technology, process, policies, laws, environment, culture, etc. All these are practically result of something and that something is "*practical* education". *Practical* education connotes skill sets imparted to ages that are going to enter job / business market. This certainly has to be derived from theory, but should have been taught in more practical ways. Does it happen that way?

In our country, there are thousands of course offered by thousands of universities. There are crores of students passing out with flying colors every year from numerous streams. Yet, how many are employable? If we talk of an industry e.g. Manufacturing, they need team members from almost all background including Engineering, Commerce, Safety, Health, Operations, Supply Chain, Marketing, Technology, Quality assurance, Human Resource, etc.

1.1 *WORK EXPERIENCE – WHY?*

When companies go for hiring, 90% of the Job Descriptions have *crucial* criteria of "work experience". This clause itself is an indicator of gap between education supply and industry demands.

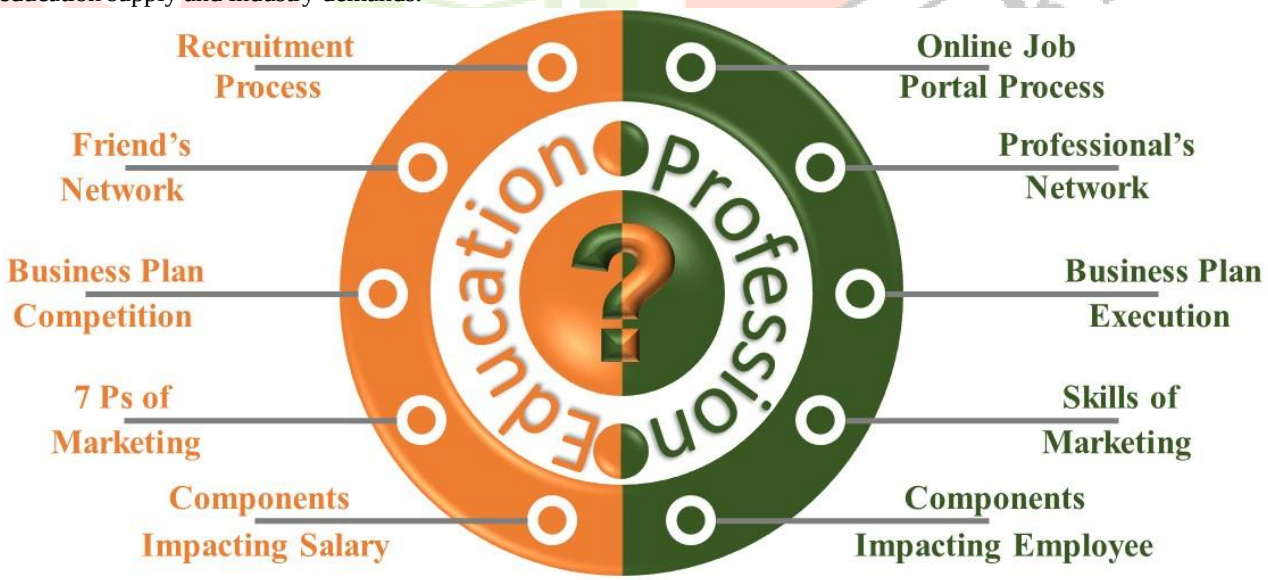

Figure 1: Expectations vs Actual

One of the fundamental reasons for having criteria of "Work Experience" is cost cutting in training employee for particular job / responsibilities. Making hired person employable and responsible for particular task is time consuming process. If it's a fresher, it carries risk of losing person post training. One more reason for this "cost" is having variety of software / applications / technologies in various departments of same company. Sometimes, even after hiring experienced employee, he needs to be trained because he might have worked on some other platforms in previous companies. But "work experience" helps joiner swallow new terms pretty easily.

2. IMPORTANCE OF STUDY

Figure 2: Technology Investment Dilemma

Source: (Jardine, 2016)

This study is focused upon Financial KPOs which is one of the biggest industry matured in India in last decade. (Outsource2india, n.d.) Though all processes of companies are in place, technology is revolutionizing almost every day. Advance systems today are destined to become archaic in few dozens of months. Because of tough competitions from global market, companies have big time problem of choosing right application for their business. More over even if any application is chosen, it is minting money annually in some or other form. So, instead of devoting huge lump sum in technology advancement, it is logical to make squads dexterous to develop in house procedures for all these purpose.

Researcher is trying to find whether having knowledge of accounts and finance enough to be competent for working in financial KPOs. If they are applying knowledge to work through computers, are they using financial applications (like Tally etc.) only?

Most of the businesses employ MS Office as major tool for their day to day work. From printing offer letters, email communication, manufacturing / sales / finance data mining, demonstration to top management / customers, to contract management, everything materializes in MS Office (MS Word, MS PowerPoint, MS Excel, MS Access, and MS Outlook etc.). It is crucial to log that if techno-savvy groups are refined to make use of existing applications in more fruitful ways, miscellaneous costs as well as technology costs can be brought down happily.

2.1 *STATEMENT OF THE PROBLEM*

When person talks about Financial KPO, biggest employee group is going to be people graduated with Commerce background. Though, other departments like HR, Admin, IT, Logistics may need teams from other streams, yet more percentage has to be from commerce for operations, marketing, sales, business development etc.

People are using MS Excel to a great extent in their day to day work. But have they learnt it exclusively during their education? Researcher is trying to find out efficacy of Excel training to make learners more competent for job. Also, research is also intended towards identifying methods of improving work efficiency.

2.2 *OBJECTIVE*

This research is pertaining to meet following objectives

- To check efficacy of MS Excel training in improving work efficiency
- To identify efficiency improvement methods while operating on MS Excel
- To diagnose whether learners have been educated in MS Excel technology during their higher education

3. HYPOTHESIS FOR THE STUDY

3.1 *Hypothesis I*

H_0: There is no correlation between employee's positions and efficacy of MS Excel training.

H_1: There is correlation between employee's positions and efficacy of MS Excel training

3.2 *Hypothesis II*

H_0: There is no correlation between employee's positions and utility of shortcut keys

H_1: There is correlation between employee's positions and utility of shortcut keys

3.3 *Hypothesis III*

H_0: There is no correlation between employee's positions and MS Excel based projects done during education

H_0: There is correlation between employee's positions and MS Excel based projects done during education

4. RESEARCH DESIGN

- Data collection Method: Structured questionnaire (manually filled as well as using Google Doc). Questionnaire used 5 Point Likert scale as "Always", "Often", "Sometimes", "Rarely" and "Never".
- Industry scope: Research is restricted to Financial KPOs only.
- Geographical scope: Financial KPOs from Pune and Mumbai in Maharashtra.
- Dependent variables - "Training Efficacy" and "Shortcut keys utility" are continuous variables. "Excel based Projects" is categorical variable. "Employee's Position" is a categorical independent variable.

To test hypothesis using SPSS, Univariate Analysis of Variance (one way ANOVA) and Chi Square tests are used.

4.1 *Data Collection*

After releasing questionnaire to the Universe of expected responding financial KPOs from Pune and Mumbai, 494 respondents turned up to contribute to the research. Geographical location wise and Gender wise bifurcation of responses is given below:

Table 1: Research Data bifurcation Location & Gender wise

City	Pune	Mumbai
Male	192	64
Female	199	39
Total	**238**	**256**

5. ANALYSIS

Using SPSS, frequency distribution chart is created for two variables – "Training Efficacy" and "Shortcut Keys Utility". Result clearly indicates skewness in population.

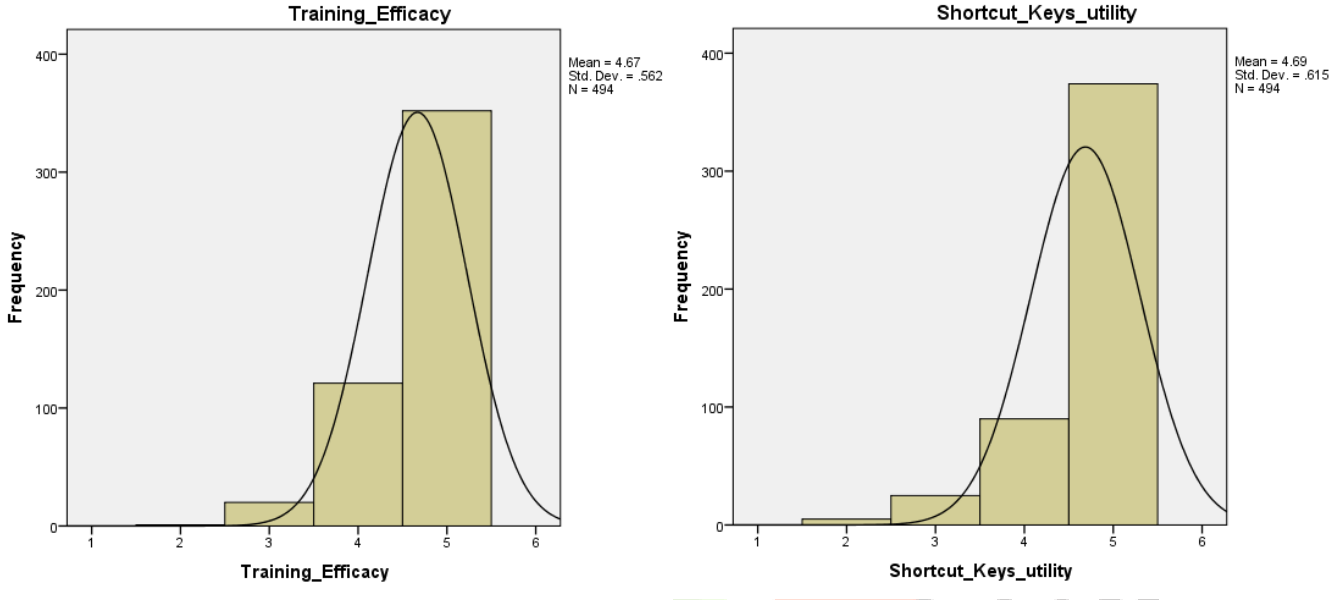

Figure 3: Frequency Distribution of Responses

5.1 *ANOVA (Hypothesis I & II)*

Using SPSS, One way ANOVA test is conducted on the dataset and following result is recorded (for 1st & 2nd Hypotheses).

Table 2: ANOVA Test Result

		Sum of Squares	df	Mean Square	F	Sig.
Training Efficacy	Between Groups	10.2	2	5.118	17.291	**0.000**
	Within Groups	145	491	0.296		
	Total	156	493			
Shortcut Keys Utility	Between Groups	3.21	2	1.603	4.297	**0.014**
	Within Groups	183	491	0.373		
	Total	186	493			

- Hypothesis I

ANOVA result indicates Sig. = 0.000 which is much smaller than 0.05 level required for statistical significance. Hence, null hypothesis (H0) is rejected. Thus, employees' positions play key role in efficacy of training.

- Hypothesis II

ANOVA result indicates Sig. = 0.014 which is much smaller than 0.05 level required for statistical significance. Hence, null hypothesis (H0) is rejected. Thus, employees' positions play key role in Shortcut Keys Utility.

To identify positions that are impacting both variables, Post Hoc test (LSD) is conducted. Result is as shown below:

Table 3: ANOVA Post Hoc Test

Multiple Comparisons

LSD

Dependent Variable	(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Training_Efficacy	Assistant Manager & Above	Below Assistant Manager	-.599*	.102	.000	-.80	-.40
		Article / Trainee / Contract	-.518*	.108	.000	-.73	-.31
	Below Assistant Manager	Assistant Manager & Above	.599*	.102	.000	.40	.80
		Article / Trainee / Contract	.081	.056	.146	-.03	.19
	Article / Trainee / Contract	Assistant Manager & Above	.518*	.108	.000	.31	.73
		Below Assistant Manager	-.081	.056	.146	-.19	.03
Shortcut_Keys_utility	Assistant Manager & Above	Below Assistant Manager	-.215	.115	.062	-.44	.01
		Article / Trainee / Contract	-.335*	.122	.006	-.57	-.10
	Below Assistant Manager	Assistant Manager & Above	.215	.115	.062	-.01	.44
		Article / Trainee / Contract	-.120	.062	.055	-.24	.00
	Article / Trainee / Contract	Assistant Manager & Above	.335*	.122	.006	.10	.57
		Below Assistant Manager	.120	.062	.055	.00	.24

*. The mean difference is significant at the 0.05 level.

For simplicity, let us say

- Article / Trainee / Contract – Group I
- Below Assistant Manager – Group II
- Assistant Manager & Above – Group III

With respect of Training Efficacy, Group II and III are significantly different than group I. Thus, training has greater impact on work efficiency of Below Assistant Manager, Assistant Manager and above levels compared to Article / Trainee / Contract.

With respect of Shortcut Keys Utility, Group I is significantly different than group II and III. Thus, Shortcut Keys Utility has greater impact on Article / Trainee / Contract compared to Below Assistant Manager, Assistant Manager and above levels.

5.2 *Chi Square (Hypothesis III)*

Using SPSS, Chi Square test is conducted on the dataset and following result is recorded (for 3rd Hypothesis).

Table 4: Chi Square Test Result

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.111[a]	2	.211
Likelihood Ratio	3.063	2	.216
Linear-by-Linear Association	1.653	1	.199
N of Valid Cases	494		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.41.

Since P-value is 0.211, more than 0.05 (significance value), we can reject null hypothesis. There is no significant relationship between position of employees and MS Excel based projects that they have done during education.

6. CONCLUSION

With the statistical analysis done based on 494 responses, it is evident that MS Excel training has greater utility to middle level and higher level performers in an organization. This is something serious that each industry needs to understand. With experience, salaries can go up, promotions can happen but MS Excel operational efficiency can be increased drastically through training. At higher levels, people are not involved in data entry. They are more focused towards reports that are generated from data and decision making, forecasting, trend analysis etc. based on it.

On the other hand Articles and other junior levels are more involved in data entry and fundamental tasks. If they are equipped with easier methods of using shortcut keys, with less efforts they can do more. In other words, data entry productivity can also be enhanced.

Such skills can never be acquired by completing books / home work on paper. Education institutes can insist on redefining their syllabus so that more of "real life skills" can be percolated to grass root levels. If it happens, industry will get ready to use skills right from 1st day of their careers. During education, students really should be compelled to do at least 1-2 hours of MS Excel work to understand real life volcanoes companies are riding upon. Huge infrastructures of educational institutions, highly paid faculty members, government education schemes for BPL etc. will be worthwhile only when acquired degree's output is a skill, not knowledge!

7. REFERENCES

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