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**Effect of Earnings Ability on Financial Performance of Savings  
and Credit Societies in Kenya**

Jane J. Barus, Prof. Willy Muturi, Dr. Patrick Kibati and Dr. Joel Koima

## Effect of Earnings Ability on Financial Performance of Savings and Credit Societies in Kenya

<sup>1\*</sup>Jane J. Barus

Post Graduate Student: School of Business  
Jomo Kenyatta University of Agriculture and Technology  
\*Corresponding Author's E-mail: jane.barus@yahoo.com

<sup>2</sup>Prof. Willy Muturi,  
Lecturer, School of Business

<sup>3</sup>Dr. Patrick Kibati  
Lecturer, School of Business

<sup>4</sup>Dr Joel Koima  
Lecturer, School of Business

### Abstract

**Purpose:** The purpose of this study was to establish the effect of earnings ability on financial performance of savings and credit societies in Kenya.

**Methodology:** The study employed an explanatory research design. The target population was 83 registered deposit taking SACCO's in Kenya that have been in operation for the last five years. The sample size for the study was all 83 SACCOs that have remained in existence since 2011-2015. Census methodology was used in the study. Both primary and secondary sources of data were employed. Multiple linear regression models were used to analyze the data using statistical package for the social sciences (SPSS) and STATA. A pilot study was conducted to measure the research instruments reliability and validity. Descriptive and inferential analysis was conducted to analyze the data. The data was presented using tables and graphs.

**Results:** Based on the findings the study concluded that earnings ability influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which earnings ability influenced the financial performance of savings and credit societies. The univariate regression results showed that earnings ability influenced the financial performance of savings and credit societies by 6.438units.

**Unique contribution to theory, practice and policy:** The study recommended for continuous review of credit policies, establishment of irrecoverable loan provision policies, development of sound staff recruitment policies and the use of appropriate financing mix. Further, the Government should review legal framework to ensure that institutional capital is used to grow SACCO's' wealth.

**Keywords:** *earnings ability, financial performance, savings and credit societies*

## INTRODUCTION

### Background of the Study

The SACCO industry in Kenya plays a very important role as the financial intermediary between savers and investors. The first ever SACCO was established in 1844 by Robert Owen (John, 2002). SACCO's belong to a group of cooperatives that are commonly called Raiffeisen cooperatives due to the German originator of this movement in the 1800s (Tache, 2006). SACCO's are guided by seven principles as stipulated by the International Cooperative Alliance (ICA); Open and voluntary membership, member economic participation, independence and autonomy, democratic member control, education, training and information, Concern for Community and Cooperation among Cooperatives. SACCO's are expected to give better and cheaper services to its members as compared to the main stream banks because SACCO's understands the needs of the members given that they are the owners (Wanyama, Develtere & Pollet, 2008). Services offered by SACCO's include normal loans, emergency loans, school fees loans and front office services for example; payment of salaries, salary advances, bank cheques, safe keeping of documents, and ATMs (Ngaira, 2011).

According to (ICA, 2009) Rochdale Pioneers was the founder of the contemporary Co-operative Movement in Lancashire, England, to deliver cheap alternative to poor-quality and adulterated food and provisions food, by the use of surplus so as to benefit the community. Subsequently, the co-operative movement has succeeded spreading throughout the world and incorporating all parts of the economy. The principles that supported cooperatives ways of doing trade is still recognized today as the basis upon which all co-operatives operate. However, the principles has been looked over and updated.

Globally, the sector has 1 billion memberships. It is estimated that co-operatives have employed 250 million people all over the world, co-operatives has an estimated global turnover of 2.2 trillion US Dollars, Co-operative generate 2.2 trillion US\$ in turnover while providing infrastructure and services that the society needs to flourish. Global statistical report for 2014, recorded a total of 57,000 Credit Unions (SACCO's), spread across 105 countries and 6 continents. The world Credit Union system has a combined savings of 1.5 trillion US\$, and an asset base of 1.8 trillion US\$ out of which 1.2 trillion US\$ constitutes the loan portfolio. The average worldwide penetration rate of the Credit Union system stood at 8.2 percent World Co-operative Monitor (2014).

Globally, efficiency of community banks was analyzed in the United States (US) using data from year-end 2006-2008. Multivariate discriminant model was used based on the CAMEL(S) model, to differentiate between low efficiency and high efficiency community banks by using the efficiency ratio as the independent variable. The results on the significance of the individual CAMEL components provide mixed results for different periods apart from the sensitivity to market risk, which is found to be statistically insignificant (Hays, Stephen & Arthur, 2009).

In India, the soundness of Indian Banking through its effect on the asset value was analyzed. The study recognized the key players such as the risk management, Non-Performing Assets (NPA) levels, effective cost management and financial inclusion. Moreover, In India performance of different Indian private and public sectors banks over the period 2000-2011 were analyzed using the CAMEL approach and established out that the private sector banks were at the top, with their performance being the best in terms of soundness (Chaudhry & Singh, 2012).

In Africa growth of SACCO's has been experienced to the extent that in 1965, Africa Federation of Cooperative Societies Savings and Credit Association (ACCOSSCA) was formed with the principle objective of offering SACCO insurance, education to members and promoting SACCO principles (Ng'ombe & Mikwamba, 2004). There are 28 countries in the continent of Africa with established SACCO's (saving plus, 2010). Africa has membership of 16 million which is 8 percent of the whole world membership, with savings of 62% and loans of 65% being 3<sup>rd</sup> after Asia and North America which has 36 million and 102 million respectively. Africa mobilize 0.4 percent of the worldwide savings of US\$ 1.1 trillion and 0.4 percent of international loans given to members standing at US\$ 912 billion (WOCCU, 2009). In Africa, performance of the South African Banking Sector was analyzed from 1994 and found out that all bank-specific variables were statistically significant at conventional level for both Return on Assets (ROA) and Return on Equity (ROE) equations. The study had shown that Asset Quality (measured by assets to capital employed ratio), Management Efficiency (measured by operating profits per employee ratio), and Liquidity Management (measured by quick ratio) has positive relationship with both measures of bank performance, which is consistent with a priori theoretical expectations. However, the Leverage Ratio, which is a measure of Capital Adequacy, shows a surprising significant negative relationship with ROA, whereas its relationship with ROE is significant and positive as expected, (Ifeacho & Ngalawa, 2014). In Ghana CAMEL Rating System was used to assess the Performance of Local and Foreign Banks results from the study indicated that not all the CAMEL variables affect Banks performance in Ghana in terms of ROA and ROE (Ansah, 2015).

In East Africa the East African Legislative Assembly (EALA) passed the East African Community (EAC) Cooperative Societies Bill, 2014. The Bill is currently awaiting assent by the East African Community Heads of States in line with Article 63 of the EAC Treaty. The objective of the EAC Cooperative Societies Bill, 2014 is to provide a legal framework for the operations of Co-operative Societies within the Community, which is in line with Article 128 of the EAC Treaty on the strengthening of the role of private sector as an effective force for developing economies, by virtue of EAC Treaty and Article 2(6) of Kenyan Constitution 2010 which recognizes that treaties ratified by Kenya are part of the laws of Kenya, the Kenyan National Legislations on Co-operatives will be required to be aligned to EAC Cooperative Societies Bill, 2014 once it becomes law. The Bill is based on the understanding that each Partner State shall undertake to encourage the efficient use of resources and to promote the development of private sector organizations which are engaged in all types of economic activities, such as the chambers of commerce and industry, confederations and associations of industry, agriculture among others. It also recognized the responsibility of state parties to enact national legislations to govern the operations of co-operative societies within the party states. In Ethiopia Zerfeshewa, 2010 investigated the determinants of SACCO performance; the study established that the educational level of members and officials as well as the regulations posed the greatest impediment to the performance of SACCO's.

### **Problem Statement**

The SACCO's subsector remains a significant player in the provision of financial services to the Kenya household and small business segment. Its membership as per 2013 increased to 3.3million from 2.97 million in 2012. SACCO's plays a vital role of pooling resources for investment and wealth creation (Kinyua, 2013). They spur economic growth through the



mobilization of domestic savings. According to SASRA report (2010), SACCO activities contribute 43% of the gross domestic product (GDP).

The significance of SACCO's to the Kenyan economy is further evidenced by inclusion in the Vision 2030 economic blue print (Kioko, 2014). Given their significance in the financial sector and poverty alleviation, it is important to investigate the moderating effect of sensitivity to market risk on determinants of performance in order to provide accurate and consistent assessment of savings and credit financial conditions and operations in the area of performance. Zerfeshewa (2010) investigated the determinants of SACCO performance in Ethiopia; Sonja (2010) analyzed SACCO's in Uganda to determine effect of automation on the growth of SACCO's.

Based on these studies and the varying gaps in literature, there is need to conduct similar studies in Africa and more so in Kenya. Therefore, the research attempted to establish the effect of earnings ability on the financial performance of savings and credit societies in Kenya.

### **Research Objective**

To establish the effect of earnings ability on the financial performance of savings and credit societies in Kenya

## **LITERATURE REVIEW**

### **Theoretical Framework**

#### **Portfolio Selection Theory**

Harry Markowitz, 1952 developed this theory through his paper, portfolio selection. Markowitz formalized this intuition by proposing that investors focus on selecting portfolios based on portfolios overall risk return characteristic instead of compiling portfolios from securities that each individually have attractive risk return characteristic. He argued that only systematic risk can be diversified while unsystematic risk cannot be diversified but can be hedged and transferred only. Tobin (1958), expanded on Markowitz's theory by adding a risk free asset to the analysis which made it possible to leverage portfolio on the efficient frontier. The main propositions of this theory are: The future return of the invested stocks is uncertain and therefore to calculate it with absolute certainty is not possible. Different investors have different preferences of the risk associated with uncertainty. Therefore, a method to allow investors to choose the stocks with their desired level of risk preferences is highly valuable, and The future return of the invested stocks are correlated to each other. Hence, while creating the portfolio, considering independence between the return values of the stocks is not ideal. In this study risk is an inherent part of a higher return thus risk averse sacco management (investors) can construct portfolio based on a given level of sensitivity to market risk. According to Omisore, Munirat and Nwufo (2012) asset diversification to hedge against market risk as well as risk that is unique to a specific organization uses this theory. Essential to the portfolio theory is its quantification of the relationship between risk and return tradeoff and the assumption that investors must be compensated for assuming risk. The portfolio selection theory is relevant to this study as it guides SACCO's and saving investors on how to construct their investment portfolios and how to mitigate risk through portfolio diversification and hence increase return to SACCO members.

### **Expense-Preference Behavior theory**

Expense-Preference behavior theory is one of the most employed in the research. This theory was developed by Williamson (1963) and later refined by (Rees, 1974), this theory posits individual preferences of managers of a firm as utility maximizing, as opposed to profit maximizing. It predicts that under certain conducive circumstances such as the separation of ownership and control, costly monitoring of managerial behavior, a lack of effective competition in input and output markets, or effective regulation in those same markets, managers spend more on other prerequisites than is consistent with profit maximization behavior, Gropper & Oswald (1996). The first empirical work for the Expense Preference Theoretical Framework on financial institutions was carried out by Edwards (1977). Using aggregated bank data for 44 banks in 1962, 1964, 1986 and total wages and salaries; total employees as the dependent variables, he finds the coefficient on the three bank concentration ratios to be positive and significantly correlated with both the bank's total labor force and the bank's total wage bill. Thus, he concludes that expense preference behavior is a significant force that detracts from profit maximization in many banks. Other works consistent with this view include the empirical works of (Hannan, 1979 and Arnould, 1985) who found evidence of the expense preference theory in the banking firms. The theory is relevant to this study as it guides on how the profitability of the bank is taken in measuring performance though there are other alternative theories, in which factors other than profitability are taken as a measure of performance.

### **Economic Efficiency Theory**

Economic efficiency theory states that companies should achieve their output at the lowest possible cost per unit produced. According to this theory, economies of scale should be exploited to achieve optimal production. The theory focuses on two kinds of efficiency; allocative and productive efficiency. Allocative efficiency is achieved by ensuring that all firms in the industry charge optimal prices. In the banking sector, this will result in a reduction of lending rates.

The economic efficiency theory is relevant to this study as it guides in savings mobilization, which will enable SACCO's to create credit out of excess deposits (credit creation) hence SACCO will earn interest. Allocative efficiency in the determination of lending rates among SACCO's will ensure unhealthy competition does not ensue between them. High competition in banking is associated with instability (De Nicoló, Jalal & Boyd, 2006). Productive efficiency is achieved when banks employ all their resources efficiently, producing the most output from the least input (Said, 2011). Productive efficiency guides both the lending and investment decisions of financial institutions. It would involve investing in low risk assets such as government bonds.

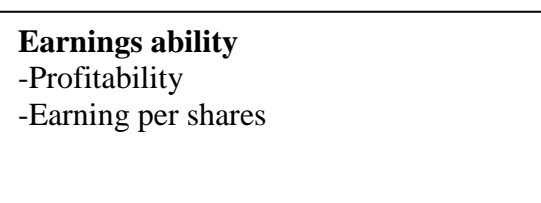
### **Empirical Review**

Ausina-Tortosa (2012) examined the relationship between earnings quality and bank performance in Spain. The study found that contrary to expectations, earnings management did not significantly influence profitability. Kongiri (2012) investigated the effect CAMEL variables on the efficiency of commercial banks. The study found that Capital Adequacy, Earnings and Liquidity ratio have a negative relationship to efficiency ratio while Management quality and Asset Quality have a positive relationship. The study mentioned that the earnings ability reflects the bank's ability to absorb losses, expand its financing, as well as, its ability to pay dividends to its shareholders, and helps develop an adequate amount of own capital (Kongiri, 2012).

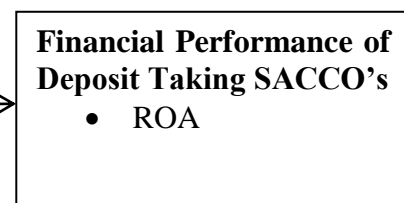
Olando, Mbewa and Jagongo (2012) studied financial practice as determinant of growth in SACCO's in Kenya. The study found that Growth of SACCO's wealth depended on financial stewardship, capital structure and Funds allocation strategy. According to the study, most SACCO's inadequately complied with their by-laws. Their incomes from investments did not adequately cover their costs. The study recommended a continuous review of credit policies, establishment of irrecoverable loan provision policies, development of sound staff recruitment policies and the use of appropriate financing mix. Further, the Government should review legal framework to ensure that institutional capital is used to grow SACCO's' wealth.

### Conceptual Framework

#### Independent variable



#### Dependent variable



**Figure 1: Conceptual Framework**

### RESEARCH METHODOLOGY

The study employed an explanatory research design. The target population was all the 83 registered deposits taking SACCO's licensed by SASRA as at 31<sup>st</sup> December 2011 to 2015 and has been in operation for the last five years. Therefore, the study used the inclusion criteria to select a total of 83 SACCO's registered by SASRA as at 31<sup>st</sup> December 2011. The sampling frame for the study consisted of all licensed deposit taking SACCO's in operation in Kenya as at 31<sup>st</sup>December, 2011and still in operation as at 31<sup>st</sup> December 2015 as they appear in the SASRA database. Census methodology was used in the study in order to enable researcher gather sufficient information. The study also used purposive sampling procedure to identify the sample units. The sample size for the study was all 83 SACCO's that have remained in existence since 2011-2015. The questionnaire in this study was divided into three parts. The data collected was keyed into Statistical Package for Social Sciences (SPSS) computer software for analysis. SPSS and STATA software was used to produce frequencies, descriptive and inferential statistics which was used to derive a conclusions and generalizations regarding the population.

### RESULTS AND DISCUSSIONS

#### Response Rate

The number of questionnaires that were administered was 83. A total of 71 questionnaires were properly filled and returned. This represented an overall successful response rate of 86% as shown on Table 1. This agrees with Babbie (2004) who asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on this assertion 86% response rate is adequate for the study.

**Table 1: Response Rate**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Returned	71	86
Unreturned	12	14
<b>Total</b>	<b>83</b>	<b>100</b>

### **Demographic Characteristics**

This section analyzes the demographic characteristics of the respondents. This section presents the descriptions of the respondents in terms of type of shareholders and period of existence.

#### **Type of Shareholder**

The respondents were asked to indicate their shareholders. Results in table 2 reveal that 47% of the respondents indicated business men and women, 42% of the respondents indicated the general public while 11% of the respondents indicated government employees. This implies that majority of the SACCOs members and customers are business people and the general public. This implies that most business people rely on SACCOs for finances. This is likely to have a positive influence on Sacco's financial performance.

**Table 2: Type of Shareholder**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Government employees	8	11.3
General public	30	42.3
Business Men and Women	33	46.5
<b>Total</b>	<b>71</b>	<b>100</b>

The respondents were asked to indicate the number of years their organizations have been in existence. Results in table 3 reveal that majority (68%) of the respondents indicated more than 20 years, 16% indicated 5-10 years, 10% indicated 16-20 years while 7% of the respondents indicated 11-15 years. This implies that majority of the SACCOs have been in the market long enough to gain the prerequisite experience and relevance. This implies that the SACCO's have the potential to be competitive and thus performance well.

**Table 3: Period of Existence**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
5-10 years	11	15.5
11-15 years	5	7
16-20 years	7	9.9
More than 20 years	48	67.6
<b>Total</b>	<b>71</b>	<b>100</b>

### **Descriptive Statistics**

The objective of the study was to establish the influence of earnings ability on financial performance of savings and credit societies in Kenya. The respondents were asked to respond to statements on earnings ability. The responses were rated on a five likert scale as presented in Table 4. Majority of 69% (63.4%+5.6%) of the respondents agreed with the statement that the earning ability determines the financial performance of a Sacco, 60% agreed with the



statement that the earning ability guards the Sacco against erosion of capital due to potential changes while 80% of the respondents agreed that the rating manifest adequacy of the current and future earnings.

On a five point scale, the average mean of the responses was 3.62 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.70.

These findings disagree with those of Ausina-Tortosa (2012) who examined the relationship between earnings quality and bank performance in Spain. The study found that contrary to expectations, earnings management did not significantly influence profitability.

**Table 4: Earnings Ability**

<b>Statement</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Mean</b>	<b>Std. Dev</b>
The earning ability determines the financial performance of a Sacco	0.00%	14.10%	16.90%	63.40%	5.60%	3.61	0.80
The earning ability guards the Sacco against erosion of capital due to potential changes.	0.00%	11.30%	28.20%	59.20%	1.40%	3.51	0.72
The rating manifest adequacy of the current and future earnings	0.00%	7.00%	12.70%	80.30%	0.00%	3.73	0.59
<b>Average</b>						<b>3.62</b>	<b>0.70</b>

The respondents were asked to rate the quality of their organizations' earnings relative to industry ratings for the past 5 years. Results in table 5 reveal that in 2015, majority of 59% of the respondents rated the quality of their organizations' earnings by over 100%, 38% rated the quality of their organizations' earnings by 76-100% while 3% of the respondents rated the quality of their organizations' earnings by 51-75%. In 2014, majority of 54% of the respondents rated the quality of their organizations' earnings by over 100%, 37% rated the quality of their organizations' earnings by 76-100% while 10% of the respondents rated the quality of their organizations' earnings 76-100%. In 2013, majority of 56% of the respondents rated the quality of their organizations' earnings by 76-100%, 28% rated the quality of their organizations' earnings by over 100% while 16% rated the quality of their organizations' earnings by 51-75%. In 2012, 47% of the respondents rated the quality of their organizations' earnings by 76-100%, 31% rated the quality of their organizations' earnings % by over 100%, 16% rated the quality of their organizations' earnings by 51-75% while 7% of the respondents rated the quality of their organizations' earnings by 21-50%. In 2011, 48% of the respondents rated the quality of their organizations' earnings by 76-100%, 23% of the respondents rated the quality of their organizations' earnings by over 100%, 20% rated the quality of their organizations' earnings by 51-75% while 10% of the respondents rated the quality of their organizations' earnings by 21-50%.

On a five point scale, the average mean of the responses was 4.19 which implies that majority of the respondents rated the quality of their organizations' earnings by 76-100%; however the answers were varied as shown by a standard deviation of 0.73.

**Table 5: Earnings Ability**

Year	By 0 to 20%	By 21% to 50%	By 51% to 75%	By 76% to 100%	By Over 100%	Mean	Std. Dev
2015	0.00%	0.00%	2.80%	38.00%	59.20%	4.56	0.55
2014	0.00%	0.00%	9.90%	36.60%	53.50%	4.44	0.67
2013	0.00%	0.00%	15.50%	56.30%	28.20%	4.13	0.65
2012	0.00%	7.00%	15.50%	46.50%	31.00%	4.01	0.87
2011	0.00%	9.90%	19.70%	47.90%	22.50%	3.83	0.89
<b>Average</b>						<b>4.19</b>	<b>0.73</b>

The respondents were further asked to indicate whether earnings ability influences the performance of their organization. Results in table 6 reveal that majority of 61% of the respondents indicated yes while 39% of the respondents indicated no. This implies that majority of the respondents believe that the financial performance of their organizations is determined by their earnings ability.

**Table 6: Earnings Ability**

Response	Frequency	Percent
No	28	39.4
Yes	43	60.6
<b>Total</b>	<b>71</b>	<b>100</b>

### Inferential Statistics

The results presented in table 7 present the regression model used in explaining the study phenomena. Earnings ability explained 46% of the financial performance of SACCOs in Kenya. This is supported by coefficient of determination also known as the R square of 46%. This means that earnings ability explain 46% of the financial performance SACCOs in Kenya. Further, results indicate that the overall model was statistically significant as supported by a p value of 0.000. This implies that Earnings ability is a good predictor of financial performance. This was supported by an F statistic of 387.42 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

These findings disagree with of those of Kongiri (2012) who investigated the effect CAMEL variables on the efficiency of commercial banks. The study found that Capital Adequacy, Earnings and Liquidity ratio have a negative relationship to efficiency ratio while Management quality and Asset Quality have a positive relationship. The study mentioned that the earnings ability reflects the bank's ability to absorb losses, expand its financing, as well as, its ability to pay dividends to its shareholders, and helps develop an adequate amount of own capital.

**Table 7: Regression model**

ROA	Coef.	Std.Err	z	P> z	[95%	Conf.Interval
Earnings Ability	6.4384	0.3271	19.68	0.000	5.7973	7.07954
cons	-1.589051	0.2374	-6.69	0.000	-2.0543	-1.12384
R <sup>2</sup>	0.4631					
F-statistics	387.42					
P value	0.000					

The specific model was;

$$\text{Firm Financial Performance} = -1.5891 + 6.4384 \text{Earnings Ability}$$

## DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

### Discussion

The objective of the study was to establish the effect of earnings ability on financial performance of savings and credit societies in Kenya. The univariate regression results showed that there is a positive and significant relationship between earnings ability and financial performance of savings and credit societies as supported by a p value of 0.000 and a beta coefficient of 6.438. This implies that improvement in earnings ability would increase the financial performance of savings and credit societies by 6.438 units.

### Conclusions

Based on the findings the study concluded that earnings ability influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which earnings ability influenced the financial performance of savings and credit societies. The regression results showed that earnings ability influenced the financial performance of savings and credit societies by 6.438 units.

### 5.3 Recommendations

The study recommended for continuous review of credit policies, establishment of irrecoverable loan provision policies, development of sound staff recruitment policies and the use of appropriate financing mix. Further, the Government should review legal framework to ensure that institutional capital is used to grow SACCO's' wealth.

### 5.4 Areas for Further Studies

The study recommends that a similar study should be conducted in other financial sectors such as banking sector for comparison purposes. The study also recommends that a study seeking to examine the effects of other financial factors on financial performance of savings and credit cooperatives should be conducted. This would help to give insight to the SACCO's and other organizations on what other financial factors to consider in order to enhance their performance.

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