

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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**INTERFACE OF ENTREPRENEURSHIP AND FRUGAL INNOVATION IN HEALTHCARE INDUSTRY WITH SPECIAL REFERENCE TO ASOPA HOSPITAL AND RESEARCH INSTITUTE**

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**ABSTRACT**

*India is one of the largest developing country where huge population survives below poverty line so it is a buyer market of unserved consumers or potential market where the cost plays an important role. Hence, all the MNCs are focusing to capture this huge market. Frugal innovation came into existence for the unserved, poor and needy consumers. This study highlights the characteristics of frugal innovation and their relationship with entrepreneurship. Affordability and economies of scale are key elements in frugal innovation but at present quality also plays an important role. Asopa hospital is not just a hospital. They take interest in different types of innovative operations, which satisfy the need of unserved or needy consumers. The researchers intend to explore the impact of existing frugal innovation on the society at large and to study its future implications.*

**KEYWORDS**

Asopa hospital, frugal innovation, healthcare, poverty line, entrepreneur.

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**FRUGAL INNOVATION**

**F**rugal innovation is a prominent yet critical business stratagem of the modern age companies of plummeting the intricacy and outlay of a good and its production. It counters to the inadequacy of resources whether monetary, material or establishment and challenges Western companies to generate premium products which are sustainable as well as sought-after and at the same time, momentous for the end users. It initiates and provokes companies to flourish in humankind where clientele are both value cognizant and value oriented. It would be appropriate to render it as frugal engineering as it involves a great deal of calculations and extensive usage of the latest trends, efficient modes of new production tactics and research work.

A product's durability and removal of dispensable features is sought after in this business paradigm and it commences globalization and rising incomes by convivial of avant-garde distribution channels. One of the principal factors taken into account is that throughout the application of such a strategy, care should be taken that there is no compromise when it comes to the quality of the product or service so manufactured.

**ENTREPRENEURSHIP**

Entrepreneurship, for all intents and purposes, encompasses the overall modus operandi of exploitation of the optimum business opportunity in order to establish a thriving business organization offering a product, process or service. It operates within an entrepreneurship ecosystem, which includes business incubators, seed accelerators, grants and venture capital financing. This process is juxtaposed to what we call as "sole proprietorship" as it is not only apprehensive with the establishment and financial soundness of a business venture, but endeavors for an eminent social position, excellence as far as innovation is concerned, and unvarying fortitude on the part of the entrepreneur to convoy business risk with biases in order to exploit an opportunity which is not only new-fangled, but becoming a pioneer during the practical application of his vision.

The modern-age British economist Edith Penrose has identified the collective nature of entrepreneurship. As per her research studies and analysis, to facilitate capturing and retaining as well as creating business opportunities in modern organizations, human resources need to be coalesced.

Expanding Penrose's view, Paul DiMaggio suggested that when organized actors or institutional entrepreneurs see new institutions as opportunity to fulfill their interests, then only they are able to consider them as excessively important.

So, it can be minimally stated that entrepreneurship is analogous to the construction of a building which starts off as a brawny foundation on which the whole mega structure rests, but is an unbounded battle of traditional concepts and new age technology and innovation. The materialization of risk taking and universal outlook of the profitable nature of any business entity requires an exceptionally calculative and logistic brain and the aptitude to view business in totality. Such traits are obligatory within an entrepreneur as he intends to not only establish a successful and favorable position in the market, but influence the thought processes of his subordinates so that their mindset does not offer resistance to the application of views which are completely new and non-traditional. At the same time, it is expected out of him to utterly satisfy the ultimate consumer who decides the fate of any business establishment.

**ASOPA HOSPITAL**

Dr Asopa has worked in close association with Aligarh Muslim University as an editor of the University Gazette in January 2011. This gazette promotes those values and achievements that foster a sense of pride and belonging to a well defined area of specialization.

"I thank almighty for giving me vision and strength." These words prove his affinity towards God and his unimpeachable nature. He was given a lifetime achievement award in the North Zone USI Awards 2013 for his great contribution in the field of laparoscopic surgeries as well as urology.

Asopa Hospital and Research Centre came into existence in the year 1991 as a 100 bedded multi-forte association of trained connoisseurs and a vision of serving humanity. Its motto, which states, "Where your health is our top concern and excellent service is our goal" exemplifies that it is undeniably a global vanguard in pioneering the art of medical services as a comprehensive element of service to mankind.

A team of eminent doctors, latest technological enhancements and well knowledgeable staff, makes it one of the leading healthcare units of the country. It is also acknowledged for its research work on surgery for Epispadias, Stricture Urethra, Hypospadias, Pancreatic cancer and male incontinence.

It is well known for offering an extensive range of surgeries, which are reasonably priced. Its multiplicity of departments makes it a well synchronized and modernized version of medical boons.

Asopa Hospital and Research Centre endows with admirable revelation to the youth who believes in being an imperative part in the medical profession. Practical acquaintance in this profession is exceedingly crucial in order to monitor patients and make them believe that their health is the hospital's pinnacle precedence. Despite being a surgeon, he is also the director of Asopa Hospital and Research Centre. His vision statement takes into account the various facilities, which make his hospital compatible enough to provide exceptional medical aids within affordable prices. He has been known for his "personal touch" with his patients so that they are able to feel optimistic especially when it comes to crucial cases.

He is also the former president of UP Chapter ASI website and an active member of Selsi National Executive Committee. The National Jalma Institute of Leprosy and Other Mycobacterium Diseases has also honored him for his research work.

Apart from such achievements, he believes in a straightforward living with dedication to his profession. His idea of living is quite different as he considers life not to be wasted but invested for the betterment of others. Self-Actualization is found to be one of the utmost rationales behind his modesty.

**NEED OF THE STUDY**

Indian Prime Minister Narendra Modi launched his ambitious "Make in India" program last September, pledging to lower barriers to doing business and promote foreign investment. He is hoping to transform Asia's third-largest economy into a manufacturing powerhouse like China. In present time, no one denied the importance of frugal innovation just because of daunting task, which firms are, facing in developing countries. The government of India has not been able to meet healthcare need of all. The purpose of this study to identify the frugal innovation in Asopa hospital and their relationship with entrepreneurship. Its assumed that Asopa hospital done various frugal innovation which are very helpful and provide financially viable healthcare system in India.

**OBJECTIVES OF THE STUDY**

The proposed study will be based on the following objectives:

To determine the frugal innovation in Asopa hospital.

To find out the linkages between Entrepreneur and Frugal innovation in Asopa hospital.

**HYPOTHESIS**

The researcher would like to test the validity of the following hypothesis with references to the objectives:

H01: There is no relationship between entrepreneur and frugal innovation in Asopa hospital.

**RESEARCH METHODOLOGY**

This is empirical research in which empirical evidence are used to explore the Asopa hospital and frugal innovation. Qualitative and Quantitative both data are used for study.

**SCOPE OF THE STUDY**

The study restricted to Agra zone (Asopa hospital).

**SAMPLING TECHNIQUE**

The non-probability sampling techniques like judgmental and convenience sampling used because the population is finite and related to doctors.

**SAMPLE SIZE**

The population is very specific and finite hence 14 registered doctors of Asopa hospital are taken as a respondent.

**JUSTIFICATION OF THE SAMPLE SIZE**

The respondents for collecting the primary data are chosen from the whole Asopa hospital. The sample size 14 registered doctors of Asopa hospital are approximately equal to the whole doctor population of Asopa hospital in specific time period (APRIL-OCTOBER 2015) make study more useful and authenticated.

**DATA COLLECTION**

Primary data collected through questionnaire and interview. Secondary data collected from documents and records of hospital provided by them.

**DATA ANALYSIS & INTERPRETATION**

**ANALYSIS**

**GENDER**

**TABLE 1: GENDER**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	11	78.6	78.6	78.6
	FEMALE	3	21.4	21.4	100.0
	Total	14	100.0	100.0	

**CHART 1**

**GENDER**



Approx. 78% of male doctors and 22% of female doctors are taken as respondents of research.

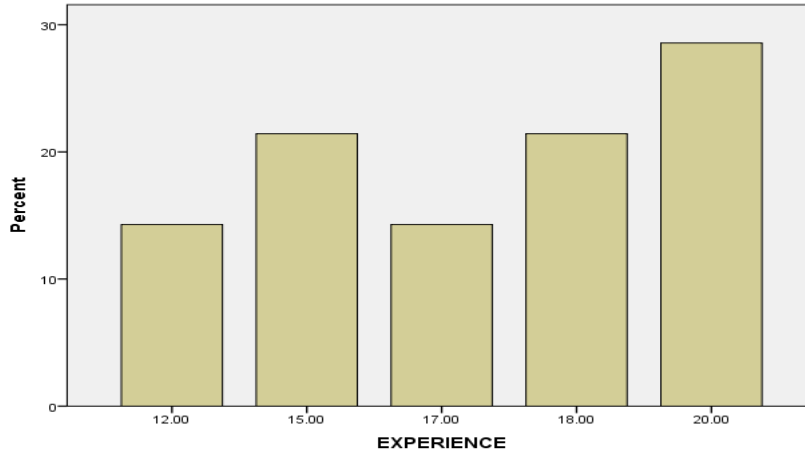
EXPERIENCE

TABLE 2: EXPERIENCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12.00	2	14.3	14.3	14.3
	15.00	3	21.4	21.4	35.7
	17.00	2	14.3	14.3	50.0
	18.00	3	21.4	21.4	71.4
	20.00	4	28.6	28.6	100.0
	Total	14	100.0	100.0	

CHART 2

EXPERIENCE



Approx. 29% of doctors are 20 year experienced holder and approx. 50% doctors are more than 17 year.

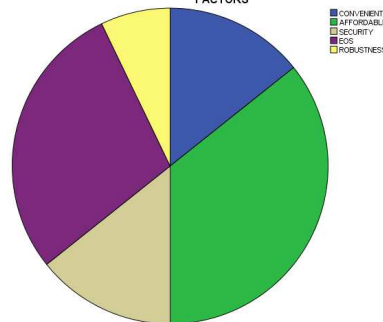
FOR FRUGAL INNOVATION FACTORS

TABLE 3: FACTORS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CONVENIENT	2	14.3	14.3	14.3
	AFFORDABLE	5	35.7	35.7	50.0
	SECURITY	2	14.3	14.3	64.3
	EOS	4	28.6	28.6	92.9
	ROBUSTNESS	1	7.1	7.1	100.0
	Total	14	100.0	100.0	

CHART 3

FACTORS



Approx. 36% are think that the treatments are affordable and 29% think that EOS and these two are high percentage value in factors.

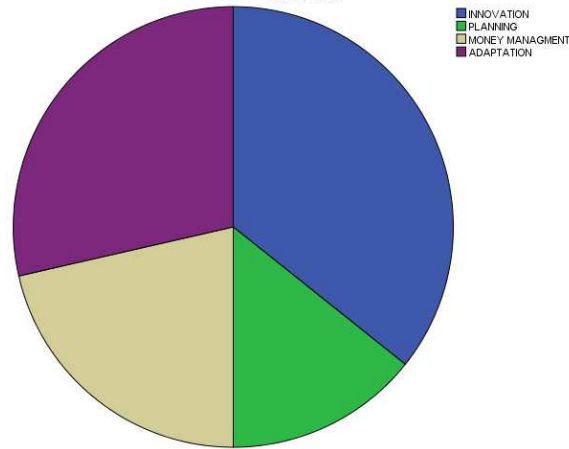
FOR ENTREPRENEURSHIP

TABLE 4: FACTORS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	INNOVATION	5	35.7	35.7	35.7
	PLANNING	2	14.3	14.3	50.0
	MONEY MANAGMENT	3	21.4	21.4	71.4
	ADAPTATION	4	28.6	28.6	100.0
	Total	14	100.0	100.0	

CHART 4

FACTORS



Approx. 36% are think that the main factor are innovation and 29% think that adaptation and these two are high percentage value in factors which influence the Dr. Asopa to become an entrepreneur.

TABLE 5: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.076 <sup>a</sup>	.006	-.175	.50815	.006	.032	2	11	.968

a. Predictors: (Constant), EOS, affordable

TABLE 6: ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	.017	2	.008	.032	.968 <sup>b</sup>
Residual	2.840	11	.258		
Total	2.857	13			

a. Dependent Variable: Innovation  
b. Predictors: (Constant), EOS, Affordable

TABLE 7: COEFFICIENTS<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.681	1.207		2.222	.048
	Affordable	.064	.331	.058	.193	.851
	Eos	-.053	.301	-.053	-.177	.863

a. Dependent Variable: Innovation

**DISCUSSION**

Researcher take EOS AND AFFORDABILITY of frugal innovation as independent variables. Correspondingly, a focal factor of entrepreneurship i.e. INNOVATION which is rendered as exceedingly influential, can be considered as a dependent variable for the reason that both ESO and AFFORDABILITY have a high percentage. It would not be oblivious to citation that the crucial physiognomies of frugal innovation and entrepreneurship are mutually inter-related as innovation is the central factor of entrepreneurship and the ensuing regression equation demonstrates their relationship: **Entrepreneurship=2.681+.064Affordability-0.053EOS**. Researcher castoffs null hypothesis as t value is greater than 2 and hence, entrepreneurship and frugal innovation are linked or inter-connected to each other and their relation in Asopa hospital is elucidated in the above equation.

**CONCLUSION**

Frugal innovation modus operandi has been proficiently and efficaciously applied by Asopa hospital in the form of their frugal innovative treatments like hypospadias and structure urethra. Excepting from being inexpensive, these products are reasonably economical. Indubitably, numerous factors play a vital role in the practical application of frugal innovation but affordability and economy of scale are core ones. Asopa hospital is not operational for business class or for mere professionalism, but inherently, their aim is to serve the society on the whole.

The central intention behind opening up of Asopa hospital was to invigorate the concept of the innovative mindset of Dr. Asopa. Medical procedures are charted strictly as per ethical norms of the field of medicine and at the same time, the hospital isn't functioning commercially. Asopa was constructed for gratification of their principal drive of serving deprived sections of the society due to the complications they face as a result of exorbitant prices hence they conveniently cut down their prices in such cases. They also provide training to other doctors and stimulatingly the mainstream doctors in Agra who treat hypospadias, are students as well as trainees of Dr. Asopa and charge a lump sum of fees for the same treatment. The research and development wing of Asopa hospital is very sturdy and resilient as every year two students are sent by National Board of Examination. Hence forward Asoapa hospital is much more than a surgical institute, it is an urge of optimism for poor and needy. Being a medical boon, they believe in service before self.

**SUGGESTIONS**

Suggestions are based on the researcher experienced. They are as follows Dr. Asopa has done all HR and marketing activities itself but time has changed and its demand of market to open proper HR and marketing department which explore more their hospital.

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