

Application of ABCD Analysis Framework on Private University System in India

Abani Kumr Muduli¹, Pratap Kumar Pati² and Minushree Pattnaik³

1Assistant Professor, Department of Basic Sciences, Aryan Institute of Engineering and Technology, Bhubnaeswar

2Assistant Professor, Department of Basic Sciences, Raajdhani Engineering College, Bhubaneswar

3Assistant Professor, Department of Basic Sciences, Capital Engineering College (CEC), Bhubaneswar

Abstract

Private Universities recently introduced in Indian educational system, have enhanced the scope of innovations in Higher education in India due to their autonomy and zeal to excel. In this paper, we have analyzed its merits and limitations using the analyzing framework called ABCD technique. For these six determinant issues which relate to the functioning of a University has been chosen. These are Organizational aspects, Students Progression, Faculty development, Societal & other stakeholders issues, Governance, Leadership, and Issues on Innovations and Best Practices. Further, four key issues were identified under each of these and critical constituent elements under these factors are worked out. Through this analysis, 192 critical constituent elements which satisfy the success of a private university have been explored.

Keywords : *ABCD analysis framework, Opportunities for Private universities, Challenges for private universities.*

I. INTRODUCTION

India has one of the largest and diverse education systems in the world. Privatization, widespread expansion, increased autonomy and introduction of programs in new and emerging areas have enabled access to higher education. At the same time it also has led to widespread concern on the quality and relevance of higher education. To address these concerns, the National Policy on Education (NPE, 1986) and the Programme of Action (PoA, 1992) that spelt out strategic plans for the policies, advocated the establishment of independent Private Universities. As a result, University Grant commission (UGC) allowed State Governments to establish Private Universities, in the form of Private University Act passed by the State Assembly. A State Private University is a university established through a State/Central Act by a sponsoring body viz. A Society registered under the Societies Registration Act 1860, or any other corresponding law for the time being in force in a State or a Public Trust or a Company registered under Section 25 of the Companies Act, 1956. Private universities are different in size, enrollment, courses offered, funding authority, financial and managerial capacity. It has been realized that many private universities are providing quality education when compared to most public universities. Private universities are widely acclaimed as best option to the students due to their real concern on quality [1].

Throughout the world, Higher Education Institutions (HEIs) function in a dynamic environment. The need to expand the system of higher education, the impact of technology on the educational delivery, the increasing private participation in higher education and the impact of globalization (including liberal cross-border and transnational educational imperatives), have necessitated

marked changes in the Indian higher education system. These changes and the consequent shift in values have been taken into cognizance by the objectives of Private Universities.

Objectives of Private Universities :

Private Universities are established with the following objectives :

- (a) To create high levels of intellectual abilities.
- (b) To establish state-of-the-art facilities for education and training.
- (c) To create centers of excellence for research and development.
- (d) To provide consultancy to the industries & public organization.
- (e) To impart value and ethic based education through national and international collaboration
- (f) To focus on new models of education like training including online and distance education along with traditional education system.
- (g) To stress the importance of multi-disciplinary and trans-disciplinary education and research in various areas of science, engineering, technology, philosophy, and culture.
- (h) To develop scientific, technological, cultural and traditional heritage of the people of the society through continuous education.
- (i) To create effective trainers to train human resource of the world.

Challenges for Higher Education in India :

Higher education in India has largely been the preserve of the government till recently in terms of both funding and provision of education. In the 2000s the government of India realized the need for setting up private universities as it was clear that the public universities in India would not be able to meet the increasing demand for higher education. It was a milestone in the history of higher education. Private universities are established by philanthropic, religious, and private organizations and foundations, and by not-for-profit organizations. At present there are 165 private universities in India. Some are providing world standard education. These quality institutions have prepared a ground to compete each other about the quality of education they are providing [2]. Out of 15 crore University age population in India only 18 % people are getting higher education. The main challenges facing higher education in India can be summed up as follows :

- Need to double capacity – not just in terms of seat count but “quality” seats count.
- Deregulate education in India.
- Remove the “Not for profit” requirement to facilitate the investment from private sector.
- Industry and Academia connect necessary to ensure curriculum and skills in line with requirements. Industry is investing a lot on training the personnel they hire for each job. This cost could be saved and burden reduced if the industry-academy are connect is established. Similarly most often what is required to be performed on the job is not what the students learn in the class. This is a glaring paradox.
- Skill building is very crucial to ensure employability. The slogan is like knowledge + skills + global professional skills = Good jobs
- Industry and students are expecting customized courses to be offered in lieu of customary courses so that they get the latest and best in education and what is suited to their environment and themselves.
- Too much of power is vested in single institutions that regulate such as policy, licensing, funding, curriculum etc. (example – AICTE). Need to disintegrate such power concentration in regulatory bodies to perform specific key functions.

- Industry-academic connect wherever it exists is not working out as expected – eg. Summer training for MBA students – most of them are given dummy projects. Industry needs to get involved to support institutions.
- Vocational and Diploma courses need to be made more attractive to facilitate specialized programs being offered to students.

Opportunities for New Universities

There is ample opportunity for establishing Private Universities in India [3] because state resources alone cannot contain the ever increasing need of educational services. Inferior quality service provided by State universities indicates that there ought to be healthy competition from private players in education as well. Also the Private Universities with state-of-art infrastructure, facilities and highly qualified faculty members will be able to attract students from developed and other developing countries due to high quality education at low cost.

II. UNIVERSITY AS A SYSTEM

Systems analysis is a problem solving technique that dismantles a system into its component pieces for the purpose of studying how well those component parts work and interact to accomplish their purpose. System Model of University is shown in Figure 1.

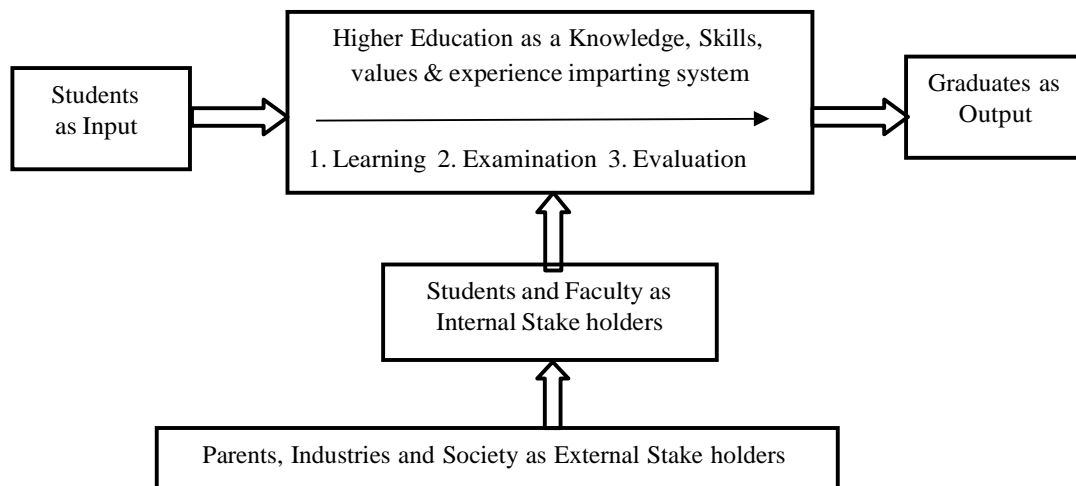


Figure 1 : University as a System

Government (Public) Universities in India have their own constraint of updating the curriculum due to the long procedure and approvals by many bodies. As a result, the curriculum update get delayed which results in outdated curriculum usage in colleges affiliated to it. Some of the affiliated colleges find their own way to solve this problem by means of add-on courses. The Higher Education Stage model (Aithal P.S., 2015)[4], developed for affiliated colleges which do not have autonomy in deciding their curriculum, helps such institution to ensure the achievement of desired learning outcomes such as emotional maturity, social maturity, business acumen, professionalism and intellectual capabilities. Value added programmes are designed in each semester to accomplish the stated objectives of each stage. Based on University syllabus and value added programmes designed in each semester, the students’ progress is evaluated and monitored to promote the students to the next stage. It is observed that students who undergo

training as per stated 'Stage Model' would be able to show better performance both in curricular and competitive exams to get better job/higher educational opportunities through enhanced graduate attributes.

The effectiveness of the system can be analysed using various analyzing frameworks. Out of various analyzing frameworks available for analyzing a system, like, SWOT, PESTLE, Porter's Five Forces Model, BCG matrix, Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) Matrix, Competitive Profile (CPM) Matrix, ABCD Model etc, ABCD analysis framework results in an organized list of a business advantages, benefits, constraints, and disadvantages in a systematic matrix [5]. The entire framework is divided under various issues/area of focus and various business deployment factors affecting the system and analyzed under each issue by identifying suitable critical effective element/s. In this paper, we have used ABCD framework for evaluating Private University and its business strategy. This study is meaningful in suggesting integrated perspective analyzing business strategy of Private University in the frame of reference of organization issues, Student Progression issues, Faculty development issues, Societal & other stakeholders issues, Governance and Leadership issues, and Issues on Innovations and Best Practices.

A random listing of advantages and limitations of private universities is provided below :

Advantages of Private Universities :

1. Academic Freedom : Scope for innovation
2. Customized Program : Enhanced choice for students
3. Faster technology adoption : Keep updated and efficient
4. Global Reach : Attracting students from far and wide
5. Focus on Research : Creativity and knowledge enhancement
6. Quality through competition : Strive for excellence
7. Contribution to Economic growth : Job creation and value addition
8. Autonomy : Offering administrative freedom
9. New Courses in unique specializations : Adding diversity and relevance
10. Collaborations : Exchange of wisdom
11. Industry supportive curriculum : Employability
12. Examination reforms : Measure of competence
13. Flexibility in timings : Learning made convenient

Limits and Limitations of Private Universities :

1. Permission Constraints : Legal bottlenecks.
2. Initial recognition : Struggle to survive.
3. Investment : Capital intensive.
4. Constraints of Govt. policies : Red tapeism.
5. Expansion : Challenges for growth.
6. Research funds : Deficiency.
7. High quality faculty appointment : Financial commitment.
8. Industry collaboration : Readiness and availability.
9. High competition : Outsmart competitors .
10. Quality : Dilution in standards .
11. Affordability : Fee structure.
12. Financial Commitment : No external support .

13. Image : Takes time to build.
14. Student outlook : High expectations.

III. LITERATURE REVIEW ON ABCD ANALYSIS

Various analyzing frameworks are mentioned in the literature and are used to study a concept, system, idea or strategy in Business management. Various techniques are used to analyze individual characteristics or organizational effectiveness & strategies in a given environment like SWOT analysis, SWOC analysis, PEST analysis, McKinsey 7S framework, ICDDT model, Porter's five force model etc. But there is a need for simple but systematic analyzing technique for business models analysis. A consistent method to analyze the structure, behaviour and the dynamics of a business model should allow identifying possible optimizations governing the business models, to assess the impact of innovative changes and to identify critical success factors before the changes are implemented within a particular environment.

Recently Aithal P.S. et. al. (2015) [4] developed ABCD analyzing framework to analyze any business model/concept and to study its effectiveness in providing value to its stake holders and sustainable profit through expected revenue generation. Application of ABCD analysis results in an organized list of a business advantages, benefits, constraints, and disadvantages in a systematic matrix. The entire framework is divided under various issues/area of focus and various business deployment factors affecting the business/concept can be identified and analyzed under each issues by identifying suitable critical effective element. This analyzing technique being simple, gives guideline to identify and analyze the effectiveness of any business model and new concepts developed.

Reshma et. al. (2015^a & 2015^b) [5 - 6], have analysed the characteristics of "Working from Home" e-business model using 'ABCD Analysis Technique'. Based on various factors which decides the Working from Home system, a model of various factors and their constituent critical elements affecting under organizational objectives, employers point of view, employees point of view, customers/students point of view, environmental/societal point of view and system requirements are derived by a qualitative data collection instrument namely focus group method. It is found that the factors supporting advantages and benefits are more effective compare to constraints and disadvantages of this model, so that working from home model may become more popular from the prospective of employers and employees in the organization in the future.

Recently ABCD analysis framework is used for analysing Black ocean strategy concept [7-8](Aithal et. al. 2015 & Aithal et. al. 2015). The various factors & their constituent critical factors affecting the BOS concept adopted in some of the business organizations for quick relief from the problems are identified for organizational point of view, administrative point of view, employee point of view, operational point of view, business point of view and external issues point of view are determined under the four constructs - advantages, benefits, constraints, and disadvantages.

ABCD analysis framework is also used for analysing National Assessment and Accreditation Council (NAAC) accreditation process on higher education institutions [9] Aithal 2015. The various features of the NAAC accreditation system is evaluated based on identifying and analyzing the advantages, benefits, constraints, and disadvantages of some of the chosen issues like organizational issues, Faculty performance issues, student development/progression issues,

social/environmental/community engagement issues, Infrastructure And Learning resources, and Issues on Innovations Creativity and Best Practices. The affecting factors under these issues found out using focus group method and the constituent critical elements under each factor are identified. The result supported the logic of using ABCD analyzing technique in any System/concept performance evaluation.

ABCD analysis framework is also used for analysing an innovative Stage Model in higher education system (Aithal et. al. 2015) [10]. In this paper the various features of Stage Model intervention technique are analysed through the ABCD analyzing framework. The results supported the logic of using ABCD analyzing technique for any system/concept performance evaluation.

A general guidelines on using ABCD analysis framework is suggested in the paper “Study on ABCD Analysis Technique for Business Models, Business Strategies, Operating Concepts & Business Systems’ (Aithal 2015) [11], This paper is an attempt to quantify the affecting factors to calculate the scores and hence weightage to the critical constituent elements. Also, ABCD analysing framework is compared with other known analyzing techniques like SWOC, Competitive Profile Matrix (CPM) analysis, EFE & IFE Matrices, BCG analysing frameworks, Porter's Five Forces Model, and PESTLE Analysis.

In this paper, we have studied Private University system in terms of its constituents using ABCD analysis framework. The characteristics of the strategies of Private Universities are evaluated based on identifying and analyzing the advantages, benefits, constraints, and disadvantages under the issues like Organizational Point of view, Students Progression point of view, Faculty development point of view, Societal & other stakeholders point of view, Governance, Leadership point of view, and Issues on Innovations and Best Practices. The various affecting factors on above issues are found out using ABCD framework and the constituent critical elements are identified for each factors using Focus group method. The result supported the logic of using ABCD analyzing technique for any System/concept opportunity and challenge evaluation.

VI. ABCD ANALYSIS OF PRIVATE UNIVERSITY SYSTEM

Advantages, Benefits, Constraints and Disadvantages (ABCD) of a System can be used to analyze and understand the model/system in an effective way. As per this analysis technique [Aithal P. S. et. al. (2015) [11], the effectiveness of a business model/concept/system can be studied by identifying and analyzing the advantages, benefits, constraints, and disadvantages by considering various determinant issues like organizational objectives, employers and employees perspective, customer/student perspective and environmental/ social prospective as in the block diagram of determinant issues affecting the private university system and is shown in fig. 2.

As per the ABCD framework given by Aithal et. al.(2016) [12], the various determinant issues of private university system are :

- (i) Organizational Issues : The affecting factors under key issues like Financial Resources, Organizational Image, Faculty Profile, Academic Programs are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.
- (ii) Student Progression Issues : The affecting factors under key issues like Distinctive curriculum, Affordability, Examination & Evaluation, Flexible schedule are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.

- (iii) Faculty development Issues : The affecting factors under key issues like Recruitment, Motivation & Retention, Promoting growth, Harvesting results are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.
- (iv) Societal & other stakeholders Issues : The affecting factors under key issues like Fulfilling needs. Realizing expectations, Contributing the development, Outreach activities are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.
- (v) Governance, Leadership Issues : The affecting factors under key issues like Administration, Direction, Policy formulation, and Academic Leadership are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.
- (vi) Issues on Innovations and Best Practices : The affecting factors under key issues like Curriculum design, Teaching-Learning, Technology Adoption, and Publications and Patent are determined under the constructs Advantages, Benefits, Constraints and Disadvantages of the System.

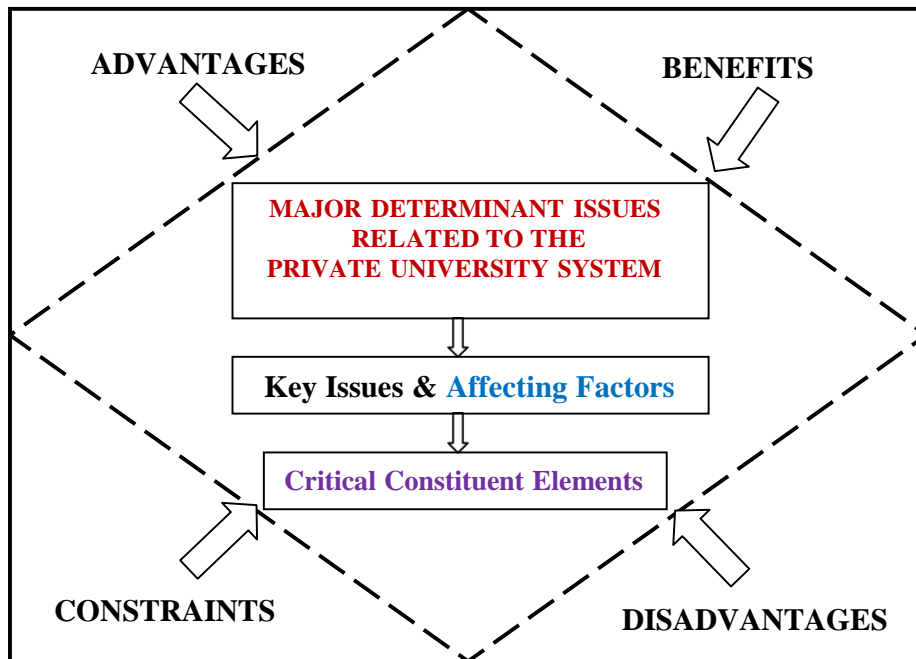


Figure 2 : Block diagram of issues affecting the Private University System as per ABCD framework.

Each determinant issue has sub-issues called key issues used for analyzing the advantages, benefits, constraints and disadvantages, the four constructs of the framework. The factors affecting the various determinant issues of private university system for each key issue under four constructs are derived by a qualitative data collection instrument namely focus group method [Rogers E. M. and Hunt S. D. (1994) [13], Morgan R. M. and Hunt S. D. (1994) [14]] and are listed in table 1.

Table 1 : Analysis of Private Universities model using ABCD framework.

Determinant Issues	Key Issues	Advantages	Benefits	Constraints	Disadvantages
Organizational	Financial	Viability	Smooth	Limits to	Chances to

Point of view	Resources		functioning	expansion	become sick
	Image	Reputation	Sustainability	Time taking	Unhealthy competition
	Faculty Profile	High profile	Better quality	Huge rewards	Financial commitments
	Programs	Diversity of courses	New opportunities	Predicting future requirements	Risk
Student Progression point of view	Distinctive curriculum	Curricular innovation	Employability	Dependent on various factors	Unable to assure
	Affordability	Attract talents	Capacity utilization	Limits Choice	Chances of discrimination
	Examination & Evaluation	Ensure transparency	Reward merit	Establishing mechanism	Conventional thinking
	Flexible schedule	Convenient to requirement	Suited to all	Operational viability	Unmanageability
Faculty development point of view	Recruitment	Identification of talents	Procurement of faculty	Compensation	Availability
	Motivation & Retention	Best output	Stay longer	Monitoring	Attrition
	Promoting growth	Develop capability	Quality performance	Varying perception	Resistance
	Harvesting results	Length of Service	Efficiency	Application	Developing indicators
Societal & other stakeholders point of view	Fulfilling needs	Generates satisfaction	Continued interest	Growing expectations	Continuous process
	Realizing expectations	Proves worthy	Greater trust	Demand for dynamism	Over dependence
	Contributing to development	Better economy	Improved living	All-round development	Cascading effect
	Outreach activities	Community benefitted	Problems addressed	Time and cost	Divert focus
Governance, Leadership point of view	Administration	Freedom	Transparency	Misuse	Dilution of Standards
	Direction	Clarity in vision	Focus	Unshared gain	Limited benefit
	Policy formulation	Articulate policies	Promotes growth	Not well conceived	Discontent
	Academic Leadership	Sharing & Involving	Empowered teachers	Level of commitment	Faculty potential
Issues on Innovations and Best Practices	Curriculum design	Adaptive & creative	Student centric	Limited experience	Over exposure
	Teaching-Learning	Improved pedagogy	Student satisfaction	Lack of skills	Trial & error
	Technology Adoption	Integrates technology	Promotes learning	Tech-savvy	Pro-innovative mind
	Publications and Patent	New initiatives	Greater recognition	Delay to materialize	Require considerable efforts

IV. CRITICAL CONSTITUENT ELEMENTS AS PER ABCD MODEL

The critical constituent elements of these factors are listed under the four constructs - advantages, benefits, constraints and disadvantages of the ABCD technique and tabulated in tables 2 to 5.

Table 2 : Advantages of the Private University

Sl. No.	Issue	Factors affecting	Critical Constituent Elements
1.	Organizational point of view	Viability	Investment potential Returns
		Reputation	Performance popularity popularity
		High profile	Tested talent Rewards
		Diversity of courses	Adoptability Capacity to manage
2.	Student Progression point of view	Curricular innovation	Attractive to student interest Appealing to industry
		Attract talents	Confidence Skills
		Ensure transparency	Proper system Procedural simplicity
		Convenient to requirement	Offer flexibility Open to choices
3.	Faculty development point of view	Identification of talents	Expanded search Refined selection
		Best output	Striving to contribute Healthy peer relations
		Develop capability	Conducive work atmosphere Congenial Learning environment
		Service	Better maintenance Consistent performance
4.	Societal & other stakeholder point of view	Generates satisfaction	Employable youth Economic progress
		Proves worthy	Good rating Admiration
		Better economy	Increased earnings Better living
		Community benefitted	Reduced societal problems Energized youth
5.	Governance, Leadership point of view	Freedom	Established policies Design courses
		Clarity in vision	Futuristic perspective Farsighted thinking
		Articulate policies	Integration of

			stakeholders
			Ease to implement
		Sharing & Involving	Mutuality
			Trust
6.	Issues on Innovations and Best Practices	Adaptive & creative	Student friendly
			Result oriented
		Improved pedagogy	Student centric focus
			Adoption of new styles
		Integrates technology	Newer ways of performing
			Response to demands
		New initiatives	Projects /Idea generation
			Lateral thinking

Table 3 : Benefits of the Private University

Sl. No.	Issue	Factors affecting	Critical Constituent Elements
1.	Organizational point of view	Smooth functioning	Allocation of funds
			Freedom
		Sustainability	Quality
			Continuous improvement
		Better quality	Utilization of potential
	Avenues to perform		
2.	Student Progression point of view	Employability	Expanded choices
			Extended demand
		Capacity utilization	Acquire employability skills
			Demonstrate capability
		Reward merit	Growth
	Development		
3.	Faculty development point of view	Procurement of faculty	Fair and objective
			Motivation
		Stay longer	Work life balancing
			Changing personal requirements
		Quality performance	Conditions of service
Congenial workplace			
Efficiency	Positive work culture		
	Struggling to compete		
	Monitor output		
4.	Societal & other stakeholders point of	Continued interest	Focused on quality
			Hard work
			Commitment
	More contentment		
	Increasing fulfillment		

	view	Greater trust	Reliability
			Recognition
		Improved living	Changing life style
			Prosperity
		Problems addressed	Identifying problems
			Addressing problems
5.	Governance, Leadership point of view	Transparency	Welcome criticism
			Respond to feedback
		Focus	Set standards
			Fix targets
		Promotes growth	Readiness to implement
			Honesty of purpose
		Empowered teachers	Creative thinking
			Continuous learning
6.	Issues on Innovations and Best Practices	Student centric	Pace of learning
			Focus of learning
		Student satisfaction	Better learning
			Faster learning
		Promotes learning	Technology guided learning
			Technology induced learning
		Greater recognition	Original contribution
			Desired efforts

Table 4 : Constraints of the Private University

Sl. No.	Issue	Factors affecting	Critical Constituent Elements
1.	Organizational point of view	Limits to expansion	Internal and external factors
			Resource crunch
		Time taking	Prove good
			Continuous efforts
		Huge rewards	Limits to affordability
			Balancing cost
		Predicting future requirements	Fluctuating job market
			Unpredictable student interest
2.	Student Progression point of view	Dependent on various factors	Aptitude
			Ambition
		Limits Choice	Standardization not possible
			Un-healthy competitors
		Establishing mechanism	Viable models
			Teething trouble

		Operational viability	Suited to requirement Readiness to accept
	Faculty development point of view	Compensation	High cost Skepticism of returns
		Monitoring	Softer systems Reliable feedback
		Varying perception	Positive spirit Equal opportunity
		Application	Readiness Devotion
4.	Societal & other stakeholders point of view	Growing expectations	Unfulfilled needs Changing needs
		Demand for dynamism	Effective leadership Changing expectations
		All round development	Neglected areas Low attention
		Time and cost	Consume time Un-anticipated expenditure
5.	Governance, Leadership point of view	Misuse	Incompetence Ignorance
		Unshared gain	Accumulation of wealth Profit motive
		Not well conceived	Not fitting to reality Wrong presumptions
		Level of commitment	Unwillingness to take responsibility Bullying
6.	Issues on Innovations and Best Practices	Limited experience	Knowledge gap Training needs
		Lack of skills	Mastery of skills Personal differences
		Tech-savvy	Generation gap Training and exposure
		Delay to materialize	Considerable efforts Time consuming

Table 5 : Disadvantages of the Private University

Sl. No.	Issue	Factors affecting	Critical Constituent Elements
1.	Organizational point of view	Chances to become sick	Efficiency affected Resource depletion
		Unhealthy competition	Ethical consideration Attitude of competitors
		Financial commitments	Defective reward

			management
			Short of own assets
		Risk	No takers for new courses
			Experimentation
	Student Progression point of view	Unable to assure	Job market changes
			Student attitude
		Chances of discrimination	Merit without means
			Un-intentional drawbacks
		Conventional thinking	Wrong mindset
			Pessimism
		Unmanageability	Stress
			Weak time management
3.	Faculty development point of view	Availability	Demand and supply
		Attrition	Personal preferences
			Pressure of work
		Resistance	Built in Prejudices
			Immune to new ideas
		Developing indicators	Differential appraisal
			Bias
4.	Societal & other stakeholders point of view	Continuous process	Developing hopes
			Newer ending needs
		Over dependence	Reduced self-reliance
			Failure in decision making
		Cascading effect	Slow to materialize
			Sectoral dependence
		Divert focus	Primary activity subsidiary
			Dumped with issues
5.	Governance, Leadership point of view	Dilution of Standards	Reduced accountability
			Own convenience
		Limited benefit	Gain not distributed
			Not able to keep united
		Discontent	Lop sided
			Unsatisfied interest
		Faculty potential	Limited potential
			Over expectation
6.	Issues on Innovations and Best Practices	Over exposure	Long Exercise
			Tedious
		Trial & error	Developing new methods
			Testing new methods
		Pro-innovative mind	Curiosity
			Creativity
		Require considerable efforts	Exploring mindset

			Perseverance
--	--	--	--------------

VI. CONCLUSION

We have studied Private University as an entity of higher education system, it's necessity, objectives and prominent features. There is substantive reason to suggest that private university is a long term solution to many far reaching problems in higher education and supports the students' progress towards enhancing their knowledge, skills, and experience. The system is able to cultivate a partnership particularly with parents, business and the community as a whole to support student learning and progression. The private university system alone can provide to the requirements of higher education especially to innovate and progress. The various stake holders get enhanced support in this kind of a system. The analysis has brought about 192 critical constituent elements which satisfy the success for its existence.

REFERENCES

- [1] Rajesh Ranjan, Private Universities in India and Quality of Education, International Journal of Humanities Social Sciences and Education (IJHSSE) Volume 1, Issue 9, September 2014, PP 140-144.
- [2] Jeelani S., Ramana Murthy M.V., & Harisingh Naik S., (2014), Private Universities : Challenges and opportunities in Higher Education, International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), Vol. 3, Issue 5, pp. 116 - 121.
- [3] Aithal P.S., & Suresh Kumar P. M., (2016) Innovations in Private Universities : A Case of Srinivas University, International Journal of Management, IT and Engineering, 6 (1) pp. 250-264.
- [4] Aithal P. S. & Suresh Kumar P. M., (2015) "Enhancement of Graduate attributes in Higher Education Institutions through Stage Models", IMPACT: International Journal of Research in Business Management, Vol. 3, Issue 3, pp. 121 - 130.
- [5] Aithal P. S, Shailashree V. T., Suresh Kumar P. M., (2015) A New ABCD Technique to Analyze Business Models & Concepts, International Journal of Management, IT and Engineering (IJMIE), Vol. 5, Issue 4, pp. 409 - 423.
- [6] Reshma, Sridhar Acharya P., Aithal P. S., (2015) "Information Technology Innovations in Office Management - A Case Study, International Journal of Research & Development in Technology and Management Sciences", Vol. 21, Issue 6, pp. 35 - 53.
- [7] Reshma, Aithal P. S., and Sridhar Acharya P., (2015) "Relevance of On-line Office Administration through Working from Home in Future Education System", International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume 4, Issue 4, pp. 345 - 355.
- [8] Aithal P. S, Suresh Kumar P. M., (2015) Black Ocean Strategy - A Probe into a New type of Strategy used for Organizational Success, GE International Journal of Management Research, Vol. 3, Issue 8, pp. 45 - 65.
- [9] P. S. Aithal, V. T. Shailashree, & P.M. Suresh Kumar, (2015), ABCD analysis of Black Ocean Strategy Concept, International Journal of Applied Research, Vol. 1, Issue 9, pp.

[10] Aithal P. S., Shailashree V. T., & Suresh Kumar P. M., (2016) Analysis of NAAC Accreditation System using ABCD framework, International Journal of Management, IT and Engineering (IJMIE), Volume 6, Issue 1, pp.30 - 44.

[11] Aithal P.S., Shailashree V. T., & Suresh Kumar P.M., (2016) ABCD analysis of Stage Model in Higher Education, International Journal of Management, IT and Engineering (IJMIE), Volume 6, Issue 1, pp. 11-24.

[12] Aithal, P.S., (2016) Study on ABCD Analysis Technique for Business Models, business strategies, Operating Concepts & Business Systems, International Journal in Management and Social Science, 4 (1) pp. 98-115.

[13] [Rogers E. M. and Hunt S. D. (1994) 'Diffusion of Innovation', 1995, The Free Press, NY.

[14] Morgan R. M. and Hunt S. D. (1994) The commitment-trust theory of relationship marketing, Journal of Marketing, Vol. 58, (July), pp. 20–38.
