An Integrative Trust Model in Evaluation Process: An Innovative Approach

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Abstract: Having trust is crucial to all categories of institutions, including colleges and universities. Typically, with autonomous institute establishing the trust in academic evaluation process is major challenge. To maintain credibility in the examination system, it is essential to exert efforts to comprehend and evaluate trust. Though modelling the trust in organization is attempted in research, no major attempt is made to model the trust of evaluation process of academic institute. This paper attempts to explore the usefulness of model of Organizational Trust of Mayer et.al to evaluation process executed at self-financed autonomous college. The Mayer et.al trust model, having ability to construct a context specific trust model, claims to understand the trust in organization. In context of trustworthy evaluation process, the paper elaborates the selected trust model with reference to direct and indirect practices associated with examination at institute to build trust.

Keywords: An Integrative trust Model, Evaluation, Examination Process

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1. Introduction

Academic autonomy yields responsibility towards every academic process, not only in teaching-learning standards but also in evaluation measures. Thriving for excellence in teaching and achieving transparency in evaluation process are the major goals of autonomous institute to aim for, specially, the trust in evaluation process. Research has validated that an institute's capability to develop trustworthy relationships among its processes is essential to gain competitive advantage over other institutes [1].

The research is focused around "Trust" from various perspectives. Establishing and measuring trust has been attempted in research for different domains ranging from psychology, political science, sociology, Business management to different discipline of computer science like e-commerce [2]. The work of Mayers et.al. is considered as pioneer work in fields of defining trust [3].

The model defines trust with reference to situation having characteristics as trustor (the one who trusts) is willing to trust actions of trustee (the one who will be trusted) for future. Also trustor willingly or unwillingly relinquished control over actions performed by trustor. This leads to possibility of perceived risk in trust if action of trustee is not trustworthy. The outcome of trust is loop back to monitor result over the process.



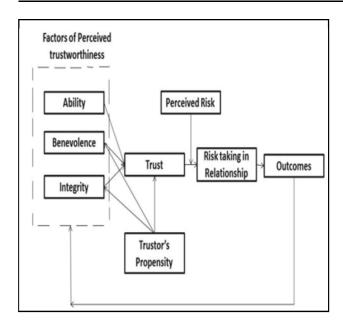


Figure 1. Mayer, Davis, and Schoorman's Model of Organizational Trust

As shown in Figure 1, in Mayer, Davis, and Schoorman's Model of Organizational Trust, trust is characterized by three factors-

- Characteristics of the trustee (the one who will be trusted),
- ☐ Characteristics of trustor (the one who trust), and
- ☐ The perceived risk

Characteristics of Trustee:

Trustworthiness is represented by characteristics of the trustee. Mayer et al. discussed three elements of trustworthiness-ability, benevolence, and integrity.

Ability defines the competency of the trustee in the specific domain.

Benevolence expresses the willingness of the trustee to do good for the trustor.

Integrity outlines whether the trustee has a core set of values to guide behaviour.

Characteristics of Trustor:

This is characterized by Trustor's propensitywillingness to trust some individuals more than others.

Risk taking in relationship:

Risk is considered as inherently present part in trust model. A behavioural manifestation in being vulnerable is assumed in trust model.

Perceived Risk

The model assumes trustor propensity of trust leads to unchecked action of trustee. The condition of process will have a particular amount of perceived risk associated with existing trust. Normally, when greater the trust and the lower the perceived risk, possibility of the risk is more.

Outcome

The outcomes of trust model serve as feedback to maintain level of trustworthiness.

This model applicability had been evaluated with different case studies such as business case study, medical community, understanding trust in government [4,5,6].

The paper referred the Mayer, Davis, and Schoorman's Model of Organizational Trust to evaluate the how effective evaluation practices at K.J. Somaiya College of Engineering, Mumbai (KJSCE) under the status of academic autonomy are to meet the trustworthiness within system.

$\begin{tabular}{ll} \bf 2. \ Mapping \ an \ Integrative \ Trust \ model \ to \ practices \\ adopted \ at \ KJSCE \end{tabular}$

Various educational institutions implemented innovative and improved practices to achieve the improvement in quality and efficiency in the various stages of examination systems especially in the conduction and evaluation [7]. In the discussion of best practices for higher education, evaluation is categorized under quantitative and qualitative evaluation [8]. Thus various educational institutes attempt to improve the experience of evaluation through different approaches to attain quantitative and qualitative evaluation.

Though best practice adopted by one institution may not be a best practice for another institution, thus in attempt to improve own experience every institute strives to develop its own set of practices. In further discussion we put forward the practices which are related directly or indirectly to evaluation process at KJSCE under the status of academic autonomy. The focus of these practices is to develope trustworthy and



transparent evaluation process.

The beneath fact of maintaining transparency in interaction is developing trust.

The academic institute's efficiency and success have measured to through different means [9, 10,11,12] but not much is discussed on evaluation process of academic institutes [13]. As far as the author is aware, research has not focused to model the evaluation process of academic institute as influential factor in establishing faith in institute to determine its success.

In this work, practices related directly or indirectly to evaluation process at KJSCE are modelled to trust model. The paper elaborates the selected trust model with reference to direct and indirect practices associated with examination at KJSCE to build trust assuming KJSCE in role of Trustee and students undergoing evaluation as Trustor.

Characteristics of Trustee (KJSCE):

Mayer et al. discussed three elements of trustworthiness- ability, benevolence, and integrity. Following table 1 shows how processes at KJSCE are mapped to characteristics of trust discussed by Mayer et al.

Table 1. Mapping of Characteristics of Trustee to Processes

Characteristics of Trustee	Process	
Ability	Assessment in line with course outcome	
	Continuous Assessment	
	Well Informed Schedule	
	Proofreading of Paper	
Benevolence	Answer sheet Evaluation based on	
	Evaluation Scheme	
	Open Day Conduction	
	Redressal of Grievances	
Integrity	Reformative action plan for unfair	
	mean Cases	
	Special exam conduction methods for medically and physically challenge students	

Table 1 is discussed as follows:

Ability defines the competency of the trustee in the

specific domain. To discuss ability, paper maps practices of KJSCE which could be taken place because of autonomy status. The practices are as follows:

Assessment in line with course outcome

One of the ways to improve educational experience is informed assessment methods. It is recommended that evaluation should be based on expected learning outcome for the course. Assessment methods need to be in line with requirement to validate the skills students are expected to acquire [14].

In KJSCE autonomy syllabus every course prescribes course outcome. The course outcomes are adhering to levels of Bloom's taxonomy - knowledge, comprehension, application, analysis and synthesis [15]. In general, Bloom's taxonomy's levels reflect achievement testing at various stages such as obtaining knowledge, comprehending knowledge, application of knowledge and so on. Such achievement testing is conducted in KJSCE in two parts, namely Continuous Evaluation (CA) and End Semester Examination (ESE).

In evaluation process, college insist question paper set for End Semester Examination (ESE) in line with course outcome. This helps to improve understanding of both - teachers and students towards evaluation process.

☐ Continuous Assessment

Examinations play vital role in determining performance of student throughout the conduction of course as well as at the end of the course. In Continuous Assessment (CA) - The course teacher conducts different activities under Internal Assessment (IA) component throughout the semester along with midterm test and end term test. Students are evaluated in Internal Assessment (IA) component using assignments, presentation, seminar, quiz, mini project, group discussions and other such means. The objective of evaluation is mapped to different level of Bloom's Taxonomy mentioned in course outcome.

Well informed schedule

In autonomy, most important requirement is a time bound conduction of activities mentioned in the Academic Calendar. In the Academic Calendar,



different time schedules are mentioned including start and end date of semester, start and end date of midterm test, start and end date of end term test, commencement of final practical/ oral examinations, End Semester Examination, open day conduction.

This informed schedule served as information resource to schedule the activities of teaching-learning and assessment for courses.

☐ Proofreading of Paper

On the day of examination, one of the examiner or faculty related to course is present in examination centre for proof reading of the paper. The present faculty ensures not only that question paper is errorfree (such as no typography mistakes, missing data, and repetition of questions) and covers the complete syllabus but also questions are mapped with course outcomes and explicit instructions are mentioned in question paper.

This task in exam conduction confirms hassle free exam conduction and improves trust in students undertaking the exam.

The next characteristic of Trust in Mayer's model is Benevolence which expresses the willingness of the trustee to do good for the trustor. Paper mapped following practices of examination process which reflects willingness to establish fair, impartial and transparent evaluation.

Answer sheet Evaluation based on Evaluation Scheme

Normally the course faculty is appointed to evaluate the answer sheets of ESE. It is insisted that evaluation scheme to be prepared before evaluation. This evaluation scheme is preferably overseen to check the quality as well as standard of evaluation by the other faculty associated with course. As a part of examination system, college assert to follow same evaluation scheme in case of reassessment as well to maintain uniformity in evaluation. Before conduction of open day, the evaluation scheme is shared with students.

Not only having evaluation scheme for assessment and reassessment of answer sheets but also sharing the evaluation scheme with students contribute as major factor in achieving transparency in exam paper evaluation. KJSCE made it practice to display ESE evaluation scheme as well as final Practical/oral evaluation scheme for all courses.

Open Day Conduction

Open day is a predefined day, on this day all the students allowed to view their assessed answer papers of all courses. Necessary precautions are taken so that there should not be scope to attempt overwriting on the assessed papers or any other malpractices.

Conducting open day is leading step in achieving transparency in evaluation process. Showing answer sheet to students along with description of evaluation methodologies mentioned in evaluation scheme form the basis of transparent and impartial evaluation process.

☐ Redressal of Grievances

Handling grievances at different levels leads to encouragement of fair and transparent evaluation. Grievances of students will be considered in 2 categories as explained in table 2.

Table 2. Redressal of Grievance

Grievances Category	Nature of Grievances	Action to be taken
Category I	Report onTotaling mistake and Un- assessed answer	Immediate by COE (Controller of Examination) for correction to be done by the examiner
Category II	Request for reassessment of part or full answer sheet	Another examiner for reassessment to be appointed by COE

Grievances of both categories are handled in following ways:

Category I

Change in the marks will be implemented only if change in marks is greater than zero (>0)

Category II

Change in the marks will be implemented only if change is \pm (>=10%) of obtained marks or if student is getting benefit of passing the course, the change in



marks to be implemented even though change is <10% of obtained marks.

The third characteristic of Mayer's model is Integrity outlines whether the trustee has a core set of values to guide behaviour. To exert positive control of academic autonomy, KJSCE adopted two major processes- Reformative action plan for unfair mean Cases and distinct exam conduction methods for medically and physically challenge students.

☐ Reformative action plan for unfair mean Cases

In order to take idea of autonomy further in constructive way, the college has decided in consultation with Academic Board and Examination committee to handle unfair mean cases in more positive way by giving an opportunity to students involved in unfair mean cases to understand their mistake and improve. It was then recommended that this reformative action could be taken by utilizing their vacation (special internship) and involving them in additional academic work such as lab development or engaging in social work/activities, etc.

KJSCE has recently signed a Memorandum of Understanding (MOU) with an organization "Snehalaya" from Ahmednagar. The college also associated with the K J Somaiya College of Physiotherapy, Ayurvihar, Sion, Mumbai.

The students can participate in variety of activities in these institutes, extend their help in challenges that they face, assist / interact with the inmates or repair/maintain some machines as required by the administrators.

A recommendation from the administrators may give students an opportunity to save their grade point reduction as punishment that they might get due to their act of unfair means practices during recent examinations.

Special exam conduction methods for medically and physically challenge students

At KJSCE cases of students, who have certain medical or physical problems, are handled case to case or semester to semester basis. To leverage the privilege of autonomy of college, college try to exercise flexibility in conducting exams for such students with approval from authority. College uses alternative method which is suitable for such students

and allow them to complete term work and take the exams.

The provisions of such alternative methods seek approvals from External and Internal Examination committee.

Characteristics of Trustor:

This is characterized by Trustor's propensity-willingness to trust some individuals more than others. Paper evaluates examination practice under University of Mumbai against KJSCE examination practices to justify the trustor's propensity as students in favour of KJSCE.

The table3 shows that practices followed at KJSCE exert efforts towards impartial and transparent evaluation. Because of this, paper proposes trustors propensity from the perspective of students towards KJSCE.

Table 3. Examination Practices

Sr. No.	Practice	Mumbai University	KJSCE under Autonomous status
1	Assessment in line with Course Outcomes (COs)	COs are mentioned in revised University syllabus but adherence of question papers in line with COs are not ensured	COs are mentioned in revised syllabus as well as adherence of question papers in line with COs are is ensured
2	Continuous evaluation	Ratio of Continuous evaluation (CA) to End Semester Examination in university is 20:80	Ratio of Continuous evaluation (CA) to End Semester Examination in university is 40:60
		Considered as separate Head of Passing	Not considered as separate Head of Passing
		Only in form of term tests	Not only in form of term tests but also in form of Internal assessment (IA) composed of quiz, assignment, presentation, etc.

3	Academic	Moderately	Well informed
3	calendar	informed schedule	schedule
		Result declaration not included	Declaration of Open day included
4	Proofreading of Question Paper	Executed as a practice of examination process It takes moderate time to communicate changes in	Executed as a practice of examination process It takes minimal time (if at all) to communicate
		paper after proof reading	changes in paper after proof reading
5	Open day Conduction	Not Conducted	Conducted
6	Answer sheet Evaluation based on evaluation Scheme	Evaluation Scheme not displayed/ communicated to students	Evaluation Scheme displayed/ communicated to students
		At university level assessment (semester I, II, VII and VIII), different assessors are appointed which results in varying assessment pattern for same course	One assessor is appointed for one course (except semester I and II). Though for semester I and II different assessors are appointed, these assessors follow same evaluation scheme. Thus ensures uniformity in evaluation
7	Redressal of Grievance through Reassessment and Revaluation	Allowed It take minimum 5-6 weeks to display result of Reassessment	It take minimum 2 -3 weeks to display result of
		and Revaluation	Reassessment and Revaluation
8	Reformative action plan for unfair mean Cases	No such provision exists	Such provision exists
9	Special exam methods for medically &physically challenge students	No such provision exists	Such provision exists

Risk taking in relationship

Risk is considered as inherently present part in trust model. A behavioural manifestation in being vulnerable is assumed in trust model. In context of evaluation process, some of the risk factors can be as follows:

- Assessment methods which are not in line with course outcome
- ☐ Abrupt change in schedule of academic calendar
- Inadequate evaluation scheme for answer sheet assessment

Perceived Risk

The identification of nature of perceived risk is important for success of trust model. One of the perceived risks in current set up of examination at KJSCE is

Use of limited set of assessment tools to assess the course outcome in continuous evaluation

Outcome

The outcomes of trust model serve as feedback to maintain level of trustworthiness. The discussed practices related to evaluation resulted in increased trust in evaluation process among KJSCE student which reflected through reduced number of reported grievances cases.

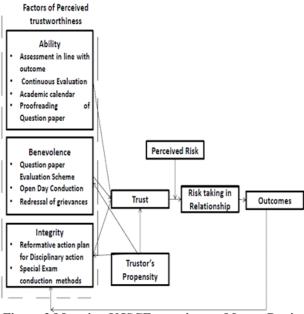


Figure 2 Mapping KJSCE practices to Mayer, Davis, and Schoorman's Model of Organizational Trust



Figure 2 Mapping KJSCE practices to Mayer, Davis, and Schoorman's Model of Organizational Trust

3. Conclusion

For an autonomous institute developing credibility in evaluation process is vital. KJSCE, under autonomous status, have not only took major efforts on evaluation process to have informed, fair and transparent evaluation but also introduced improved processes related to examination such as reformative action, special mode of examination for medically and physically challenged students.

This paper attempted to model the trustworthiness of evaluation process of KJSCE with reputed organizational trust model. The processes, directly and indirectly related to evaluation, are mapped to Mayer et.al integrative trust model. This first attempt succeeds in reorganization of processes followed at KJSCE meeting characteristics of Trustee as well as in identification of trustor's propensity and perceived risks. Thus, this modelling infers success of processes related directly or indirectly to evaluation followed at KJSCE in forming, cultivating and maintaining trust in academic evaluation process.

Acknowledgement

The author would like to acknowledge support of K.J.Somaiya College of Engineering, Mumbai.

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