

**ROLE OF INCOME GENERATING ACTIVITIES ON
PERFORMANCE OF HUMAN RESOURCE AND PHYSICAL
DEVELOPMENT OF MASENO UNIVERSITY - KENYA**

MARGARET ULAKA APONDI*

N. B. OKELO**

MOSES OGINDA***

ABSTRACT

This paper presents the role of Income Generating Activities (IGAs) on the performance of human resource and physical development of Maseno University (MU). The study will form a basic source of reference to the stakeholders who are interested in the private financing of universities. It adopted descriptive exploratory correlation and cross sectional survey research design. The study targeted a population of fifty one departments of the university where census sampling technique was used to select the sample frame. Results from the study show that IGAs had made a major role in the performance of the human resource and physical development of the university. However, it was found that among other drawbacks, the progress of running IGAs has been hampered by inadequate funds for further expansion, lack of qualified personnel, lack of awareness of the presence of IGAs and lack of full support from the top management

* DEPARTMENT OF FINANCE

** SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCE

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY, P. O.
BOX 210-40601, BONDO- KENYA

*** DEPARTMENT OF MANAGEMENT SCIENCE, MASENO UNIVERSITY, P. O. BOX
333 MASENO-KENYA.

INTRODUCTION

Universities have resources that can effectively be used to contribute towards income generation provided that the necessary catalytic investment is made to unlock the revenue. Maseno University, in her attempt to supplement her finances received from the government launched the Department of Investment of Economic Enterprises (IEE), which was established on 17th October 1994 with the major objective of systematic identification of income generating opportunities for the University (Maseno University College, 1997). The situation was more or less the same in the other Universities. To mitigate the worsening financial situation, the Universities started parallel degree programmes where students who do not qualify for government sponsorship pay full cost of their courses. Kaimenyi (2005) argued that there were about 14,000 parallel students at the University of Nairobi, just half of the total student population of about 30,000. The University gets additional revenue from the program as students pay much more than their regular counterparts. Accordingly the University collects between Kshs. 800,000 million and Kshs. 1 billion a year, and that 35% of the money is set aside to pay lecturers, and the rest is used to develop the University's already existing facilities. All other public Universities have started the parallel programmes with different levels of success. It is however Makerere University in Uganda that has made the most remarkable success in this area. At the beginning of 1990 Makerere was at the verge of collapsing. But with the introduction of parallel programmes, the University has been able to expand its enrolment from 3,361 students in 1993 to more than 22,000 students. At least 20% of the students pay fees making it possible for the University to finance 30% of its annual budget.

Nakhone (2004) argues that the increase in the student population has not been matched with similar growth in resources. Whereas there has been an increase in the student population in Africa by 61% between 1980 and 1990, there has been a reverse trend in financing. The public support per student at the same period dropped from Kshs. 346,500 to Kshs. 82,500 in real terms for sub-Saharan Africa. It is evident, therefore that expansion of enrolment should be managed in a manner that will preserve or enhance educational quality.

Abugi (1999) agrees that the government national budget on educational is over-stretched. Higher education in all developing countries is financed by the entire population, but with the

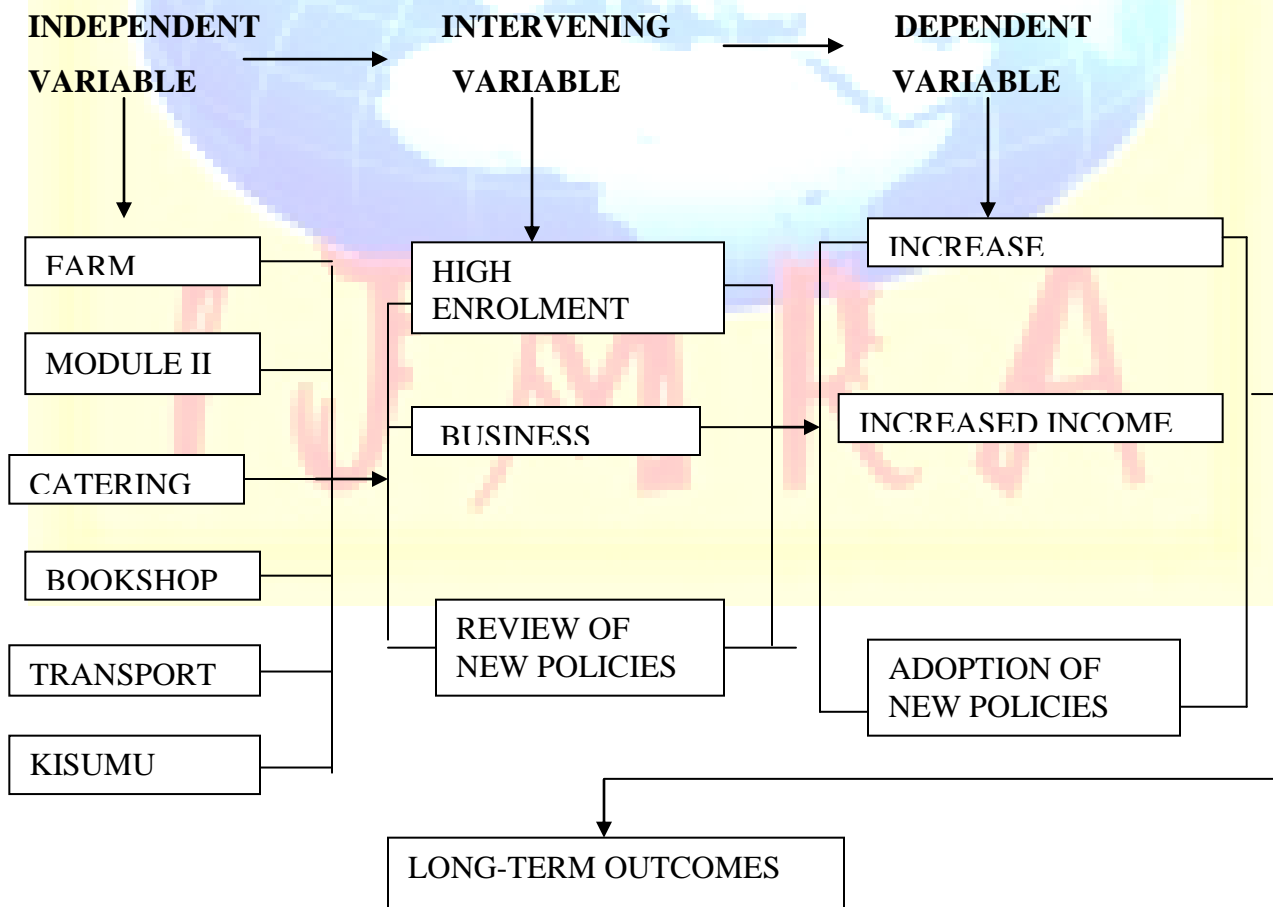
low income groups bearing the heaviest burden of commodity through taxes, yet chances for higher education are open for a relatively small minority. This implies that expenditure in higher education has retrogressive fiscal input. For example, the budget on higher education was 18% of the recurrent budget of the ministry of education in the 1994/95 fiscal year, which was for 6% of the student population. The Kenya Government and donors have urged private universities to use the existing resources efficiently and establish measures to reduce wastage. As a result, a cost sharing policy has been implemented at all levels of education. The degree of financial distress being experienced at universities is reflected in the chronic finance deficit shown in the Appendix V. Although there was a brief reprieve in the fiscal year 1994/95, the deficits keep rising because essential service must be kept afloat. Nevertheless, normal services have continued to deteriorate due to recurrent lack of materials. In the medium and long term, the uncontrolled accumulation of deficits in the University sector will compromise the quality of teaching, research and service if the direction of rising deficits is not reversed. There is therefore a need to devise new resources for financing Universities and methods of implementing of realistic strategies to achieve financial viability as well as quality education.

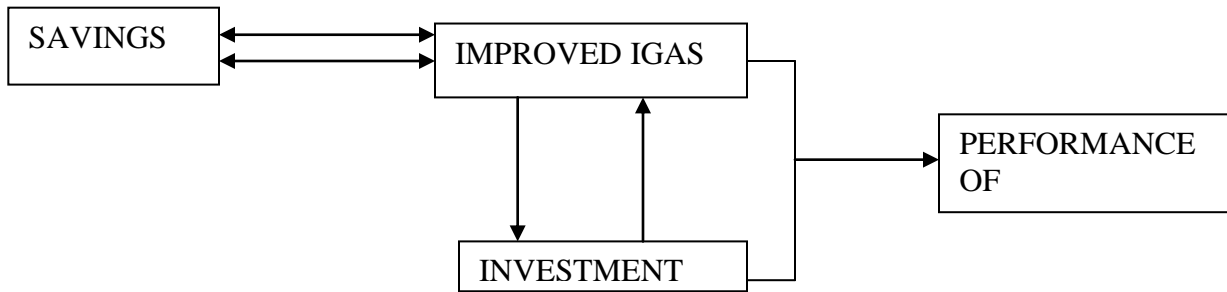
Kiamba (2003) noted that the Universities should separate the management of IGAs from the public sectors oriented mainstream, educational and research function of the University while ensuring that the income from these activities serves the learning, research and staffing objectives and functions of the University. Hence the adoptions of business like income generation and financial management strategies. University of Nairobi recommended that in order to ensure the observance of several business practices in the running of income-generating activities, a limited liability company wholly owned by the University be formed to co-ordinate the activities of IGAs. Mwiria (2005) argues that Public Universities should set up commercial research units to raise money and avoid collapsing financially. He notes that private firms should be barred from giving contracts to individual Researchers from Universities. Instead such contracts should be given through the University. Proposal contained in a report drafted by fifty researchers in Nairobi, Kenya in November 2005 stresses the need for Universities to commercialize research as one of the ways of raising money to fill the huge financial gap in their budgets. The seven Public Universities were faced with Khs.800 million shortfalls for salaries and owed suppliers and contractors about Khs.3 billion in unpaid bills.

CONCEPTUAL FRAMEWORK

The study was based on the concept that entrepreneurial universities must often be seen as a means of improving their performance by providing income, savings and investment. It must directly tackle the financial challenges that face the universities though the short-term income level which should allow for the long-term outcomes, hence the savings which brings about the performance of human resource and physical development within the university. It has four categories of research elements that are connected by directional arrows. These elements are: - Research inputs, Research inputs, Activities, Short term outcomes and Long-term outcomes.

Research inputs are the various IGAs that provide support to the research Activities, which are the services, materials and actions that characterize the IGA performance. Short-term inputs are immediate results of these activities. Long -term outcomes are the broader and more enduring impact on the system. Under inputs are the different IGAs as follows: - Farm Sales, Faculties, Catering Sales, Book-shop, Kisumu Hotel, Kisumu City Campus, and Transport





Conceptual Framework model on Performance of Maseno University due to IGAs

RESULTS AND DISCUSSIONS

The findings showed that much as there might have been IGAs services at the university, majority of the respondent seemed to have no in depth idea with regard to the IGAs. As a result of this, the researcher decided to investigate the cause of this. It was found that majority of the respondents who disputed the presence of IGAs at the university were either new comers at the institution or the lower ranked employees who did not have detailed understanding of IGAs services offered at the university.

There after, the researcher wanted to know the kinds of services offered by IGAs from those who acknowledged the presence of IGAs at the University. The services revealed were as the table below.

Table 4 Services offered by IGAs

Service	Purpose	Year started
Farm	Production of farm out puts/products	1990
Catering & accommodation	Reservation for students	1996
MITC	Information, Communication Technology	2002
Varsity plaza	Rental and parking services	2006
Kisumu hotel	Accommodation, conferences and catering services	1997

Source: Research data (2010)

The researcher then wanted to determine the general trend of the revenue collection at the university. From the data, the following trend was established

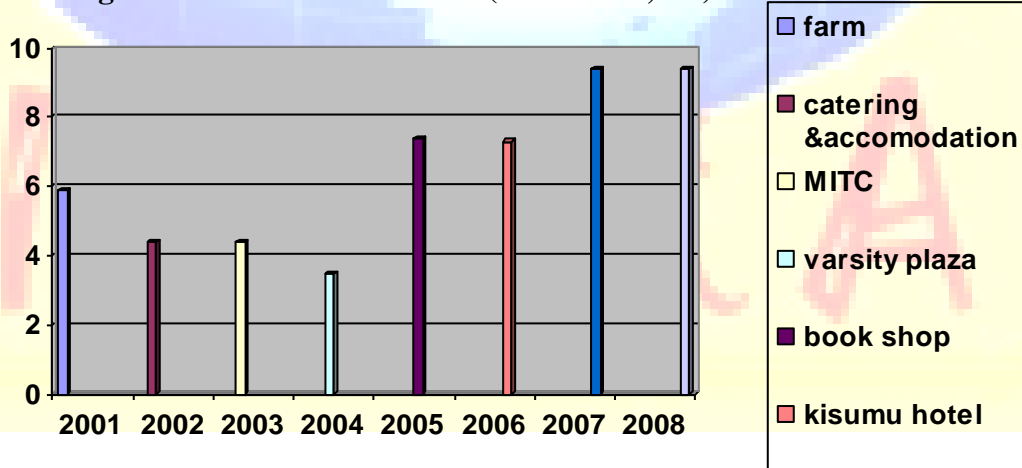
Income trend

Table 5 Revenue in (Kshs. Millions)

Category	2001	2002	2003	2004	2005	2006	2007	2008
Farm	1.8 m	2.1m	3.6m	4.7m	4.1m	5.2m	7.7m	6.5m
Catering & accom	15.5m	10.4m	15.2m	9.6m	23.7m	24.1m	24.9m	24.5m
MITC			1.7m	2.3m	7.2m	5.7m	9.1m	9.2m
Varsity plaza							13.5m	15m
Book shop			0.9m	0.5m	0.8m	0.9m	0.5m	0.5m
Kisumu hotel	0.41m	0.62m	0.69m	0.61m	0.98	0.81m	0.67m	0.57
Average trend	5.9m	4.4m	4.4m	3.5m	7.4m	7.3m	9.4m	9.4m

Source: Research data (2010)

Average revenue trend in millions (KSHS. 000,000)



From the research data, the revenue trend at the university was not consistent. This was based on different IGAs services offered by the university. It was evident that there were no IGAs carried out within the academic departments, a case which is not true as per the schedule of Fee Income produced by Prof. Aduma (Appendix V). The Researcher concluded that the academic and other departments which claimed did not have IGAs were ignorant of the presence of IGAs in the

university and that awareness should be created to let everybody know of the IGAs in all units and departments. Some departments were aware but left the revenue collection to Finance Department and did not follow up how it was used. According to Wanyama (2009) of School of Development and Strategic Studies, IGAs were found within the Departments except for the fact that the university policy was not clear on how it was used since the collection was done in Finance Department. It was again evident that the university policy did not recognize fees from parallel students as IGAs. It was found that IGAs are carried out only in specific units.

The respondents faulted the inconsistency of the trend on the country's economic instability, price increases and lack of transparency in running the units. Based on the established trend, there was growing rate in the number of IGA units and the growth in the revenue collected. However, some respondents still insisted on fact that there was improvement on the trend of revenue collection. Asked why the trend had improved, they said that this was due to the improvement and efficiency in the producing units.

The researcher wanted to determine the cause of the inconsistency of the trend. From the respondents, this was faulted on poor transportation services which discouraged the visitors eyeing for reservation, accommodation and conference facilities at their premises. Besides, poor supervision also did limit direct supervision of the facilities located outside the main campus. Insufficient funding for expansion and red tape in finance disbursement were also mentioned as a cause of inconsistent revenue trend.

The researcher was further interested in knowing the respondents revenue collection methodology. The respondents acknowledged the fact that the institution was mainly using cash sales (receipts) and the cash register machines as a common mode of revenue collection method. They said that this method ensured transparency and accountability in the managing finances within the university. They said that everybody was being encouraged to adopt the method and insist on receipts issuance upon any transaction. This was so as to out do the possible fraudulent practices.

The researcher had to determine the pattern or functional nature of relationship that existed between the variables and determined the line of best fit: According to Kotheri (1978) coefficient of correlation measures the degree of relationship between casually related variables. The values

lay between +1 and -1, +1 is an indication that there is a perfect positive correlation while -1 means perfect negative correlation meaning an inverse relationship between the variables. This study used the method of least squares to come up with the estimate of regression line.

$$Y = a + bx$$

Table 6: Revenue Trend Per Year.(Kshs 000,000)

Year (X)	Revenue (Y)	(XY)	X ²	Y ²
1	17.1	17.1	1	313.64
2	13.12	26.24	4	172.13
3	22.09	66.27	9	487.97
4	17.71	70.84	16	313.64
5	36.78	183.9	25	1352.77
6	36.71	220.26	36	1347.62
7	56.37	394.59	49	3177.58
8	56.27	450.16	64	3166.31
Total 36	256.76	1429.97	204	10331.66

Source: Researcher's data (2010)

Where

- n = number of paired observations =8
- $\sum xy$ = summation of individual products of values of x and y =1,429.97
- $\sum x$ = summation of x variable =36
- $\sum y$ = summation of y variable =256.76
- $\sum x^2$ = the x variable squared then summed =204
- $(\sum x)^2$ = the x variable is summed and then squared =1,296
- $\sum y^2$ = the y variable is squared and then summed =10,331.66
- $(\sum y)^2$ = the y variable is summed then squared = 65,925.70

$$b = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2} = \frac{8(1,429.97) - 36(256.76)}{8(204) - 36^2} = \frac{11,439.76 - 9,243.36}{1,632 - 1,296} = \frac{2,196.4}{336} = 6.537$$

$$n(\sum x^2) - (\sum x)^2 \quad 8 \times 204 - (36)^2 \quad 1,632 - 1,296 \quad 336$$

$$= 6.5.$$

$$a = \frac{\sum y - b \sum x}{n} = \frac{257 - 6.5 \times 36}{8} = \frac{23}{8} = 2.875$$

The equation of the line that would represent the line of best fit is given below.

$$Y = 6.5 + 2.875X$$

In order to test the strength of the relationship r was used as explained below.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

$$= \frac{8 \times 1430 - 36 \times 256.7}{\sqrt{8 \times 204 - (36)^2} \sqrt{8 \times 10332 - (256.7)^2}}$$

$$= \frac{2199}{2370}$$

$$= 0.927$$

$$r^2 = 0.859$$

According to Levin and Rubi (2008) when dealing with samples, the sample coefficient of correlation is denoted by r and is the square root of the sample coefficient of determination (r^2). The coefficient of correction (r) is more difficult to interpret than r^2 .

$r = 0.927$ and $r^2 = 0.86$ and this means that 86% of the variation in Y is explained by the regression line.

Efficiency of revenue collection methodology

The researcher wanted to know the efficiency of the revenue collection method adopted at the university. From the respondents, 85% said it was efficient while 15% said no. It was evident that the success of the institution, and running of IGAs dependent on the systems that are in place to run them, and also on people behind the systems. Not just people but the right people. Therefore the researcher observed, that it was important to train and develop the staff working under IGs so as to allow them realize the presence of IGAs.

Table 7 Efficiency of revenue collection methodology

Category	Frequency	Percentage
Yes	29	85%
No	5	15%
Total	34	100%

Source: Research data (2010)

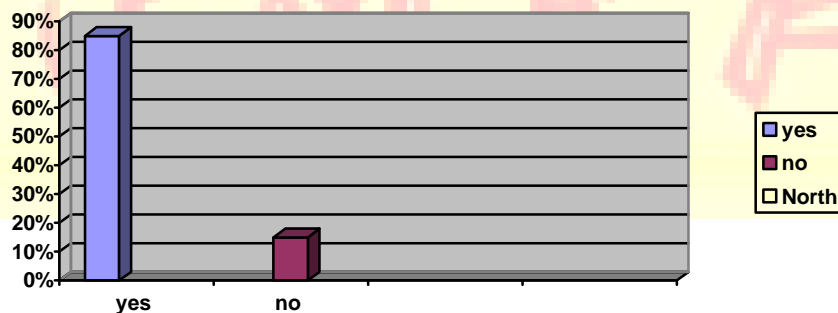


Figure 5 Efficiency of revenue collection methodology

Source: Research data (2010)

From the data it was evident that cash sales (receipt) and the cash register machines method of the revenue collection was efficient. The respondents said that with the method in operation,

fraudulent practices were limited. The method provided evidence whenever any transaction was done thus enhancing accountability at all levels of financial transactions. The researcher wanted to know from the respondents who disputed this fact on which method of revenue collection should be adopted and how the in efficiency can be improved. From the respondents, they said that due to the technological advancements, it was important to introduce computerized system so as to maintain very high level of data processing with regard to .

Table 8 Resource utilization

Year	Expenditure KSHS.
2001	607,724,338.20
2002	529,553,318.19
2003	571,854,369.31
2004	621,294,545.00
2005	938,078,448.00
2006	1,345,806,841.00
2007	1,205,597,481.40
2008	1,184,738,020.90

Source: Maseno University strategic plan (2010)

From the findings, it was worth noting that hardly any respondent had the in-depth idea with regard to how the university did utilize the funds generated. All that was known regarding the revenue collected from IGAs was the fact that it used to subsidize the revenue given by the Government as Grants.

The researcher wanted to find out the way in which the resources were being utilized led to any improvement in the university. From the findings, 20% said yes while 80% said no.

Table 9 contribution of funds utilization

Category	Frequency	Percentage
Yes	7	20%
No	27	80%
Total	34	100%

Source: Research data (2010)

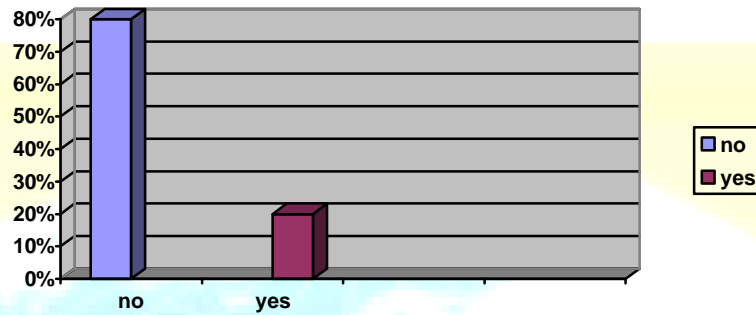


Figure 6 contribution of funds utilization

Source: Research data (2010)

From the findings, it was evident that the respondents were not conversant with the funds utilization at the university and as such majority of the respondents did not agree with the fact that it led to any positive contribution to the university. They said that university improvement only depended on how these funds were being generated, saying that this was the determinant of positive contribution to the university. They further argued that funds utilization at the university depended on the management from the grass roots. For those who said yes, the researcher was interested in knowing the areas of improvements from the respondents. From the findings, the respondents said that selling farm out put to catering units at subsidized prices, pedigree production, transparency in management were among the areas of improvements cited by the respondents.

Funds provision for sustaining university operations

The researcher wanted to know from the respondents if the university did provide sufficient funds to sustain its operations. From the response, 75% said yes while 25% said no.

CONCLUSION AND RECOMMENDATIONS

The study concluded that the Maseno university possesses in a number of IGAs and that most of their finances are generated from these IGAs institutions. The study also concluded that the progress of running IGAs has been hampered by inadequate funds for further expansion, lack of qualified personnel and lack of full support from the top management. The study finally concluded that Kisumu hotel is the best IGAs institution that has greatly generated the highest revenue among other IGAs institutions.

As a result of the role played by the IGAs not only at the Maseno university but in other universities, the researcher recommended that for its economic stability and to ensure proper maintenance of the existing facilities, IGAs must be at the fore front in championing for expansion of the facilities that ensures continued generation of revenue for the day to day activities within the university. The study also recommends competent management both at the university and IGAs institutions. Moreover, the research recommends IGAs institutions ensure recruitment of competent and qualified personnel at all levels of management for effective running of their facilities. More important is having the knowledge of the existence of IGAs in all departments because this may change the way people work, especially when they are aware of the satisfaction they get from its income. Therefore all departments should start IGAs in whichever way to avoid depending on what others have generated. This should start from the Heads of Department, Dean of Faculties and Directors of schools. Finally the direct Entry students' fees should be treated as IGAs as done in other Universities and also as requirement by the government. |Accordingly, Maseno University has been unique on the way module 11 fee income is handled. According to the study the fee is received as income but the departments do not make a follow up of happens to it. The researcher recommends that the departments should make a follow that the money can be apportioned or shared prorate between the university and the workers.

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