



# Challenges of Women Career Advancement in Knowledge-based Service Industry: Case of the Banking System in Sudan

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## ABSTRACT

The purpose of this study is to make an assessment of the challenges to female career advancement in a knowledge-based services industry - the banking industry. In this paper the researcher is studying the challenges facing information technology (IT) female workforce in their profession. Several barriers prohibit promoting female workforce skills by reducing their capacity to learn and limit their competencies in providing knowledge-based enhanced services. Specific data on barriers of women advancement in banking system was collected from 57 females working in junior and middle IT jobs in banks in Sudan. Data was collected by means of a questionnaire using purposive sampling and was analyzed using frequencies and mean. Research findings show that knowledge-based banking sector is marked by sustained growth in its services. However, the majority of the IT senior jobs are handled by male workforce. Findings showed that the gap in the skills between the two genders contributed to preference of male worker, lack of training, male domination in knowledge-based banking sector, the demanding nature of the job, less flexible time and personal barriers. The research recommended enhancing knowledge-based services by leveraging on the skills of the female workforce by training and changing the organization culture.

**Keywords:** Career Advancement, Knowledge-based Economy, Inequality

**JEL Classifications:** M150, D63, J310

## 1. INTRODUCTION

The banking sector worldwide is now using technology to serve its clients faster. These technologies have changed the banking industry from traditional system where a lot of paperwork was done to digital system where transaction are done with a click of a button. In such system, accounting information systems are dependent on technology. Although introducing technology in banks is a bit costly, but such technology changes efficiency of service delivery and allows the existence of banks in competitive banking industry and global banking. Banks are now depending on sophisticated information systems which requires competent staff and who can assure the delivery of services quickly and effectively. With the same token, the growing need for fast and convenient required hiring personnel who is comfortable and capable of coping with the intensively changing technologies in the banking system. The banking system nowadays require knowledge

workers who are well trained to use these advanced information technologies (ITs). During the last two decades, hiring knowledge workers became a leading agenda for all banks. The developments and sophistication in banking technology necessitated greater emphasis on knowledge workers' competencies. The banking system in Sudan, like many of their contemporaries in developing countries puts hiring knowledge workers as one of its top agenda.

A considerable amount of research has been conducted on use of technology, its dissemination through education, and related externalities in many countries (Schultz, 2006; Godin, 2006; Roberts and Armitage, 2008; Shiva, 2007; World Bank, 2003; Bhole and Mahakud, 2012).

These researches focused on different research gaps. The purpose of the current study is to help fill in this gap in the literature, particularly in relation to Sudan. The study investigates the

perceptions of different knowledge workers on the barriers to their career advancement, and highlights these barriers and suggests some means for mitigating them. Exploring their perception may shed some light on these barriers and bring them to the surface for employers. The remainder of this paper is structured as follows: Section 2 provides an overview of archival literature on knowledge based economy and barriers to women advancement. Section 3 outlines the research methodology. Discussion of findings is shown in section 4. Finally, section 5 summarizes the findings, implications and conclusions, and recommends areas for future research.

## 2. LITERATURE REVIEW

### 2.1. Background on the Banking System in Sudan

Sudan's financial system is a relatively small system when it is compared with the other systems in the region. The system is composed of commercial banks and public banks whose systemic risk is considered to be low because of the volume transactions. The banking system in Sudan developed a lot over the past 60 years. Prior to independence, the banking industry composed of foreign banks mainly which served the basic banking purposes of the expatriates in Sudan as well as exports and imports related activities. Sudanese banks prior to the year 2000 predominantly provided fundamental banking services such as accepting deposits and granting loans (<https://www.mfw4a.org/sudan/financial-sector-profile.html>). The following year banks could not ignore the importance of IT (Mustafa, 2001). Banks use IT in all its transactions. Becoming a member of the SWIFT community required the introduction of modern technology.

Like many developing countries Sudan started to slowly consider expansion in its banking system. To compete with the global banking systems, Sudan started to focus on IT knowledge which is very essential to gain (Abdulnabi, 2004). With the passage of time, new several services are provided by banks. This include automated teller machine networks, bill payments, call center services and electronic clearance. The increased competition called for IT training and education for its workforce to assure enhanced operations. The pressing need for the use IT rapidly transformed the traditional banking system into a rigorous knowledge-based system in which IT is the driving force.

### 2.2. Knowledge Based Economy and Barriers to Women Progression

A knowledge based economy is an economy that is predominantly driven by knowledge in its growth and relies on human capital in acquiring and disseminating knowledge. Various efforts to define knowledge based economy have been attempted. knowledge-based economies are defined as economies that depend on the production, distribution and use of knowledge and information (Organisation for Economic Co-operation and Development, 1996).

It is also defined later as economy in which knowledge is created and used effectively to promote economic and social development (World Bank, 1999). A knowledge based economy is further defined as an economy that rely heavily on intellectual capabilities to integrate improvements in all products and services (Powell and Snellman, 2004). A knowledge based economy is an economy

that allows an effective use of knowledge for greater economic development (Radwan and Pellegrini, 2010). It is also as an economy where educated and highly skilled workers are needed (Sporer, 2004). In such economies it is expected the social and economic barriers against women participation in development activities would not exist. (Radwan and Pellegrini, 2010).

In developed countries where women have good representation in the banking system, males still are found on the top of the ladder (Linehan and Scullion, 2001; Metz, 2003). Women are expected to contribute to their workplace as long as they have the education as their male counterparts. However previous research stipulated that that there is women exclusion in certain professions (Obeid, 2016). Women career advancement is seen to be hindered by gender bias (Jayaweera, 2000), gender attitudinal difference (Morley et al., 2002) and social barriers (Komori, 2008).

The last decade witnessed tremendous pressures for equal rights for women. Special emphasis was made on the removing the barriers to career advancement (World Bank, 2012). The main reason behind these pressures was the underrepresentation of women in senior position in most organizations. Successful organizations enhance their competencies by hiring skilled knowledge workers who play an important role in achieving the organizational goals (Roztocki and Weistroffer, 2015).

Another study identified key factors that results in difference in career advancement between men and women. These factors include education and training (Dench et al., 2002b). Other barriers that are identified by literature include the stereotype attitude in certain firms. Some firms feel that women are less capable than men in the workplace (Blau et al., 2006) Women are perceived to be less capable in attaining senior positions. Other studies stipulated that motherhood is a barrier to women career advancement (Dambrin and Lambert, 2008; Hughes et al., 2009).

Another barrier identified by literature is the ability of men of forming an informal network that supports their progression to senior jobs (Liff and Ward, 2001; Powell, 1993). The Informal network that exists in banks affect women career advancement and their chances for promotion.

## 3. METHODOLOGY

The study was conducted in Khartoum in private and public banks in Sudan. A descriptive research design was adopted in which survey was used to highlight the barriers facing women working in IT jobs. A purposive sample is used by the researcher to address a problem that is common to all the sample participants. The methodology that is followed in this study is to gather the perceptions of female working in junior and middle IT jobs in banks in Sudan on the barriers to their career advancement. Data was collected from participants during the period June 2017 to August 2017. For the purpose of the study, 66 questionnaires were distributed to a purposive sample, which contained two categories of respondents: junior and middle IT jobs. Fifty-seven questionnaires were returned were subsequently analyzed using frequencies and mean.

As for the research instrument, the researcher identified a number of barriers to women career advancement from archival researches. Based on review of the literature a questionnaire was designed to give information on the possible barriers that impede women advancement to top positions in banks. Two different measures were used in assessing the perceptions of the different groups of respondents: Perceptions regarding barriers to career advancement, and perceptions regarding the means for mitigating these barriers. The questionnaire is divided into three sections. The first section is designed to obtain demographic information about the respondents, as well as their qualifications and years of experience. The second section seeks to capture the respondents' opinions on a list of barriers to career advancement and the third section lists down the means for mitigation. Sections two and three of the questionnaire used a 5-point Likert-scale to gauge the opinions of the participants.

## 4. RESULTS AND DISCUSSION

### 4.1. Response Rate and Demographic Information

Table 1, shows the response rate among the respondents. The overall response rate was 86%. This rate is encouraging because it is above 60%. The response rate among middle IT female workers was 90%, while that of junior IT female workers was 83%.

### 4.2. Barriers of Career Advancement in Junior and Middle IT Workers

Table 2 shows the barriers to career advancement in as perceived by the respondents. The main focus of this section is to identify the barriers that impede women advancement in their career in the banking system. Frequencies and mean were used to analyze the

**Table 1: Details of the response rate**

Group	Distributed questionnaire	Usable questionnaire	Response rate (%)
Middle information technology workers	30	27	90
Junior workers	36	30	83
Total	66	57	86

IT: Information technology

**Table 2: Barriers of career advancement in junior and middle IT workers**

Statement	Mean-junior workers	Mean-middle IT workers
1. Stereotype attitude towards women	4.40	4.50
2. Family responsibilities/motherhood	2.96	2.50
3. Discrimination in hiring	4.4	4.67
4. Glass ceiling	4.63	4.67
5. Lack of training	4.63	4.50
6. Gender bias	4.63	4.67
7. Flexible time	2.77	2.33
8. Long working hours/Job stress	2.96	2.33
9. Lack of support from the management	3.33	2.50
10. Lack of mentor	2.96	2.33

IT: Information technology

respondents' perceptions. Based on the findings in Table 2, there is a general consensus among the different groups of respondents that the stereotype attitude towards women, discrimination in hiring, lack of training, glass ceiling and gender bias are the main barriers to women career advancement as perceived by the respondents. The findings also showed women feel that they can hold senior position regardless of the fact that they have equal skills. They feel that irrespective of the law enacted in last decade on equal pay and equal chances for hiring but yet there are still some barriers.

Almost half of the sample felt that they are not supported by their management and this may be attributed to stereotype attitude towards women or the culture. Women in the banking system feel that the stereotype perception of the motherly role of women reflects on the attitude of management. This discouraging environment may result in losing competencies and lead to entry barriers and quick exit from the banking system. With this mind, the competitive advantage that may be reaped from a diversified workforce is not likely to exist and hence the knowledge and skills that will be gained from attracting and retaining a wider pool of knowledge workers will never be attained.

The majority of respondents agreed on the lack of adequate training as an impediment to their career progression. The research findings show that women identified the lack of adequate training and experience as one of the major barriers to the difficulties women experience in getting advanced jobs in their career ladder. They feel that access to sponsored training in their workplace is unequal to their male counterparts.

This lack of training will result in a skills gap. This skills gap hampers the process knowledge building and slows down the banking industry attempts for transforming to a knowledge-based industry. The limited training offered to women and their inexperience, does not adequately prepare them for senior positions and narrows their chances for career advancement. Lack of prospects of career advancement leads to female workforce disengagement and accordingly turnover.

### 4.3. Means for Prompting Career Advancement

Table 3 shows a number of means that may increase women career advancements. The majority of the respondents feel that equal chances for professional development, equal chances for hiring and promotion are the best way for enhancing their chances for progression up the career ladder. According to the respondents, if they get enough training this will allow for increasing their competencies and propel to achieve their progression goals. They feel that knowledge training can cater for enhancing their competencies as their counterparts.

The respondents feel that a supporting leadership, is one of the factor that bank managements need to look into is the gender balance and diversity in their senior jobs. Banks need to put the issue developing diversity in hiring and training. They need to think more broadly about actual skills that can bring more benefits to the workplace. By doing so they will create a culture that is inclusive. This culture will cater for more hiring and retaining knowledge workers who can make real progress no matter their

**Table 3: Means for prompting career advancement**

Statement	Mean-junior workers	Mean-middle information technology workers
1. Equal chances for professional development	4.40	4.33
2. Equal chances for hiring	4.63	4.50
3. Equal chances for promotion	4.63	4.50
4. Flexible working hours	2.78	2.67
5. Supportive leadership	4.40	4.50
6. Shift in workplace culture	3.89	4.33
7. Enhancing networking skills	2.59	2.67
8. Mentorship	2.59	2.50

gender is. The subtler barriers women face today may diminish if their contributions are acknowledged. Other means identified in the study were networking, mentorship and flexible working hours. But they were not considered as effective as the former ones. Also the issue of networking is an issue for women in the banking system because of many factors such as the culture and religion. Women can easily develop a network with their females however networking with male counterparts will challenge as they might be negatively labelled.

In summary this study aims to highlight the existing barriers to women's advancement in the banking system in Sudan and explore a variety of personal, social and structural factors that may be related to progression. The researcher aims to gather guidelines for employers as to means of countering barriers as well as to collate mechanisms for women to assure their progression in the workplace.

Based on these finding the study is recommending that the banking system needs to look into its culture and change the stereotypical assumptions held against women. Women being part of the workforce need to possess some essential skills that are needed to pursue their jobs. Furthermore, they need to focus on the capacity building of their employees irrespective of their gender. Banks are also advised to include leadership programs for their employees as part of their training programs. Such training programs will change the perceptions of employees and sensitize women ambitions for going up their career ladder.

## 5. CONCLUSION

Based on this study organization need to focus on building up their human capital by implementing training programs to propel towards achieving their goals. Organizations should provide training to build up their female human capital. To ensure that organizations should design knowledge bases activities and training that caters for enhancing the competencies of their employees irrespective of their gender. Mitigating gender barriers in knowledge-based economies will create a supporting culture for synergies that achieve the desired organizational goals and leading to a more knowledge-based development. The fair representation and opportunities of growth for both genders will boost the development of knowledge economies. This can be achieved by

increasing the organization research and development budgets. By investing more on research and development organizations will leverage their skills. Such an intangible expenditure will increase the competencies of the organization human capital and support the development of knowledge-based economies.

A gap in this research is that the researcher only focused on one industry. The researcher is unaware of the other industries as the study only reflect the perceptions of respondents in the banking system. Despite this, the research has contributed to the scare existing literature on gender and knowledge-based economy. Future research may analyze other industries for further investigation.

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