

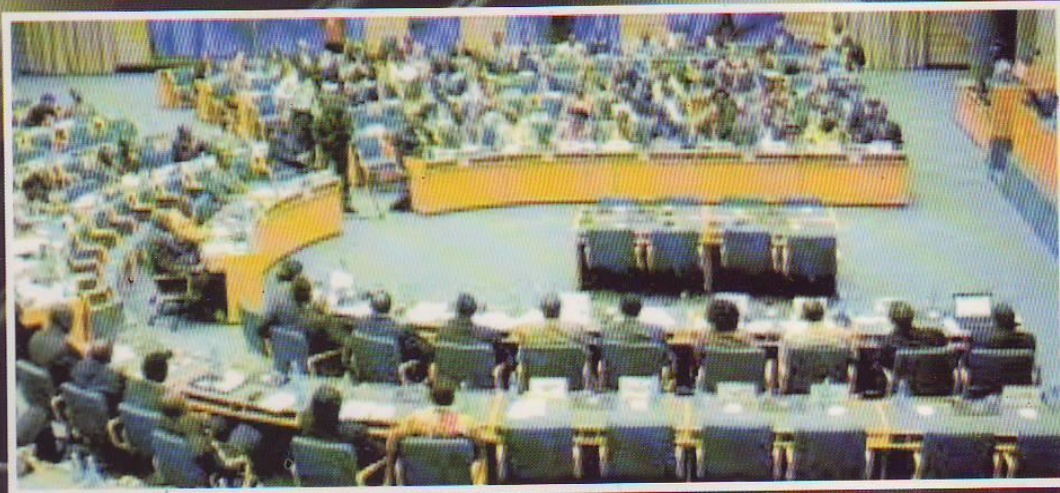


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Editors:
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E-mail - nexusconference@ymail.com

Phone:

+2348061364681

+2348024071175

+2348154413298

+2348160900893

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Leading Beyond Sustainability in Nigerian Higher Education Institutions: Imperatives for Quality Management and Technology Acceptance

Lasisi Abass Ayodele & Hairuddin Mohd Ali
Institute of Education International Islamic University
Kuala Lumpur, Malaysia
abasstps97@yahoo.com

Shuaibu Hassan Usman
Dept. of Management and Information Technology
Abubakar Tafawa Balewa University, Bauchi
Bauchi State, Nigeria
hasusman@gmail.com

ABSTRACT

Leadership is a protruding aspect that needs enquiry based on the extent to which administration practices in higher education institutions (HEI) to achieve quality. The main argument of this paper emanates from the understanding that "quality management in HEI" is a highly challenged aspect that requires „strategies" and should follow basic approach of quality assurance, quality control, strategic planning and technology acceptance in managing educational institutions for quality achievement and sustainability of HEI. The quality management theory not unturned any stone in order to provide quality service and leading beyond through technology acceptance to catch new customers for high education achievement. Thus, the study is seizure method of administrating and application of technology in carrying out quality services in educational institutions.

Keyword: Quality, Quality management, Leadership, technology acceptance, higher education institutions, Sustainability.

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1. OVERVIEW OF THE STUDY

Nigerian HEI may improve through leadership capacity in managing institutions of higher learning towards sustainable future. This is because governance of higher education and agencies; National Universities Commission (NUC) and Pre-Universities Examination bodies (NECO, JAMB, WAEC, etc) have realized the

importance of providing quality education for citizen and maintain certain number of students of high grades in examinations. This is for sustainability of Education in Nigeria. However, is sustainable future easily achieved? Sustainability is a questionable quest that leaders need to address in managing HEI in Nigeria.

This is clearly pointed out by researcher that sustainability is the way of living, working in an organization without economically, socially and environmentally jeopardizes the future and present of the physical and human resource (Sadler, 2003). Undoubtedly, sustainability cannot smoothly take place until the HEI leaders take stock of their activities in terms of quality management approaches, technology acceptance and implementation of strategies for true sustainability of HEI.

Besides, it's not really news that sustainability in HEI is riddled in word that require an advanced degree dictionary to understand. Several HEI administrators typically bypass understanding the philosophical meaning of „quality“ because it's easier as an ordinary word. Despite the fact, achieving true sustainability in HEI required understanding the philosophical meaning of these phenomena which could enhance in achievement of quality and real technology acceptance for sustainable future of higher education institutions.

2. PURPOSE OF THE STUDY

Today, sustainability is major topic of several conferences, administrating HEIs, and technology acceptance for innovation throughout the world (Moore, 2005). Meanwhile, technology is tremendously used in this present generation in teaching-learning, social activities as well as administrative unit of HEIs. There are many evidences today that show the important use of technology through the aids of internet among HEI customers (Morris, 2009; Saadé, 2007; Pikkarainen, et. al., 2004)). Indeed, the word customer is often used by the educational administrators. This is to show the importance of student who is in position of the receiver of quality services provided in HEIs. Basically, customers simply mean the student as well as other stakeholders of HEI.

In the context of educational sector, administrators have realized the importance of implementing technology in term of admission, compilation of the customers“ results, keeping students“ records, and other administrative purposes (McGhee, 2004). The fact is that Nigerian higher educational industries are still lacking in acceptance of technology in administrative task and other teaching-learning activities which can fast track the sustainable future of HEI.

Internationally, most of develop and developing countries as example South Africa, Malaysia, Thailand and others respectively. Their HEI administrators have realized the impact of utilizing technology through its compactable, stronghold and faster in processing the services for quality achievement. While, its e-response to the customer“s enquiry keeps HEI customers satisfy without bias. However, the quest to this study is that there is relationship between quality management in HEI and technology acceptance for SHEI in Nigeria.

In order to overcome the difficulty facing the HEI and for SNHEI, it is important to scrutiny the concept of Quality Management emphasized in Deming theory and Technology Acceptance based on perceived usefulness, perceived ease of use and quality of internet connection components which has it background from theoretical background from Technology Acceptance Model (TAM) for SHEI (Davis et al., 1989).

These can provide intensive view against inconsistency in-service and can set step towards adjustment and better satisfaction for the customers in Nigerian HEIs. This article is divided into four parts: part one contains brief literature review on Sustainability, Quality Management and Technology Acceptance for sustainability of higher education institution (SHEI).

The second part presents the theory involve in the study while, third part present the strategies as solution for SHEI. The final part consists of conclusion and suggestions for further study on quality management and acceptance of technology on SNHEI.

3. CONCEPTUALIZING SUSTAINABILITY IN HEI

The study and explanation of sustainability is a recurring theme examined the administrative effort in HEI. The internationalization of HEI brought by globalization is the ground causes of frequency and uncertain future, and competition among HEI in Nigeria and elsewhere, which begging for continuous innovations while, fast track and growing use of information technologies is difficult to implement and at the same time forces many HEI in facing the challenge for improvement. On the other hand, this effort has enhances other HEIs able to compete with their counterpart internationally.

However, Sustainability can be described as living and working in ways that does not jeopardize the future of social, economic and natural resources of the society (Sadler, 2003). Sustainability further means retaining the present and the future quality achievement through management of staff performance towards services providing for continuous satisfaction of customers in HEIs.

Several higher educational sectors around the world have attempted practices of sustainability to meet the society expectation in term of quality management initiative at HEIs in different disciplines. It is, perhaps, for this reason that the concept of Sustainability of Higher Education. Institution (SHEI) is now considered as inevitable in HEI especially institution that is reputable and persistence in customer's satisfaction for sustainable future (Wright, 2010).

This commencement closely recall the Johannesburg summit 2002 outcomes, where it was consistently stated that a third wave of concern pertaining to social sustainability and activity on environmental change is now evidently gaining strength and balance approach to sustainable development on social improvement in the context of education as well as economic dimensions on sustainability which "are being given equal weight alongside the environmental change" (Sadler, 2003: 35). Meaning that, sustainability concept is also highly increase known in educational sectors beyond environmental study concentrated only as before.

Initially in educational sector, sustainability concept is only focuses on environmental studies, but due to injustice that exists at the part of social environment resulting into concern and exercises sustainability expansion into other educational units in HEIs.

With regard to this, education institution was envisioned on what a "Sustainable" University might look like. This was in term of sustainable development on educational programs and sustainable development of university climate for quality achievement (Moore, 2005).

Building on the insights to the concept of sustainability, different definitions and interpretations pertaining to SHEI trigger the authors and researchers base their writing on this new phenomenon. HEIs administrators are now pursuing quality through sustainability concept and to be a culture in managing organizational climate for SHEI (Djordjevic and Cotton, 2011).

To identify the level of HEIs administrator awareness on SHEI, a qualitative research has being carried out by Wright (2010) which involved 29 Canadian University presidents and vice-presidents whose institutions are among the signatories to the Talloires declaration on sustainability. The findings from this research shows that majority of

participants are well aware of the sustainable development but „less familiar with the concept of sustainability“ of HEI (Wright, 2010). Similarly, all universities in Sweden are in support and aware of sustainability where new amendment to Act on Higher Education (1992:1434-1 Chapter 5) assigned new task that: “Institutions of higher education shall promote sustainable development in their activities meaning that present and future generations will be assured a healthy and good environment, economic and social welfare and justice”(Axelsson, et al., 2008).

3.1 Sustainability of Higher Education Institutions: Quality influences

Sustainability revolves the fundamental management techniques, institutional leadership and quality improvement efforts, through specialized skills under a rigorous process which is in line with quality assurance, strategic planning at institutional levels among administrative unit and teaching-learning service providers for sustainable future of HEIs (Griffith, 1996). Sustainability has relation with quality achievement, without quality there is no true sustainability. In the contemporary definition of quality, it is simply means exceptional, consistency or transformation (Harvey and Green 1993) while, quality perhaps related to excellent (Parri, 2006).

Oderinde (2004) enumerated two aspects of quality in education, which are both internal and external. The internal aspect is the implementations of the institution objectives while the external aspect deals with the implementation of national objectives which are pre-requisites to the achievement of quality in any educational institution. Quality is a grade of achievement, a standard against which to judge others (Middlehurst, 2001). Meanwhile, quality is a special concept that sets a goal for universities management and academician communities to be the best in providing sustainable future for customers and “better outcomes than others” (Parri, 2006). However, the philosophy of quality management is to be consistent in assuring quality which its means excellent product or service for society

Sustainability is one of the concepts moving round, especially in the premises of higher citadel of learning where standard and valuable knowledge are acquiring (Bornman, 2004). Majorities of HEI leaders are now engage in SHEI through quality management initiative for the sustainable future of HEIs (Filho, 2005). Thus, quality management philosophies need to be understood in order to resist changes among staff for Sustainability of HEI.

(Deming, 2000). Quality management is a questionable concept in Nigerian HEI, according to Adebayo, et al., (2010:12); “The way and manner some of the Nigerian universities are being managed by the university administrators is also have consequential effect on quality assurance in the universities. For most of the universities, management means little more than playing the role of “Caretaker”. This vital function has been largely reduced to the maintenance of the status quo.

This unfortunate development significantly negates the concept of a university, particularly in a developing country like Nigeria. It seems certain that as long as management continues to play this non-challant role, the quality assurance will continue to be jeopardized in the universities”. With regard to this, “quality management” is highly challenged in NHEI which it requires „strategies” to overcome the challenge and changes. This study offer solution to the HEI leaders by follow basic quality management approach of quality assurance, quality control, planning strategically through Deming theory as well as technology acceptance theory of Davies in managing educational institutions for quality achievement and for sustainability of HEI in Nigeria.

Evolution of Quality Management theory and Technology Acceptance theory of the study
Technology Acceptance theory: In order to understand the composition of variables and

determinants of technology users based on the uses of technology acceptance for SHEI. Several theoretical models have been developed which were strive to explain the intension to use and actual technology use in the literatures (Dillon and Morris, 1996; Ball and Levy, 2008). Technology Acceptance Model TAM is the background of this study which was proposed by Davis, (1989). This is a model that vividly explains computer-usage behavior and constructs related to acceptance of technology in any sector. Initially, TAM is rooted from Theory of Reasoned Action (TRA), where the predictor of behavior is intension. TRA further expanded by creating a model that suggests that perceived ease of use (PEU) determine individual intension to use of technology system (Fishbein and Ajzen, 1975; Pikkarainen, et. al., 2004). Similar research found that attitude is one of predictor to use of technology acceptance. Despite the fact that, many researchers dropped attitude to use technology in TAM, because of its weak strength in mediating beliefs" on behavioral intension to use (Davies et. al., 1989; Saadé, 2007) and this is also consistent with result of research done by Saadé and Galloway, (2005) on internet acceptance.

Nevertheless, Davis beliefs there are two variables mediating technology acceptance which are influencing the users; perceived ease of use (PEU) and perceived usefulness (PU). This study based its investigation on PEU and PU for SNHEI. Quality Management theory: by considering quality as hallmark of excellent managers in any sector, developing quality management theory by Deming rooted from Middle Ages (1200-1799) where the guilds-skilled craftsman were responsible to control their own products. By Mid18th century, there is increases of industry and requires improve the productivity. This trigger the researchers strive to maintain quality as root of product and services for customer satisfaction. In this regard, quality management method was developed by Deming in US industry during and before the Second World War (Sabet, et. al., 2012). The method further refined in Japan where it received quality award and continues as tradition of Japanese till now. Several business and corporate sectors realized this method improve their productivity and care for society needs. Based on this this method is now adopted into educational industries which is benefit for service in HEI. Despites, it requires strategies in carrying out expectations of the customer for quality achievement that can leads to true sustainability in HEI.

4. CONCEPTUAL FRAMEWORK OF THE STUDY



Fig. 1: Conceptual Framework
Adopted Deming, 1989 and Davis, et. al., (1989) theories

Basic approaches for Sustainability of Nigerian Higher Educational Institutions (SNHEI)

(a) Quality Assurance: Quality assurance is about consistently meeting customers' expectations while in product denoted meeting the specification or getting things right first time, every time (Adebayo, 2007). Quality assurance in the university system implies the ability of the institutions to meet the expectations of the customers and human resource in relation to quality of skills acquired by their outputs (Ajayi and Akindutire, 2007).

Equally, it can be said to be the ability of the universities administrators to meet certain criteria relating to academic matters, students services, staff, staff development and other activities. The guide and standard can be seen in ISO9000 of British Standard Institute (BSI) which requires university to follow PDCA- theory of Edward Deming the guru of quality assurance. The theory linking administrators to base on P-plan, D-do, C-check/control/study and A-act in their action plan for managing HEI.

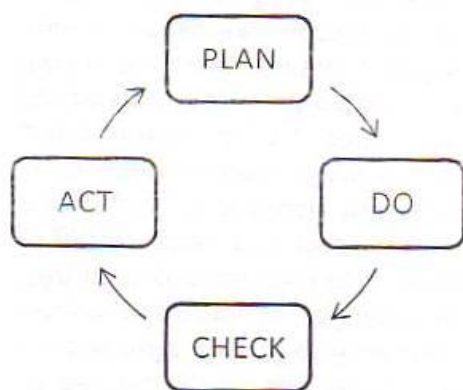


Fig. Adapted Deming theory of quality assurance

Source: Rumane, 2011:30

By applying the approaches of PDCA, it enhances in sustainable development conformity, establishing standard, and it

makes HEI to be relatively superior to others in the world. Thus, quality assurance is a key component of successful internationalization, mechanism for building institutional reputation in a competitive local and global arena and necessary foundation for consumer protection (NUC, 2007). It indicates the preeminence and special features that makes the institution distinct from other forms of institution (Alele-Williams, 2004).

(b) Quality Control: quality control is leader's responsibility for SNHEIs. Quality control is the process involves or applied by the administrators to see quality aim is achieved in HEI. Olagboye, (1997) defined quality control as the management arrangement or the mechanism put

in place to maintain the degree of excellence of a product or service. As applies to education, it means, the mechanism by which an education system ensures that the service it delivers or intends to deliver serve the purpose for which it is intended. Kerzner, (2001) explain that quality control is a collective term for activities and techniques, within the process, that are intended to create specific quality characteristics.

Such activity allowed the administrators to involve or applies continually in monitoring processes, identifying and eliminating problem causes, use of statistical process control to reduce the variability and to increase the efficiency of the process in HEI (Lasisi and Hairuddin, 2010).

When the quality control certifies that the organization's quality objectives are being met and standard (Kerzner, 2001; Rumane, 2011). Thus, focuses on the means by which HEIs ensures quality service provided remains relevant and appropriate to the needs of the

customers and the societies. This means involves series of operational techniques and activities which involve action plan in quality strategy. Indices for quality assurance and control in education according to Deming, (2000) include planning strategy.

(c) Strategic Planning: Administrators as leaders in HEI are responsible for proper planning and implementing the strategic plans for SHEI. Strategic planning is managerial tool that is readily available to measure the future of HEI. It is a tool that is systematically used to help higher educational community deals with challenges circumstances. Strategic planning is an advantage tool for management for building a standard strength and identifies the external opportunities in order to overcome the weakness and minimizes the internal as well as providing solutions to internal challenges. To achieve sustainability in NHEIs, strategic planning processing steps need to be accounted for by HEI leaders (Lasisi and Hairuddin, 2010).

It allowed the institution set and identifying its vision and mission for sustainable development. Once these are clearly defined, it moves on to a series of analyses, including strategic analysis (assess the external and internal environments to identify strengths, weaknesses, opportunities, and threats), strategic choice (which provide a context for developing organization's strategic issues) and strategic implementation (formulate strategies to manage the issues identifying facing the HEI), and the institution develops specific strategies including strategic goals, action plans, and tactics to achieve the aims for SNHEI. Emergent strategies evolve, challenging the intended tactics, and altering the realized strategy. Periodically, thus institution management evaluates its strategies and reviews its strategic plan, considering emergent strategies and

evolving changes for sustainable future (Lasisi and Hairuddin, 2012).

(d) Technology Acceptance: Technology is one of the major therapies to successful of the HEI. It is an operational mechanism that can aid HEI leader's effort in realizing and achieving quality for SNHEI. Let the institutions exchange professionalism, developmentalism and emulates the advanced countries for true sustainability in our HEI in Nigeria. Basically, Technology acceptance (TA) was proposed by Davis (1989) to the extents of establishing a scientific model known as technology acceptance model (TAM) which has been extended and applied to different information technologies, working environments, and end-users. HEI is an avenue that has huge numbers of end-users of technology. This is because it has first-hand awareness for improvement of the applications.

The scope of implementing technology acceptance in administrative services and other activities in HEI is to ensure information between HEI resource unit and customer is effective. According to (Ortinou, et. al., 1987) the levels of student satisfaction are a direct function of the extent to which expectations are realized. In order words, if the interaction within services provided by HEI exceed or not match the expectations of the customers, then, dissatisfaction as occurred. Several literatures have revealed the researches done on evaluation, computer self-efficacy (Piccoli, et al., 2001; Compeau and Higgins, 1995) while others investigating the purpose of using technology, perceive usefulness, and other reasons on; internet uses, e-learning, social networking, uses of computer, e-banking, internet-based-learning and any other forms of operation in different sectors (Morris, 2009; Saadé, and Weiwei, 2007; Saadé, and Bahli, 2005; Pikkarainen, et. al., 2004; Alavi, 1994; Hiltz,1995). Nevertheless, this study

concentrates on the extent in which customer satisfaction „occurs or not” over the use of technology in managing HEI through the TAM which is concurrently used and as a validated model among researchers (Davis et al., 1989; Mathieson, 1991; Davis and Venkatesh, 1996) for sustainability of HEI. Meanwhile, it serves as basis for other new model (Saadé, and Weiwei, 2007).

This study implies that PEU is the extent to which HEI customers believe that using technology acceptance in managing HEI would enhance in meeting their expectation. Meanwhile, PU is described as the extent to which HEI customers believe that using technology acceptance in managing HEI is very useful for them in satisfying their needs for SHEI. Meanwhile, quality of internet connection (QIC) was added as it believes that it may be one of the factors enhance customer satisfaction in use of technology acceptance in management for SHEI. By applying these assumptions to uses of technology acceptance in administrative services and teaching-learning activities, it advantages and important for SNHEI. Advantages of quality management strategies for SNHEIs

Quality management has many advantages for sustaining the progress and achievement of quality in HEI. Quality management is required and advantage to be part of community that involves in internationalization. It is important due to effectiveness and efficiency in managing HEI among staffs. Committed in quality management is advantage which brings more effective in uses of specific resources or standard approaches and strategies that result in sustainability of Higher education in Nigeria.

3.2 Advantages of technology acceptance for SNHEIs

Universities leaders need to realize that acceptance of technology facilitate quality

achievement and speedup the activities either administrative service or customer services. It enhances in current operation in managing HEI management system facilities which now a day most global required. Acceptance of technology for SNHEI strengthen assuring public competency, gaining opportunity and reducing threaten encountered while technology absent in HEI. Acceptance of technology attracts more student oversea and local to contend and able to further in NHEI. Thus, technology acceptance in NHEI will bring prospect and predict true sustainability in development of standard education.

4. CONCLUSION

Leading beyond sustainability in NHEIs required quality management and technology acceptance as viewed in other counterpart around the world. It is undoubted that Nigeria has all facilities that can generate quality and sustainable development, leaders need to emphasize on deliver, communicate on quality and proper implementation of modern technology in order to be head in standard education as observed in the past centuries in Nigeria. Thus, sustainability is responsibility of all, quality saves money, while defect in managing for sustainability should be identified and brought for corrective action.

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Authors' Biodata



Lasisi Abass Ayodele holds the B.Ed(Mgt) M.Ed(Adm) and currently a PhD Candidate in Education Management and Leadership at International Islamic University in Malaysia. Research interest

areas include: Leadership and Quality Management in Higher Education, Strategic Planning and Educational Marketing (both Qualitative & Quantitative method). Author and Co-authors in books, International Journals: *International Business Education Journal*, *International Journal of Management & Entrepreneurship*, and www.amazonbooks.com. Membership: British Educational Leadership, Management and Administration Society; Australian Institute of Project Management. His work has been presented at United Arab Emirates, Thailand and many conferences in Malaysia. He can be contacted at: abasstps97@yahoo.com



Dr. Hairuddin Mohd Ali is an Associate Professor and currently heads the Department of Social Foundations and Educational Leadership at the Institute of Education,

International Islamic University Malaysia. He is a prominent writer and authors of books, book chapters and refereed international journals. Holding a master degree in Management Science and a PhD in Services marketing. Vast experiences and knowledge in educational management and leadership field and research. Served more than a decade in the National Institute of Educational Management and Leadership, Malaysia. He can be contacted at: hairuddin@iab.edu.my.



Shuaibu Hassan Usman received his degree in Management and Information Technology from Abubakar Tafawa Balewa University Bauchi,

in 2009. Currently, he is a lecturer at Abubakar Tafawa Balewa University Bauchi. He is a Master student of Information Technology at International Islamic University in Malaysia. His interest research area is Computer Networking. He can be contacted at: hasusman@gmail.com

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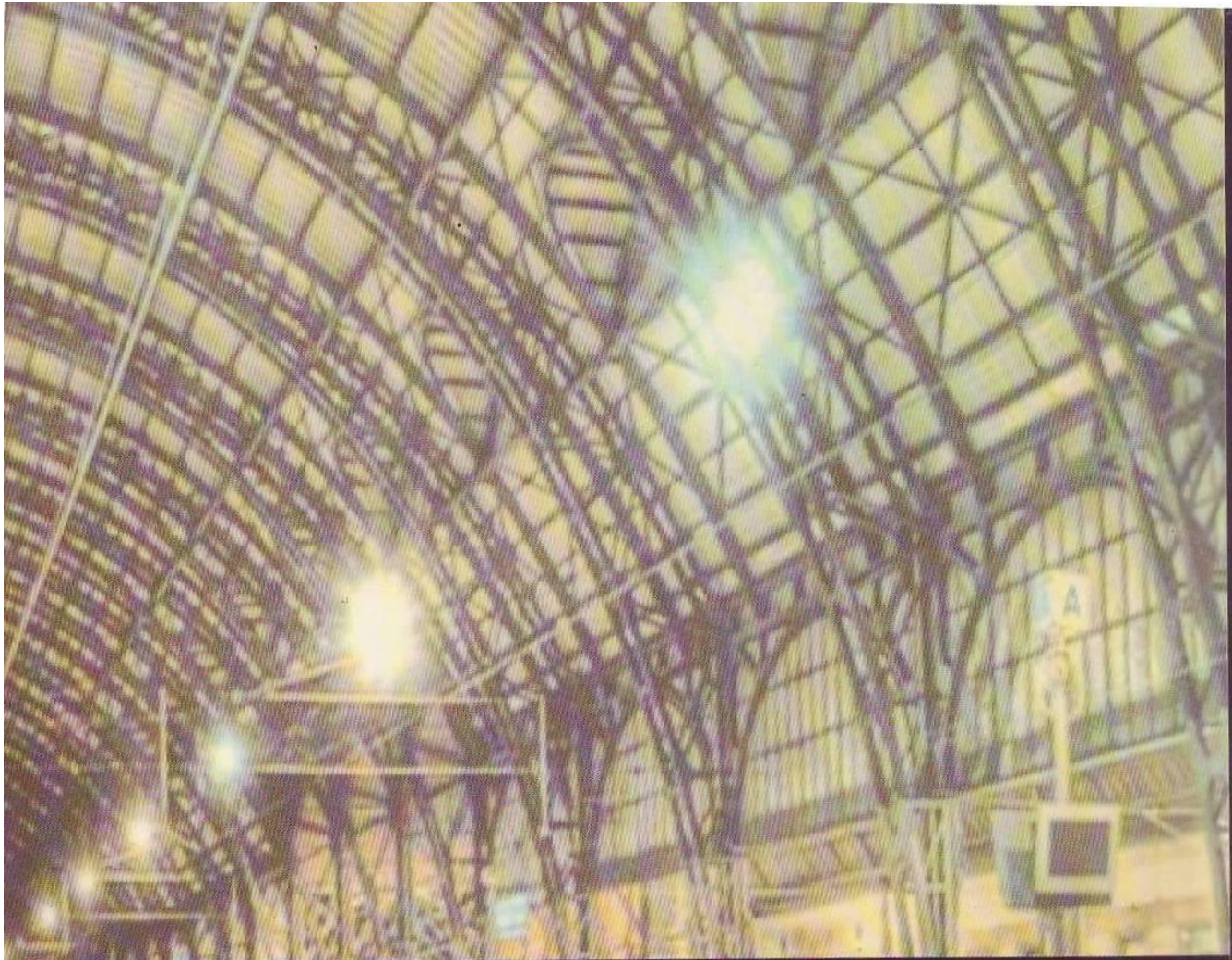
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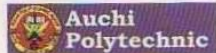


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