

DO KENYAN PUBLIC UNIVERSITIES HAVE THE POTENTIAL OF INCOME GENERATING UNITS? A CASE OF MOI UNIVERSITY, KENYA

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ABSTRACT

Due to a decline in government funding, public universities are experiencing financial crisis of unprecedented proportions. The crisis is threatening to reduce the capacity of the universities` to effectively fulfill their role of teaching, research and contributing to national development. To address the short falls, universities` have diversified sources of funding by engaging in income generation initiatives to raise additional funds. The alternative sources of funding are run and managed by the institutions themselves or by the university holding companies. In this respect schools are increasingly becoming the backbone of the university in generating additional income.

In generating income, Moi university schools are generally responsible for financial and administrative decisions in line with Responsibility Based Management policy contained in the Strategic Plan document 2005- 2015. This paper based on research findings, a case study of Moi University, examines the characteristics of a potentially income generating school. Some of the aspects explored include physical and human resources available in schools and related indicants.

Key Terms: Academic school, Income generating potential

INTRODUCTION

In todays globalized, information and knowledge based economy; education continues to be vital in social and economic life of a country. Not only does education promotes national growth, it has the ability to resolve complex problems and development challenges that face the world (Council on Higher Education, South Africa- CHE (B), 2001). According to the World Bank (2003) no nation can successfully integrate in, and benefit from this 21st century economy without a well-educated work force.

Spurred by the input of skilled manpower, many African countries after independence embarked on enormous expansion of their educational opportunities at all level of the education system. The Higher Education (HE) sub sector became the hub of this expansion in majority of African countries following their independence in the early 60s. The expansion was characterized by increased technical knowledge, skills and competencies that befitted a modern, globally-competitive economy (Bruce,

1998). Many newly independent countries alternative to achieve this noble goal lied in the expansion of HE. This rapid expansion has inevitably led to increased expenditure in this education sub-sector. Ayot and Briggs (1992) observed that worldwide spending on education and particularly HE has continued to rise more rapidly than the rate of increase in the Gross National Product (GNP) of many countries.

Kenya is not exceptional. Since independence the country devoted a substantial amount of its resources to the education sector. In an attempt to be fully self-governed, Kenya employed massive resources in HE in an attempt to boost its technical workforce and initially offered HE free to the populace. The sub-sector continued to receive high allocations compared to the other sub-sectors (Ransom et al., 1993; Kamunge, 2005). However, economic difficulties occasioned by increase in population and rising oil prices of 1973 (Cutter, 2001) have changed these trends resulting in the reduction of recurrent budget allocated to HE. Currently tertiary education in Kenya receives about 13% of total educational expenditure (UNESCO, 2006). This is not sufficient to cater for all its needs. The upshots is the presence of several 'white elephant' projects' left half completed in almost all state universities (Boit, 1998) and poorly paid staff leading to frequent strikes. In addition, cost sharing resulted to tuition fee and scrap of industrial attachment and teaching practice allowances which was initially free (Oketch, 2003). Further, limited facilities, out dated learning materials and shortage of teaching staff have become the order in most public universities. Commenting on expenditure on education, Ogot and Weidman (1993) noted that the investment the government had made in HE was commendable, however the trends were not to continue due to pressure from structural adjustment program by the World Bank, other donors aside and the limited capacity of HE itself on equity and efficiency grounds (Ngolovai, 2006b).

In 1994, the government reduced the education budget from 37% of its total annual recurrent budget to about 30% stating that it was not possible to allocate additional funding to HE (Kiamba, 2004). This short fall was threatening to reduce the capacity of these institutions to effectively fulfill their principal role of teaching, research and contributing to national development. Further, the situation was exacerbated by the government demand that universities supplement the government award to the university employees' salary and housing allowances of 2005 and in 2011. Public Universities heeded to this policy changes for the need to reduce their over dependence on government budget and adopted several innovative means and ways for revenue diversification. These among others include and not limited to the following:

CONTRACT WITH INDUSTRY, PRIVATE AND PUBLIC SECTORS

Universities through contracts have broadened their income base by creating an enabling environment for mutual benefit to stakeholders. The opportunity to generate revenue from sales of research findings in areas of applied research and consultancy services, and demand driven courses are offered to the needs of the client. (Blair, 1991; Association of Africa Universities, 1991; Moi University Strategic Plan, 2005-2015). Research findings show that, industries in Kenya and Africa at large are small with

limited resource base. However, basic links with industries in areas such as small scale services, training and employment are important sources of mutual benefit, although they may not generate significant income for the universities (Blair, 1991).

DUAL TRACK TUITION POLICY

The introduction of tuition fees in public universities in Kenya in 1991 did not significantly improve the resource base due to limited number of students. Dual track tuition policy introduced in 1998 enabled the universities to admit extra students who pay full fees. These includes the form four leavers who did not merit to join the university through joint admission board, those employed and wish to advance their professional careers but do not have time off their jobs and foreign students. Cheboi (2004) States that although this is a good source of additional revenue, the location of the University determines the viability of these programmes. For instance due to a rich catchment area, income generated by module II programs at the University of Nairobi rose from 4% of total income in 1998-99 to one third of 2002-2003 (Ngolovai, 2006a). Universities have taken this initiative further by establishing satellite campuses to satisfy demands for higher education. (RoK, 2005; Cheboi, 2004).

OPEN AND DISTANCE LEARNING

For years, distance education has been a minor activity carried on and promoted by a small group of educators in Universities aimed at broadening access of educational programming to universal or underserved populations of students. Because of its broadness, it has been re-casted as “on line learning” or “e-learning”. It has captured the attention of the educational world in both developed and developing, and estimates are that overall demand for HE is expected to grow from 48 million enrolments in 1990 to 159 million in 2025 (Ayoo, 2006). Moreover, with the growing ICT, institutions can generate money through “pay-to-surf” fee. Cheboi (2004) noted that, even though the initial costs of establishing the infrastructure for distance and technology based teaching are high, it is worth investing in because it reduces final costs, increases productivity and employment.

GENERATION OF REVENUE FROM ASSETS

Universities can also generate revenue from assets that are currently not used or under-utilized. For instance land could be leased to private enterprise or universities could establish private companies to manage them (Boit, 1998). The sale of farm produce such as milk, meat, crops, and cereal can also be a source of income to universities. University physical assets such as lecture halls, accommodation catering and transport facilities can earn university income. They can be rented out for conferences, seminars and workshops. Parking spaces is a famous area of contention as an IGA in the west and is worth attempting by our universities (Lund 1999). Blair (1991) in his survey on income generating in fifteen African universities noted that, well managed facilities generate significant income. The fifteen universities that were surveyed reported that they charged fees for external use of their facilities, and the ones that charged full cost recovery fees earned substantial profits.

SUBCONTRACTING OF STAFF

Having raised the students staff ratios, the available staff can fully be utilized in in-service training for various target groups through seminars, workshops and tailor made short courses at market rates. Some universities have instituted overhead charges on individual academic staff with external research contacts whereby they must surrender 15% of the contract to the university (Ngolovai, 2006b). A study by Lund (1999) maintains that students and staff working together to solve problems and manufacture “marketable goods” which compete commercially with similar products elsewhere, a part from creating entrepreneurship concept, income is generated for the university. The introduction of work study programmes has enabled the University to save greatly. Funds saved are released to the core activities of teaching, research and consultancy services (Ngolovai, 2006a).

FUND RAISING

Universities have raised quite substantial amount from donors and non- governmental organizations as research and scholarship funds. In this case, science and technology based companies have been actively involved in providing funds to universities by sponsoring specific programmes, preferably those related to its corporate mission. Desruisseau (1999) noted that donors prefer funding buildings to scholarships, or programmes, or professorships. In Moi University, the examples of donated buildings are the Margaret Thatcher library, the industrial and commercial development corporation-ICDC complex in the school of human resource development and Professor L. Huisman laboratory in the school of Engineering. Charitable organizations have also contributed generously in the donation of laboratories and equipment that is further used to generate revenue by universities.

Universities have also set up alumni associations for the purpose of rising funds in aid of university activities. However this attempt to mobilize resources has not been successful due to a limited economic base, poor alumni data-base and unemployment of graduates (Mutula, 2002).

ESTABLISHING ENTERPRISE SERVICES

Many universities have commercialized service units such as bookshops, printing units, photocopying services, guest houses, mortuary services, internet services, university press and petrol stations; financial investments such as in treasury bonds and private sector enables the university to mobilize resources (Boit, 1998; Kigotho, 2000; CHE(A), 2003; Mbaru, 2005; Moi University Strategic Plan, 2005-2015).

While most of the enterprises have become profitable, their profits remain small. Commenting on financial investments, Lund (1999) states that universities with large assets can divide funds and invest in various financial institutions with high rates of return over a varying length of period. This minimizes loss and enables universities to re-invest its “profit” immediately.

Regardless of the various innovative methods introduced to generate additional income, Universities economic situation is still precarious. In a brief description of HE systems in Kenya, Ngolovai (2006a) observes that income generation measures that have been introduced only offsets a fraction of the huge financial burden facing the universities. This raises key questions: How can universities fill these financial gaps? Do academic schools have the capacity or the ability to significantly generate additional income for universities?

This paper was informed by these concerns and examines the potential of IGAs in Public Universities using a case of Moi University, Kenya. The study examines the manpower characteristics in the academic schools and their relationship with income generating activities in Moi University.

FINDINGS

Distribution of respondents in the academic schools by gender

There are high chances of gender disparities in institutions of higher learning. This study attempted to establish the position as regards to academic schools in Moi University. To achieve these respondents in the academic schools were asked to state their gender. The findings are summarized in Table 1 below.

Table 1: Distribution of respondents in the academic schools by gender

Academic School	Gender			
	Female		Male	
	Frequency	%	Frequency	%
Agriculture and Biotechnology	3	18.2	9	81.8
Science	2	18.7	13	81.3
Natural Resource Management	2	16.7	10	83.3
Environmental Studies	1	10.0	9	90.0
Medicine	7	29.2	17	70.8
Public Health	1	20.0	4	80.0
Human Resource Development	3	37.5	5	62.5
Education	5	26.3	14	73.7
Business and Economics	4	22.2	14	77.8
Law	1	14.3	6	85.7
Arts and Social Sciences	6	21.4	22	78.6
Engineering	2	9.1	20	90.9
Information Science	4	33.3	8	66.6
Mean Gender		21.3		78.7

The table shows that majority of the respondents were male (over 70%) in all academic schools. The mean computed for male stands at 78.7% compared to 21.3% for female. This is a clear indication that great gender disparity exist in the academic schools in Moi University. The greatest hit schools with over 90% gender imbalances were the school of environmental studies and engineering. This is against the expectation of gender balance in institutions of higher learning by 2015. The low representation of

women in the academic schools may have far reaching implications in the management and performance of universities and more so in the operations of IGAs which highly depends on women input.

Distribution of respondents in the academic schools by age

Age of the respondents in schools was studied with an attempt to establish the extent the various categories of academic staff are represented in the participation of IGAs. Table 2 below gives a summary of the age composition of the respondents in schools.

Table 2: Distribution of respondents in the academic schools by age

Academic School	Age range in years							
	Below 40		41-50		51-60		Over 61	
	F	%	F	%	F	%	F	%
Agriculture and Biotechnology	1	9.1	8	72.7	-	-	2	18.2
Science	6	47.5	7	43.8	3	18.8	-	-
Natural Resource Management	3	25.0	7	58.4	1	8.3	1	8.3
Environmental Studies	2	20.0	7	70.0	1	10.0	-	-
Medicine	1	4.2	15	62.5	7	29.2	1	4.2
Public Health	-	-	1	20.0	4	80.0	-	-
Human Resource Development	3	37.5	3	37.5	1	12.5	1	12.5
Education	4	21.1	10	52.6	2	10.5	3	15.8
Business and Economics	7	38.9	8	44.4	2	11.1	1	5.6
Law	3	42.9	3	42.9	1	14.3	-	-
Arts and Social Sciences	9	32.2	15	53.6	2	7.1	2	7.1
Engineering	4	18.2	14	63.6	4	18.2	-	-
Information Science	2	16.7	5	41.7	4	33.3	1	8.3
Mean Age	3.3							

Age is considered a factor especially in embracing new ideas and innovations. It has been alleged that old academicians are reserved as regards to ICT and new innovations but considerably are apt with experience. On the other hand young academicians commonly referred to as 'young tacks' are widely perceived to be technologically able with an ego to engage in new ventures. These characteristics are important in the new era of information age and innovations where universities are expected to be on the helm. In addition young academicians are considered to have high potential in engaging in IGAs. Thus the respondents' age was found crucial as it is believed to have a bearing in the IGAs schools are expected to undertake. Table 2 reveals that most of the academic staff in the schools of Moi University is of the age bracket 41-50 years with six out thirteen schools having over 50% of its staff within this age bracket. The computed mean ages for the age brackets does reveal that slightly over 50% of all the academic staff fall within the 41-50 years bracket with only six percent over 61 years of age.

This is considered a good indicator of the schools' potential in engaging in IGAs. Most likely the high representation of the youthful academic staff in schools is an indication of their high ambition to progress commonly associated with the youthful years. In addition the high age range of 51-60 years,

is an indication that majority of the respondents in these schools are in old age, experienced and knowledgeable in their respective disciplines and that can be useful in identifying entrepreneurial ideas that when implemented can generate additional income. This finding concurs with what Psacharopoulos and Woodhall (1985) observe that average earnings increases with age which indicates that work experience increases workers' productivity.

Distribution of respondents in academic schools by years of experience

The study believes that an individual experience highly correlates with ability to engage in IGAs. The study thus sought to establish the experience rate of academic staff in the academic schools of Moi University. This was expected to establish whether the academic schools had the ability to effectively participate in IGAs and the extent to which the various levels of experience are represented in the participation of IGAs. The years of experience was categorized into four; below 3 years, 4-6 years, 7-10 years and over 11 years. The respondents were asked to state their years of experience and the results are as tabulated in Table 3.

Table 3: Distribution of respondents in academic schools by years of experience

Academic School	Years of Experience							
	3 & Below		4 - 6		7 - 10		Over11	
	F	%	F	%	F	%	F	%
Agriculture and Biotechnology Science	2	18.2	2	18.2	4	36.4	3	27.3
Natural Resource Management	1	8.3	2	16.7	5	41.7	4	33.3
Environmental Studies	-	-	7	70.0	1	10.0	2	20.0
Medicine	-	-	4	16.7	9	37.5	11	45.8
Public Health	1	20.0	2	40.0	-	-	2	40.0
Human Resource Development	2	25.0	-	-	1	12.5	5	62.5
Education	4	21.1	4	21.1	2	10.5	9	47.4
Business and Economics	1	5.6	9	50.0	5	27.8	3	16.7
Law	2	28.6	2	28.6	2	28.6	1	14.3
Arts and Social Sciences	2	7.1	3	10.7	4	14.3	19	67.9
Engineering	2	9.1	4	18.2	3	13.6	13	59.1
Information Science	1	8.3	3	25.0	1	8.3	7	58.3
Mean Experience		13.1		27.6		20		39.3

Table 3 does reveal that almost 60% of the academic staff (59.3%) in the schools had at least seven years of experience and above. A close analysis also reveal that the schools of Human Resource Management, Arts and Social Sciences, Engineering and Information Science have more that 50% of their staff with experience of over 11 years. The statistics also show that the school of environmental science and medicine had no respondents of less than three years of experience. The high number (59.3%) of the academic staff with at least 7 years and above experience is a strong indicator that the academic schools have a great potential to effectively participate in IGAs. Most likely, the high level of

experience is an indication that the academic schools have experts who can share experiences that can improve income generation and also suggest viable IGAs that schools can engage in. This is in line with what Psacharopoulos and Woodhall (1985) observes that increased years of experience increases workers' productivity. The finding also reveals that not all categories of experience are represented in some schools. The missing levels of experience appear to be partly due to delays in the recruitment process and brain drain which can be a drawback in income generation. Schools with all levels of experience indicate that the academic staff in these schools has varied experience and ability of which can be exploited for income generation in diverse activities.

Distribution of respondents in academic schools by qualifications

The qualifications of the respondents in academic schools was sought to establish their ability to effectively participate in IGAs and also to establish the extent the different qualifications were represented in academic schools of Moi University. To achieve these respondents' level of qualification was categorized as Bachelors, Masters and Doctoral. The results are as tabulated in Table 4 below.

Table 4: Distribution of respondents in academic schools by qualification

Name of school	Qualifications			
	Masters		Doctoral	
	F	%	F	%
Agriculture and Biotechnology	4	36.4	7	63.6
Science	7	43.7	9	56.3
Natural Resource Management	6	50.0	6	50.0
Environmental Studies	2	20.0	8	80.0
Medicine	12	50.0	12	50.0
Public Health	2	40.0	3	60.0
Human Resource Development	6	75.0	2	25.0
Education	11	57.9	8	42.1
Business and Economics	13	72.2	5	27.8
Law	5	71.4	2	28.6
Arts and Social Sciences	11	39.3	17	60.7
Engineering	9	40.9	13	59.1
Information Science	4	33.3	8	66.7
Mean Qualification		48.5		51.5

Table 4 does show that over 50% of the academic staff of Moi University are doctorate holders. However, a large proportion of the academic staff (48.5%) are not doctorate holders. This is contrary to the expectations that academic staff should by a larger extend be doctorate holders and above. The schools that had most of their respondents with masters' degree are; human resource development (75%), business and economics (72.2%), education (57.9%) and school of law (57.1%). Those that had most of their respondents with doctoral degree were; school of environmental studies (80%), information sciences (66.7%), agriculture and biotechnology (63.6%), arts and social sciences (60.7%), public health (60%), engineering (59.1%) and science (56.3%).

The findings do show that generally the academic schools have qualified manpower that can fully participate in IGAs. This is in line with Psacharopoulos and Woodhall (1985) who observed that benefits of educated workers results to high productivity to the individual and the society. These sentiments are similar to those expressed by Prewitt (2004) who noted that highly qualified individuals are key national resources whose term values to society exceeds their current value to employees. From the table, none of the schools had academic staff with bachelor's degree. High representation of respondents with doctoral and master's degree in most schools is an indication of high capacity of staff to initiate and participate in IGAs such as competitive proposal writing, research and consultancy services and publications that includes findings of researches done and PSSP.

IGAs engaged by academic schools of Moi University.

With the realization of the need to generate more resources to meet the demand of higher education, most universities initiated IGAs to supplement government resources. However, this initiative has not been easy as most universities decentralized the noble idea to the academic schools with the expectations that these academic schools have the ability in terms of resources and expertise to run and manage IGAs. The study thus sought to establish the IGAs Moi University academic schools engage in. To achieve these respondents were asked to state the IGAs options their schools were engaging in. The findings are summarized in Table 5 below.

Table 5: The IGAs academic schools of Moi University engage in

IGA	% YES	% NO
Research Services and Commercialization of Research Findings	69.2	30.8
Privately Self-Sponsored Programs (PSSP)	76.9	23.1
Short Courses	76.9	23.1
Link with International Universities and Organizations	69.2	30.8
Link with Industry, NGOs and Regional Universities	69.2	30.8
Publication	69.2	30.8
Marketing and Sales of Products	38.5	61.5
Farming	23.1	76.9
Laboratory Services	46.2	53.8
Consultancy Services	61.5	38.5
Conferences and Workshops	38.5	61.5
Transport Services	38.5	61.5
Hotel and Catering	23.1	76.9
Health and Medical Services	46.2	53.8
Photocopying Services	38.5	61.5
Open Distance Learning	53.5	46.2
Funds Appeals	28.0	72.0
Mean Percentage	51.0	49.0

The findings in Table 5 clearly indicate that Moi university academic schools do engage in a number of IGAs. However, this is mainly pegged on the area of their specialization. The high mean (51%) of

acceptance of engagement in the various listed IGAs is an indicator of high potential of income generating ability of the academic schools of the University. However, the mean rate for non- acceptance of the academic schools (49%) in engaging in IGAs is a relatively high indicator that some academic schools were not engaging in IGAs even though some were core to the University like research services, conferences and workshops and PSSP. This may pose a great challenge to the university resource generation. For instance Table 5 does reveal that the maximum engagement of any particular academic school in any of the listed IGAs does not surpass 77%. This clearly indicates that none of the academic schools fully engage in IGAs within their specialty despite the available right mix of age, experience and qualifications as exhibited by the academic schools as earlier discussed. It is also clear that some of the IGAs like ODL with only a paltry 53.5% engagement clearly indicate that the academic schools have a long way in embracing ICT in service delivery and generation of income, a source that has shown great potential in income diversification. The findings also reveal that the academic schools are inadequate in actively participating in the core business of the university- publication and dissemination of knowledge despite having staff that is experienced. This initiative stands at 69.2%, yet progression and growth of members and academic schools worldwide is pegged on this initiative. In addition, the Moi University schools also have not fully engaged in conferences and workshops as indicated by only 38% of the academic school's acceptance of participating in conferences and workshops. This low percentage clearly indicates that the rich academic staff-mix is underutilize sharing knowledge. There results reveal the need for the academic staff of Moi University to exploit more possible potential of IGAs and also improve on the already existing IGAs.

The perception of academic staff on IGAs engaged by academic schools of Moi University

The study also sought to establish the perception of academic staff on IGAs engaged by academic schools of Moi University. The respondents were asked to state their opinion on the IGAs there academic schools engage in and the potential they had. The findings from the respondents emerged strongly that although the academic staff had the potential to generate income they were not fully utilized due to the following factors that posed as challenges of IGAs in academic schools of Moi University.

Table 6: Perception of academic staff on IGAs engaged by academic schools

Perception on IGAs	% YES	% NO
You have adequate essential facilities for IGAs	27.7	72.3
You have adequate funds to initiate IGAs	27.7	72.3
There are clear policies on IGAs establishment in your school	15.4	84.6
You have adequate support staff to initiate IGAs	15.4	84.6
You have a supportive management structure	38.5	61.5
Your school is well situated for IGAs establishment	15.4	84.6
Staffs are trained in entrepreneurial skills for Income Generation	38.5	61.5
There is motivation of staff who engage in IGAs	7.7	92.3
Mean response	23.3	76.7

The study sought to establish the reason of low engagement of the academic schools in IGAs as indicated in Table 5 despite the exhibited potential (right age, academic qualifications and experience) by the academic schools. The results in Table 6 do reveal that most of the respondents (76.7%) attribute low engagement of the academic schools in IGAs to inability of the academic schools of Moi University to meet the various expectations of the academic staff to engage in IGAs. Top on the list are lack of motivation (92.3%), unclear policies on IGAs, inadequate staff, university location (all at 84.6%) and lack of funds and facilities at 72.3%. Interestingly the findings of the study indicate that lack of adequate facilities does hinder schools from generating income to the maximum. This contradicts the findings of the study by Blair (1991) and Boit (1998) who observes that available facilities as long as they are well managed can generate significant income.

The high percentage (72.3) of lack of funds to establish IGAs is a clear indication of the need by the academic schools and Moi University to diversify resources in IGAs. This may mainly be attributed to the decline in the government's percentage allocation to universities. This may have had a negative effect on resource allocation to the academic schools. However, findings from document analysis do indicate that despite the existence of little funds to the university bureaucratic processes does hinder allocation of university resources to the academic schools for engagement in IGAs. The finding reveals that a lot of man-hours are wasted chasing for signatures for the approval and disbursement of funds, a process which is indeed cumbersome and a hindrance to active engagement by academic schools in IGAs. In addition, this long procedure renders the money that could have been spent on IGAs not being spent at the end of the year. Further, documentary analysis show that lack of clear policy framework had also contributed to difficulties on the part of the management to motivate both the academic subordinate staff to continue participating actively in IGAs.

The study findings also reveal that a high percentage (61.5) of the respondents feels that the university and the academic schools lack supportive management structure yet Moi University has an established RBM. This highly signifies that the RBM policy that was instituted was not yet fully implemented. It also suggests that academic schools still have limited authority to make decisions and use the money generated from IGAs. This could have negatively contributed to the low engagement of academic schools in IGAs.

CONCLUSIONS

The study findings do reveal that Moi university academic schools to a larger extent have manpower characteristics (youthful staff, experience and qualifications) that can enhance income generation. However, there is need to balance the academic staff to achieve gender parity and training of the low academic holders (masters) to acquire the necessary qualifications.

Despite this the general observation of the study is that Moi university academic staff have high potential in the establishment and management of IGAs but lack the right support from the University and the individual academic schools to maximize the academic staff engagement in the listed IGAs. Therefore there is need for the university and the academic schools to pool resources to provide

adequate working space, adequate funds, clear policy on establishment of IGAs, adequate support staff, supportive management structure and location of schools for IGAs establishment . This may go a long way in increasing the income base of Moi University through IGAs.

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