

## **Identifying VUCA Factors in a Pandemic Era – A Framework Focused On Higher Education in India**

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### **Abstract-**

Nowadays, it is suitable time to utilize abbreviation of "VUCA (Volatile, Uncertain, Complex, and Ambiguous)". Associations at worldwide and domestic levels are encountering most high levels of vulnerability because of the COVID-19 pandemic, the effect of which is phenomenal. All sectors have been encountering instability, vulnerability, multifaceted nature and vagueness consistently. In any case, there are no equals to the COVID 19 pandemic in the recent past. Researchers in their prior investigations have recognized different VUCA factors and difficulties that have impacted these associations during different emergency circumstances, for example, Global Financial Crisis of 2008, demonetization and BREXIT to name a few. However, there is absence of exploration that clarifies difficulties looked within the sight of a pandemic driven VUCA climate. This investigation is first of its sort to introduce insight into the Indian Higher Education Sector with regards to a pandemic scene. The outburst of COVID-19 pandemic in the year 2020 has prompted all the sectors upsetting slow walk and Indian Higher Education Sector is no special case. Hence, this creates a need to recognize different challenges i.e. VUCA factors encountered by associations across the Indian Higher educational sector with regards to a pandemic climate. It is a subjective report achieved with the assistance of detailed conversations of dynamic academic leaders and intellectual researchers. The literature in the paper has been enhanced with various kinds of studies. The findings depend on information accumulated from above sources (Primary and Secondary). The research makes an endeavor to recognize different VUCA factors affecting associations across the Indian Higher Education sector during a pandemic, merged in a framework for future reference.

**Keywords:** *VUCA (Volatile, Uncertain, Complex, Ambiguous), Pandemic, COVID-19, Higher Education Sector, Framework*

## **I. INTRODUCTION:**

### **Background to the Study:**

VUCA is a term presented by the US Army War College during the 1990s to depict the significantly changed conditions in which military pioneers needed to work. VUCA is an abbreviation for Volatile, Uncertain, Complex and Ambiguous. The abbreviation VUCA has been applied in the world as the working climate is exceptionally testing and developing these days. The business leaders and groups had very less of time what's more, energy and greatest break is thinking ability how to adapt effectively to change. Individuals as well as organizations refuse to accept change, may not sustain. Thus there is requirement for a dynamic VUCA framework in every sector.

As fast changes occurring on social, financial, political and mechanical fronts in the current climate, COVID 19 pandemic has arisen as a perfect illustration of a VUCA scene. "VUCA resembles an on-going test that any association needs to pass to succeed."(Sahu and Panda, 2016). The VUCA innate to the present world have presently become a reality due to the pandemic COVID-19 which is a Black Swan circumstance. From point of view of manufacturing or service sector, this new the truth is significantly changing not only style of working but also how business pioneers lead in spite of challenging environment of VUCA.

This study focuses into the Indian Higher Education sector with regards to a pandemic. The flare-up of COVID pandemic in the year 2020 has prompted all the sectors and Indian Higher Education sector is not an exemption to it. These situations leads to recognize different VUCA factors come across by the Indian higher education area with regards to a pandemic climate.

### **i. Defining VUCA:**

VUCA has four dimensions (Bennett and Lemoine, 2014)

**Volatility:** Volatility may be defined as a recurrent, speedy and noteworthy transformation for which the period may be indefinite.

Volatility alludes to disturbance, or the unforeseen, which has expanded throughout the most recent thirty years with comparing increments in both force and length of the occasions (Beabout, 2012). There are extra factors which have additionally added to the expansion in turbulence in the higher education world including: the ascent of the computerized economy, network, exchange progression approaches far and wide, expanded worldwide rivalry and development (Brodnick and Gryskiewicz, 2018).

In the twenty-first century, instability has moved the mission of worldwide advanced education to guaranteeing that everybody will have the option to adjust to changes in the worldwide work markets and keep on being employable (Ansell, 2017). Advanced education has encountered the

development of extra schools either as revenue driven colleges or different colleges in a market that brings down the interest for classes and has carried expanded instability to what exactly had been a steady market (Carrillo, 2016).

ii. **Uncertainty:** Uncertainty may be defined as the lack of predictability of the future. It is a condition where events and consequences are irregular.

Vulnerability, or the nonappearance of consistency in the two issues and occasions and the absence of dependability doesn't permit pioneers to look to the past for direction in how to anticipate future occasions (Cook, 2015). For instance, spending decreases have prompted the deficiency of workforce and the apparition of expanding execution requests for understudy success. Bennett and Lemoine (2014) bring up that unpredictability makes a circumstance where in spite of an absence of data; the occasion's principal cause and its belongings are known. Consequently change is conceivable however not generally guaranteed. A model could be a college bringing its expense of educational cost down to draw in more understudies.

iii. **Complexity:** Complexity may be defined as a phenomenon having many interconnected parts or variables resulting in an overloaded information network.

Worldwide advanced education associations in the twenty-first century should oversee huge intricacy (Jongbloed,2015). Three areas of organization are basic for progress: (1) Global advanced education associations are progressively less self-ruling; (2) worldwide advanced education authoritative conditions are progressively complex; and, (3) worldwide advanced education associations are progressively subject to innovation (Lemoine and Richardson 2019).

Multifaceted nature or the presence of a large number of conceivable or hard to get causes and different components both inside and outer to the association are engaged with tackling issues (Baltaci and Balci, 2017; Obolensky,2014). The extra layer of multifaceted nature, combined with uplifted disturbance, and an absence of effectively comprehended past indicator's expands the trouble in using sound judgment (Moodie, 2016). Uhl-Bien and Arena (2017) add that some data is accessible, however the sheer volume or type of the information can really meddle with the ability to handle the data. Mechanical advancements have disturbed the universe of worldwide advanced education which in the past was available to just a restricted not many in light of the fact that its items and administrations were costly and frequently unavailable. That has been changed to one where availability is not, at this point an issue alongside being helpful and it is available to all paying little mind to riches or ability (Khan, 2018). Intricacy can be said to make vulnerability due to the sheer volume of potential cooperations and results (Arena and Uhl-Bien, 2016; Hazy and Backstrom, 2014). Models remember the guidelines and guidelines for advanced education for far off nations or indeed, even states with their own special laws and guidelines, social qualities, or instructive guidelines (Stafford & Taylor, 2016).

iv **Ambiguity:** Ambiguity may be defined as absence of clearness. It is a phenomenon or a state having more than one clarification.

Equivocalness has been characterized as an absence of lucidity that encompasses an occasion and its significance, or the causes behind the things happening which are hazy and hard to comprehend. Equivocalness in VUCA could be conceptualized as powerlessness to precisely recognize dangers and openings before they become crushing (Stensaker, Frolich, Huisman, Waagene, Scorat, and Pimentel Botas, 2014). Bennett and Lemoine (2014) add that there is an absence of comprehension of causal connections. There are no points of reference, so pioneers face "obscure questions" (p.27). Various measures of information lead an absence of lucidity bringing about a steady way to deal with critical thinking, neglecting to address the bigger key causes that underlie the obvious issue. For instance, the twin difficulties of heightening data innovation costs and the need to dodge mechanical out of date quality is overwhelming for worldwide colleges in the VUCA world (Hackett, Lemoine, and Richardson, 2017).

## **II. VUCA & INDIAN ECONOMY:**

Any developing country exists in a VUCA climate for the very reality that it continues going through different changes to create itself as an economy. India, being one of the biggest non-industrial countries, is the same.

Very less components which lead to a VUCA climate in India are indefinite and intricate government strategies, regulatory modifications frequently, uncertainty driven by the various principles and beliefs and the number of inhabitants in the nation, bringing about changing segment examples of buyers dependent on geology, religion, caste, gender and so on

There are a few VUCA challenges that have been affecting one of the quickest developing sector of India viz. Indian Higher Educational Sector which has been examined at a later stage in the review of literature segment.

## **III. OVERVIEW OF HIGHER EDUCATION IN INDIA:**

Development of any country exclusively relies upon the nature of human resources; and great human asset is delivered through quality education. Good teaching and training gives persons an instance to think about the social, financial and ethical issues and contributes towards the improvement through stimulating of particular information and aptitudes.

India, even following 70 years of its autonomy, is far away from the objective of widespread education. The way that India's higher education framework is producing a large number of graduates who are unemployable discusses the need to improve the nature of instruction in the nation. Nonetheless, on a positive note, India is occupied with the utilization of higher education as an amazing asset to assemble information based data society of the 21st Century. Indian experts are considered among the best in the world and are in incredible interest. This means the intrinsic strength of the Indian educational framework.

A significant change in the plan of higher education was brought by the European rulers. The British set up the proper arrangement of advanced education zeroed in on dialects, writing, history, and reasoning. These learning fixates were centered on creating English-talking common individuals for the British regulatory administrations, armed force and exchange. The British

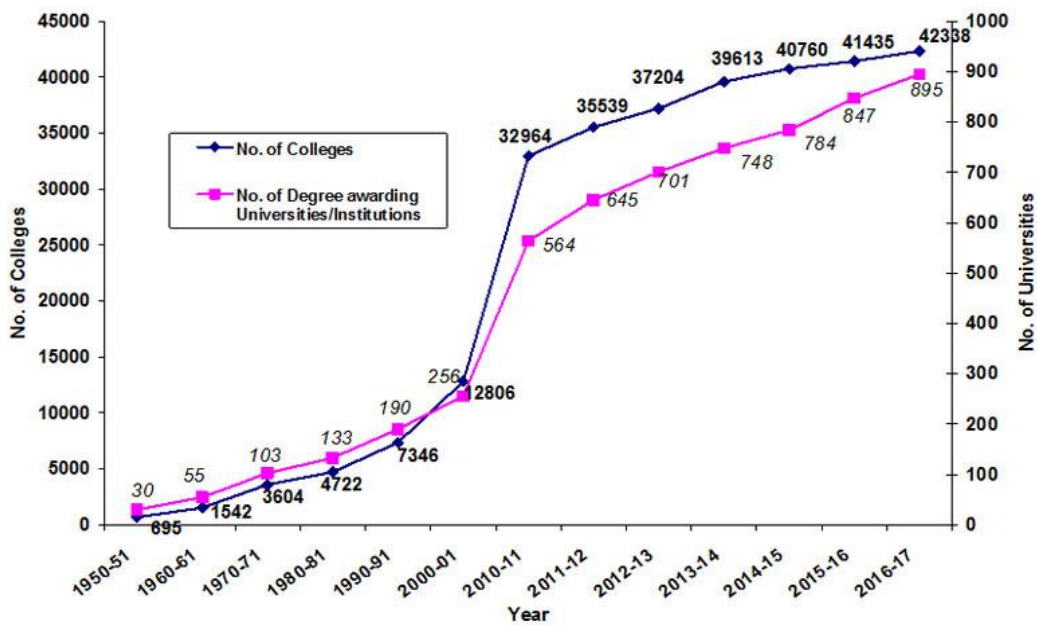
model of University framework, enlivened by the University of London, kept on extending across India, prompting a rising number of higher learning places by 1947.

The higher education framework in India developed quickly after independence. By 1980, there were 132 colleges and 4738 universities, selecting around five percent of the qualified age bunch in higher education. The quantity of foundations in India is multiple times more than the quantity of organizations both in the United States and the whole Europe.

- **Present-day Scenario:**

India is running head-first towards monetary achievement and modernization. It is relying on cutting edge ventures, to drive the country to thriving. Right now, Indian higher education sector has numerous ideal elements for its potential benefit. India has a huge higher education area, the third biggest on the earth. It utilizes English as a main language of advanced education and research and has a broad scholarly convention. Scholastic freedom is valued and there are few excellent organizations that can frame the establishment of value schooling. The Government and policy makers were always striving hard to move ahead with required essential duty regarding higher education. Following some of the statistics published by University Grants commission through light higher education status over the period:

**Fig.1.1: No of Colleges and Universities**



[Source: <https://www.ugc.ac.in/stats.aspx>]

This above graph shows clear increase or growth in number of colleges and universities in India

**Fig.1.2: Growth in Universities and Colleges in India (2008-2016)**

Growth in Universities and Colleges in India (2008-2016)				
Source: UGC India   Analyzed by DrEducation.com				
Institutions	2008	2016	Increase (#)	Increase (%)
Central Universities	25	47	22	88%
State Universities	228	345	117	51%
State Private Universities	14	235	221	1579%
Institutions Deemed to be Universities	103	123	20	19%
<b>Total</b>	<b>370</b>	<b>750</b>	<b>380</b>	<b>103%</b>
Colleges	23,206	41,435	18,229	79%

[Source: Dr. Education]

Figure 1.2 shows Growth in Universities and Colleges in India for the period 2008-2016. In each category there is a growth more than 50%.

**Fig.1.3: Growth Student Enrollment (2008-2016)**

Growth in Student Enrollment by Level of Education and Field of Study in India (2008-2016)				
Source: UGC India   Analyzed by DrEducation.com				
Level of Education	2008	2016	Increase (#)	Increase (%)
Bachelor's (Graduate)	11,908,151	24,593,321	12,685,170	107%
Master's (Post-graduate)	1,489,685	2,764,886	1,275,201	86%
Doctorate	95,872	180,957	85,085	89%
Others	148,100	945,582	797,482	538%
<b>Total</b>	<b>13,641,808</b>	<b>28,484,746</b>	<b>14,842,938</b>	<b>109%</b>

Field of Study	2008	2016	Increase (#)	Increase (%)
Arts	5,875,532	10,271,296	4,395,764	75%
Engineering/Technology	1,313,706	4,885,134	3,571,428	272%
Science	2,612,406	5,417,464	2,805,058	107%
Commerce/Management	2,486,901	4,637,317	2,150,416	86%
Education	286,478	1,085,876	799,398	279%
Medicine	446,087	1,118,178	672,091	151%
Others	620,698	1,069,481	448,783	72%
<b>Total</b>	<b>13,641,808</b>	<b>28,484,746</b>	<b>14,842,938</b>	<b>109%</b>

[Source: UGC India and Analyzed by Dr Education]

Figure 1.3 shows Growth in student's enrollment in India for the period 2008-2016 for higher education. In each category there is a growth more than 70%.

Yet the shortcoming plainly exceeds the qualities. India teaches roughly 10% of its young people in higher education. Despite the fact that, none of its colleges possess a strong situation at the top. A couple of the best colleges have some brilliant offices and focuses. UGC delivered a report depicting the current situation of the Indian Higher Education System. It shows that

regardless of the developing quantities of universities and enlistments, it isn't adequately sufficient to take into account the instructive necessities of the expanding youthful populace.

#### **IV. CORONAVIRUS (COVID-19) PANDEMIC:**

The word 'pandemic' is gotten from a Greek word 'pandemos' where Demos implies the populace and Pan implies everybody. Thus, this is where a sickness can happen over a wide geographic region and can influence particularly a high extent of the populace. On their site, World Health Organization (n.d.) characterizes Coronaviruses as a gathering of infections that may cause illnesses in warm blooded creatures and winged animals. They are known to contaminate people commonly prompting diseases in the upper respiratory framework.

An epic strain of Coronavirus – SARS-CoV-2 that has not been recently recognized in people was distinguished in December 2019 in Wuhan, China which prompted abrupt flare-up of pneumonia and contamination in upper respiratory plot with no undeniable reason.

The beginning of SARS-CoV-2 is as yet indistinct. Coronavirus was described as a pandemic by World Health Organization (WHO) on March 11, 2020. (Stewart, Connelly and Robinson, (2020). Coronavirus pandemic is an exemplary illustration of an exceptionally unpredictable, questionable, perplexing and equivocal scene. It is the best worldwide wellbeing challenge the world has confronted. The worldwide economy has gone for a throw in the midst of the COVID-19 pandemic.

As indicated by International Monetary Fund, the worldwide economy is required to shorten by 3% in 2020. Essentially, as indicated by Raghuram Rajan, previous legislative head of Reserve Bank of India, Indian economy is seeing its steepest decline since autonomy. The pandemic has set off a few other VUCA factors affecting the Indian economy

#### **V. REVIEW OF LITERATURE:**

##### ***a) Volatility, Uncertainty, Complexity and Ambiguity in Global Scene***

We are living in a world which is dynamic and changing at a quick movement. Also, the organizations and pioneers have been working in a climate which is exceptionally precarious. The results might be unfavorable. Associations are attempting to be proactive in this continually changing and capricious world. (Gruwez, 2017). In their examination, Doheny, Nagali and Weig (2012) have featured a few factors that have been affecting associations across the world.

These combine steady globalization, interconnected tasks, and troublesome patterns, for example, fluctuating interest, work rates or item costs and different factors, for example, characteristic cataclysms. Every one of these impediments and detours has been ascending in the new year's making economic situations much additionally testing. Studies show an expansive agreement that the entire world is encountering Volatility, Uncertainty, Complexity and

Ambiguity. It subsequently gets significant for pioneers and associations worldwide to thoroughly consider of the container to keep up to date with the current situation. (Bennett and Lemoine, 2014).

***b) Volatility, Uncertainty, Complexity and Ambiguity in Indian Landscape***

As indicated by an examination, India has consistently existed in a VUCA world. India is a cosmopolitan nation with a great deal of intricacy and it gets significant for corporates to gain from the capricious nature around us (Sabherwal, 2013). As indicated by Economic Survey 2018, India will confront different difficulties in the coming time. A portion of the difficulties clear from the review are India's agrarian emergency, rising oil costs, the loaning area and expanding rivalry in innovation area. (Run, 2018) .An overview report by KPMG discovered that India has been working in a profoundly unpredictable and questionable climate with financial, administrative and political conditions going about as significant difficulties. (Financial Express, 2015).

***c) Unpredictability, Uncertainty, Complexity and Ambiguity in Indian Landscape***

The criticality of the higher educational area to the requirements of things to come economies shows that learning itself can be viewed as a VUCA power that is affecting both the education area. The pace of information decay has quickened quickly with a consistently shortening of the half-existence of information (Arbesman 2012 ).

The new pandemic made an open door for change in educational methodologies and presentation of virtual training in all degrees of schooling. As we don't have a clue how long the pandemic circumstance will proceed, a continuous move towards the on the web/virtual instruction is the interest of the current emergency. Blend of the customary advances (radio, TV, landline telephones) with versatile/web advancements to a solitary stage with all vaults would upgrade better openness and adaptability to training. This would include overhauling the administration stage to empower it to meet the necessary volume of instructive requests of understudies. All specialist organizations should be prepared to give appropriate admittance to the instructive assistance stages to the burdened gatherings of populace moreover. Virtual training is the most favored method of instruction during this season of emergency because of the flare-up of Covid-19. The post Covid-19 training is by all accounts schooling with broadly acknowledged on the web/virtual schooling which may be an equal arrangement of instruction. ( Jena 2020)

***d) Research Questions:***

A comprehensive review of related literature have done by researchers about VUCA climate and various VUCA factors influencing globally as like Indian economy. There have been similar research examines portraying impact of COVID-19 pandemic in Higher Education in explicit. But it has observed that hardly any research is available that elucidates the COVID -19 pandemic driven VUCA factors affecting the Indian Higher Education. Subsequent to finding that the present study will be lacking to reach inferences, researchers raise the following research questions:



- What are the VUCA factors affecting the Indian Higher instruction industry during a pandemic?
- How can the recognized VUCA factors be useful in giving ways to future research?

## **VI. RESEARCH OBJECTIVES:**

- To understand the terminology of VUCA
- To identify VUCA factors in Higher Education in India during a pandemic.
- To establish a framework based on identified VUCA factors.

## **VII. RESEARCH METHODOLOGY:**

The research is exploratory in nature and subjective information has been gathered from different primary and secondary sources. As indicated by Brown (2006), an exploratory research is generally directed to consider an issue and investigate the research questions; it takes into account adaptability in development instead of concern with forecasts or results.

Extensive literature review was led, the exploration work examined journals, research papers, authoritative reports, government reports, media reports and articles accessible on web which contributed hugely in giving guidance to the work. The novelty of the subject requested an inside and out subjective examination which could let the researchers approach the theme subjectively while recognizing the pandemic driven VUCA factors in the Higher Education industry in a more significant way. To recognize the above on a more profound level, smaller sample sizes were gathered through semi-structured telephonic interviews. The primary data based examination had members from associations across higher Education industry. 48 individuals from the Higher Education industry were approached toward dependent on their involvement with the education industry and roles in their particular associations, support in meetings, unequivocal information on gatherings, presence via social media, (for example, LinkedIn) and such related components. It includes Deans, Principals, Head of Departments, Professors and Senior Academicians and top management of various universities and education hub.

Primary discussions through mail were done with imminent members. From the individuals who reacted certifiably, 10 members were picked based on purposive sampling. Purposive sampling is an examining strategy that permits researchers to choose members who can give itemized and inside and out data related to the investigation's research questions and phenomena in the study (Yin, 2011, p. 311). The one to one telephonic conversation with the respondents allowed researchers the chance to get point by point discussions and note down responses.

Semi- structured questionnaire had questions relating to Higher Education, effect of existing situation and questions relating to the research objectives which were looked into by specialists (academicians and research experts) to assure dependability. These questions were asked for

selected stakeholders for the study i.e. Students , Educators, Top Management and Parents. Due to lockdown and safety measures difficult to reach student and parents but their views and opinions were asked through Educators and Top Management of Higher education sector. The suggestions made by them were valued and merged. The investigation is narrowed to educational organizations working in the Indian Higher Education area. Each conversation kept was roughly 25–30 minutes. To keep up inventiveness and genuineness, all conversations were recorded. With the end goal of data analysis, the conversations were translated by the researcher. All the recorded conversations were then compared and composed records. In the procedure, a few pandemic focused VUCA factors affecting the Higher Education industry arose. These were additionally grouped. Highlighted points in the interview were asked and identified in level of percentages i.e. priority. According to the level of priorities of identified VUCA factors framework has been designed by researchers. This framework shall be useful for Higher Education sector to apply and need to concentrate for actions to be taken in pandemic situation. mentioned based on the data got. As a final point, framework was set up characterizing the general need of the notable VUCA factors in the Higher Education Industry.

## **VIII. LIMITATIONS OF THE STUDY:**

The restrictions of the examination have been identified with time and inclinations of conclusions assembled from essential and auxiliary sources. Different restrictions incorporate gathering information from respondents by meeting them over phone. With the current circumstance of a cross country lockdown, it was unrealistic to lead individual meetings. The cycle of information assortment was tedious as it was gathered dependent on arrangement dates fixed with singular respondents. The investigation is restricted to a Higher Educational Sector in Indian economy because of time and asset imperatives.

### **i. Discussion:**

This part presents key topics that arose in the investigation. VUCA factors affecting the Indian Higher Education Sector during a pandemic. These factors were distinguished through reactions given by respondents from the Higher Education Sector.

The classification of respondents included Professors, academic professionals, top-management officials of Higher Education institutes etc. The respondents have been indicated with A1, A2, till A10 to keep up secrecy of information. The respondents had mentioned not to cite their personality and the names of their individual associations. Respondents were asked about various factors. The main emphasis was given on stakeholder's perspectives like students, parents, top management and educators as they have regular virtual interaction with them. Due to the lockdown difficult to reach to students and parents but their views were asked through educators. Following are main points narrated by sample respondents.

An outline of reactions from respondents 1 to 10 has been depicted

➤ **Respondent-1:**

VUCA factors described by Professor of University:

- Educational activities including admission, examination and teaching learning had confusions and changes due to pandemic.
- Professor narrated that confusions were related educational activities were observed in all stakeholders in education sector.
- Professor mentioned about doubt for availability of opportunities to under-privileged students.

➤ **Respondent-2:**

Following major points discussed by top-management representative regarding VUCA:

- They have to deal with infrastructure issues especially related to virtual teaching-learning.
- Capacity building for educators for virtual learning needs to be done significantly.
- Assessment systems have to be designed effectively to have outcome based learning.

➤ **Respondent-3:**

Recognized VUCA factors by an Academic Dean at Higher Education Institute:

- Attendance of students may go lower in new normal conditions due to pandemic.
- Difficulty in testing knowledge of practical subjects in virtual mode.
- It will affect academic research and professional development.

➤ **Respondent-4:**

Following points were highlighted by Principal of renowned Institute:

- Parents confused about teaching- learning methodology in virtual education system due to pandemic.
- Students are worried about placement opportunities due to reduced requirements.
- Limitations were faced in research areas due to lack of availability of resources as well as limitations in one to one discussions.

➤ **Respondent-5:**

Following VUCA factors narrated by Head of Department in renowned Higher Education Institute:

- Higher Institute facing financial issues due to less and late fees collection, payment salaries to staff and payment of regular fixed cost.
- Trouble in planning for future activities especially regarding infrastructure related.
- Accomplishment in vision and mission seems to be difficult.

➤ **Respondent-6:**

Major highlights mentioned by Management Representative of Higher Education Institute:

- Due to pandemic, arrangements for social distancing and other safety measures need to be considered at high priority which involves costs.

- Financial constraints suffered by Institutes as Parents not able to pay fees as well as other recurring expenses are in flow.
- Parent's views were also focused in this discussion regarding students health and safety measures applied in Institutes.

➤ **Respondent-7:**

Points discussed by a senior professor in a Technical Higher Educational Institute:

- He discussed about barriers in knowing, understanding of students in practical subjects.
- Live forums and physical active participation in National and International students meets innovation and invention seen difficulty and unpredictability.
- He discussed the parents point about placements of students due to Work from Home culture and downsizing due to pandemic.

➤ **Respondent-8:**

Following opinions represented by senior academician regarding VUCA factors:

- He drawn attention towards reduced academic research development which is crucial in higher education.
- Difficulty in online grooming and preparation of students for placement interviews.
- He narrated his experience of parents about incapacity to pay regular fees due to pandemic.

➤ **Respondent-9:**

Highlighted point after discussion with Top Management Official:

- Teachers Training with advanced tools and techniques for virtual teaching seems to be a challenge especially in case of practical subjects.
- Admission and Evaluation systems had changed due to pandemic, so accordingly training and required technical skills and infrastructure need to be transformed.
- Financial Difficulty for parents to arrange for mobile/tab/laptop, internet etc.

➤ **Respondent-10:**

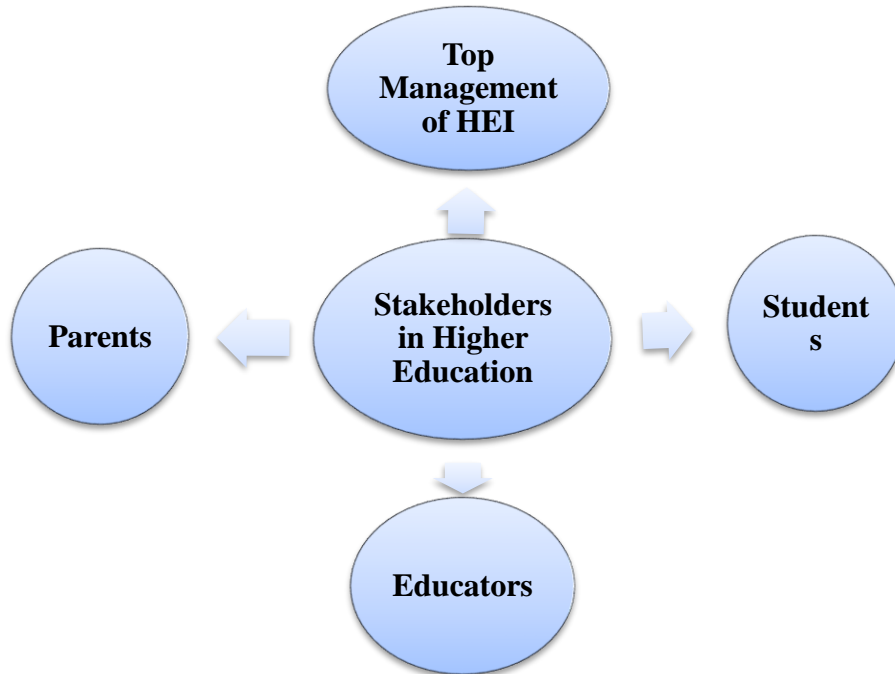
Views Presented by Top management Senior Official:

- Financial constraints arose due to the pandemic.
- Difficulty in planning for future in holistic view of organization due to uncertainty in situation.
- In new normal conditions, arrangements in shifts and safety measures seem to be financially and practically big challenge.

The VUCA elements in the light of the present situation that have been recognized from the above discussion are growth in online movement, managing additional costs, and infrastructure related issues.

**Findings and Analysis:**

**Fig.1.1: Selected Stakeholders in Higher Education**

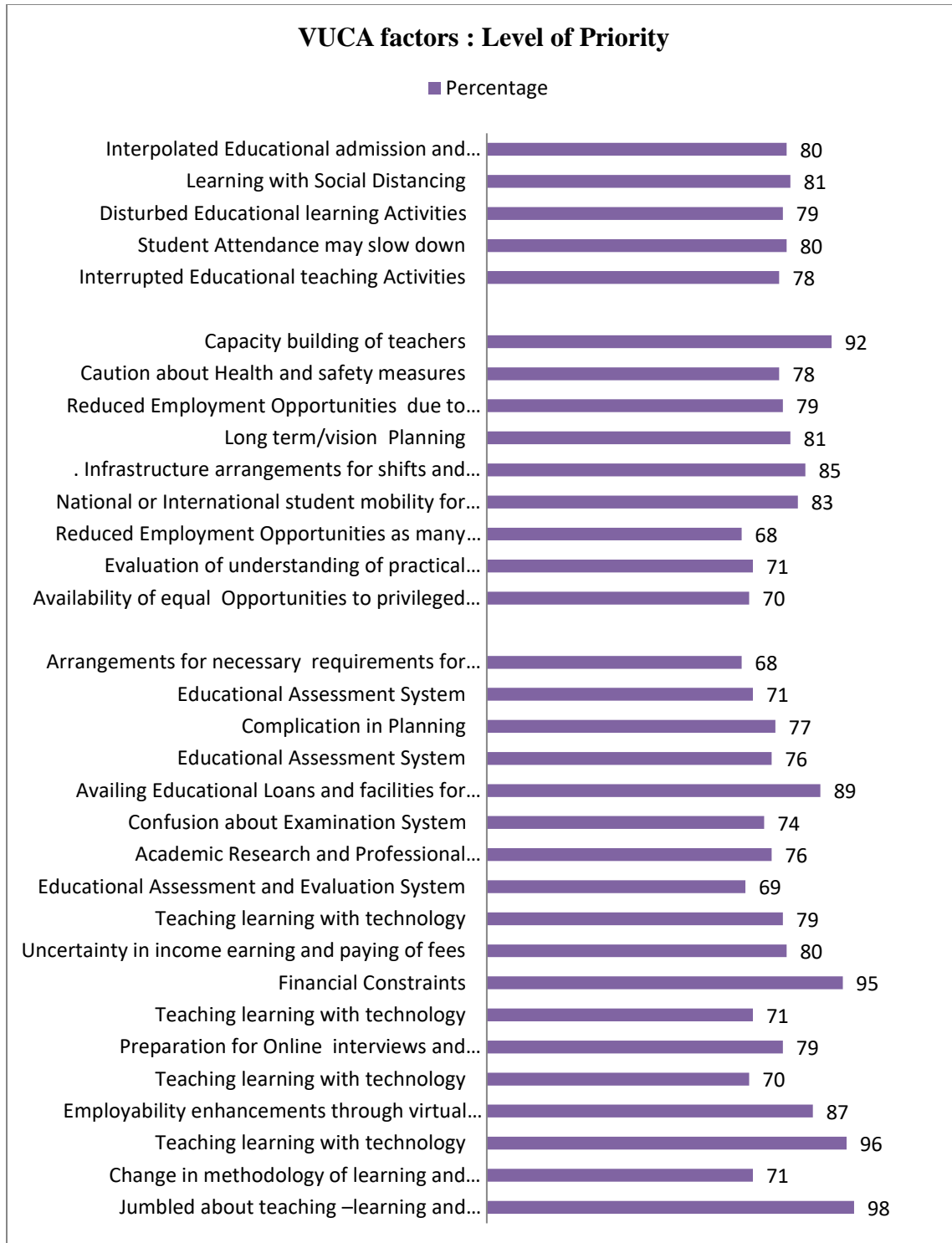


**Table 1.1 Identification of VUCA factors in Higher Education Sector in India during a pandemic**

	<b>V (Volatility)</b>	<b>U (Uncertainty)</b>	<b>C (Complexity)</b>	<b>A (Ambiguity)</b>
<b>Educators</b>	1.Interrupted Educational teaching Activities	1.Teaching learning with technology	1.Educational Assessment and Evaluation System	1.Availability of equal Opportunities to privileged and underprivileged students
	2.Student Attendance may slow down	2.Employability enhancements through virtual technology	2.Academic Research and Professional Development	2.Evaluation of understanding of practical subjects by students
<b>Students</b>	1.Disturbed Educational learning Activities	1.Learning with technology	1.Confusion about Examination System	1.Reduced Employment Opportunities as many Joining's or Offers on hold

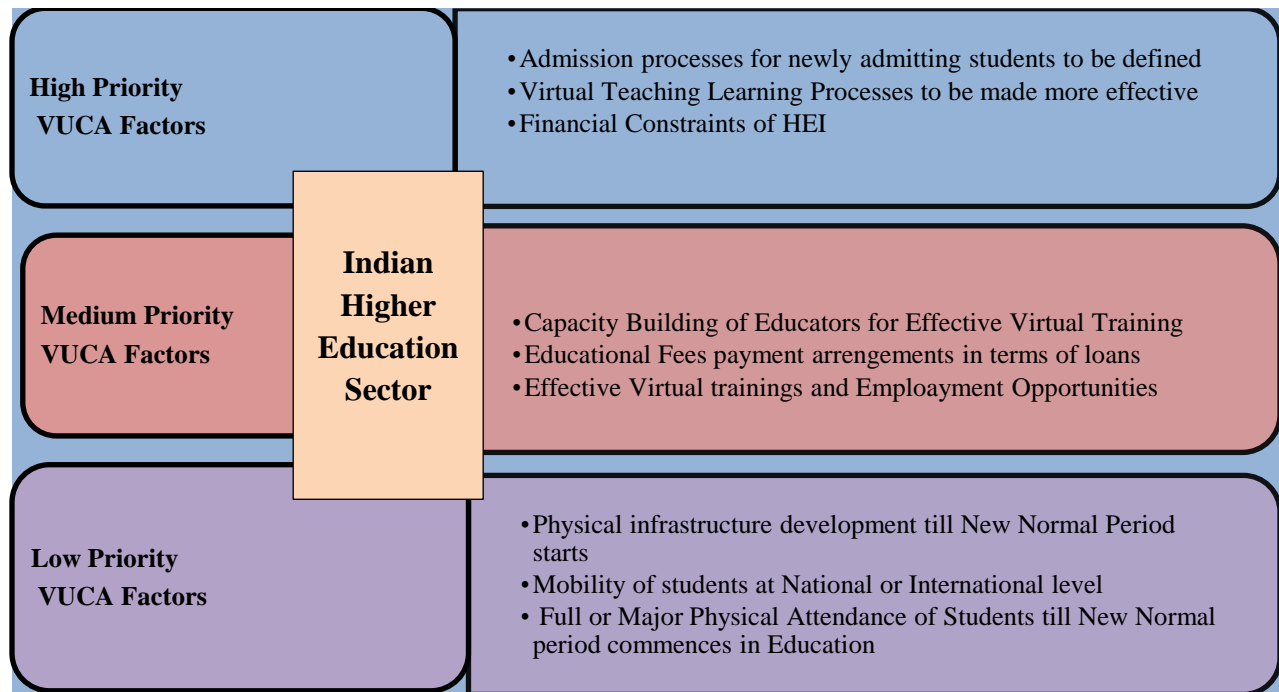
	2.Learning with Social Distancing	2. Preparation for Online interviews and Internships	2.Avaling Educational Loans and facilities for virtual learning	2.National or International student mobility for higher studies may be reduced
<b>Top Level Management Of HEI</b>	1.Interpolated Educational admission and teaching Activities	1.Teaching learning with technology	1.Educational Assessment System	1. Infrastructure arrangements for shifts and social distancing with precautionary measures.
	2.Capacity building of teachers	2.Financial Constraints	2.Complication in Planning	2.Long term/vision Planning
<b>Parents /Guardians</b>	1.Jumbled about teaching – learning and Admission Processes	1.Uncertainty in income earning and paying of fees	1.Educational Assessment System	1.Reduced Employment Opportunities due to WFH working culture
	2. Change in methodology of learning and availability of various options available for online courses.	2.Teaching learning with technology	2.Arrangements for necessary requirements for online education like Laptop/Tab/Mobile /Internet/books etc.	2. Caution about Health and safety measures.

**Fig.1.2: VUCA factors: Identified Level of Priority**



Researchers have tried to find out percentage of impact of identified VUCA factors at the time semi-structured interviews. On the basis of highest to lower percentage researchers have prepared a framework in higher education. This framework is helpful to consider and implement actions as per priority in Higher education sector.

### Framework on Higher Education with VUCA



Three Classifications has been done of the framework on the reactions given by respondents:

1) **High Priority VUCA Factors** – This classification in the structure signifies those VUCA factors that surfaced as a typical test in the reactions given by talked with experts. This suggests that these difficulties are observed by numerous associations in the Indian Higher Education Sector. Henceforth, countering them turns into a need.

2) **Medium Priority VUCA Factors**-This classification of VUCA factors suggests the importance as well as urgency as moderate. Organizations have to deal with it after high priority factors.

3) **Low Priority VUCA Factors**–This class in the system means those VUCA factors which went about as a test explicit to specific associations. This infers fighting these difficulties probably won't be a need for industry in general.

The framework proposed above can be utilized as a base model to additionally recognize original directive practices that can be attempted to counter the VUCA factors distinguished in this examination.

### IX. CONCLUSION:

The Indian business climate is working in a VUCA scene which is being directed by a pandemic climate. Some of VUCA factors that have arisen in this time affecting numerous associations and sectors. The episode of Coronavirus pandemic in the year 2020 has incited various sectors upsetting and for higher education is the same. The investigation has consequently recognized



different VUCA factors that have affected higher education as well as can be an expected test for different ventures during a period of worldwide emergency like pandemic COVID-19. The work has takeaways for academicians, analysts, top management and policy makers. Regarding this structure as a base model, vital authority of corporate associations can set themselves up to counter these difficulties brought about by the VUCA factors and accomplish business congruity consistently. This can be helpful in further recognizing inventive authority procedures that can be incorporated to counter the VUCA factors recognized in this investigation.

- **Limitations of the Study**

The restrictions of the examination have been identified with time and prejudices with views of collected from Primary and Secondary sources. Additional restrictions incorporate gathering information from respondents by having conversation with them over phone. With the present circumstance of a cross country lockdown and closure, it was difficult to have face to face interviews. The procedure of information assortment was tedious as it was gathered dependent on arrangement dates fixed with singular respondents. The examination is restricted to a solitary sector working in Indian economy (Higher Education) because of time and limited resources.

**References:**

1. Annapoorna, S. & Bagalkoti, S.K. (2015, October).Development of IT sector in India: Analysis of Reasons and Challenges. Journal of Economics and Sustainable Development. Retrieved from file:///C:/Users/Mitika%20Nangia/Downloads/Development\_of\_IT\_sector\_in\_India\_Analysisof\_Reas.pdf
2. Bennet, N. and Lemoine, J. (2014). What VUCA really means for you. Harvard Business Review. Vol 92, No 1/2. pp. 27–42.
3. Financial Express. (2015, December 15). Uncertainty and volatility greatest challenge for companies: KPMG. Retrieved from <https://www.financialexpress.com/industry/uncertaintyand-volatility-greatest-challenge-for-companieskpmg/179177/>
4. Gruwez, E. (2017). VUCA World-a quick summary. Retrieved from <https://www.tothepointatwork.com/article/vuca-world/> Pandemic. (n.d.). Merriam-Webster Online. In Merriam-Webster. Retrieved from <https://www.merriamwebster.com/dictionary/pandemic>
5. Stewart, K., Connelly, D. & Robinson, J. (2020, April).Everything you should know about the coronavirus outbreak. Retrieved from [https://www.pharmaceuticaljournal.com/news-and-analysis/features/everything-you-should-know-about-the-coronavirusoutbreak/20207629.article?firstPass=false#What\\_are\\_coronaviruses](https://www.pharmaceuticaljournal.com/news-and-analysis/features/everything-you-should-know-about-the-coronavirusoutbreak/20207629.article?firstPass=false#What_are_coronaviruses)

6. WHO. WHO Coronavirus Disease (COVID-19) Dashboard. Retrieved on June 3, 2020. from <https://covid19.who.int/> Wikipedia. Covid-19 Pandemic in India. Retrieved on May 20, 2020 from [https://en.wikipedia.org/wiki/COVID-19\\_pandemic\\_in\\_India](https://en.wikipedia.org/wiki/COVID-19_pandemic_in_India)
7. UNESCO. COVID-19 Educational Disruption and Response. Retrieved on June 3, 2020 from <https://en.unesco.org/covid19/educationresponse>
8. DNS Kumar (29 April 2020). Impact of COVID-19 on Higher Education. Retrieved on May 25, 2020 from <https://www.highereducationdigest.com/impact-ofcovid-19-on-higher-education/>
9. Pravat Ku Jena. Challenges and Opportunities created by Covid-19 for ODL: A case study of IGNOU. International Journal for Innovative Research in Multidisciplinary Filed. 2020a; 6(5):217-222.
10. Pravat Ku Jena. Impact of Pandemic COVID-19 on Education in India. Purakala. 2020b; 31(46):142-149.
11. Pravat Ku Jena. Online learning during lockdown period for Covid-19 in India. International Journal of Multidisciplinary Educational Research. 2020c; 9, 5(8):82-92.
12. Shaguri, Obadya Ray, Higher Education in India Access, Equity, Quality, EAN World Congress
13. Scholar, Global Access to Postsecondary education, 2013.
14. Kumar, Anuj & Ambrish, Higher Education: Growth, Challenges And Opportunities, International Journal of Arts, Humanities and Management Studies, Volume 01, No.2, Feb 2015.
15. Sharma, Sahil, Sharma, Purnendu, Indian Higher Education System: Challenges And Suggestions, Electronic Journal for Inclusive Education, Vol. 3, No. 4, 2015, pp.3-4.