KPMG

Safaricom

Ten years of 'True Earnings'

October 2016

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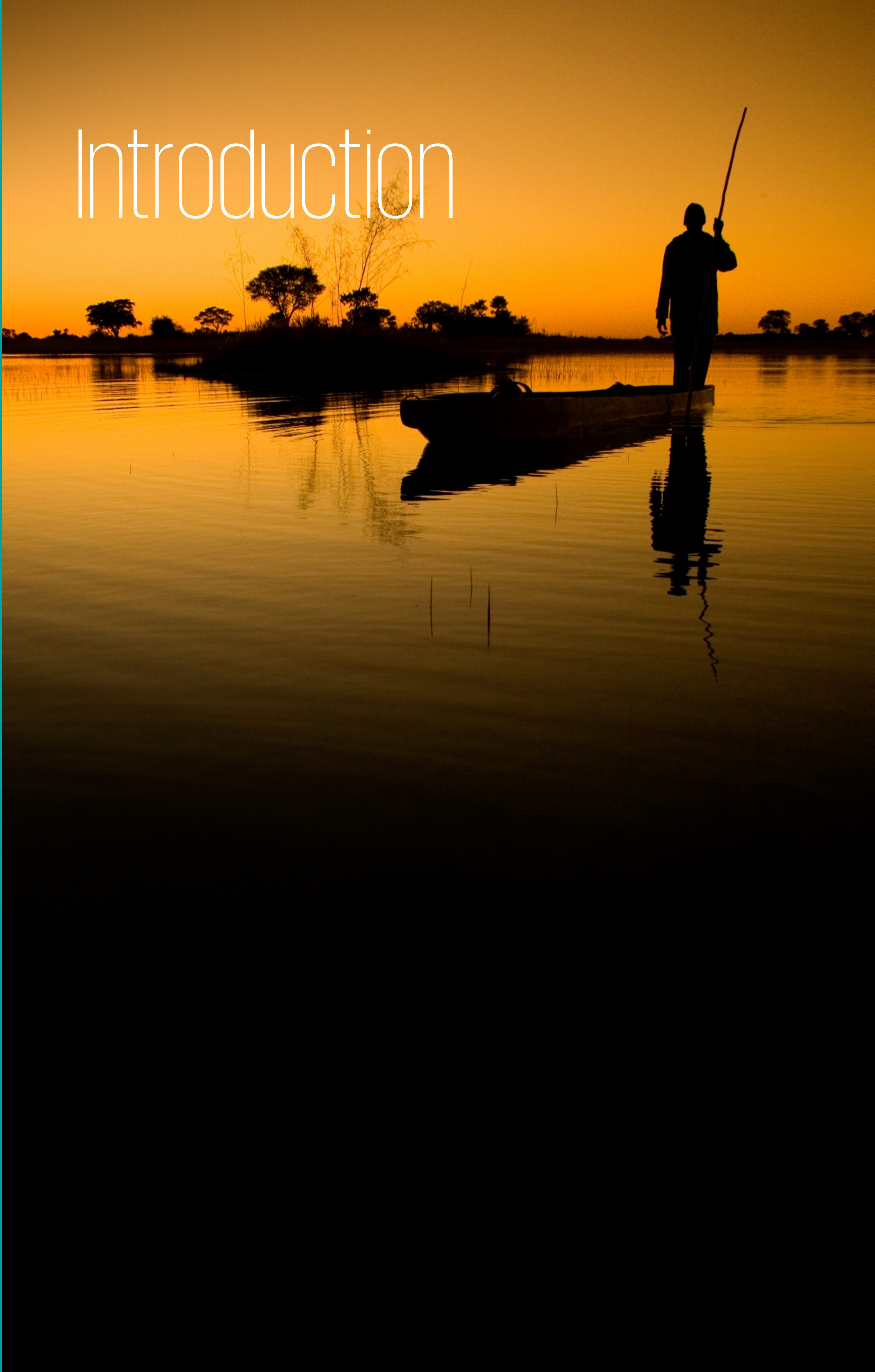

1 Introduction

KPMG carried out a 'True Earnings' exercise for Safaricom's 2014/15 financial year, which contributed towards a growing understanding within the organisation and amongst stakeholders as to what the 'True Earnings' bridge represents in terms of value being created for Kenyan society by Safaricom.

It became clear that this would be a valuable tool to interpret and analyse the way that Safaricom's contribution to Kenyan society has grown and changed in the course of the last ten years, and a decision was made to calculate Safaricom's 'True Earnings' for the period 2006/7 to 2015/16.

Carrying out a 'True Earnings' exercise over an extended period of time was also seen to be useful in identifying the factors that have affected the economic, social and environmental impact created by Safaricom.

1.1 Safaricom in Kenya

In the Kenyan telecommunication market, Safaricom Group Limited (Safaricom) is the largest mobile operator, with 65.6% market share in terms of the number of mobile consumers served.[1]

The company provides telecommunication services such as mobile and fixed voice, SMS, data, internet and M-PESA to 25.2 million customers. The number of total customers increased from 13.4 million in 2008/9[2] to 25.2 million in 2015/16, signifying an 88.6% increase. Approximately 96% of these were prepaid customers, whilst the remaining 4%, were post-paid customers.[3]

To service the growing customer base, Safaricom expanded the total number of base stations. In 2008/9, Safaricom had 1 800 base stations, of which 301 were 3G enabled.[4] In 2015/16, Safaricom had 3 800 base stations, of which 2 517 are 3G enabled and 467 are 4G[5] enabled. The 2 000 additional base stations enables Safaricom to provide telecommunication services to more people:

- 95% of the population is under 2G coverage
- 78% of the population is under 3G coverage
- 4G has been rolled out over 467 sites in 20 countries[6]

In contrast to the increase in customer base, Safaricom's subscriber market share decreased by 20.6%, from 79.1% in 2008/9[7] to 65.6% in 2015/16. This may be due to the growing

[1] Safaricom Limited Annual Report 2015/16

[2] Safaricom Limited Annual Report 2008/9

[3] Safaricom Limited Annual Report 2015/16

[4] Safaricom Limited Annual Report 2008/9

[5] Safaricom Limited Annual Report 2015/16

[6] Safaricom Limited Annual Report 2015/16

[7] Safaricom Limited Annual Report 2008/9

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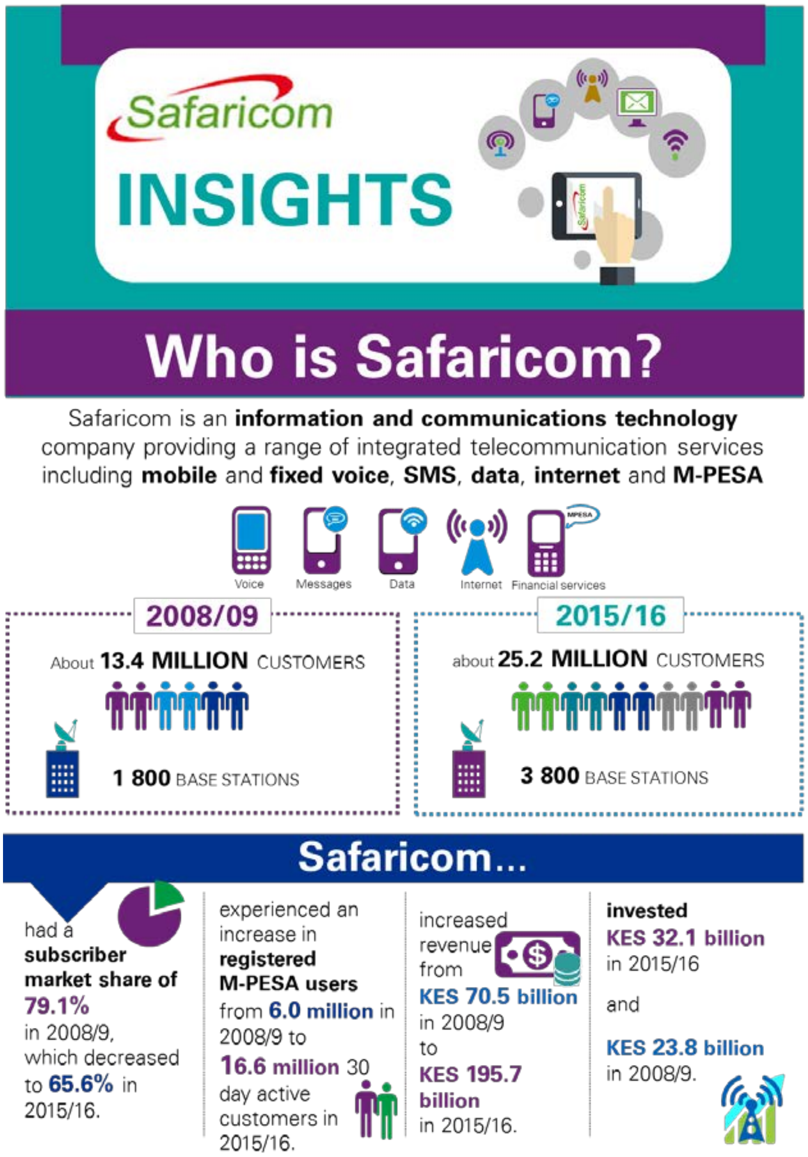

Figure 1: Source: Safaricom annual reports

telecommunications sector, as Kenya's market penetration increased over the review period, by 98.2%, from 45.0% in 2008/9[8] to 89.2% in 2015/16.[9,10]

The mobile operator has managed to grow its active M-PESA customer base by more than double over the eight-year period, from approximately 6 million customers in 2008/9[11] to 16.6 million 30-day active customers and 23.7 million registered users in 2015/16.[12] Over the same period, the number of M-PESA agents increased with 93.1%, from approximately 7 000 registered agents[13] to 100 744 registered agents in 2015/16.[14]

M-PESA together with voice, mobile data, messaging, fixed data and other services are Safaricom's main sources of revenue. Revenue amounted to KES 195.7 billion in 2015/16,[15] 177.6% higher than the recorded revenue of KES 70.5 billion in 2008/9.[16]

Investment in capital expenditure amounted to KES 23.8 million in 2008/9[17] and increased by 34.9% to KES 32.1 billion in 2015/16. This expenditure included fibre installation in key metro areas, the upgrade and modernisation of 2G networks, investment in 3G and 4G networks, new M-PESA platform and upgrades to information systems.[18]

[8] Communications Commission of Kenya, Jan-Mar 2009/2010 (Data from March 2009 – end of 2008/9 financial year)

[9] Safaricom Limited Annual Report 2015/16

[10] A change in internal reporting methodology contributed to the reduction in market share figures. Safaricom Limited Annual Report 2015/16

[11] Safaricom Limited Annual Report 2008/9

[12] Safaricom Limited Annual Report 2015/16

[13] Safaricom Limited Annual Report 2008/9

[14] Safaricom Limited Annual Report 2015/16

[15] Safaricom Limited Annual Report 2015/16

[16] Safaricom Limited Annual Report 2008/9

[17] Safaricom Limited Annual Report 2008/9

[18] Safaricom Limited Annual Report 2015/16

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Safaricom experienced growth over the review period and remains a market leader in the telecommunications sector of Kenya. Safaricom is a key player in the telecommunication sector and general business sector; therefore, it is of essence to understand the effects of this mobile operator on the Kenyan economy.

1.2 Macro-economic performance

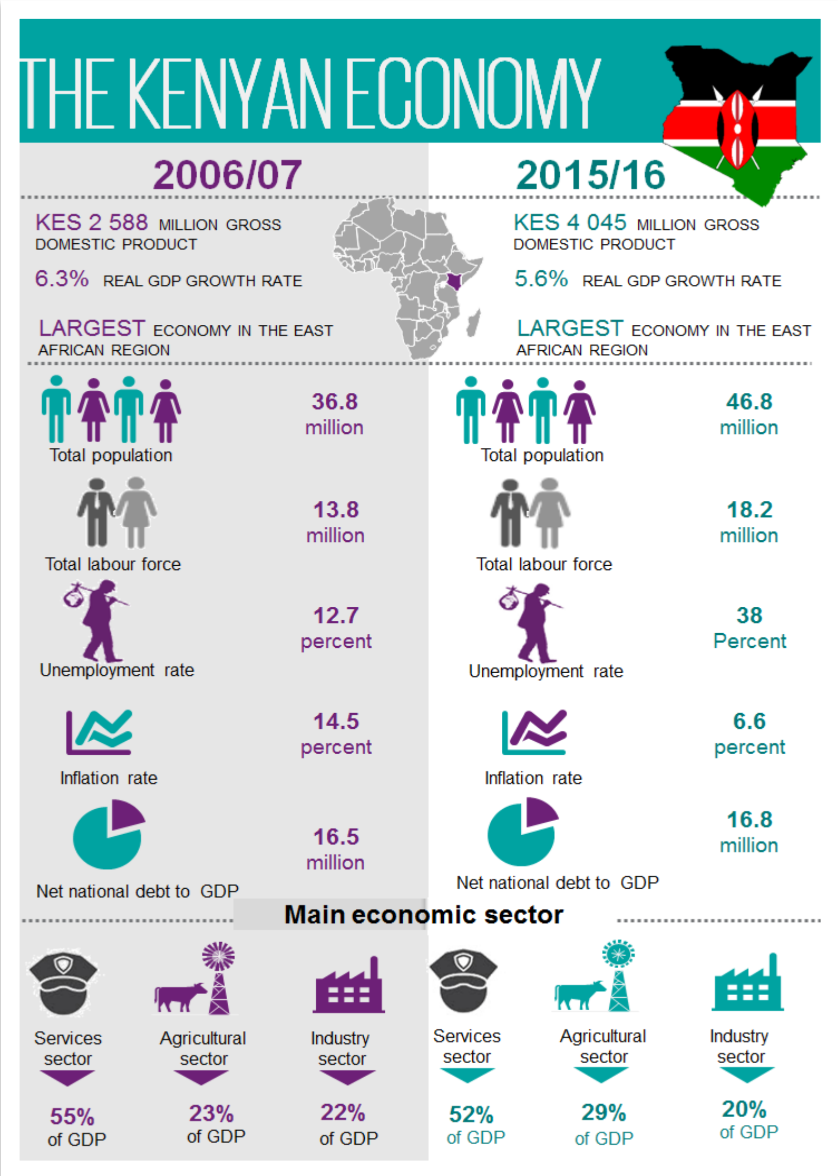

Figure 2: Source: Economist Intelligence Unit

Kenya lies across the equator in east-central Africa, on the coast of the Indian Ocean. Kenya has a very diverse population that includes most major ethnic and linguistic groups of Africa. It has a population of 46.8 million, which increases on average by 1.1 million a year. The economy is largely dependent on the Agriculture sector, as it accounts for close to 30% of GDP, with more than 75% of agricultural output coming from small-scale, rain-fed farming or livestock production. This sector also currently employs about 80% of Kenya's population.

Post-election violence in early 2008, combined with the effects of the global financial crisis, reduced GDP growth to the lowest level of 0.2%. However, the economy recovered the following year, growing by 3.3%.

Following 2014's GDP rebasing, Kenya is now East Africa's largest economy and holds a prominent profile in the East African Community (EAC). Furthermore, It is also considered the economic and transport hub of East Africa and is emerging as one of Africa's key growth centres.

Between 2006 and 2015 Kenya's GDP growth has remained robust, averaging around 5.2%. This growth was supported by investment into infrastructure, lower energy costs and expansion in sectors such as, agriculture, manufacturing, finance and insurance, information, communications and technology and the wholesale and retail trade sector. Despite the notable economic growth figures, poverty remains substantial in the country.

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The 2015 Corruption Perception Index released by Transparency International (TI) ranked Kenya among the most corrupt countries at 139 out of 168 countries. Corruption is a major obstacle to doing business in Kenya with claims of the increasing misappropriation of public funds.

Looking forward the World Bank predict that the economy will grow at 5.9% in 2016, rising to 6% in 2017. The World Bank attributes this positive outlook to low oil prices, good agriculture performance, supportive monetary policy, and ongoing infrastructure investments.

1.3 Telecommunication sector performance

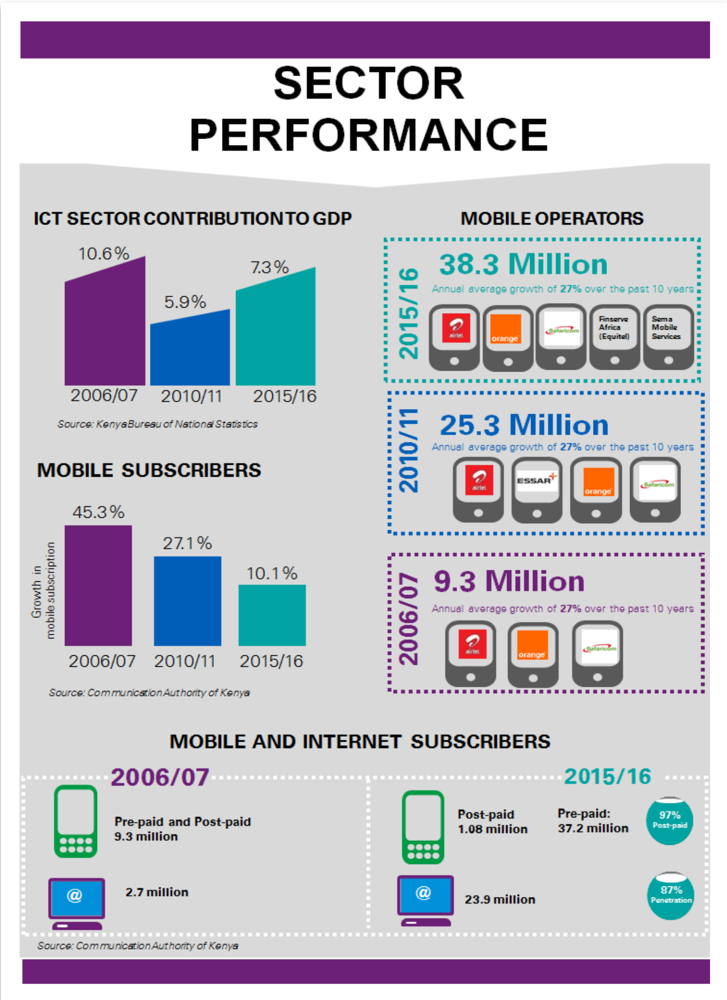

Figure 3: Source: Communication Authority of Kenya

The Kenyan Ministry of ICT had predicted sector expansion of approximately 15% by the end of 2015, but the sector surprised, coming in lower than expected at 7.3% in 2015, down from a significant growth of 14.6% in 2014[19]. This was partly on account of resilient expansion in mobile telephony network and Orange Kenya's fixed wireless network switch-off. Orange Group is also in the process of exiting the market, having sold its entire 70% holding in Telkom Kenya to Helios. Despite the slow down in growth and the market players exits, Safaricom still remains the dominant operator with over a third of the market share.

Kenya's telecommunications market has experienced a number of changes since the landing of four fibre-optic international submarine cables in recent years. This lead to an increase in international bandwidth which ended the country's dependence on limited and expensive satellite bandwidth. This resulted in a substantial decrease in the cost of broadband access ensuring that services are affordable for a large section of the population. Internet subscriptions increased significantly from 2.7 million in 2006/07 to 23.9 million in 2015/16, this translated to internet penetration levels of 87.2%[20]. Growth in internet subscription can be attributed to a number of factors, the availability of affordable data enabled devices; the increased affordability of data services as well as the increased use of the internet in accessing basic services such as mobile banking; health services and education.

[19] Kenya National Bureau of Statistics, Economic survey 2016

[20] Communication authority of Kenya, quarterly statistics reports

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1.3.1 Mobile industry

Mobile telephony continued to spearhead the growth in telecommunications sub-sector while fixed telephony remained on a declining path. The five operators that currently provide mobile services in Kenya are Safaricom, Airtel, Telkom Kenya, Equitel and a new entrant: Sema mobile services. Sema, a licensed Mobile Virtual Network Operator (MVNO) recently launched its services in 2016 quarter 3 and subsequently holds a tiny market share. Safaricom has by far the largest mobile market share, holding 65.6% of the mobile market share[21].

Over the past decade, the mobile market continued to grow steadily, supported by a mobile subscriber base of 38.3 million subscriptions recorded during 2015/16, up from 9.3 million subscriptions registered during the 2006/07 financial year. This marked an increase of 29 million subscriptions, which is 3 times more than 2006/07.The current mobile penetration stands at 89.2% up from 28.9% recorded during 2006/07[22].

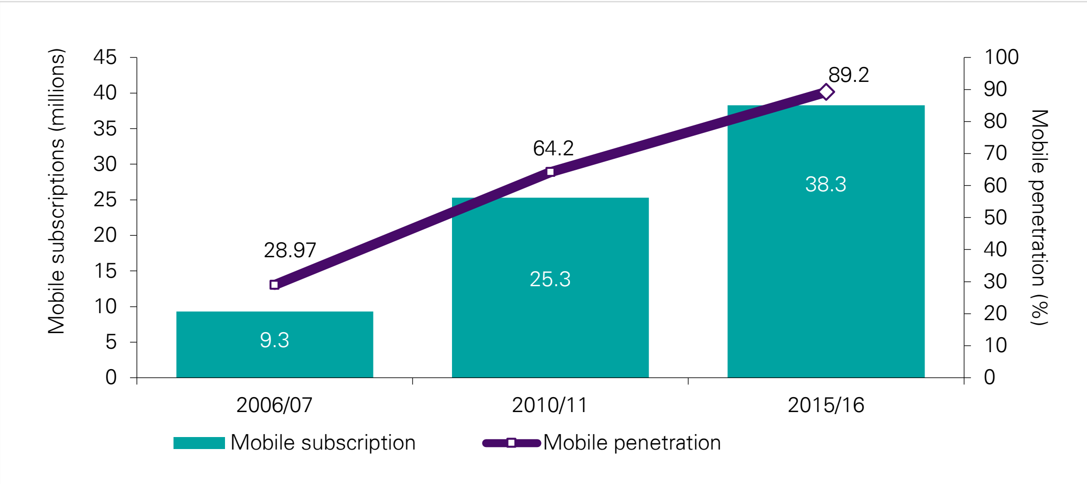

Figure 4: Source: Communication Authority of Kenya

[21] Communication authority of Kenya, quarterly statistics reports

[22] Communication authority of Kenya, quarterly statistics reports

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True Earnings for Safaricom

2 True Earnings for Safaricom

2.1 Scope, purpose and approach of this engagement

The KPMG True Value methodology is a tool to understand how a business creates and erodes value for society and, recognising that corporate and societal value creation is increasingly connected, how this is likely to affect the value the company creates for shareholders.

KPMG's 2014 Thought Leadership report, *'A New Vision of Value'*[23] sets out the theory behind the growing connection between corporate and societal value creation, and sets out the full 3-step KPMG True Value methodology. The **first step,** which forms the basis of this analysis, identifies and quantifies a company's material externalities in the form of a 'True Earnings' Bridge. The **second step** analyses the drivers of internalisation to identify risks to future earnings (ie – how likely are current externalities likely to affect the bottom line of the company, and what would drive them to do so?). The **third and final step** develops business cases for initiatives to build corporate and societal value.

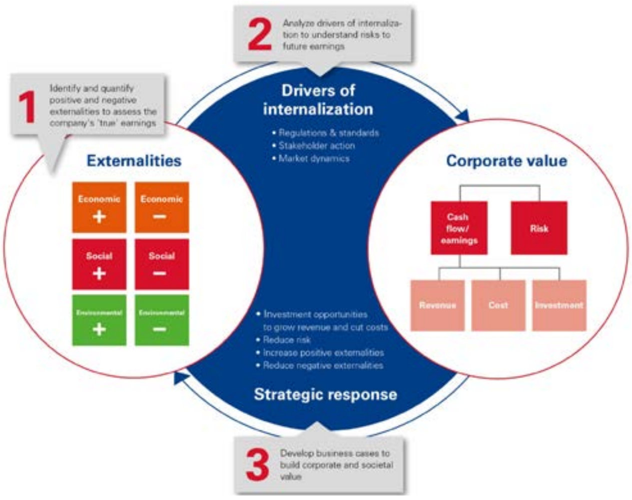

Figure 5: Steps in the KPMG True Value Methodology

[23] A New Vision of Value, KPMG International, 2014. www.kpmg.com/truevalue

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TERMS USED IN THIS REPORT	
The following terms are used widely in this report. While there is general understanding of these terms in the business and financial worlds, precise definitions vary and are debated. In this report, they are taken to mean the following:	
CORPORATE VALUE	Shareholder value (i.e. market capitalisation) and/or enterprise value (i.e. total business value)
SOCIETAL VALUE	Economic, social or environmental value created or reduced for society in the course of doing business
POSITIVE EXTERNALITY	An economic, social or environmental benefit that a company creates for society for which it is not directly or fully rewarded in the price of its goods and services
NEGATIVE EXTERNALITY	An economic, social or environmental cost that a company inflicts on society for which it does not directly pay a price
INTERNALISATION	Processes through which a company's externalities become internalised (i.e. through which a company is more fully rewarded for the societal benefits it creates and/or pays for more of the costs it inflicts on society). Regulation, such as pricing, is one driver of internalisation, with direct effects on corporate value creation. However, other interconnected factors, including stakeholder action and market dynamics, are also at work.

Figure 6: Terms used in this report

Internally, the **purpose** of conducting a 'True Earnings' assessment is to provide a new lens for decision-making to improve performance and inform strategy. This is particularly relevant in light of the extended period over which the analysis has taken place, as changes in the 'True Earnings' will point to important junctures and strategic decisions which have influenced the social, economic and environmental externalities of Safaricom.

In external stakeholder communication, the assessment can provide a starting point for improved transparency and reporting, and provides a base for balanced stakeholder dialogue on Safaricom's value creation, as has been seen through the wide dissemination of the Safaricom 2014/15 True Value Case Study.

KPMG has followed a five step **approach** in conducting this analysis:

2.1.1 Establish scope.

The **scope** of this True Value Assessment covers 'Step 1' of the True Value methodology, to assess the 'True Earnings' of Safaricom for ten years (2006/7 – 2015/16), by identifying and quantifying Safaricom's material externalities (both positive and negative) for the period.

a. The analysis looks at Safaricom's operations in Kenya over ten years (2006/7 – 2015/16)

b. The externalities included in the 'True Earnings' assessment were selected on the basis of a materiality assessment which included a review of the telecommunications sector

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sustainability trends, Safaricom's annual report, sustainability report, and input and validation from key internal stakeholders.

c. A practicality lens was then applied in order to assess the possibility of quantifying the externalities on the 'True Earnings' bridge. The criteria included: availability of Safaricom data and availability of proxies for monetization of impacts.

d. Three material areas of impact were identified where existing research on monetization was not available. Due to the expected significance of these impacts, these externalities were selected for 'Deep dive' analyses. These were;

    i. The economic impact of Safaricom's operations on the Kenyan economy using an economic impact assessment methodology. The full methodology and results are provided in **Section 5**.

    ii. The social value created for stakeholders through using Safaricom's M-PESA product offering using Social Return on Investment principles. The full methodology and results are provided in **Section 6.**

It is recognized that not all material externalities are covered in the scope of the assessment. Our expectation is that the material externalities not assessed in this initial study would be related to other products and services that create positive social value for stakeholders by meeting their needs. Therefore it is our view that this scope of work represents a conservative assessment of Safaricom's 'True Earnings'.

2.1.2 Select indicators.

a. Indicators for the value of each selected externality were identified, based on: the relevance of the indicator to represent the externality, available Safaricom data and available proxies linked to the indicator.

b. For the M-PESA deep dive, a theory of change was developed in 2014/15 to understand the impacts experienced by each stakeholder and indicators were defined for each of the material impacts. This theory of change was used as the basis of analysis for the other 9 years in the study.

2.1.3 Set prices.

Appropriate prices were identified through a literature review for each of the material externalities defined, with the exception of the M-PESA deep dive, where a combination of desktop research and primary data gathering was used to set financial proxies for prices. Prices were identified for each of the years in the study. In case where reliable information was not available, a trend analysis was undertaken between existing data points to estimate values for years in which data was missing.

2.1.4 Collect data.

Data on financial, economic, social and environmental performance linked to the externalities was gathered from Safaricom.

For the 2014/15 year, significant primary research took place in order to complete the 'True Earnings' exercise, particularly in respect of the social value created by M-PESA. A decision was made not to carry out the same level of primary research again, but to extrapolate existing data and research points to create a picture of the full period that is as accurate as possible. This has necessitated making certain informed assumptions, all of which have been interrogated internally and confirmed to be the most appropriate in the specific context. It is also important to note that in cases where trend

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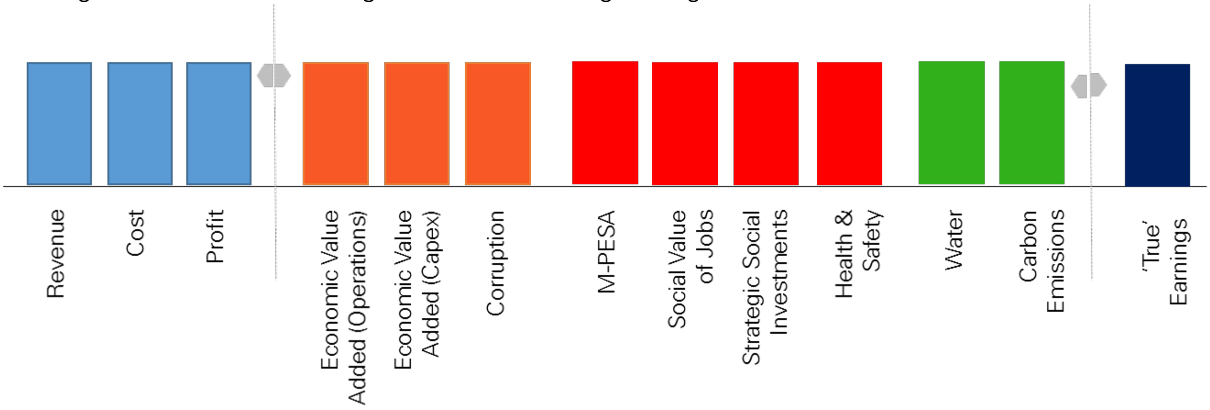
analysis was undertaken, the actual numbers for 2014/15 (which appeared in the 'True Valu'e case study) were still used, even in cases in which these were not exactly aligned to the trend numbers.

2.1.5 Build 'True Earnings' bridge

KPMG's True Value Methodology was used to consolidate all of the price and volume data for the full and represent the analysis in the form of a 'True Earnings' Bridge for each of the years in question. **Sections 4, 5 and 6** of this report sets out the results of this analysis for 2015/16 and for the full ten year period.

2.2 Safaricom 'True Earnings' Bridge

The elements that were identified in the scoping exercise as being material to Safaricom's 'True Earnings' are illustrated in the generic 'True Earnings' bridge.



In the table below, it is outlined whether these elements are positive or negative, and what assumptions were made in order to formulate the calculation.

Category	Description	Positive or negative	Data/Assumptions
PROFIT	The profit takes into account only the financial profit that was generated from Safaricom operations for each of the years in question.	Safaricom has consistently produced positive financial earnings	Financial information taken directly from Safaricom Annual Reports and data provided by the Safaricom team

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Category	Description	Positive or negative	Data/Assumptions
ECONOMIC VALUE ADDED FROM OPERATIONS AND CAPEX	By virtue of Safaricom's significant expenditure, a large amount of economic activity was generated in the Kenyan economy: - **Additional GDP as a result of Safaricom's operations**. GDP creation in the Kenyan economy as a result of Safaricom's direct expenditure, and indirect GDP creation as a result of suppliers' expenditure related to providing Safaricom with goods and services. - **Government revenue –** Safaricom's tax remittances to the government, including corporate tax, excise duties, value added tax and license fees. Safaricom's significant Capital Expenditure which has taken place as techonology as developed and the Safaricom network has expanded have also made up a significant portion of the company's expenditure and, in turn, economic value created.	**Positive economic externality** – Safaricom continues to generate GDP, tax revenue and associated job creation for the Kenyan economy, for which it is not directly financially compensated.	For the purposes of the 'True Earnings' bridges, only direct and indirect economic impacts have been included. Induced impacts – the additional spending that arises from the change in employment opportunities created – have been excluded. These have been identified through Economic Impact Assessments for each year in the period under review.
CORRUPTION	The corruption element accounts for the unfortunate reality that of the economic value generated by Safaricom's operations and capital expenditure, some of this value will be lost through corrupt activity in the Kenyan economy. The corruption factor adjustment is calculated by applying Transparency International's country corruption index for Kenya to the Economic Value Added.	**Negative adjustment on positive economic externality** – corruption erodes the economic value creation externality.	Applied Transparency International's corruption factor for each of the years in the analysis, combined with OECD and Asian Development bank research on GDP loss due to corruption.

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Category	Description	Positive or negative	Assumptions and sources
SOCIAL VAULE OF M-PESA	M-PESA is a groundbreaking product and service offering that is continuously innovating to meet the evolving financial services needs of Kenyans. The social value Safaricom generates for Kenyan society through M-PESA far exceeds the financial revenue derived by Safaricom. - M-PESA Customers have consistently derived the greatest social value from M-PESA as they are able to receive, save and spend money more freely and independently than would have been the case without M-PESA. - The number of jobs and degree of economic activity created by M-PESA agents has contributed substantially to the Kenyan economy, but also to the wellbeing and financial stability of the M-PESA agents and their employees. - M-PESA merchants experienced the smallest impact out of the stakeholders assessed, due to this being a relatively new service offerings. Merchants experienced improvements in well-being, financial stability and business profits as a result of using M-PESA	**Positive social externality** Although Safaricom earns revenue from the M-PESA product, the social value generated far exceeds the financial benefit to Safaricom in each of the years since its inception.	The social externality is calculated by subtracting M-PESA's revenue from the total estimated social value creation for each of the years in question. M-PESA's revenue represents a financial internalization of a portion of the social value created.

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Category	Description	Positive or negative	Assumptions and sources
STRATEGIC SOCIAL INVESTMENTS	The M-PESA and Safaricom Foundations remain amongst the biggest in Kenya, and have disbursed a significant amount of funds in the last ten years.	**Positive social externality.** Positive social and economic impacts are generated by Safaricom's investments. The benefits are experienced by external stakeholders, and not Safaricom.	Social Return on Investment estimated by applying existing ratios from similar-themed projects, and assuming a 1:1 ratio, where no similar ratio existed.
SOCIAL VALUE OF JOBS	It is well understood that jobs create value for people which extends further than the amount they get paid. The sense of purpose, skills developed and wellbeing that comes with working is also of significant value	**Positive social externality** Positive social impact is created for those that have a job as a result of Safaricom's existence.	Social value of jobs estimated adding stated value of employment over and above salaries from Social Return on Investment projects carried out by KPMG in the past.
HEALTH AND SAFETY	Although Safaricom strives to maintain a safe working environment for staff and contractors, regrettably, serious incidents occurred in each of the years throughout the period. There is no health and safety data from 2006/7 to 2010/11. For years without data, no health and safety data has been factored into the calculation.	**Negative social externality.** Health and safety incidents have a negative economic impact on parties involved, which exceeds financial compensation.	Applied estimated value of a statistical life, adjusted for Kenyan GDP for the year in question. For the LTIs, a ratio of the statistical life value was assumed.

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Category	Description	Positive or negative	Assumptions and sources
CARBON EMISSIONS	Emissions used for this calculation include the diesel consumed in generators, fuel used in fleet vehicles and fugitive emissions from air conditioning.	**Negative environmental externality –** carbon emissions contribute to climate change, where the related impacts have an economic cost. In the absence of a carbon price, there is no financial impact for the emitter.	External cost of carbon at 25 USD per tonne CO_2-e adjusted for inflation in each year.
WATER	Safaricom's water consumption is mainly from water use in Safaricom's biggest facilities. In 2014, Safaricom began harvesting water. This counteracts the negative impact of water consumption for the years since which this initiative began.	**Negative environmental externality** Consumption of water is an essential and increasingly scarce resource. Water has a social and economic value of water that exceeds the tariff paid for it.	Water externality price is based upon scarcity level. The scarcity price is derived from a 2013 Trucost study on behalf of the TEEB Business Coalition, adjusted for inflation and current price.

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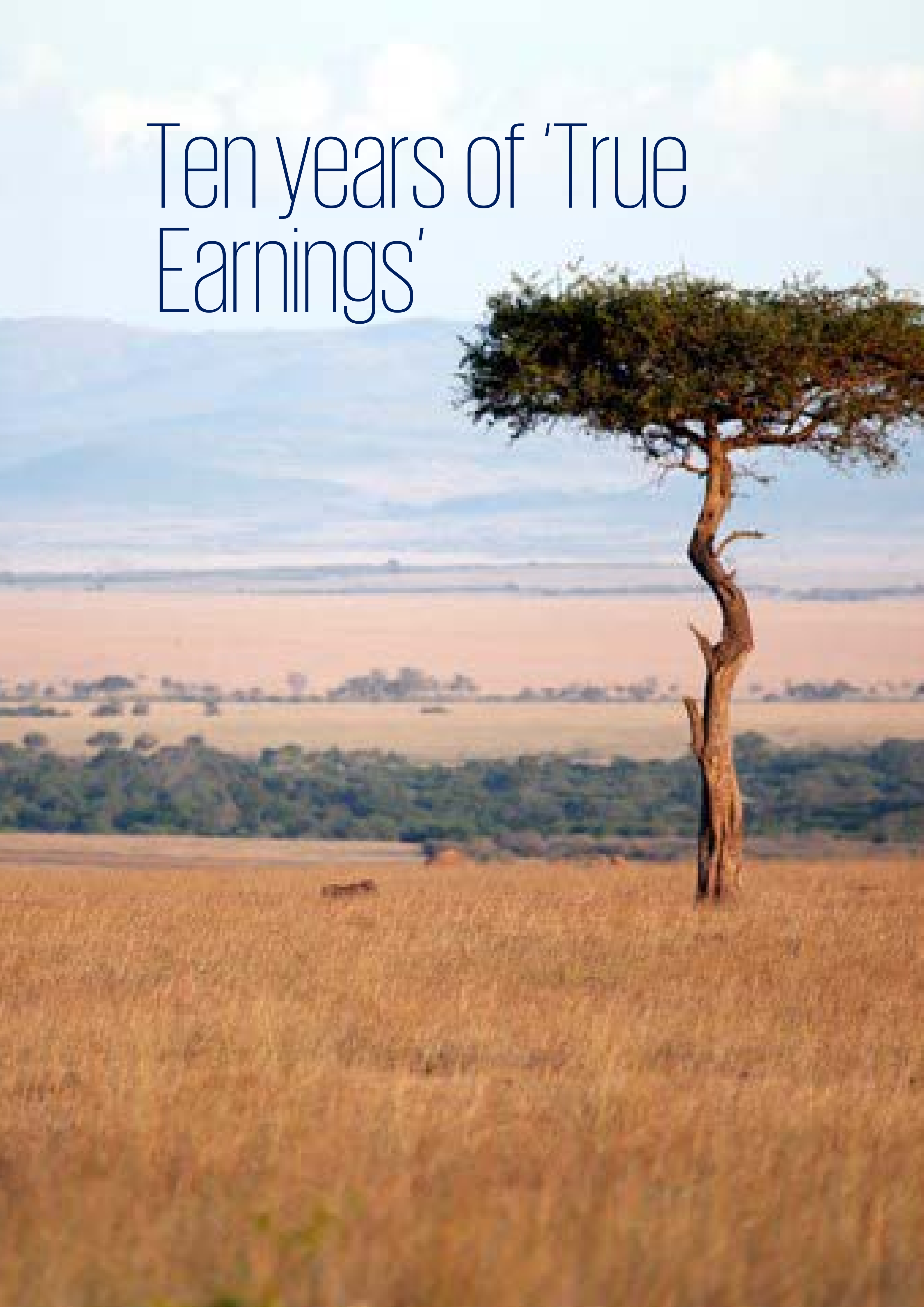
Ten years of 'True Earnings'



3 10 years of 'True Earnings'

The ten year picture that is painted in this analysis points clearly towards the ways in which Safaricom has evolved as a company, increasing the number of products and services made available to customers, attracting a wider range and larger number of customers, and constantly innovating in a way that continues to add value to Kenyan society through its economic, social and environmental contributions.

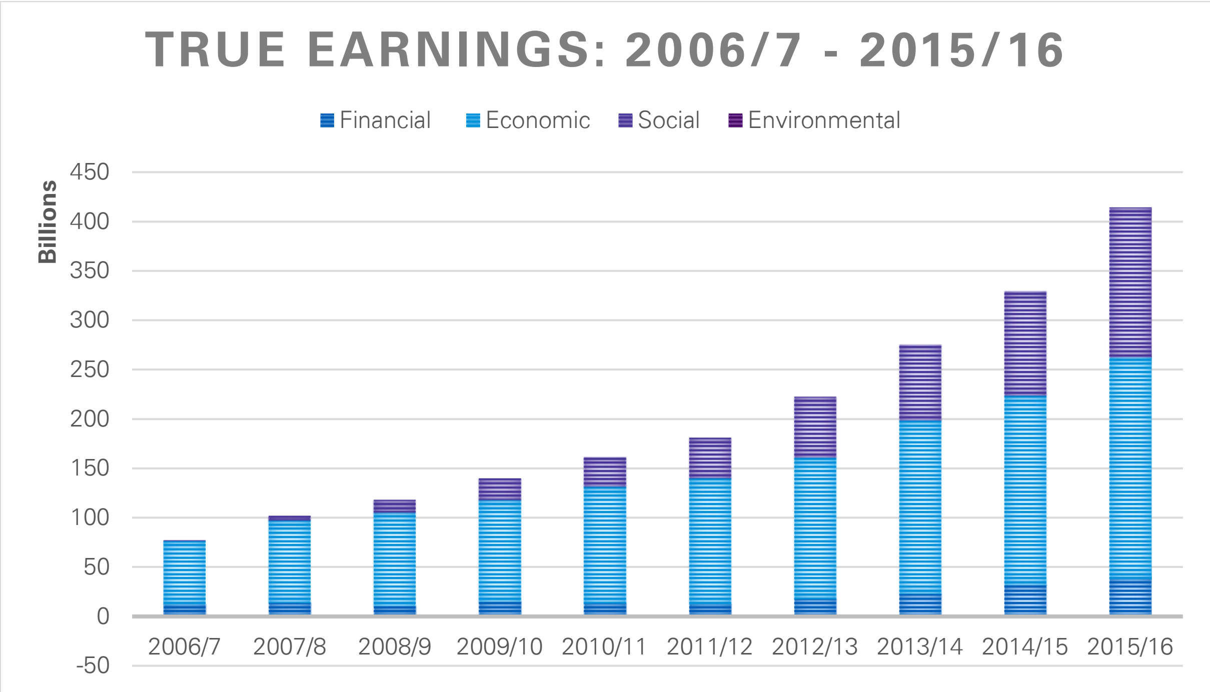


Figure 7: Source: 'True Earnings' Bridges compiled by KPMG

The graph above illustrates the way in which all factors have contributed towards the 'True Earnings' of Safaricom for this period. The full 'True Earnings' bridges for each year in the period are included in **Appendix 1**. Most noteworthy is the growing contribution from social externalities, particularly through the social value created by M-PESA as the product has grown and evolved.

Throughout the period, the greatest contribution to 'True Earnings' has been in the form of the economic value created through Safaricom's operations and capital projects, while the negative environmental externalities have had a negligible impact on the 'True Earnings' in any of the years in which the analysis took place.

In the sections that follow, a discussion is laid out regarding each of these elements; the way in which they have changed and developed in the last decade, and what has driven them to do so.

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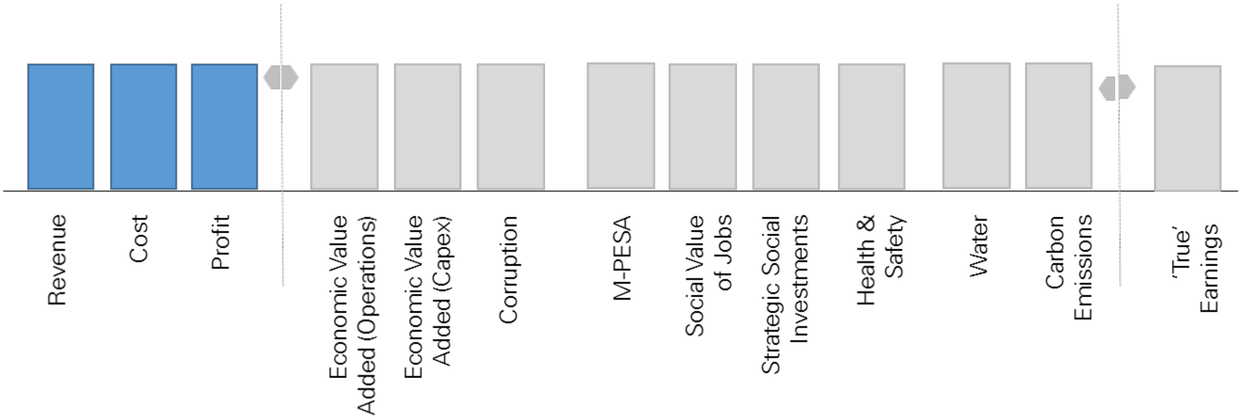
4 Revenue, Cost and Profit

4.1 Introduction

The first element in the 'True Earnings' bridge, and the only one that that is traditionally valued, accounted for and internalised, is the financial element, which takes into account the Revenue, Cost and Profit of Safaricom since 2006/7.



4.2 Our Approach to calculating the Revenue, Cost and Profit of Safaricom

The data for this element of the bridges was taken from the financial results of the company for each year, as disclosed in the respective Annual Reports.

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4.3 Safaricom's Financial Performance

Safaricom saw a reduction in profits[24] between the financial years ending 2007/08 and 2008/09 from 13,853,286 to 10,536,760. This was due to costs increasing at a faster rate than revenue. This increase in cost is partly attributable to the acquisition of a fixed and wireless data service provider, One Communication Ltd, in the financial year ending 31 March 2009. External factors that influenced the profits in this way include a slowdown in economic growth in Kenya from 7% to less than 2% during this time.

An Increase in financial profit was seen between financial years 2008/09 and 2009/10 when profit (KShs '000) increased from 10,536,760 to 15,148,038. Safaricom subscribers increased by more than 3 million to 13.36 million in 2008/09 opened the door for increased revenue. The improvement in profits during 2009/10 was due to a reduction in the growth of costs as well as improved growth in revenue (based on previous period). The significant growth in data revenue lead to total revenue growth exceeding subscriber growth and thus improving revenue per subscriber during 2009/10. A clear trend emerged as MPESA and Broadband data revenues increased its share of total revenue from 6.3% to 12.5%. This supported the decision to acquire a 100% stake in Pocketstream Data Networks limited in the 2009/10 financial year as it dramatically increased Wimax (internet access provider) capacity.

The improved growth in profits starting 2012/13 was due to improved utilisation of previously developed infrastructure. M-PESA contributed 18% of total revenue to Safaricom and continued to grow as the number of agents grew from 39,401 to 65,547 during the 2012/13 financial year, dramatically improving accessibility of the service. During this year Safaricom launched M-Shwari is an extension of M-PESA which allows Commercial Bank of Africa customers to access micro-loans with their mobile phones. Focussed cost cutting strategies for 2012/13 were implemented, such as saving on license fees and top-up card production and yielded notable results.

The graph shows the way in which, overall, profits have continued to increase over the period, with a dip between 2007/08 and 2008/09. There are a number of reasons for this, which are set out in more detail below:

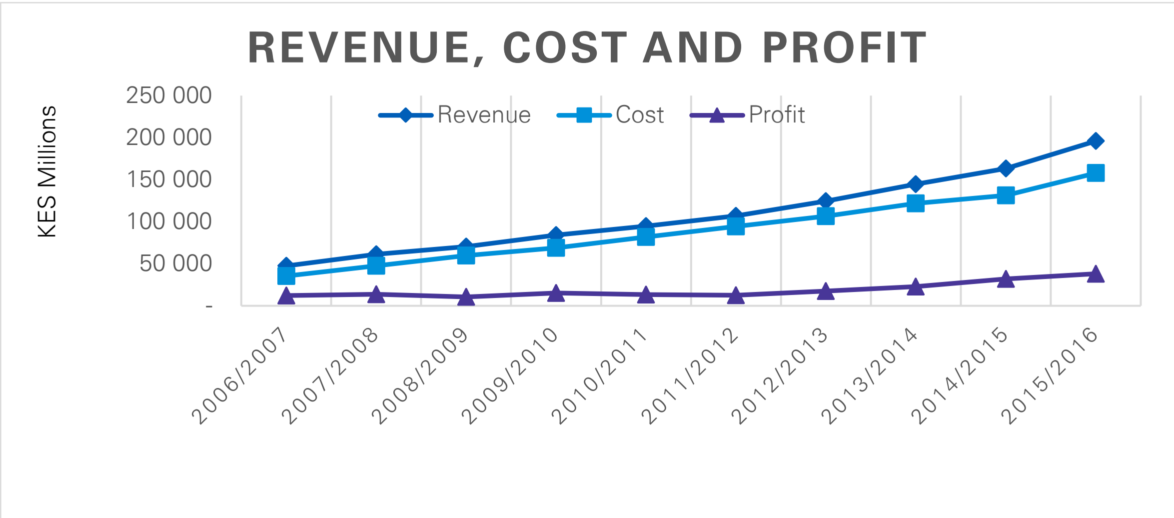

Figure 8: Source: Safaricom Annual Reports

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[24] (KShs '000)

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4.3.1 Safaricom's contribution to Kenyan Society

An analysis of the way in which the 'True Earnings' of Safaricom relates to the company's financial earnings for each year creates an interesting picture of the trajectory of the company's journey over the past decade.

Although the ratio of profit to 'True Earnings' has varied significantly over the period, it is noteworthy that the ratio has moved from **6.29 in 2006/7** to **10.86 in 2015/16**. In the graph below, it is evident that the True Earnings have continued to grow, despite fluctuations in profit.

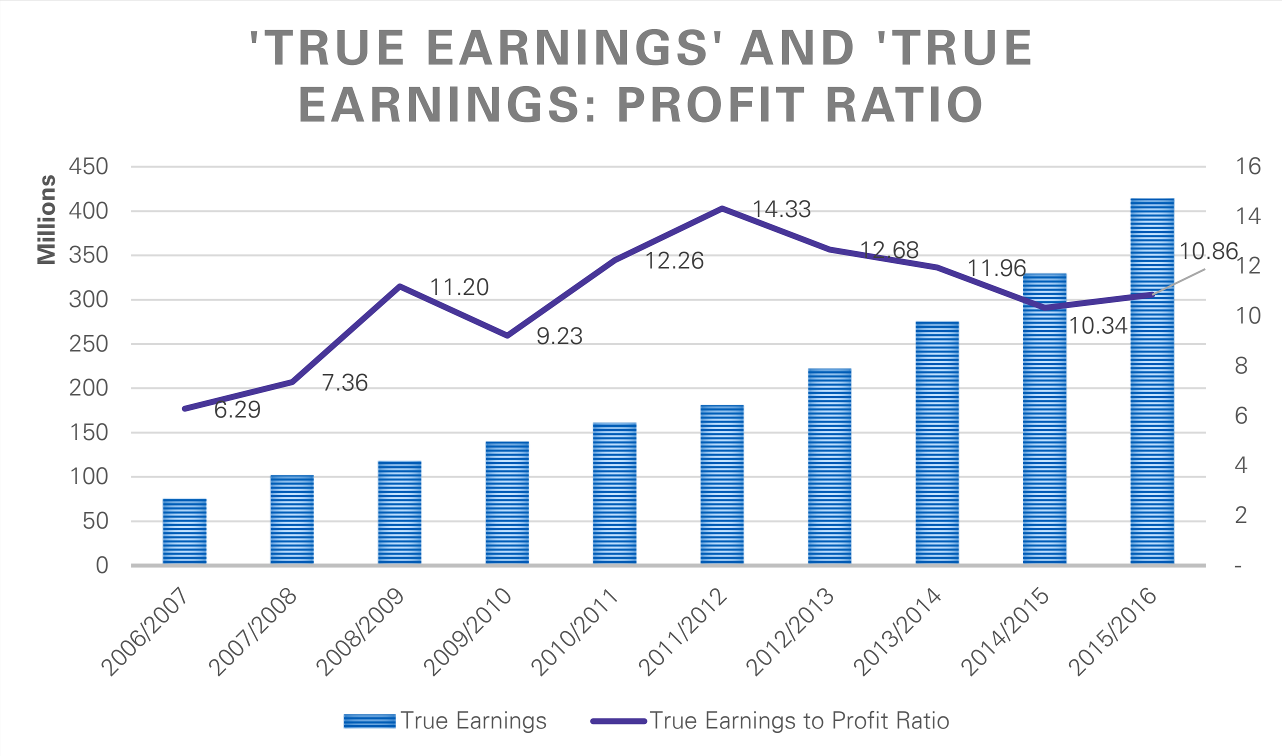

Figure 9: 'True Earnings' Bridges compiled by KPMG

4.4 Safaricom Interpretation

The ratios above present an important opportunity for Safaricom to reflect on what this means for the organisation. There are two points of view which may lead the change in ratios over the period to influence the decisions of Safaricom going forward:

- **Internalisation of societal value**: The fact that there are periods in which the societal value is being created which far exceeds the profit of the company implies that there is value being created which could be internalised by Safaricom if the company chose to do this. The most straightforward way of doing this would be to increase the revenue from the products and services that are creating the most value. This is linked to the fact that although value created is not a proxy for willingness to pay on the part of customers, it does provide an indication of which stakeholders are receiving the greatest impact and associated value.
- **Prioritisation of investments:** A number of instances in which profits have been lower have been the result of significant investments made by the company, such as the acquisition of Pocketstream Data Networks in 2009/10. Although this negatively impacted the profit in that year, it increased the number of customers (leading to revenue for the company) and provided enhanced access to data (leading to value for society). This is an instance in which an initial reduction in profits results in significant Shared Value opportunities for both Safaricom and society.

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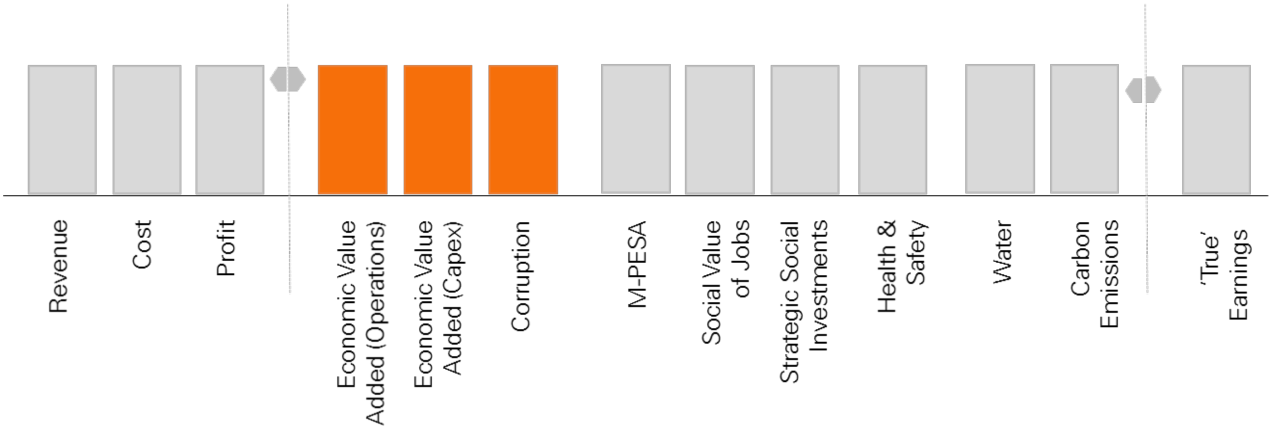
5 Economic Value

5.1 Introduction

The second element in the bridge is made up of the economic value added as a result of Safaricom doing business, specifically in terms of the forward and backward linkages with other industries and the impact of its operations within the telecommunications industry and the economy as a whole. For example, this is the flow of funds/services between Safaricom and its suppliers situated in different sectors of the economy.

The only negative externality captured in the economic sphere is the portion of this value that is eroded as a result of corruption in the Kenyan economy.

As the most significant contributor towards economic value, a ‘deep dive’ into value added through revenue generation and operational expenditure is carried out below.



5.2 Our approach to calculating the economic value added through operations and capital expenditure

The EIA considered for this project, uses the theory of input-output analysis developed by Wassilly Leontief. The basis of input-output analysis is that it shows the interdependencies between different sectors of the economy in a matrix format. The structure of this input-output model incorporates into national accounting systems of various countries, including Kenya, and therefore forms an important part of measures such as Gross Domestic Product (GDP).

In addition to studying the structure of national economies, input-output analysis is a tool for economic planning. It can also identify economically related industry clusters and so-called “key” or “target” industries. These industries are most likely to increase the internal coherence of a specified economy by analysing the linkages between the different sectors in the economy.

Linkages refer to forward and backward linkages that occur between consecutive steps of a production value chain. A forward linkage exists where Safaricom uses the product of a particular firm or industry as an input. Conversely, a backward linkage occurs where the product of Safaricom is used as inputs by another firm or industry. The benefits of having an increased number of such backward linkages within an economy are that it centres local demand for raw materials and reduce dependence on imports as local suppliers can be relied upon for the supply of raw materials.

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When estimating the impacts of Safaricom's operations, the **direct**, **indirect** and **induced** impacts are considered.

1. The **direct impact** includes the first round effects, where increased demand for particular goods/services leads to increased business activity and thus a direct change in sectoral production. This is the impact associated with the investment spending and operational expenditure undertaken by Safaricom.

2. The **indirect impact** includes the second round effects that change the demand for factors of production and household income, explained by the inter-linkages of sectors in the economy. With reference to this project, these impacts emanate from the increased demand for goods and services acquired by Safaricom from external service providers, as well as increased employment opportunities created on the back of this economic activity.

3. The **induced impact** includes the multiplier effect that could arise through the second round of spending. This is the increase in household income and the additional spending that arises from the change in income levels from the employment opportunities created because of expenditure by Safaricom.

The sum of the direct, indirect and induced impacts represents the total impact.

According to Keynesian economic theory, any injection into the economy via investment capital, government spending or the like will result in a proportional increase in overall income (measured through GDP) at a national, provincial and local level. The basic principle of this theory is that increased spending will have carry-through or multiplier effects or impacts, which result in even greater aggregate spending over time. The multiplier itself is an attempt to measure the size of those carry-through effects or impacts. The multiplier takes all direct and indirect benefits from that investment or from the change in demand into account. The size of the impact or the effect on the economy depends on the size of the multiplier in the economy.

We used this theory as the basis of estimating the economic impact of Safaricom's investment spending and operations in Kenya. We applied an extension to the input-output matrix, the Social Accounting Matrix (SAM) in our analysis. A SAM is a presentation of the national accounts of a country that places the focus on issues that are of special interest in a country, e.g. an analysis of interrelationships between structural features of an economy and the distribution of income and expenditure among household groups. The required data was collected from a number of different sources including national accounts, income and expenditure surveys, integrated economic accounts, etc.

A SAM shows, amongst other things:

- The structure of the costs of production and the value added, which is generated in the production process;
- The inter-dependencies of industries;
- The flows of goods and services produced within the national economy;
- The flows of goods and services with the rest of the world; and
- The expenditure by different household groups.

The analysis that follows used intermittent SAMs to estimate the economic impact over the 10-year period. The SAMs used included the 2006, 2010 and 2014 SAMs for Kenya, built by KPMG. The 2006, 2010 and 2014 SAMs were adjusted to account for the inflationary movements for all other

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years in the period under analysis. We utilised the following data from a number of different sources: industry values in terms of sales from BMI; income statements from Safaricom for the period 2006/07 to 2014/15 financial year; national accounts and labour force data for Kenya from the Economic Intelligence Unit (EIU).

We used these SAMs to estimate how the activities of Safaricom in one or more parts of the economy, could affect other sectors of the economy, and how the industry investment and revenue impact distributes throughout the economy. It thereby highlights the economic linkages within the economy and has the ability to show the direct, indirect and induced effects of a given expenditure.

Gross Domestic Product (GDP) is a good indicator of economic growth and welfare, as it represents, amongst other, the remuneration of employees and gross operating surplus (GOS) (profits) as components of value added to the economy.

Labour and entrepreneurship form an important part of the primary production factors needed for Safaricom's operations. The **additional number of people employed** because of Safaricom's investment spending and revenue generation is determined by the EIA.

Safaricom's impact on **public finances** is the sum of its direct tax and non-tax contributions. In addition, Safaricom's indirect contribution to public finance is included in this analysis.

One of the components of the EIA is to determine whether Safaricom's investment and operations has a positive impact on poverty alleviation: we show how Safaricom's operations benefit low-income households, which in turn is shown through the **additional income that low income households received**.

The basis of this analysis is therefore an assessment of how direct economic activity could potentially lead to other forms of economic activity. The size of the additional economic activity is measured by means of the multiplier effect. The different rounds of the multiplier effect, from the initial spending in a sector, through to economically active individuals spending their salaries on buying goods and services (and its resultant effects), is then estimated as the direct, indirect and induced impacts of industry investment and operation

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5.3 **Summary**

The first Medium-Term Plan (2008 – 2012) of Kenya's Vision 2030 strategy aimed at promoting growth and preserving sound economic policies under the challenging circumstances. Kenya's second Medium Term Plan covers the period 2013 to 2017, with the overall objectives focused on accelerating economic growth, job creation, specifically for the youth as well as to further reduce the still high poverty levels of close to 50%[25].

It is expected that access to ICTs will contribute to the country's economic growth by contributing positively towards the above-mentioned Medium Term Plan and Kenya Vision 2030 strategy, reducing transaction costs, increasing business efficiency; and improving educational standards.

The Kenyan government also acknowledges that ICTs will increase the country's productivity and raise the competitiveness of local businesses in a knowledge-based economy

5.3.1 Summarising Safaricom's contribution to the economy of the past decade through revenue generation

Over the past decade, the revenue generated by Safaricom has contributed to a more efficient economy through the long-term nature of its economic benefit streams, especially from downstream user industries. The table below provides a summary of the overall economic benefits that were realised because of Safaricom's operations in the Kenyan economy.

Average economic benefits over the past decade resulting from Safaricom's revenue generation	For every **KES 1 revenue generated** by Safaricom over the past decad, an additional **KES 2 was added** to the economy. Safaricom's contribution to GDP, from revenue generated over the past 10 years contributed on average **6%** towards total national **GDP**.	The revenue generated over the past decade also helped create and sustain jobs in the country. Every **KES 1 million of revenue generated, 4 jobs were sustained** per year.	For every **KES 1 revenue generated** by Safaricom, an **additional KES 0.78** was potentially added to national government revenue.	Revenue generated by Safaricom helped fight poverty alleviation in Kenya, in that **6%** of additional household income generated flowed to **low income households**.

Figure 10: Source: KPMG analysis using Social Accounting Matrices for Kenya.

The figure that follows provides a more detailed look into the annual contribution to economic development. These are specific to its contrition to GDP, employment and tax revenue, which resulted from infrastructures investment in Kenya over the past decade, i.e. 2006/07 to 2015/16.

[25] Source: *World Bank, Latest statistics 2005 data*

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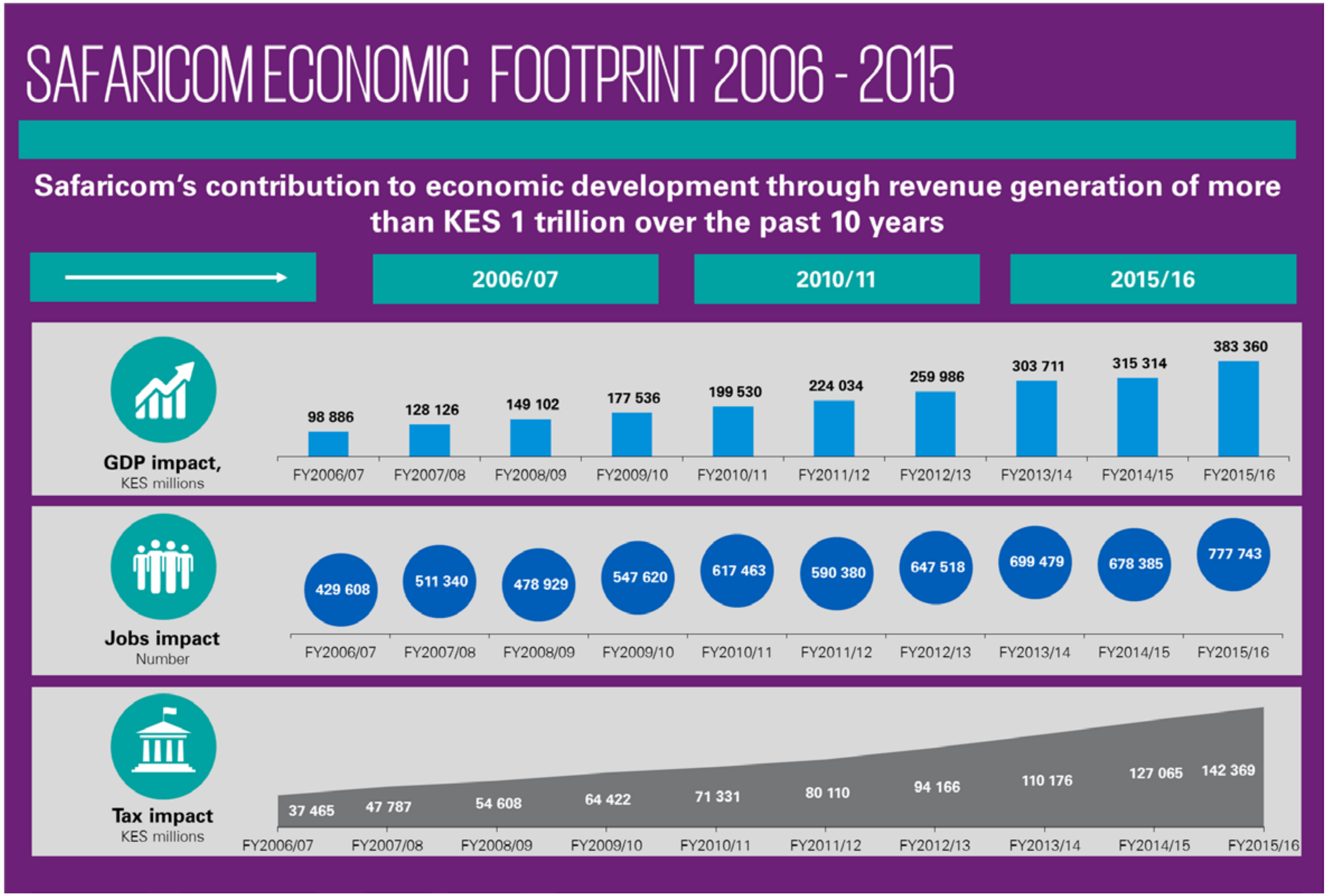

Figure 11: Source: KPMG analysis using Social Accounting Matrices for Kenya

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5.3.1 Summarising Safaricom's contribution to the economy of the past decade through infrastructure investment

Safaricom's investment in infrastructure development and improvement contributed positively towards improving productivity and efficiency in the country over the past decade. The increase in overall productivity and efficiency drove overall economic growth, which was a result of the long-term nature of the economic benefit streams created, especially in downstream user industries. The table below provides a summary of the overall economic benefits that was realised because of Safaricom's infrastructure investment to the Kenyan economy.

Average economic benefits over the past decade resulting from infrastructure investment by Safaricom	For every **KES 1 invested** into infrastructure development by Safaricom over the past decade, an **additional KES 0.66** was potentially added to the Kenyan economy, highlighting the significant contribution it makes to the economy and the efficiency and productivity thereof. Total annual investment into infrastructure development over the past 10 years contributed on average **0.5%**towards total Kenyan **GDP**.	Investment into infrastructure by Safaricom has created an additional **2 jobs per KES 1 million spent** This jobs multiplier is a result of the increased efficiency gained through telecommunication technology, allowing for a more productive workforce. Jobs created as a result of Investment into infrastructure made up about **0.4%** of the **total labour force** in Kenya	For every **KES 1 new investment** into the economy by Safaricom over the past decade, an **additional KES 0.20** was added to the national government revenue.	Infrastructure investment by Safaricom over the past decade helped fight poverty alleviation in Kenya in that close to **6%** of additional household income generated potentially flowed to **low income households**.

Figure 12: Source: KPMG analysis using Social Accounting Matrices for Kenya

The figure that follows provides a more detailed look into the annual contribution to economic development. These are specific to its contrition to GDP, employment and tax revenue, which resulted from infrastructures investment in Kenya over the past decade, i.e. 2006/07 to 2015/16

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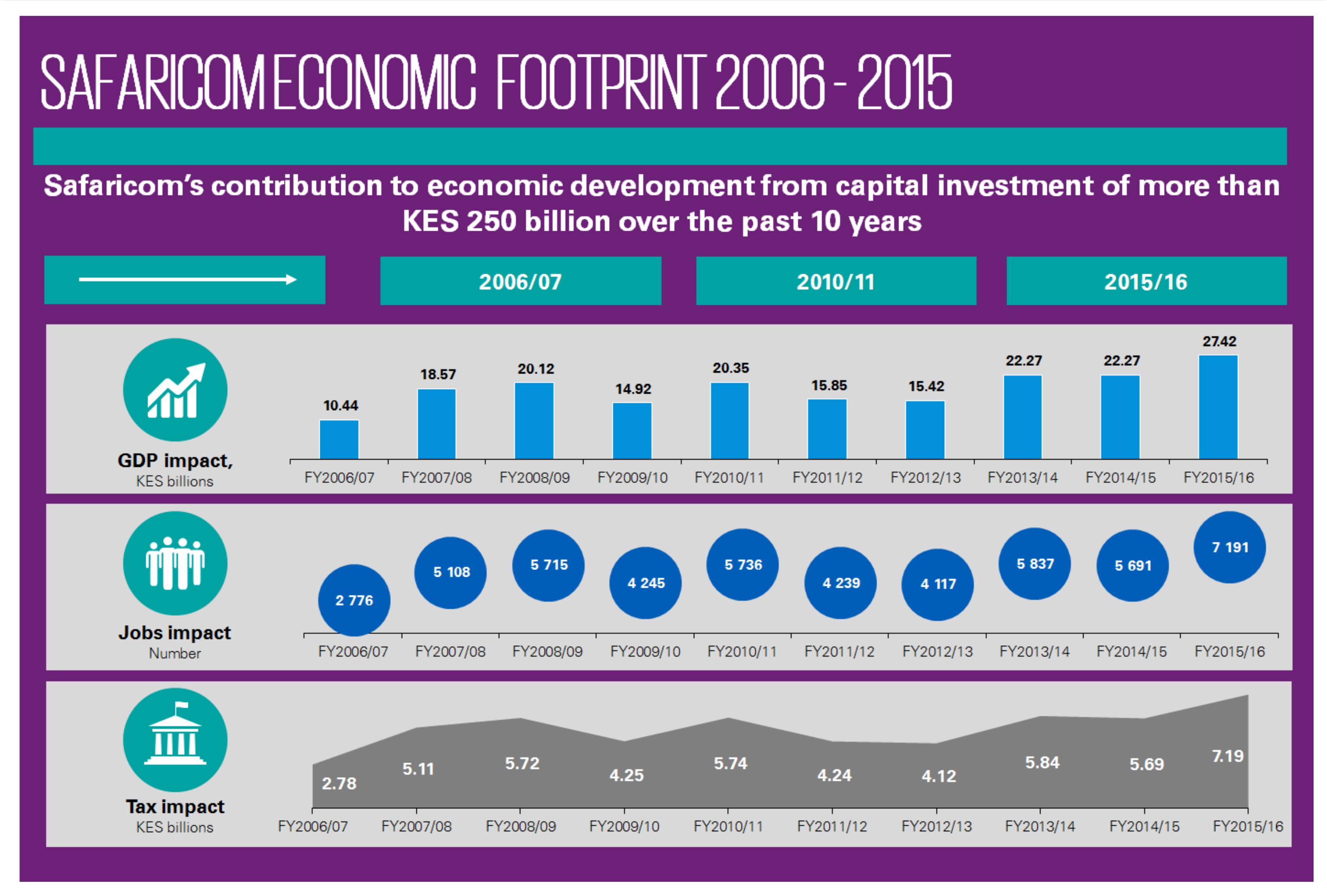

Figure 13: Source: KPMG analysis using Social Accounting Matrices for Kenya

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5.4 Safaricom's economic footprint in Kenya

Over the past decade, Safaricom has contributed towards the Kenyan economy through job creation, infrastructure development and community development. This section of the report will provide detailed insight into the nature and magnitude of Safaricom's contribution to the economy, as well as the knock on effects that have resulted from Safaricom's direct contributions.

5.4.1 Safaricom's contribution to the economy through revenue generation

Safaricom is the largest mobile operator in Kenya, with a subscriber market share of close to 66% of the total mobile industry. Safaricom customer base in Kenya has increased by more than 300% over the past 10 financial years, from 6.1 million in 2006/7 to 25.2 million in 2015/16, supported by a growing dealership network, retailer network and M-PESA agents. Safaricom currently has 252 000 active retailers, 44 retail shops, and an extensive dealer network.[26]

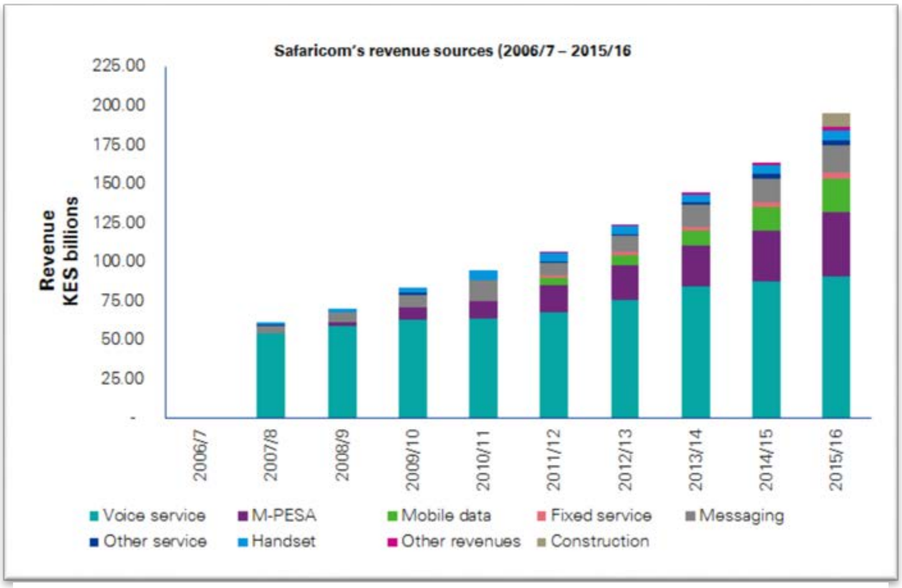

Figure 14: Source: Safaricom Annual Reports

Safaricom's goal is to continue providing the best customer experience through improving network quality, capacity and coverage. Over the past years, Safaricom has managed to increase the population coverage of the 2G and 3G network to cover 95% and 78% of population, respectively. Safaricom continues to roll out 2G and 3G base stations and has become the first operator in Kenya to deploy 4G network, rolling it out to 467 base stations in 20 countries.[27]

The performance of all the above-mentioned segments has contributed to Safaricom's overall revenue.

5.4.2 Safaricom's contribution to economic growth, through revenue generation

Over the past decade, Safaricom's revenue from Kenya's operations increased by almost fourfold from KES 47.5 billion in 2006/7, to KES 94.8 billion in 2010/11 and KES 195.7 billion in 2015/16.

Over the years, as technology evolved, Safaricom's composition of revenue changed accordingly. [28] Revenue generated from voice services decreased from 88.3% of total revenue in 2007/8 to 46.4%

[26] Safaricom Limited Annual Report 2015/16

[27] Safaricom Limited Annual Report 2015/16

[28] We were unable to find different revenue sources for 2006/7. Disaggregated data only available from 2011/12 onwards.

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of total revenue in 2015/16. This may be due to the increase in the use of mobile data, which contributed 10.8% to total revenue in 2015/16.[29]

Revenue generated from equipment (handset) sales and other revenues remained quite stable over the 10-year period.

Conversely, revenue generated from M-PESA increased substantially, from 4.2% of total revenue in 2008/9 to 21.2% of total revenue in 2015/16. As M-PESA is a contributing element in financial inclusion for all, the growth in this revenue source may be indicative of the positive economic impact that Safaricom and its services entail.

The changes in the composition of Safaricom's revenue may point to the following:

- Safaricom is in line with technological changes
- Safaricom adapts its strategies in line with consumer needs (example M-PESA)

Over the past decade Safaricom has **increased its revenue by almost fourfold,** from **KES47 billion** in 2006/07 to more than **KES185 billion** to 2015/16.

Growth in revenue over the 10-year period increased consistently at an average growth rate of over 16% per annum.

Majority of its total revenue over this period generated from services such as voice and messaging services, M-PESA and messaging services. Over the period under review revenue from these services represented close to 90% of Safaricom's total revenue.

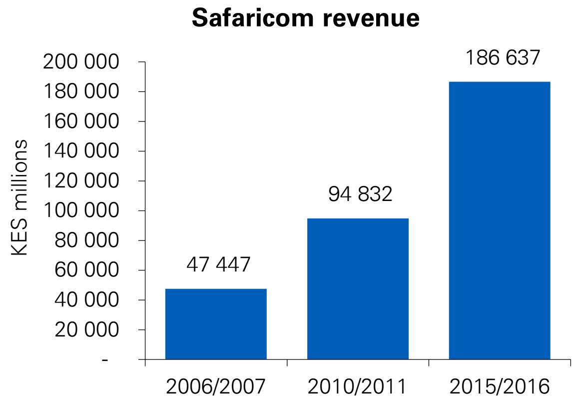

Figure 15: Source: Safaricom

[29] Note that mobile data revenue is included in messaging revenue over the 2007/8 to 2010/11 period.

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Since GDP represents the total value of all final goods and services produced in the country, it is fundamental to the economic value of life of the people in Kenya. It is therefore the most important and all-encompassing measure to determine Safaricom's contribution towards the economic growth of Kenya.

The following table depicts the additional GDP created due to the revenue generated by Safaricom over the past 10-years.

KES Billion	Direct impact	Indirect impact	Induced impact	Total impact	Multiplier	Contribution to GDP
Total GDP impact during 2006/07	26.31	18.58	54.00	98.89	2.08	5.3%
Total GDP impact during 2010/11	42.53	44.68	112.33	199.53	2.10	6.3%
Total GDP impact during 2015/16	97.33	72.46	213.57	383.36	2.05	6.4%
Total over 10 years	553.12	441.24	1 245.23	2 239.58	2.07	6.1%

Figure 16: Source: KPMG analysis using Social Accounting Matrices for Kenya.

The total additional GDP that was created due to the revenue generated by Safaricom over the 10-year period was in the order of approximately **KES 2 240 billion, an average of KES 223 billion per annum**. This represents an estimated annual average economic multiplier effect of 2.07, implying that for every **KES 1** invested into infrastructure development by Safaricom an additional **KES 2.07** is added to the Kenyan economy.

The direct value add, averaging about R55 billion per annum over the 10-year period under review, accounts for **25%** of the total value add. This shows the importance of the so-called multiplier effect Safaricom operations has on the national economy, contributing **75%** of the remaining impact.

The overall impact on value add resulting from the revenue generated represents on average about **6.1%** of the Kenyan GDP per annum.[30] In **2005/06** Safaricom contributed about **5.3% to GDP** and steadily increased its contribution to close to **6.5% of GDP** in there last financial year (2015/16). This illustrates Safaricom's efforts to increase their contribution to the economic development.

[30] Average GDP of Kenya over the period 2006 to 2015 = KES 3 658 914 million (Source: The Economist Intelligence Unit).

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5.4.3 Safaricom's contribution to employment creation

Safaricom contributes towards promoting employment in the industry that generates income for households, both directly and indirectly.

Safaricom currently employees more than **4 200** people directly through its operations in Kenya. This excludes the number of people they employ through franchises that operate under Safaricom.

Over the past decade, Safaricom increased the number of people it directly employs by fourfold. In 2006/07 Safaricom directly employed close to 1 000 people and now employs more than 4 200 people directly to perform its day-to-day operations.

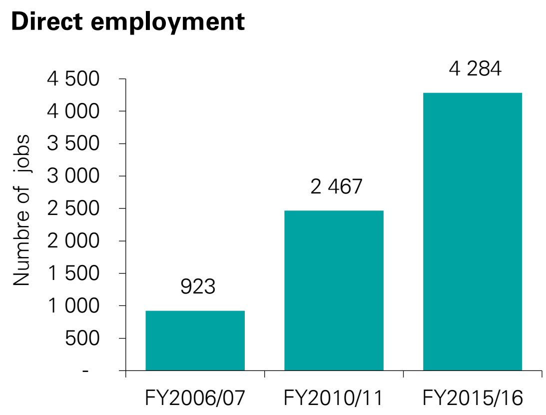

Figure 17: Source: Safaricom

Safaricom has created and/or sustained three kinds of jobs in the Kenya economy. They include the **direct jobs** created because of on-going operations, so-called **indirect jobs** resulting from multiplier effects of the operating expenditure and lastly **induced jobs** that occur due to the payment of salaries and wages to people directly employed by Safaricom. These additional jobs, created due to Safaricom's revenue generated, are depicted in the table below.

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The table below shows how the impact on employment was spread across 2006/07 2015/16.[31]

Estimated number of job opportunities	Direct impact	Indirect impact	Induced impact	Total impact	Multiplier	Contribution to employment
2006/07	923	61 077	367 607	429 608	9	3.1%
2010/11	2 467	126 026	488 970	617 463	7	4.0%
2015/16	4 284	144 342	629 117	777 743	4	4.3%
Estimated total average over 10 years	**2 647**	**108 294**	**486 906**	**597 847**	**6**	**3.75%**

Safaricom's operations sustained on average close to **600 000 jobs per annum,** directly and indirectly through the multiplier effects, in Kenya over the period 2006/07 to 2015/16. This represented an average of about **4% pa**[32] of the total economically active labour force in Kenya over the 10-year period.

Over the past decade Safaricom has directly employed and sustained, through its operations, approximately **2 700 jobs,** on average per. Since 2006/07 Safaricom increased the number people it directly employed by four times, from just under **1000 people in 2006/07** to more than **4 200 people in 2015/16**. This represents an annual average growth of about **20% per annum**. Besides the loss of jobs experienced during the 201/13 financial year, Safaricom managed to grow their employment base every other year by more than 400 jobs on average per annum.

Indirectly, Safaricom's operations created and/or sustained an estimated **595 200 jobs** over the 2006/07 and 2015/16 period. This refers to the jobs created in those sectors that provide inputs to Safaricom as well as those jobs that resulted from the payment of salaries and wages to people who are directly employed at the various consecutive stages of beneficiation by Safaricom.

Figure 18: Source: KPMG analysis using Social Accounting Matrices for Kenya

[31] Please note that the employment figures shown in the table only include formal sector jobs created. Jobs created in the informal sector are not included and therefore underestimates the total number of jobs that could potentially be created in the economy.

[32] Average economically active labour force in Kenya over the period 2006 to 2015 was 15 933 900 (Source: *Economic Intelligence Unit*).

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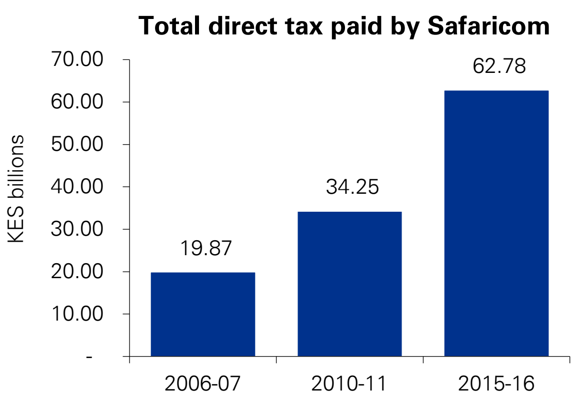
5.4.4 Safaricom's contribution to public finance

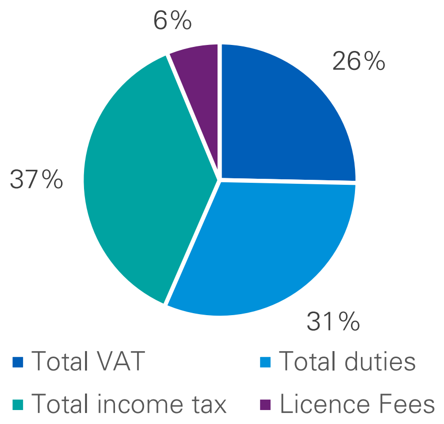
Safaricom's contribution to public finance represents a major part of the positive impact it makes within the societies in which it operate. Its contribution to public finances is both direct and indirect, through a wide range of taxes, as well as non-taxation revenue mechanisms.

Over the past 10 years, Safaricom has directly contributed on average about KES 38 billion per year towards government revenue in Kenya. This accounted for approximately 6% of total government revenue per annum[33]. Safaricom however makes a significant contribution through corporate taxes as well as through taxes collected on behalf of government, which include excise duties.

Safaricom's contribution to public finances, through tax, vat, duties and licence fees paid, has increased threefold over the past 10 years, from **KES 20 billion** in 2006/07 to over **KES 60 billion** in 2015/16**.** During this period they directly contirbuted on average close to **6% pa** towards Kenya's total tax revenue.

Safaricom continues to be a major contributor to the revenues of the Government and remitted more than **KES 62 billion** in 2015/16, with **incomes taxes and excise duties** accounting for majority of the taxes, accounting for close to close to **70%** of the total taxes paid out by Safaricom.





[33] Average annual government revenue of Kenya over period 2006 to 2015 = KES 658 billion (Source: *Economic Intelligence Unit).*

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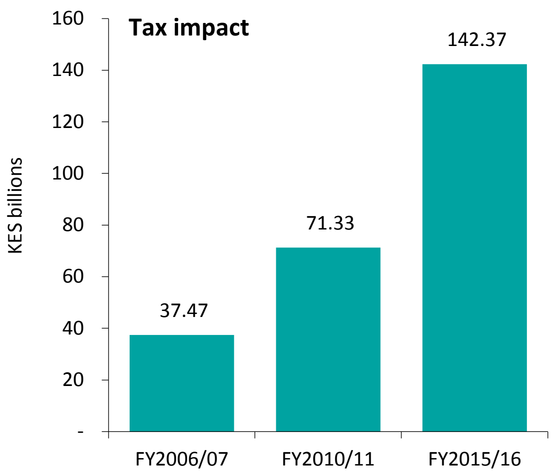
Safaricom contributes to tax revenue for the government and stimulates economic activity throughout the telecommunications value chain, incorporating a wide range of producers and suppliers, as well as retailers, distributors and the hospitality industry.

Therefore, because of Safaricom's operations in the Kenyan economy, the additional government revenue created as a result of upstream and downstream economic activity was in order of approximately **KES 83 billion** per annum over the past decade. This is both through the collection of direct and indirect tax revenue by Safaricom, as well as the broader fiscal impacts generated through the linkages the revenue generated by Safaricom has had with other economic sectors.

Since 2006/07, Safaricom total contribution to government revenue has increased substantially, from an estimated **KES 37.5 billion** in **2006/07 to KES 142 billion in 2015/16**, representing an average **growth** of more than**16% per annum**.

The total direct and indirect government revenue generated as a result of Safaricom's operations accounts for about **12%**, on average, of **total government revenue**[34] received in Kenya each year, during the period under review



The increased government revenue represents a **tax multiplier** of about **0.8** per annum, implying that for every KES 1 of revenue generated by Safaricom, government revenue increased by about **KES 0.80**

Figure 19: Source: KPMG analysis using Social Accounting Matrices for Kenya

5.4.5 Safaricom's contribution to poverty alleviation

Safaricom also contributed towards poverty alleviation through its impact on household income, more specifically where low-income households benefit from its operations. Households in Kenya benefit from Safaricom through the downward stream of income sources.

[34] Average annual government revenue of Kenya over period 2006 to 2015 = KES 658 billion (Source: *Economic Intelligence Unit).*

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Because of Safaricom's operations in Kenya over the past 10-years, the total estimated income received by households was estimated at **KES 1 779 billion,** of which an estimated **KES 100 billion** was received by lower income households. This is equivalent to an annual average total household income of about **KES 177 billion**, consistently contributing about 6% of the total (about **KES 10 million** per annum) of the total household impact to low income households.

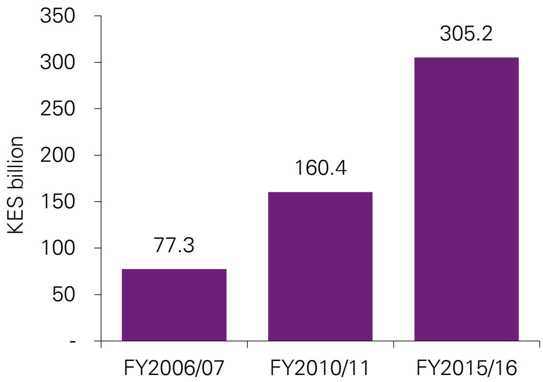

Figure 20: Source: Safaricom

5.4.6 Safaricom's contribution towards capital investment in the economy

Infrastructure development is key in maintaining a competitive advantage. Investing in new networks and technologies increases the likelihood of new customers having coverage and of customers moving to a network from a competitor for better service and cheaper prices.

Over the past decade, Safaricom invested close to **KES 245 billion** in modernising its networks as well as making it more efficient to provide the best customer experience through improving network quality. Between the 2006/07 and 2015/16 financial year Safaricom's capital investment into infrastructure development more than doubled, from KES 16.5 billion in 2006/07 to KES 33.3 billion in 2015/14.

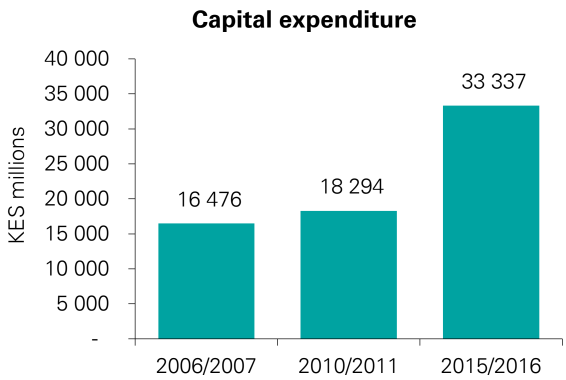

Figure 21: Source: Safaricom

By investing in its networks, Safaricom has reached a larger portion of the population coverage of its 2G and 3G networks through increased quality of service and has been able to reduce the cost of communicating.

Safaricom continues to look for alternative ways to give its customers the best network experience and high-speed data service. For example, in 2014/15, Safaricom launched Kenya's first 4G network in Nairobi and Mombasa, making them leaders in the industry by becoming the first network to deployment of advance 4G LTE technology. Through its investment spending, dedicated to building its own transmission infrastructure, Safaricom supports continued economic benefits to Kenya, such as economic growth, the creation of jobs and poverty alleviation.

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The additional economic activity created, due to the capital investment by Safaricom over the past decade, is in the following table.

Total GDP impact (KES billion)	Direct impact	Indirect impact	Induced impact	Total impact	Multiplier	Contribution to GDP
2006/07	4.39	1.71	4.33	10.44	0.63	0.56%
2010/11	8.66	2.57	9.12	20.35	0.80	0.64%
2015/16	11.44	4.49	11.49	27.42	0.82	0.46%
Total over 10 years	**78.98**	**28.39**	**80.26**	**187.63**	**0.75**	**0.51%**

Figure 22: Source: KPMG analysis using Social Accounting Matrices for Kenya.

Between 2006 and 2015, Kenya's GDP growth remained robust, averaging around 5.2%. This growth was supported by investment into infrastructure, lower energy costs and expansion in sectors such as, agriculture, manufacturing, finance and insurance, information, communications and technology and the wholesale and retail trade sector.

Safaricom contributed towards growth in the economy during this 10-year period by investing close to KES 245 billion in improving and upgrading telecommunication equipment in the country. The total additional economic activity created as a result of this investment was estimated at **KES 187.6 billion**, an average of about **KES 18.7 billion per annum**. This represents an average economic multiplier effect of **0.75**, implying that for every **KES 1** invested into infrastructure development by Safaricom an additional **KES 0.75** is added to the Kenyan economy.

The effects of the 2008 global financial crisis that saw GDP growth reduced to its lowest level of 0.2%, also affected Safaricom's investment into infrastructure development. During 2009/10, Safaricom reduced its capital investment spending by 27% from KES 23.8 million in 2008/09 to KES 17.8 million in 2009/10. Despite the reduced capital investment, they still managed to contribute positively to overall economic growth.

The direct value add, averaging an estimated KES 8 billion per annum over the 10-year period under review, accounts for **42%** of the total value add of KES 18.7 billion per annum over the period in question. This shows the importance of the so-called multiplier effect which the infrastructure development expenditure has had on the national economy, contributing **58%** of the remaining impact. The overall impact on value add resulting from the capital investment represents on average about **0.5%** of the Kenyan GDP per annum.[35]

[35] Average GDP of Kenya over the period 2006 to 2015 = KES 3 658 914 million (Source: The Economist Intelligence Unit).

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Over the past decade, Safaricom contributed positively towards promoting employment in the country, which, in turn, generated income for households, both directly and indirectly. The table below shows the impact on employment over 2006/07, 2010/11 and 2015/16.[36]

Number of jobs	Direct impact	Indirect impact	Induced impact	Total impact	Multiplier	Contribution to employment
2006/07	6 250	12 635	29 493	48 378	3	0.35%
2010/11	16 892	11 849	39 708	68 449	3	0.44%
2015/16	18 978	15 279	33 846	68 103	2	0.37%
Total average over 10 years	**13 329**	**12 684**	**33 440**	**59 454**	**2.5**	**0.37%**

Safaricom's total infrastructure investment in Kenya between 2006/07 and 2015/16, sustained an average of about **60 000 jobs** per annum in Kenya, representing an annual average of **0.4%**[37] of the total economically active labour force in Kenya over the 10-year period.

Over the 10 year period under consideration, an average of about **13 300 jobs** were **created directly** because of Safaricom's infrastructure investment. Since 2006/07, the number of direct jobs created has increased more than threefold, from just over 6 200 direct jobs in 2006/07 to close to 19 000 jobs in 2015/16.

Over the same period an average of approximately **46 000 jobs** were **indirectly created** in those sectors that provide inputs into the transmission infrastructure components, as well as through the payment of salaries and wages to people who were directly employed at the various stages of the infrastructure expansion by Safaricom.

The total estimated employment impact over the period in review represented an employment multiplier of about **2 jobs**, on average per year, for every **KES 1 million invested** into infrastructure development in the country. This is in line with industry expectation given the capital-intensive nature of infrastructure development projects in the telecommunications industry.

[36] [36] Please note that the employment figures shown in the table only include formal sector jobs created. Jobs created in the informal sector are not included and therefore underestimates the total number of jobs that could potentially be created in the economy.

[37] Average economically active labour force in Kenya over the period 2006 to 2015 was 15 933 900 (Source: *Economic Intelligence Unit*).

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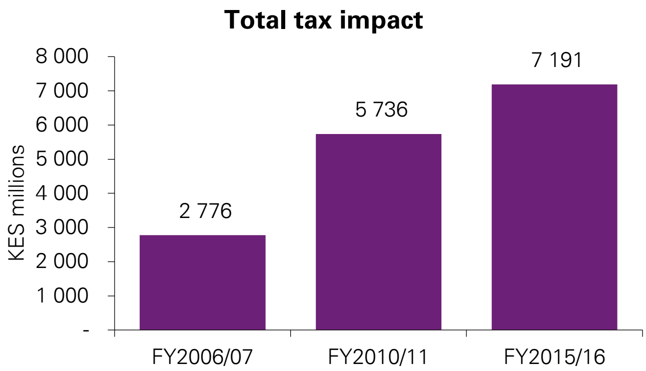
Due to the infrastructure investment by Safaricom, the total government revenue increased on average by an estimated **KES 5 billion** per annum over the past decade. This is both through the collection of direct and indirect tax revenue by Safaricom, as well as the broader fiscal impacts generated through the linkages the infrastructure investment has had with other economic sectors.



Since 2006/07, Safaricom contribution to government revenue has increased substantially, from and estimated KES 2.7 billion in 2006/07 to approximately KES 7.2 billion in 2015/16, representing an average growth of 16% per annum.

The increased government revenue represents a **tax multiplier** of about **0.2** per annum, implying that for every KES 1 invested in infrastructure development, government revenue increased by about **KES 0.20 cents**.

The total estimated income received by households during over the past decade was in order of **KES 114 billion**, an estimated **KES 6.1 billion** of which was received by lower income households. This is equivalent to an annual average total household income of about KES 11 billion, consistently contributing about 5% (about KES620 million per annum) of the total household impact to low income households.

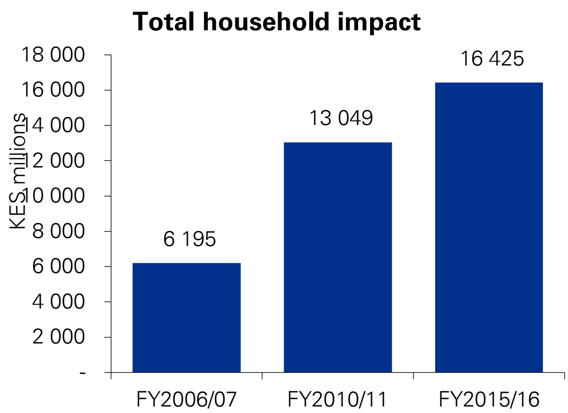


Figure 23: Source: KPMG analysis using Social Accounting Matrices for Kenya.

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5.5 Corruption

5.5.1 Introduction

Each year, a portion of the economic value generated by Safaricom is lost as a result of corruption that takes place in the Kenyan economy. It is important to note that this is not directly connected to the activities of Safaricom, but rather acknowledges the unfortunate reality that not all of this value is retained.

5.5.2 Our approach to calculation the economic value lost to corruption

Each year, Transparency International develops a Corruption Perceptions index which ranks countries from least corrupt to most corrupt. Each country is also given a score from 10 (Highly Clean) - 0 (Highly Corrupt). In later years this was adjusted to 1—(Highly Clean) to 0 (Highly Corrupt). For each of the years in question, this data value was combined with OECD and the Asian Development bank research on GDP loss due to corruption[38] to calculate the proportion of economic value generated which is eroded due to corruption.

5.5.3 Results

The table below shows the ranking and score of Kenya in each of the years, and well as the proportion of economic value that has been lost, and the corresponding value. It is evident that, overall, there is a downward trend, but that corruption is still a majpr issue for Kenya.

Figure 24: Source: Transparency International

	Rank	**Score**	**% of economic value lost**	**Value eroded due to corruption in Kenya (million)**
2006/7	142/163	21/10	10.9 %	KES 7 755.1
2007/8	150/179	2.1/10	10.9 %	KES 10 295.7
2008/9	147/180	2.1/10	10.6 %	KES 11 219
2009/10	146/180	2.2/10	10.9 %	KES 12 675
2010/11	154/178	2.1/10	10.6 %	KES 14 033.4
2011/12	154/182	2.2/10	8.9 %	KES 12 488.6
2012/13	139/174	27/100	8.9 %	KES 14 089.5
2013/14	123/177	27/100	9.5%	KES 18 567
2014/15	145/175	27/100	9.5%	KES 20 477.8
2015/16	139/168	25/100	9.5%	KES 23 728.4

Although Safaricom is unable to directly control corruption in Kenya, it is in the company's interest to ensure that the country improves its rank and score, allowing a greater proportion of economic value to be retained.

[38] http://www.transparency.org/whatwedo/publications/ , http://www.oecd.org/site/adboecdanti-corruptioninitiative/40838411.pdf

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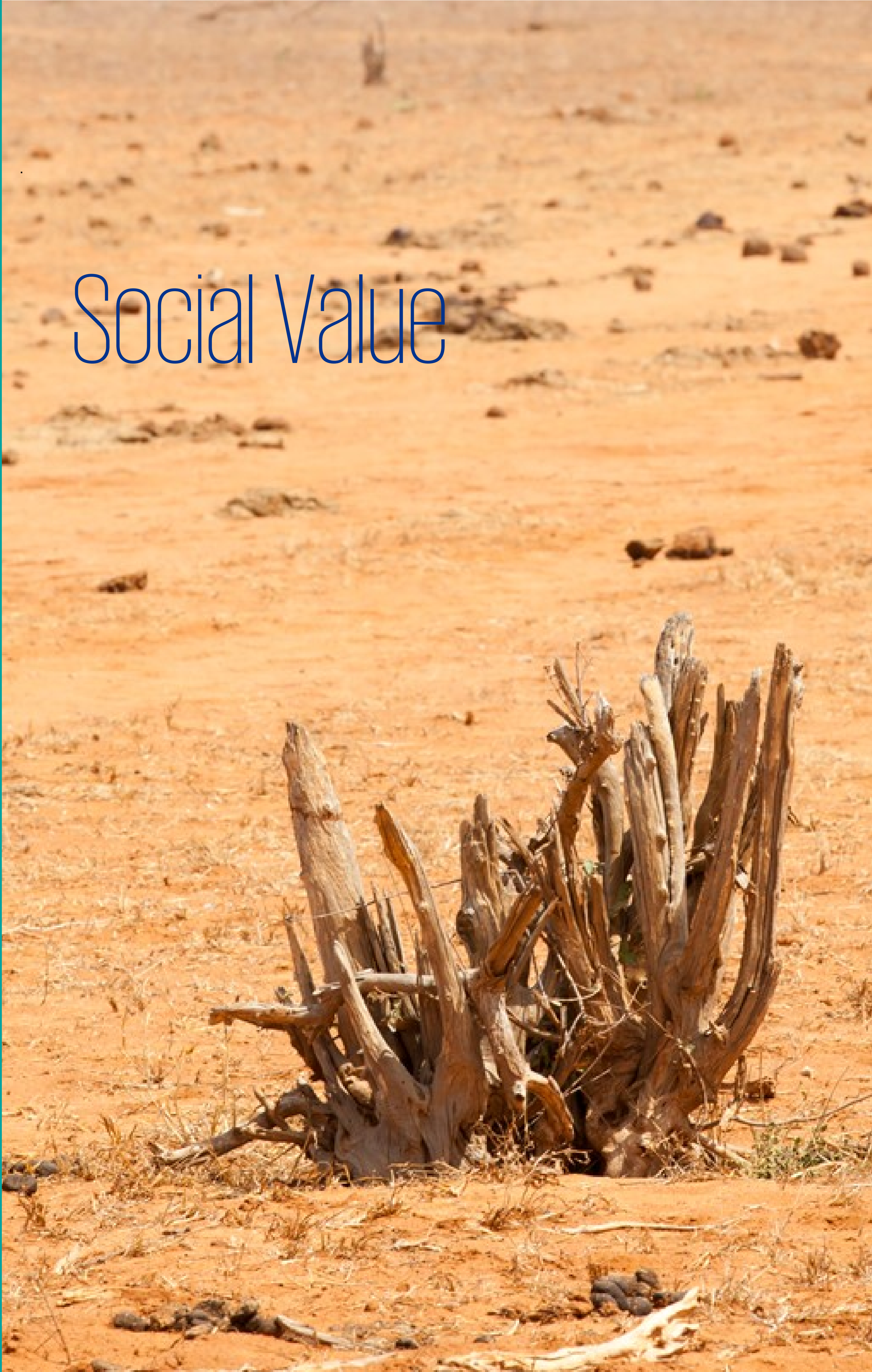
Social Value

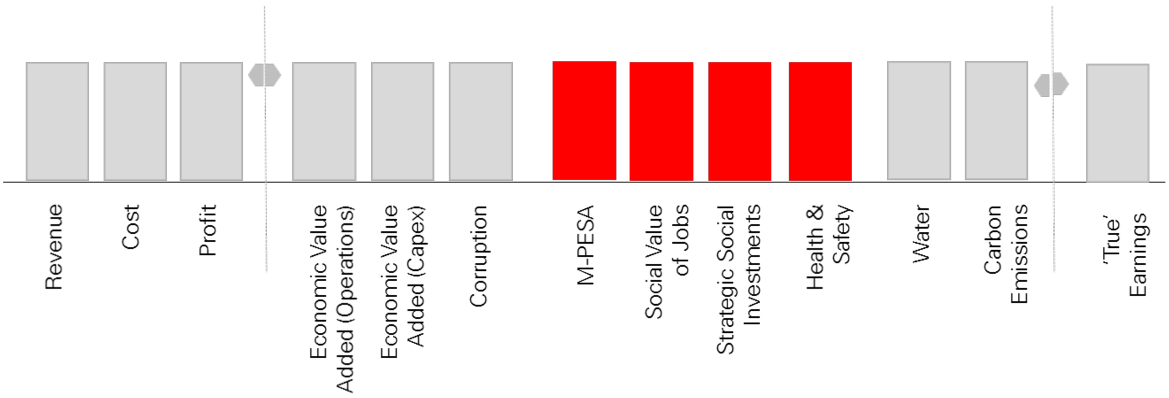


6 Social Value

6.1 Introduction

The innovation of Safaricom and the flexibility that the telecommunications sector allows has meant that the most significant social impact created by Safaricom is through its products which have evolved over time to meet the needs of Kenyans in the most effective way. The product into which a 'deep dive' study has been chosen is M-PESA.

Other positive externalities that have been taken into account are the Social Value of Jobs and the Strategic Social Investments carried out by the Safaricom and M-PESA Foundations. The negative externality of Health & Safety takes into account the fatalities and injuries that have taken place in Safaricom's operations within the period.



6.2 Our approach to calculating the social impact of M-PESA

In order to gain an understanding of the ways that the nature and magnitude of social impact created by Safaricom has changed over time, KPMG performed an evaluation of the social value of M-PESA using Social Return on Investment principles. SROI is an open-source, principles-based method used to account for social change created as a result of certain investments or activities.

Using this technique, the evaluation team arrived at a quantification of M-PESA's value in financial terms for each of the years in the 2006/7 – 2015/16 period. This represents the value created through a number of impacts for a range of stakeholders. The stages of our approach are outlined below:

1	**Impact mapping** involves assessing how cost or time inputs deliver specific outputs, which result in outcomes and impacts for stakeholders. The impact map, also known as the Theory of Change, forms the backbone of the analysis. Impact maps are constructed through literature reviews substantiated by consultations with stakeholders. In order to develop the Theory of Change, a workshop was held with a number of Safaricom employees working directly with M-PESA in 2015. In this session, the key stakeholders were identified and grouped together, the activities through which they interact with M-PESA identified, and the resulting positive and negative impacts of M-PESA on each stakeholder

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were identified and discussed. These outcomes and impacts, as well as the way in which they are likely to have changed across the ten year period were validated as far as possible through detailed desktop research. In the case of Safricom, an impact map was drawn up for three primary stakeholders, namely customers, agents and merchants. These impact maps were used as the basis for the analysis for all ten years of the M-PESA evaluation.

2

In light of the widespread use of M-PESA and the range of stakeholders within each stakeholder group, the **data-gathering** element of this evaluation was critical. This was carried out in 2015, and results for the full period were calculated by extrapolating this data in combination with extensive desktop research. In the primary research phase (2015), once Impact Maps were finalized, Focus Group Discussions were held with representatives of each stakeholder group. This served as an opportunity to validate the assumptions made in the Theory of Change and to give a clearer idea of areas in which more detailed information was required

Following this, one on one telephonic interviews were carried out with 1707 customers, 112 merchants and 201 agents. Due to the complexity and the magnitude of the data gathering process, TNS, a market research service provider with which Safaricom has an existing relationship, was engaged to carry out the Focus Group Discussions and interviews. The main goals of the data gathering process are as follows:

- Understand how people's lives would be different in the absence of M-PESA
- Collect data on indicators used to measure social outcomes and impact, including data on:
- Attribution (the proportion of the impact for which Safaricom can take credit, taking into account the contribution of other stakeholders)
- Dead-weight (change that would have taken place, even without the introduction or use of M-PESA)
- Displacement (what proportion of the positive impact may have resulted in a negative impact for another stakeholder or group of stakeholders)

This data was used as an input into the impact measurement phase

3

The **impact measurement** phase is an important part of the assessment and involves updating draft impact maps to align with evidence obtained during the data collection phase and that obtained from desktop research. Indicators were designed for each material outcome to allow for the measurement of change. This was followed by the development of financial proxies to assign a monetary value to material outcomes, using the principles of contingent valuation, revealed preference and opportunity cost analysis. In order to ensure that proxy values changed in line with the changing context, desktop research was used to validate any changes in the financial proxies to those that were identified in 2014/15.

Once a monetary value was obtained, it was adjusted for attribution, deadweight and displacement factors to ensure that the assessment only accounts for the value created by Safaricom. This process was informed

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	through the data collection phase and supported by professional judgement and input from several economists and SROI practitioners with significant development experience. One of the key assumptions regarding the adjustments includes: **Attribution of 75%:** When the data did not yield a specific attribution percentage, it was assumed that impacts were 75% attributable to Safaricom. This is due to the fact that although Safaricom created and manages the platform, its existence and continuation would be impossible without the contribution of others, specifically banks, which manage the actual money, exchanged over M-PESA, and the Kenyan government, which has supported M-PESA from a regulatory point of view. Although many of these adjustments would have remained constant throughout the period (as they are fundamental in the structure and nature of the M-PESA product), those that are likely to have changed in line with the changing context in which the product has functioned and expanded have been adjusted accordingly.
4	During this stage, the calculation was performed taking into account the number of stakeholders that have experienced a specific impact, the value of that impact, as well as the adjustments from the impact analysis phase. This was done for each individual year over which the analysis is taking place, taking into account the various changes in data and assumptions for each year.
5	A sensitivity analysis was undertaken to assess the effect of changing key assumptions on the results of the final amount for each year. This ensured that any inaccuracies in conclusions were minimized and that data and assumptions which had a material impact on the total value for the year in question were interrogated and validated appropriately.

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6.3 **Summary**

Of all of Safaricom's products, M-PESA is arguably the one that has had the greatest impact on Kenyan society. From a relatively simple solution, launched in 2007, which allowed individuals to transfer cash to one another, M-PESA has grown into a sophisticated system with a number of functions catering to a wide range of needs and services, and accounting for **98% of all mobile money transactions in Kenya**. In 2013, it was calculated that **43% of the Kenyan GDP flowed through M-PESA.**[39]

Its tenth year of existence marks a particularly interesting juncture to evaluate the impact it has made since inception. This is largely due to significant evolution of the service and product offering which has constantly sought to meet the needs of Kenyans in an innovative manner. Not only has the product itself evolved, but it's relevance to Safaricom has increased dramatically as a result of revenue from M-PESA amounting to **4.2%** of total revenue in 2008/9 to **21.2%** of total revenue in 2015/16.

The social value created by M-PESA has also grown significantly over the period. Although the revenue generated by Safaricom as a result of the M-PESA product has grown as well, this growth has been more incremental than the exponential growth of the social value created

A key reason for Safricom's ability to keep internalising only a small portion of social value created (through M-PESA income generated) is the innovation that has taken place, and the way in which M-PESA has continued to dominate the mobile money transfer space in Kenya.

For conventional products such as voice and data, the market is more established and customers have a wider range of options when deciding which service provider to use. In the case of voice and data, a significant portion of the value created by Safaricom could have been created by another provider of the same products, which would decrease the social value generated by Safaricom specifically, as well as narrowing the gap between social value generated and the revenue received.

The three stakeholder groups that were analysed for the purpose of this exercise were **customers**, **agents** and **merchants**.

[39] Runde, D (2015) Forbes, M-PESA and the rise of the global money market

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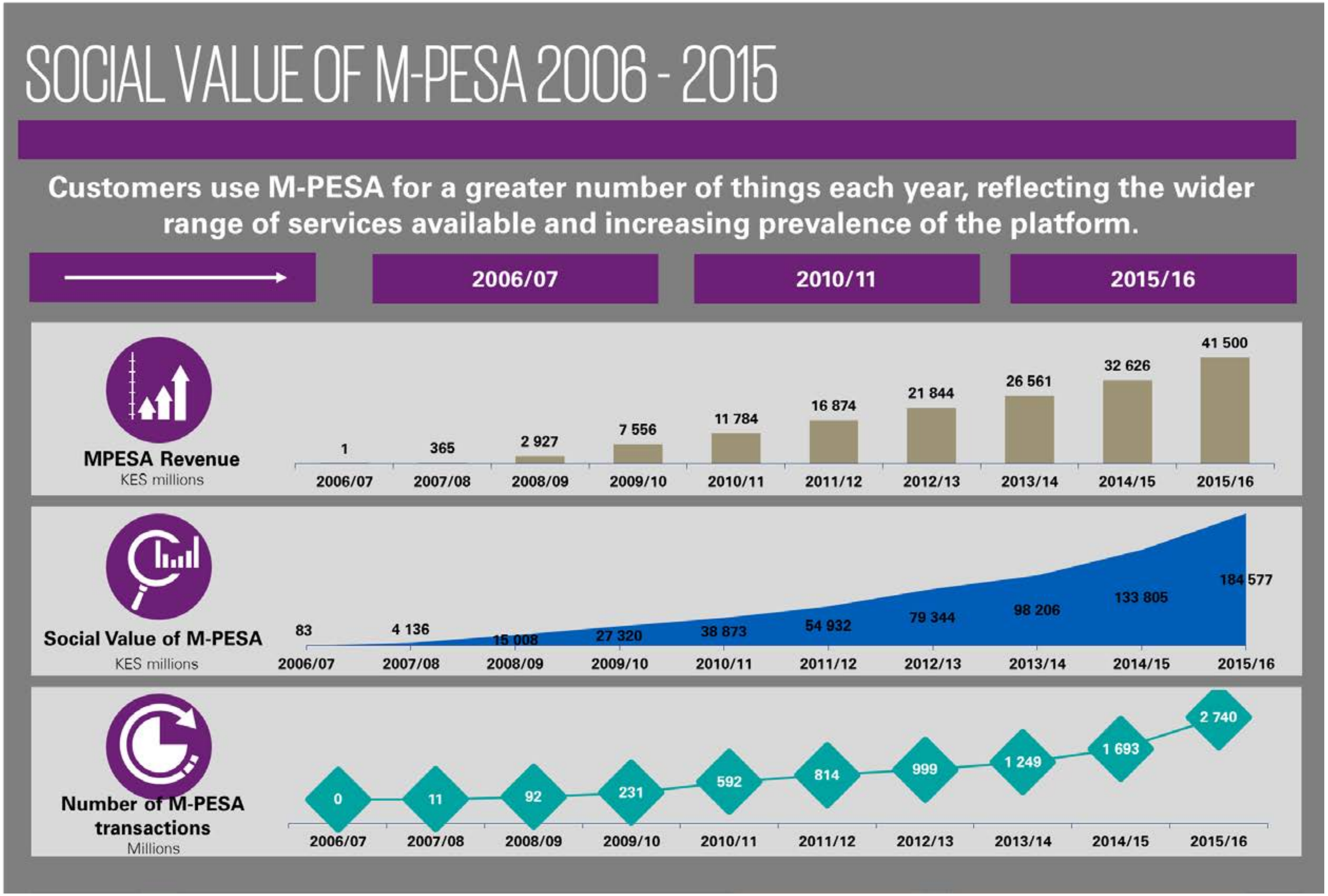

Figure 25: Source: Safaricom and KPMG analysis using SROI principles (numbers rounded off to nearest million)

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6.4 The Social Value created by M-PESA

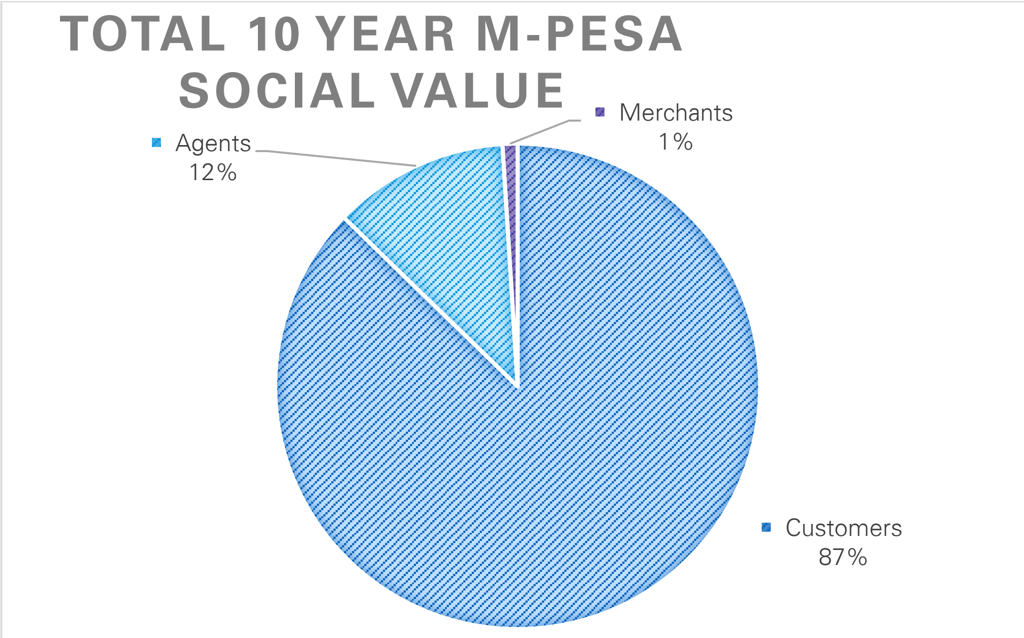

Figure 26: Source: KPMG analysis using SROI principles

Since 2007, customers have received by far the largest benefit of the M-PESA product. The main drivers in the creation of this value are the dramatic growth in customer numbers, as well as the growing range of services to which customers have access, meaning that the growth in value experienced is exponential rather than incremental, which stands in contrast to the more steady growth experienced by the Agent and Merchant stakeholder groups as illustrated below.

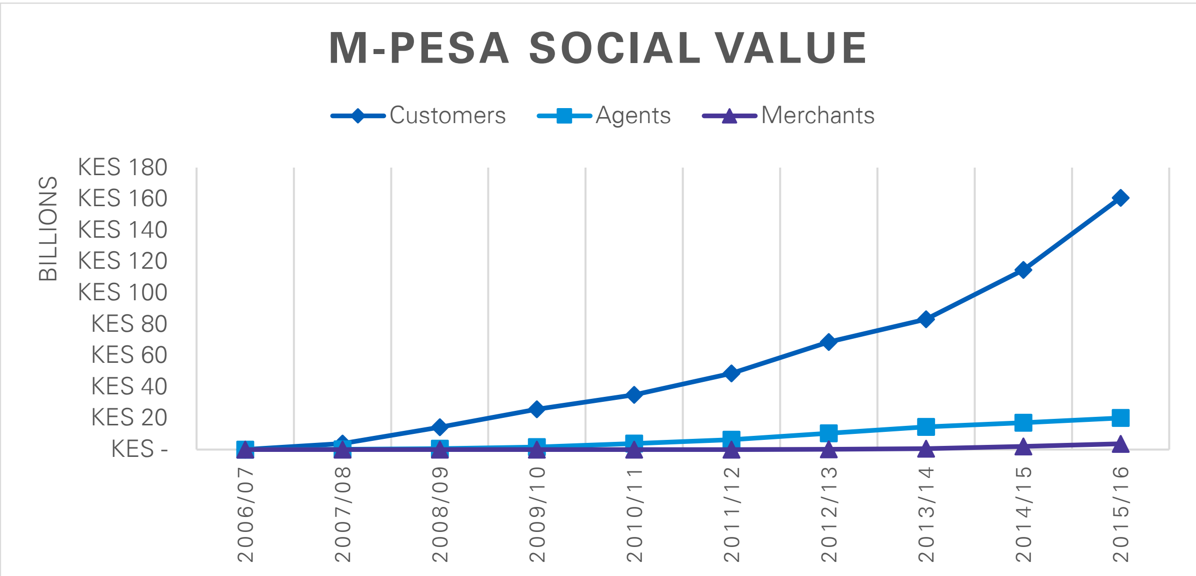

Figure 27: Source: KPMG analysis using SROI principles

Value derived for agents and merchants has been less. In the case of merchants, Lipa Na M-PESA was only launched in 2008/9, so these stakeholders would have received no value before this time. Although the value for each agent and their respective employees is large, the fact that there are significantly less agents than customer means that the total value for this stakeholder group is smaller.

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6.4.1 Customers

The number of customers has grown steadily from **19 671 in 2006/7** to **16.6 million in 2015/16.** This is by far the largest stakeholder group, and the one that has access to the greatest number of services.

It is interesting to note that the number of transactions made through M-PESA has grown faster than the number of customers. This highlights that fact that although customer numbers may have grown steadily, customers use M-PESA for a greater number of things each year, reflecting the wider range of services available and increasing prevalence of the platform.

On average, each customer has experienced impact amounting **Kes 5 632** each year. It is notable that this has tripled over the period, from **Kes 3 202 in 2006/7** to **Kes 9 679 in 2015/16**. Once again, this is a reflection of the growing value of M-PESA for each customer as a result of innovation that has allowed people to use the platform for a growing range of services, as is illustrated by the steady growth of customers against the more exaggerated growth of value.

Receiving money through P2P transfers is the way in which most value is created for stakeholders. This is followed by the benefits experienced from receiving money. The value of impact carrying out other activities using M-PESA makes up the remainder of the total value amount.

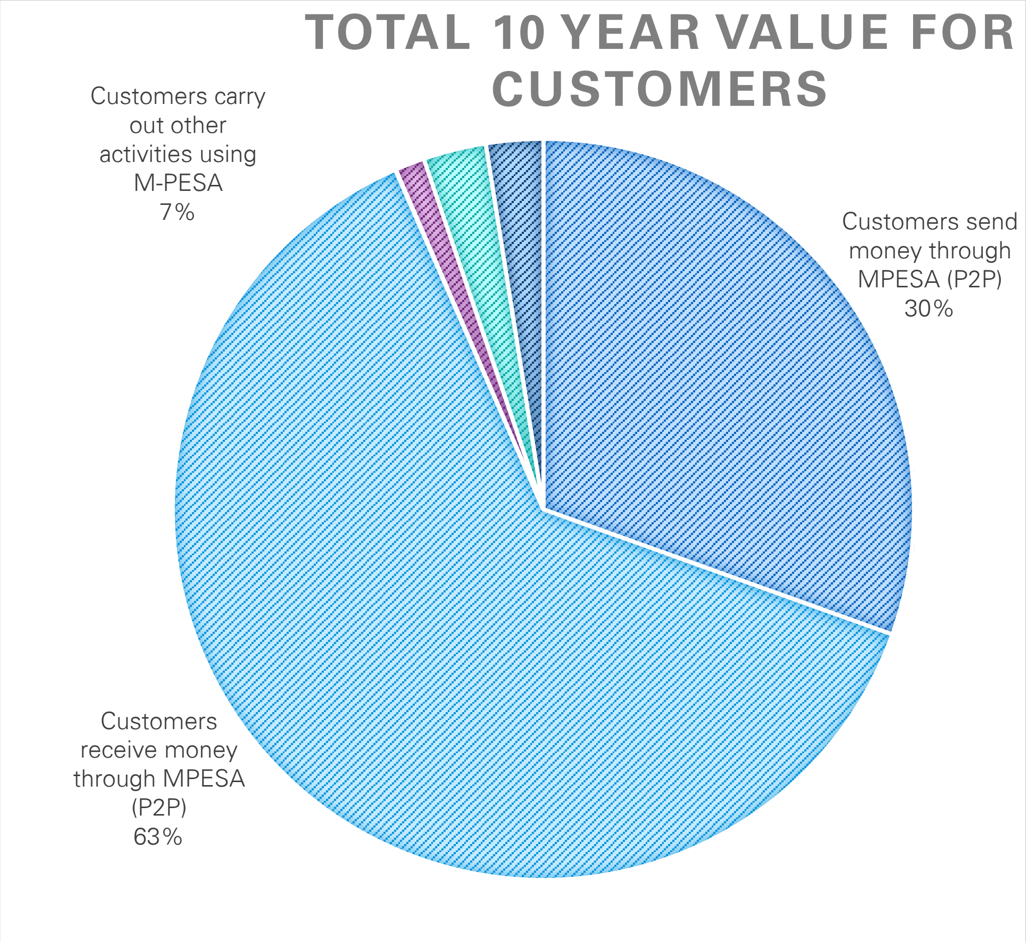

Figure 28: Source: KPMG analysis using SROI principles

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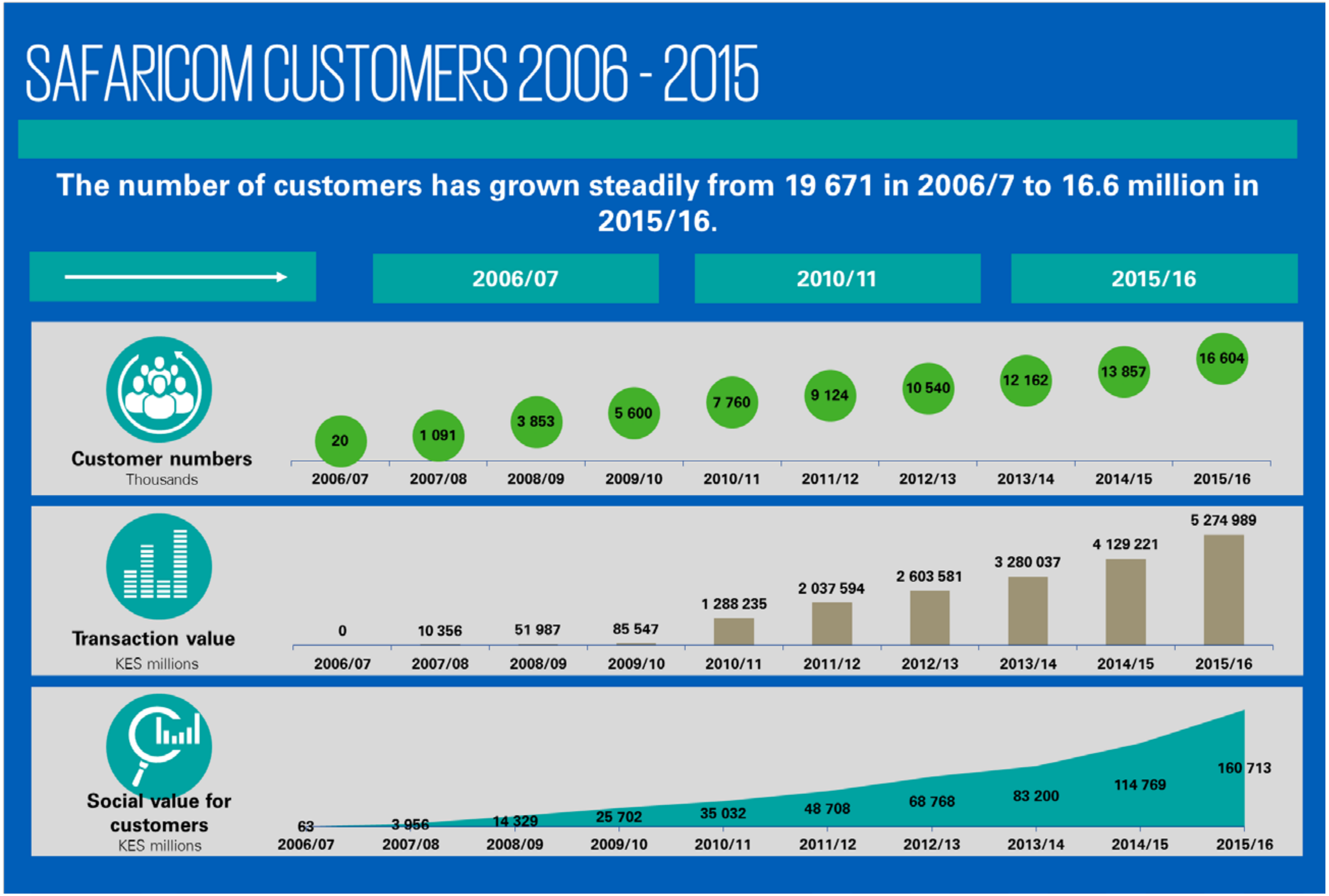

Figure 29: Source: KPMG analysis using SROI principles

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6.4.1.1 Customers receiving money through M-PESA

The impacts associated with receiving money include time and cost saving, increased safety and wellbeing as a result of not needing to carry cash and greater possession of and control over money, as is illustrated in the Theory of Change below. The only negative impact, which was experienced by a very small number of stakeholders, was a reduction in wellbeing as a result of spending less time with family members as they no longer need to receive financial contributions in person, due to this being possible through M-PESA.

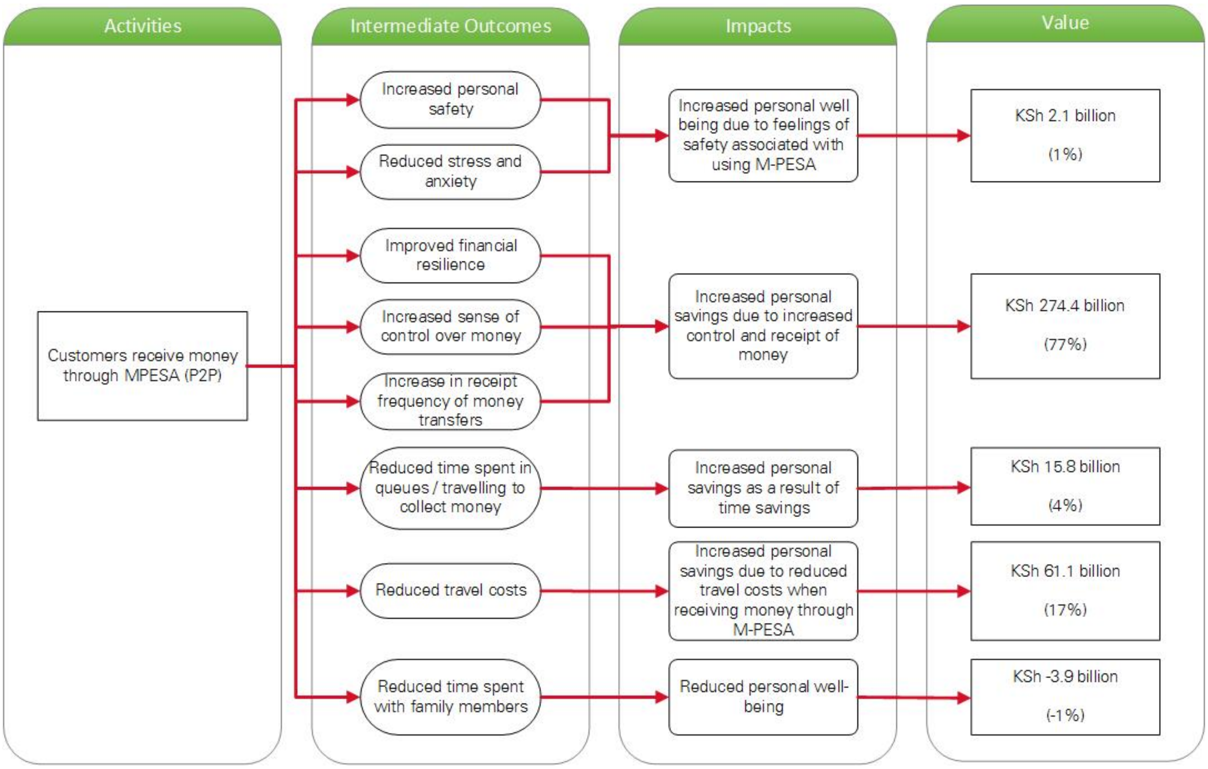

Figure 30: Theory of Change for customers receiving Money. Source: Safaricom and KPMG analysis using SROI principles

By far the greatest impact is felt by those customers who would not ordinarily have been able to access finance readily, nor have any agency in how this money was used or controlled. This applies especially to rural people or unemployed people who would otherwise be locked out of meaningful economic activity.

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6.4.1.2 Customers sending money through M-PESA

The next greatest impact for customers was felt as a result of sending money through M-PESA, as is evident from the Theory of Change below, there are a number of impacts associated with this activity.

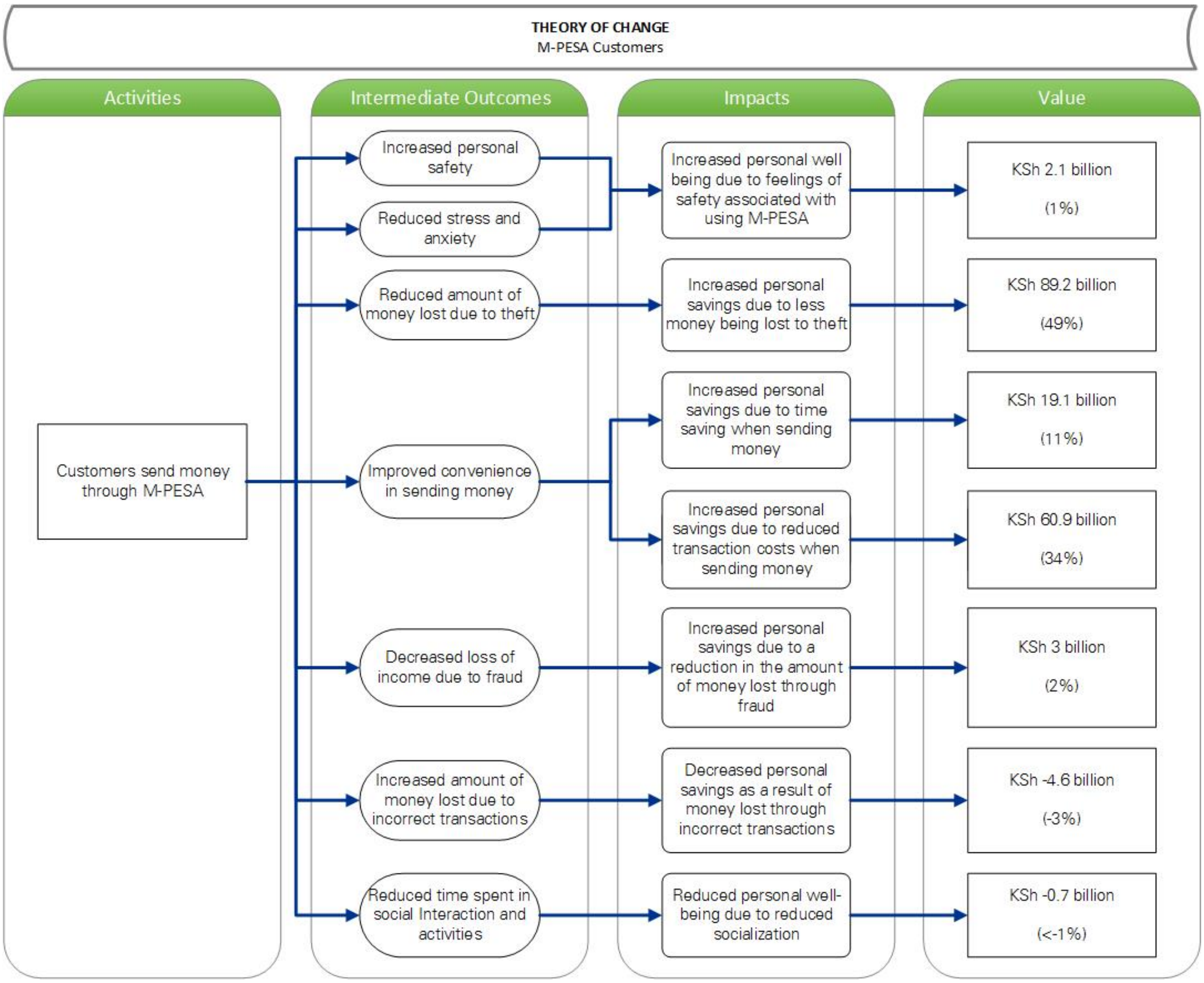

Figure 31: Theory of Change for customers sending Money. Source: Safaricom and KPMG analysis using SROI principles

Although fraud and theft are an ongoing concern at Safaricom in that thieves are finding increasingly innovative ways of defrauding people who send and receive money through M-PESA, people still perceive their money to be much safer in the form of M-PESA float than cash, or even bank cards. This accounts for the greatest portion of the impact felt by customers sending money through M-PESA.

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6.4.1.3 Customers carry out other activities using M-PESA

Aside from sending and receiving money, there are a number of other activities that M-PESA makes possible for its customers, the number of which has grown significantly since the inception of the platform.

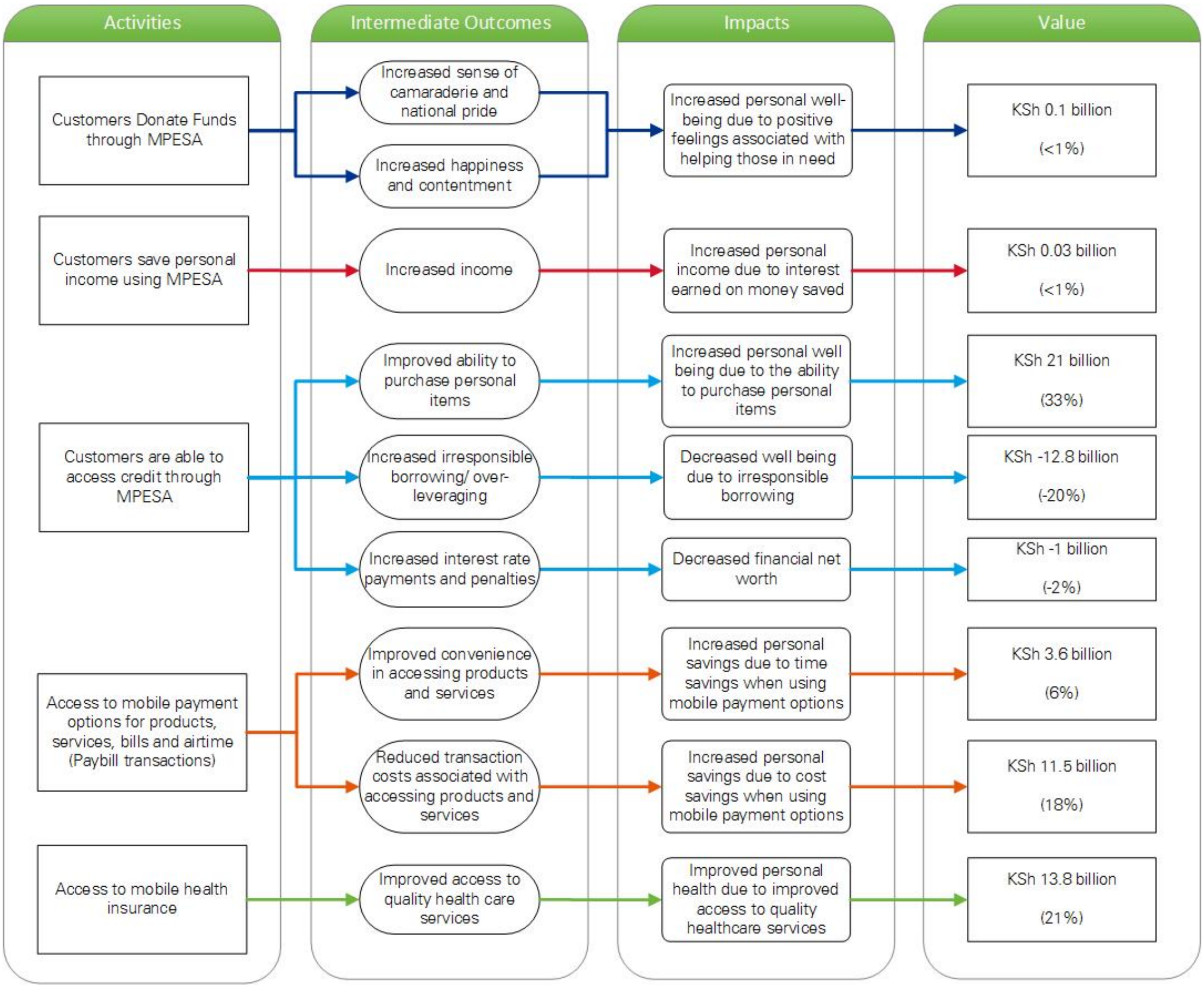

Figure 32: Theory of Change for carrying out other activities using M-PESA. Source: Safaricom and KPMG analysis using SROI principles

The activity that generated the most value is that created by M-SHWARI which allows people to access goods and servised they would not ordinarlly have been able to afford. This does have a small downside which is experienced by those who go into debt that they are unable to repay, and those who are blacklisted as a result.

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6.4.1 Agents

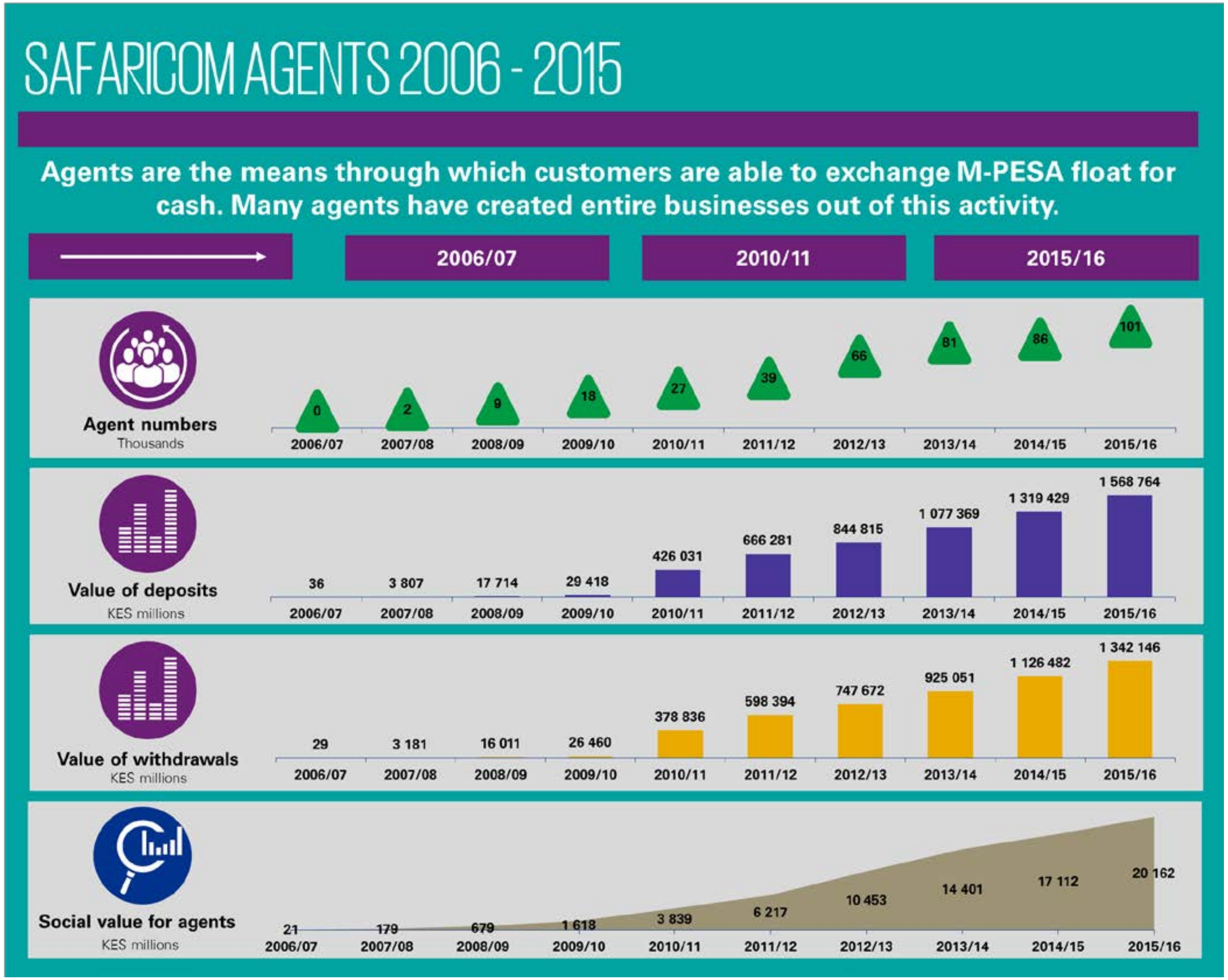

Figure 33: Source: Safaricom and KPMG analysis using SROI principles

Agents are integral stakeholders in the M-PESA environment as they are the mechanism through which cash is transferred in to M-PESA float, and visa versa. On the whole, the impact experienced each year has grown in line with the growth in the number of stakeholders. The exception to this is the period between 2011/12 to 2013/14 during which the increase in Agent numbers was sharper than the increase in value created.

On average, each Agent (and their associated businesses and employees) have experienced value amounting to **Kes 134 89,** meaning that when analysed individually, rather than in their stakeholder group, agents experience the greatest impact as a result of M-PESA.

It is interesting to note the close correlation between the values and numbers of both deposits and withdrawals. It is also notable that the number of withdrawals is greater, while the value of withdrawals is smaller, showing that people tend to deposit large amounts less frequently, and draw their money in smaller sums on a more frequent basis.

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In varying degrees, Agents employ people to assist in the running of their businesses. Throughout the years it is, in fact, the employee stakeholder group that has experienced the greatest impact due to the jobs created and associated personal income earned.

The Agents themselves experience the smallest portion of the impact. The impact associated with the Agents (aside from the financial impact of earning income) is the sense of safety experienced as a result of the training and safety infrastructure received by Safaricom.

The Agent business itself also receives significant support from Safaricom which, alongside the business skills of the Agent and their team, contribute towards the impact of business profit

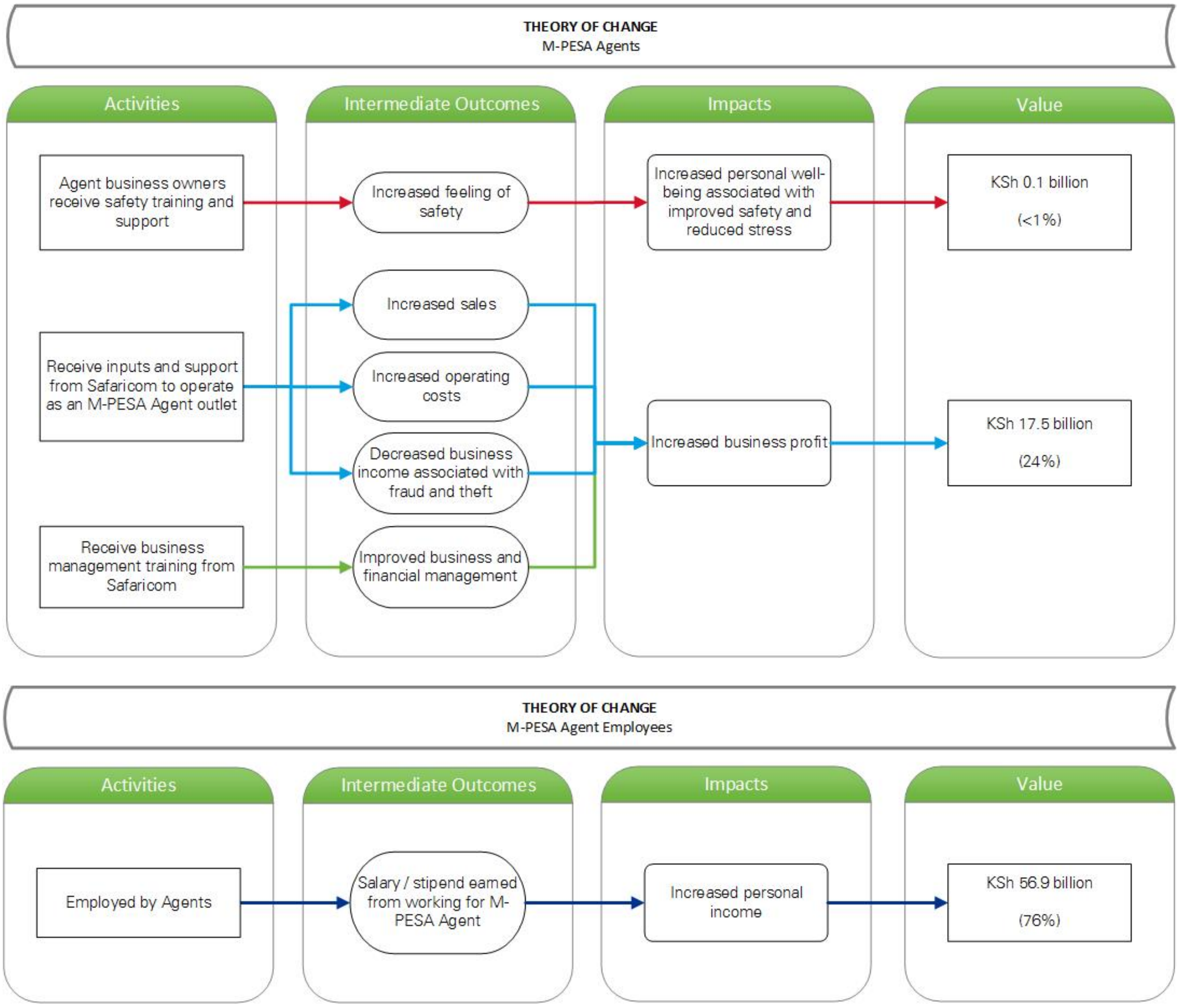

Figure 34: Theory of Change for Agents, businesses and employees. Source: Safaricom and KPMG analysis using SROI principles

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6.4.2 Merchants

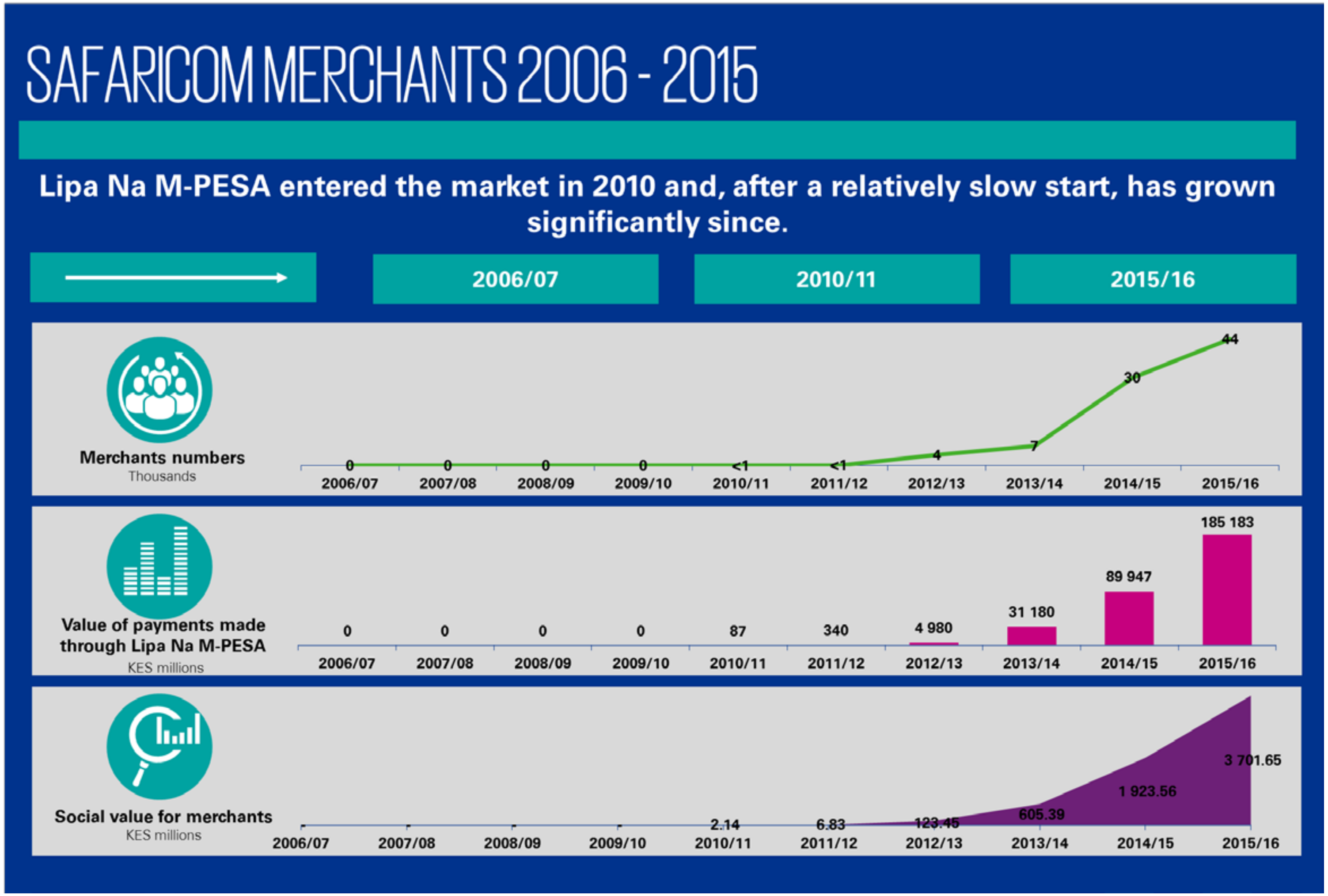

Figure 35: Theory of Change for Merchants, businesses and employees. Source: Safaricom and KPMG analysis using SROI principles

Merchants are the most recent addition to the Safaricom stakeholder group, with Lipa Na M-PESA having begun in 2010. Both the number of Merchants and the impact experienced by that group has grown sharply since. The growth in numbers and impact has, for the most part, correlated.
Merchants have interacted with M-PESA predominantly through Lipa Na M-PESA which allows them to sell goods and services through M-PESA, negating the need to use cash. Lipa Na M-PESA entered the market in 2010 and, after a relatively slow start, has grown significantly since.

Although the value paid to Merchants using Lipa N M-PESA is substantially larger than the number of transactions, it is interesting to note that their growth is correlated, indicating that the average payment size has not changed dramatically since the inception of Lipa Na M-PESA..

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This is the group for which the total impact is smallest. There are a number of reasons for this, including the fact that this is the smallest stakeholder group, and the one which has been in existence for the shortest time. In contrast to Agent businesses, Lipa Na M-PESA (and, in turn, Safaricom), did not create many jobs. In some cases, job numbers have decreased as a result of the increased efficiencies created by Lipa Na M-PESA. However, in cases where jobs have been created or maintained as a result of Lipa Na M-PESA, this has been captured in the impact of increased income.

Another factor contributing to the relatively low value is the fact that there are a number of other factors which contribute to the success of a business, of which Lipa Na M-PESA is only one. For this reason, the business impact is adjusted to reflect a lower level of attribution to Safaricom.

Finally, when interviewed, a number of Merchants acknowledged that their using Lipa N M-PESA may have had a negative impact on the stores and suppliers in their area as a result of those with cashless payment options being more attractive and convenient, leaving those without Lipa Na M-PESA with a smaller number of clients. The way in which Merchant owners and their businesses experience impact is illustrated in the Theory of Change below.

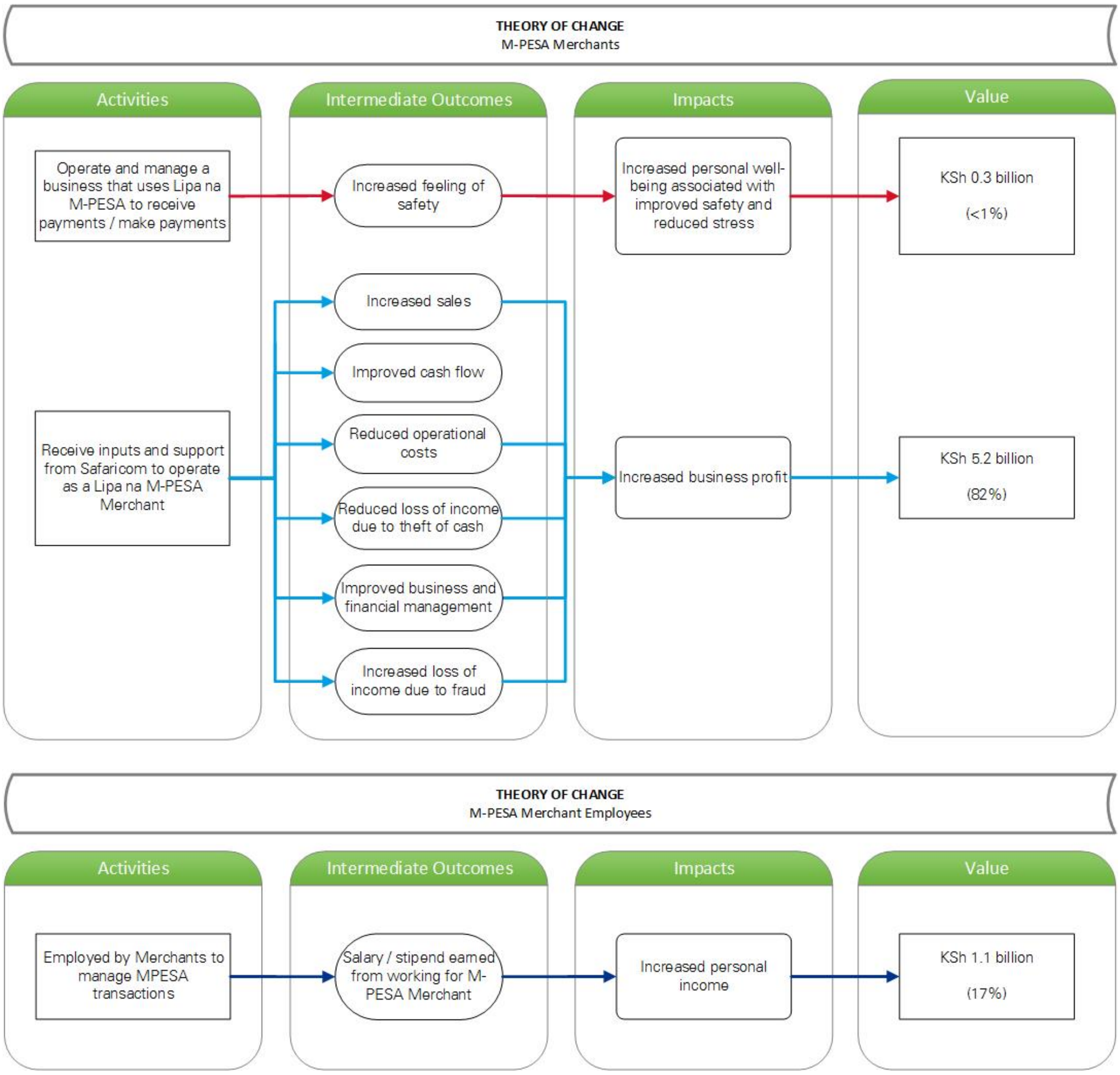

Figure 36: Theory of Change for Merchants, businesses and employees. Source: Safaricom and KPMG analysis using SROI principles

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6.5 **The Social Value of Jobs**

6.5.1 Introduction

An element that was not accounted for in the 2014/15 'True Earnings' exercise was that of the Social Value of Jobs. Essentially what this captures is the value that people who are employed get from their jobs over and above what they get paid. This accounts for the sense of wellbeing, purpose, collegiality and ongoing learning that takes place while working.

6.5.2 Our approach to calculating the Social Value of Jobs

The number of direct and indirect jobs that fed into the calculation were taken from the **Section 4** of this report. The value was estimated using previous work carried out by KPMG which sought to understand how people at different levels in different industries valued their jobs. As is the case with the M-PESA valuation, this exercise was carried out using Social Return on Investment principles.

6.5.3 Results

The total Social Value of Jobs for each year is displayed below. The most significant reason for fluctuation is the various capital investments that have taken place at specific intervals which have contributed towards the support of associated jobs in those years.

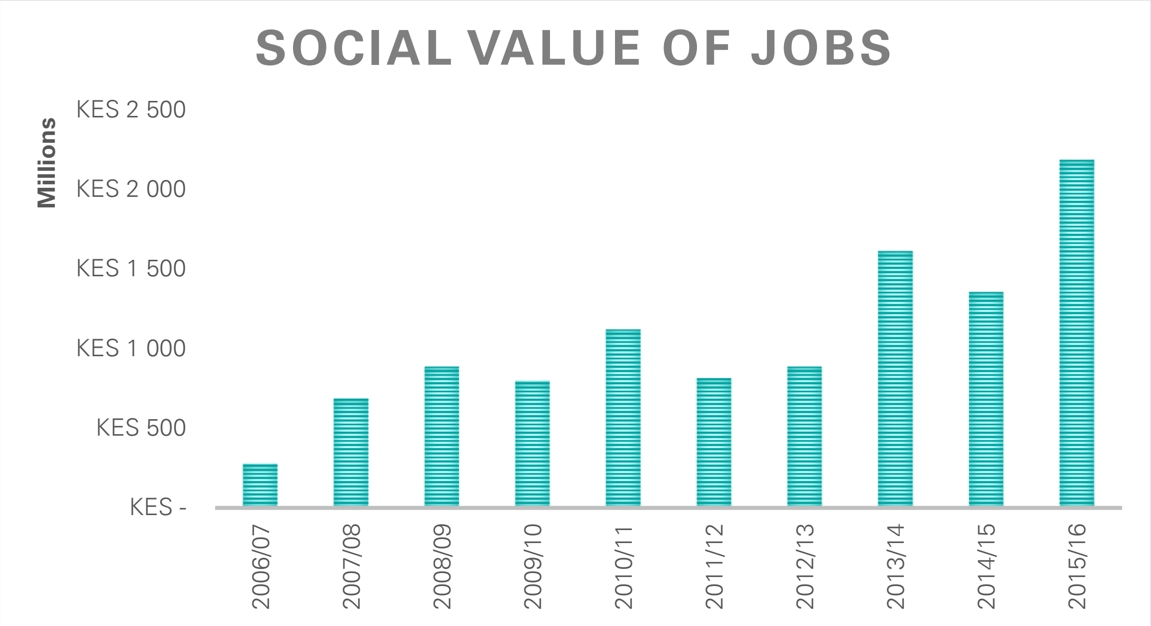

Figure 37: Source: KPMG analysis using Social Accounting Matrices for Kenya and SROI principles

The operations of the company have grown steadily over the last 10 years. 2014/15 saw a dip in indirect impact and a rise in direct impact which has normalised in the 2015/16 financial year. This was related to a lower proportion of indirect jobs associated with Opex than usual, while the direct jobs (even though small in number) continued to grow in a stable manner. In the case of the company's operations, the difference between direct and indirect jobs is much more pronounced than the difference between direct and indirect jobs created through capital expenditure.

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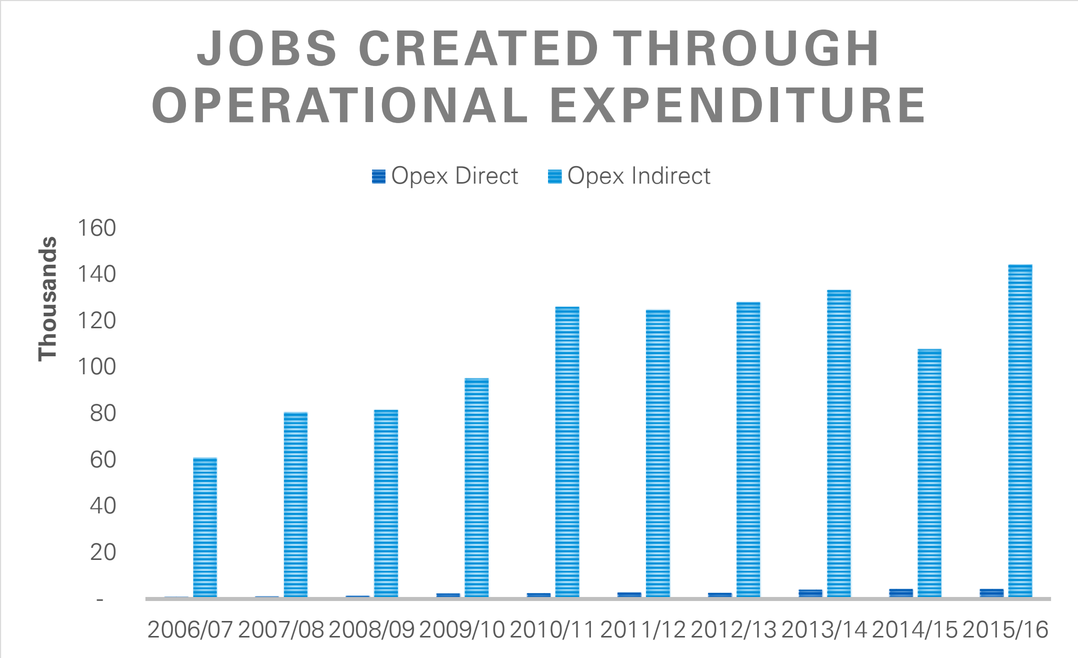

Figure 38: Source: KPMG analysis using Social Accounting Matrices for Kenya and SROI principles

The job impact created through Capital Expenditure has fluctuated in line with the varying degrees of capital investments that has taken place over the period.

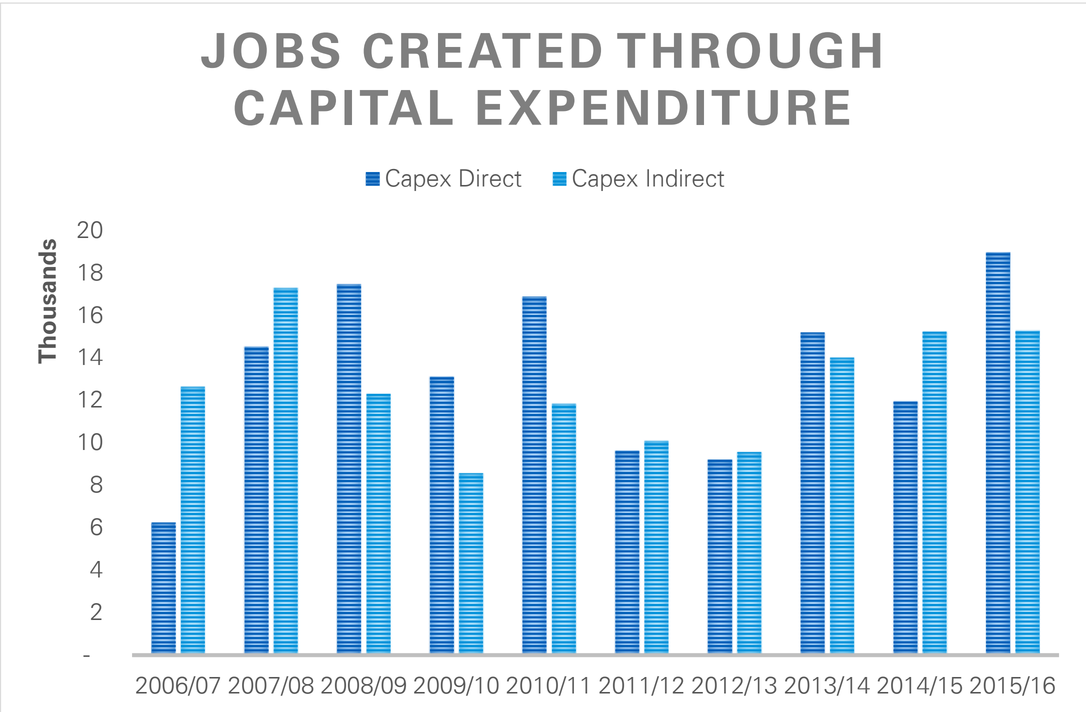

Figure 39: Source: KPMG analysis using Social Accounting Matrices for Kenya and SROI principles

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6.6 **Strategic Social Investments**

6.6.1 Introduction

Through the Safaricom and M-PESA Foundations, the company has made a significant contribution towards a range of socio-economic development initiatives in the past ten years. Due to the types of investments made, many of these will have generated value for society that is greater than that of the financial contribution, and this value has been accounted for in the 'Strategic Social Investments' value in the 'True Earnings' bridge.

Although these investments have, undoubtedly, created positive impact, this is much less than the value created through M-PESA, highlighting the power of products and services in creating positive change, largely as a result of their being integrated into core business.

6.6.2 Our approach to calculating the social value of Safaricom's Strategic Social Investments

Once again, Social Return on Investment principles have been used to calculate the social value created by the M-PESA Foundation and Safaricom Foundation initiatives. For the focus areas in which investments took place, KPMG applied a multiplier based on pervious analyses of similar projects.

6.6.3 Results

Until 2012, investments remained at a reasonably consistent level. This year marked the introduction of the M-PESA Foundation which has made a significant contribution since. The sharp rise in 2015/16 is largely due to the launch of the M-PESA Foundation Academy. Education is one of the interventions for which the Social Return on Investment is highest, amplifying the value created by this investment.

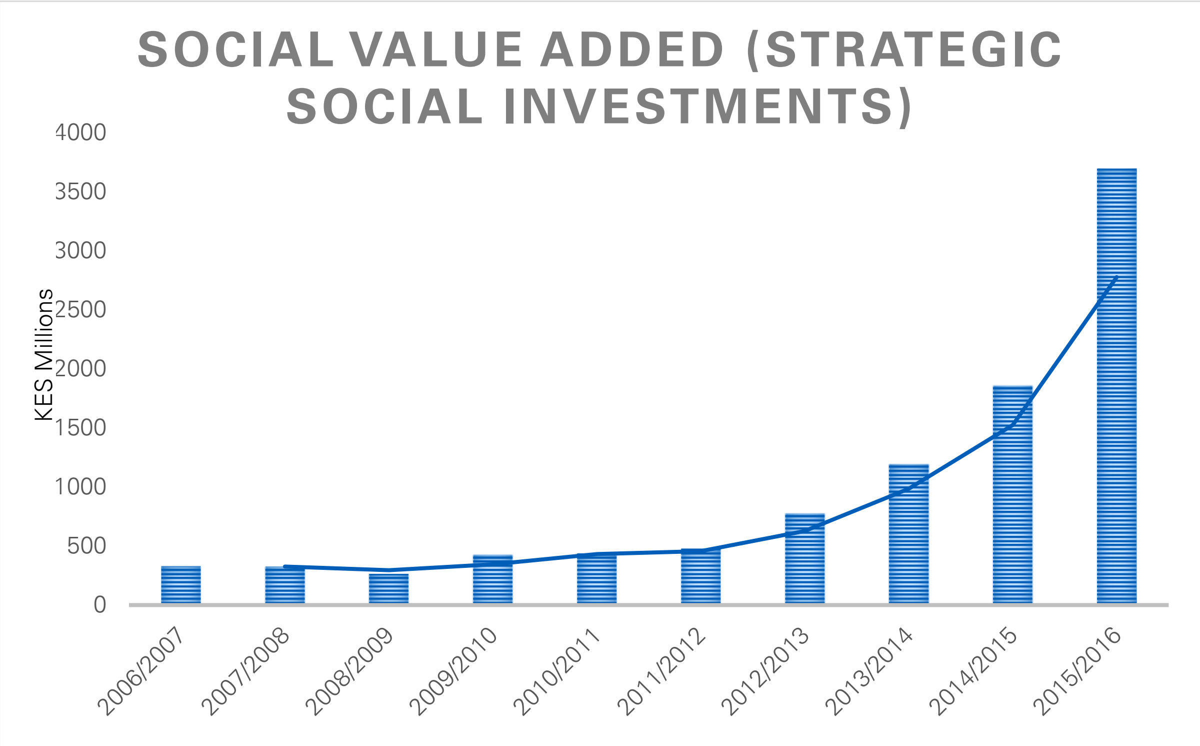

Figure 40: Source: Safaricom and KPMG analysis using SROI principles

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6.7 **Health & Safety**

6.7.1 Introduction

The negative externality of Heath & Safety accounts for the unfortunate reality that injuries and fatalities have taken place in connection with Safaricom's operations during the period.

6.7.2 Our approach to calculating the value eroded as a result of Health & Safety incidents

For each fatality, the estimated value of a statistical life, adjusted for Kenyan GDP for the year in question was applied[40]. For the injuries, a ratio of the statistical life value was assumed. For the years in which no data was available, no value was calculated for inclusion into the 'True Earnings' bridge.

6.7.3 Results

The greatest number of Health & Safety incidents took place in 2012/13, which is reflected in the most significant loss of social value for the period.

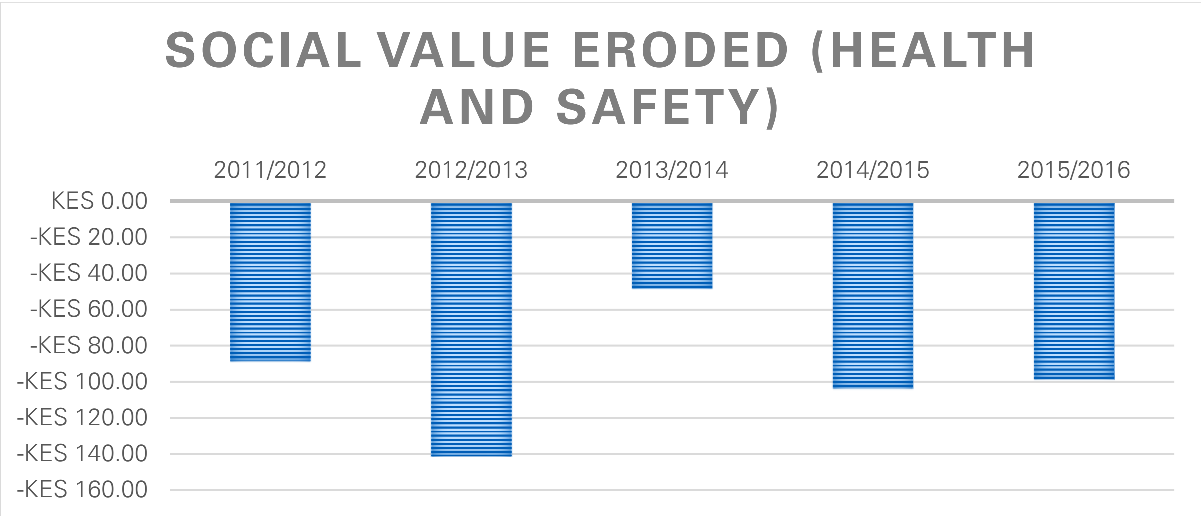

Figure 41: Source: Safaricom and KPMG analysis using appropriate proxies

[40] 2013, TruCost PLC. Natural Capital at Risk: The Top 100 externalities of business

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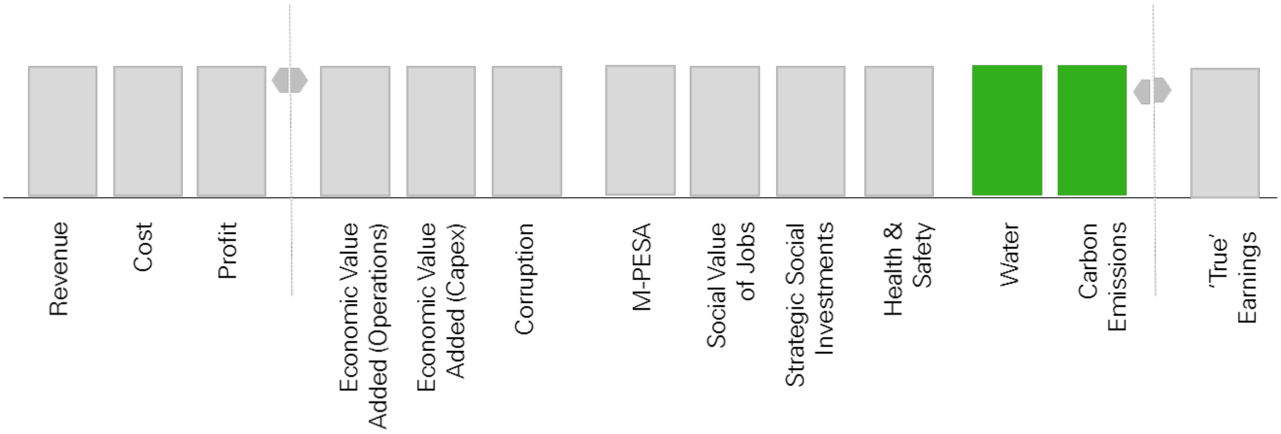
Environmental Value

7 Environmental Value

7.1 Introduction

The nature of companies in the telecommunications industry is such that their environmental impact is relatively small, certainly in comparison with some of their more resource intensive counterparts. This is the case for Safaricom as well and means that environmental externalities are consistently the least significant in terms of their contribution towards the 'True Earnings' of the company.



7.2 Our approach to calculating Safaricom's material environmental externalities

Environmental data is that for which the existing dataset at Safaricom was least complete. This required the most recent, most accurate data to be used to carry out a trend analysis for the remaining years in conjunction with the Safaricom team on whom we relied for contextual information that may have affected the data.

Once these numbers hadbeen finalised, the appropriate proxies were applied to these, taking into account changes in inflation over the period in question.

Carbon emissions	30 USD per tonne CO2-e	Social cost of carbon of USD 25 with a baseline year of 2007, 2013 Environmental Protection Agency report, adjusted for inflation and price in each year in the period.[41]
Water consumption	5.8 USD per m3	Water externality price is based upon scarcity level. The scarcity price is derived from a 2013 Trucost study on behalf of the TEEB Business Coalition, adjusted for inflation and current price. [42]

[41] 2013. With participation by: Council of Economic Advisers, Council on Environmental Quality, Department of Agriculture, Department of Commerce, Department of Energy, Department of Transportation, Environmental Protection Agency, National Economic Council, Office of Management and Budget, Office of Science and Technology Policy, Department of the Treasure. Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866

[42] 2013, TruCost PLC. Natural Capital at Risk: The Top 100 externalities of business.

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7.3 Carbon Emissions and Water Consumption

The value eroded through Carbon Emissions and water consumption is illustrated below:

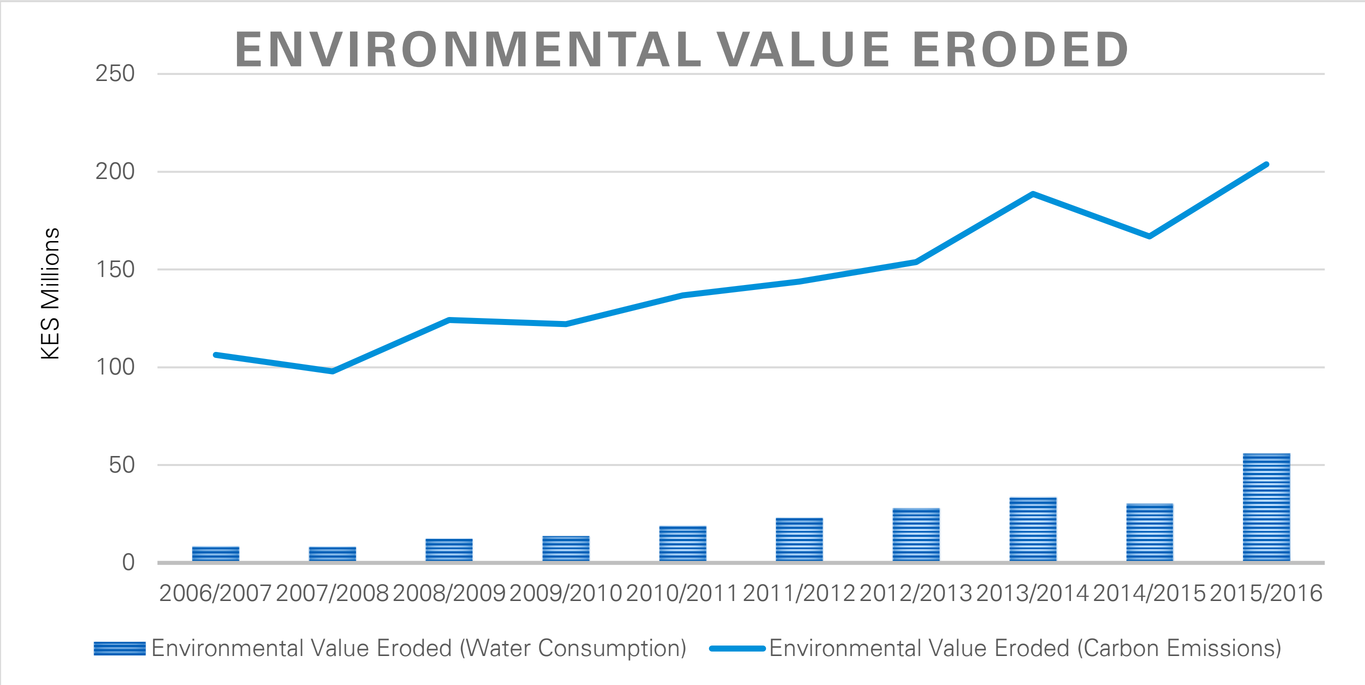

Figure 42: Source: Safaricom and appropriate proxies

This calculation takes into account scope 1,2 and 3 Carbon Emissions, and only water that has been consumed by Safaricom. The lack of reliable data points to the need for Safaricom to continue on its quest to accurately measure and report on a growing range of environmental KPIs.

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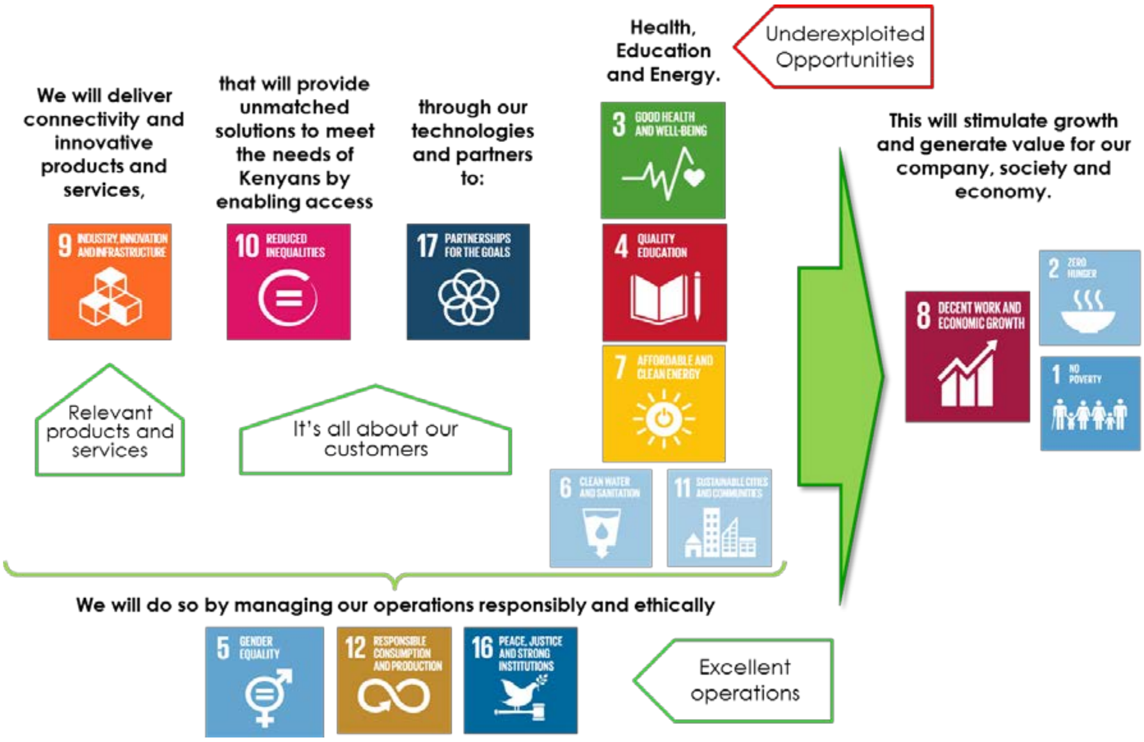
Where to next?

8 Where to next?

8.1 Understanding Safaricom's contribution made towards the achievement of the Sustainable Development Goals

In the 2015/16 financial year, Safaricom embarked on an ambitious drive to embed sustainability into the core of the business by Integrating the Sustainable Development Goals into Safaricom's Corporate Strategy.

Through and innovative top down-bottom up approach, members of the organisation at all levels were engaged in order to better understand and identify ways in which shared value opportunities were being carried out, and those that could be generated and leveraged. The targets relating to the Sustainable Development Goals identified have been integrated in to the performance management and reporting systems of the company and its individual business units, and Safaricom's expression of its commitment to the sustainable development goals has taken the form of the vision below:



The process of embedding this vision into the organisation and the way it positions itself both internally and externally is ongoing, and represents an important landmark in the company's continued commitment to 'Transforming lives' in everything that it does. This work presents an important opportunity, if clearly measured and communicated, to positively bend the curve of Safaricom's contribution to society going forward.

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Acknowledgements

We would like to express our appreciation for the time and cooperation provided to the project team by the management and staff of Safaricom.

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Limitations

We have relied upon the sources of information referred to in this report. Except where specifically stated, we have not sought to establish the reliability of those sources. We have however reviewed the information and have sought explanations for key trends and salient features identified by us. We have also satisfied ourselves, as far as possible, that the information presented is consistent with other information obtained by us in the course of the work undertaken to prepare this report.

Our engagement does not comprise a due diligence review or constitute an audit or review, other assurance engagement or an agreed-upon procedures engagement, performed in accordance with International Standards on Auditing (ISAs), International Standards on Review Engagements (ISAEs) or International Standards on Related Services (ISRS). Consequently, an audit opinion or assurance conclusion will not be expressed nor will there be a report on factual findings.

As such, this report may not necessarily disclose all significant matters about the project or reveal errors or irregularities, if any, in the information and representations made to us and upon which we have relied.

Estimations made embody assumptions on the behaviour of factors in the macro and micro economy, and the project itself. These assumptions were based on evidence available as at the time of this report. Users of the forecasts may consider other assumptions to be more appropriate, which may materially change the outcome of the forecasts.

Please note that any advice, opinion, statement of expectation, forecast, or recommendation supplied by us as part of the service shall not amount to any form of guarantee that we have determined or predicted future events or circumstances.

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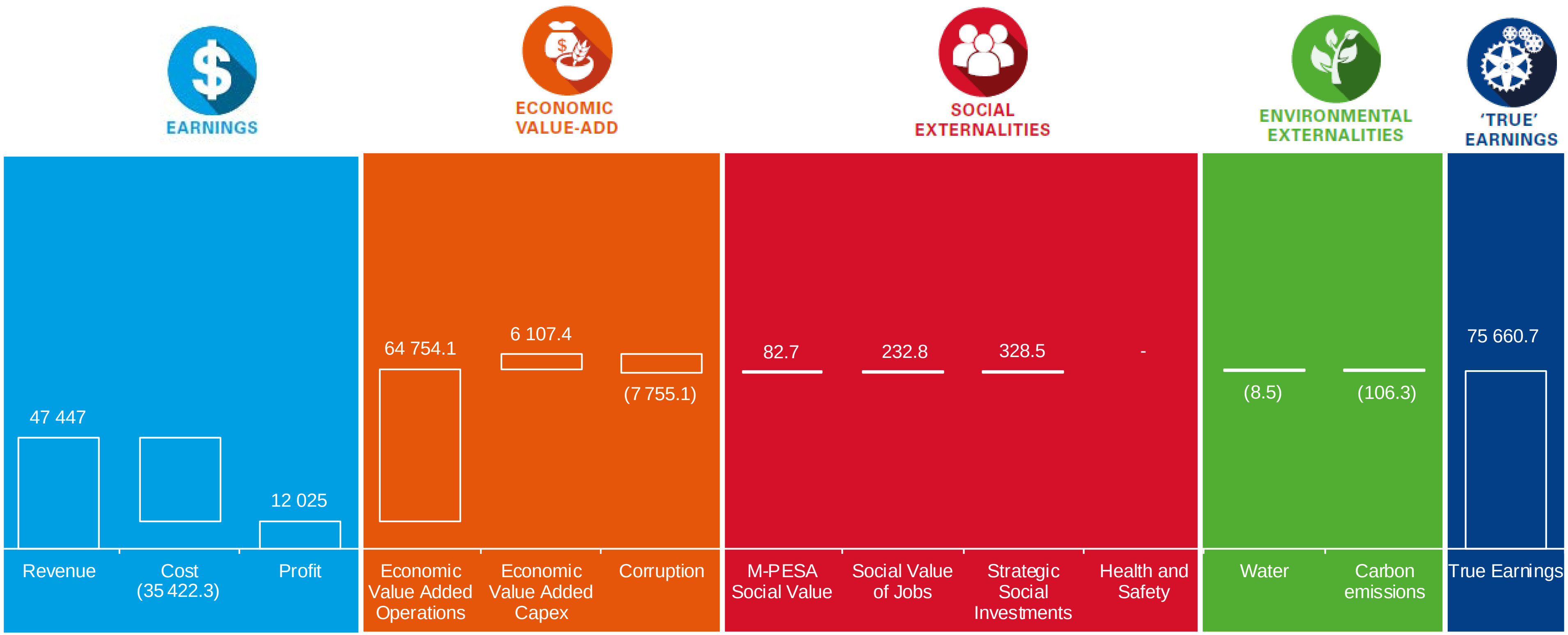
Appendix 1 'True Earnings' Bridges

(All values in KES Million)

2006/7



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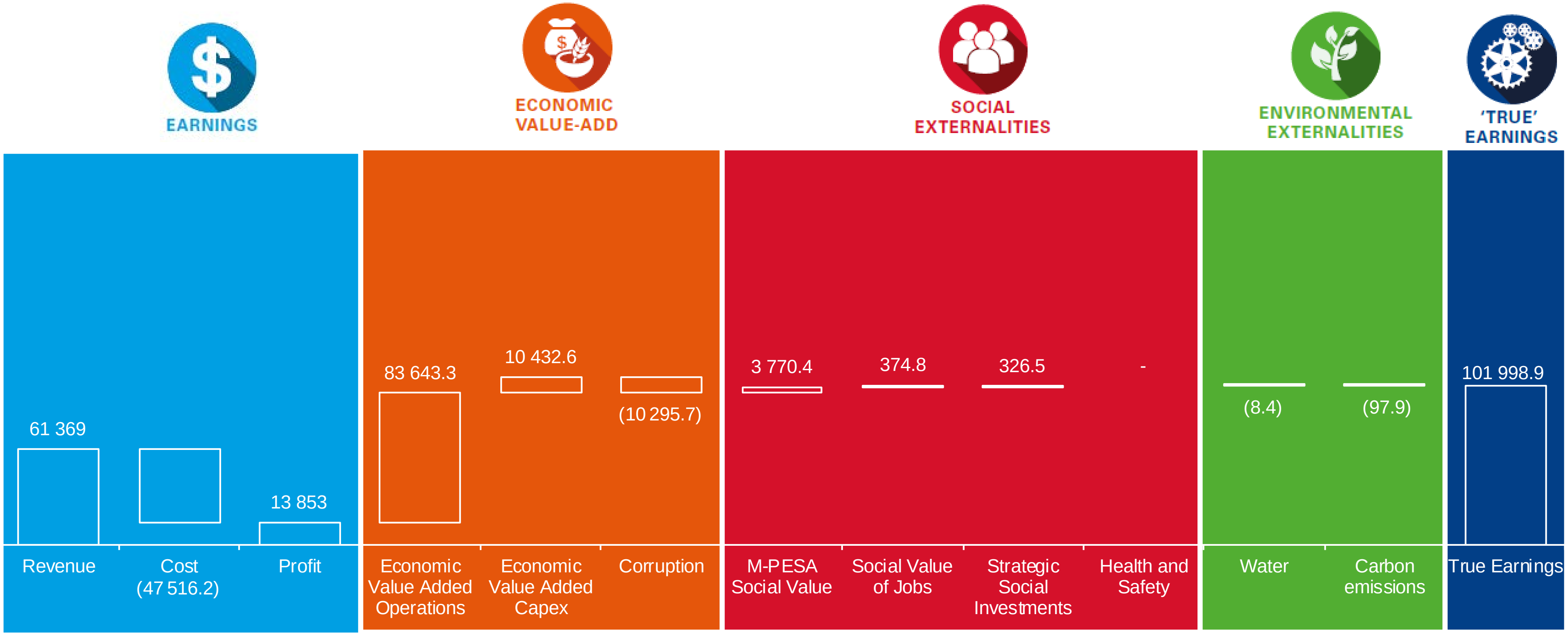
2007/8



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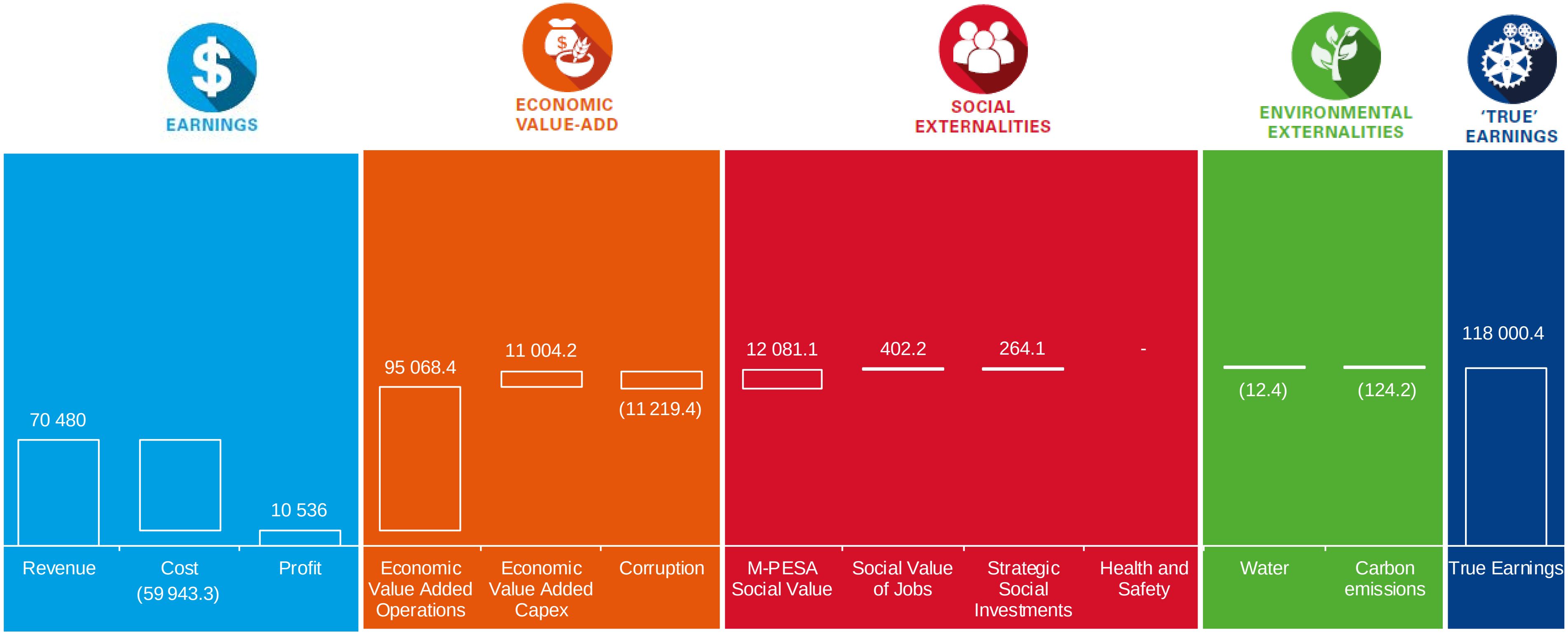
2008/9



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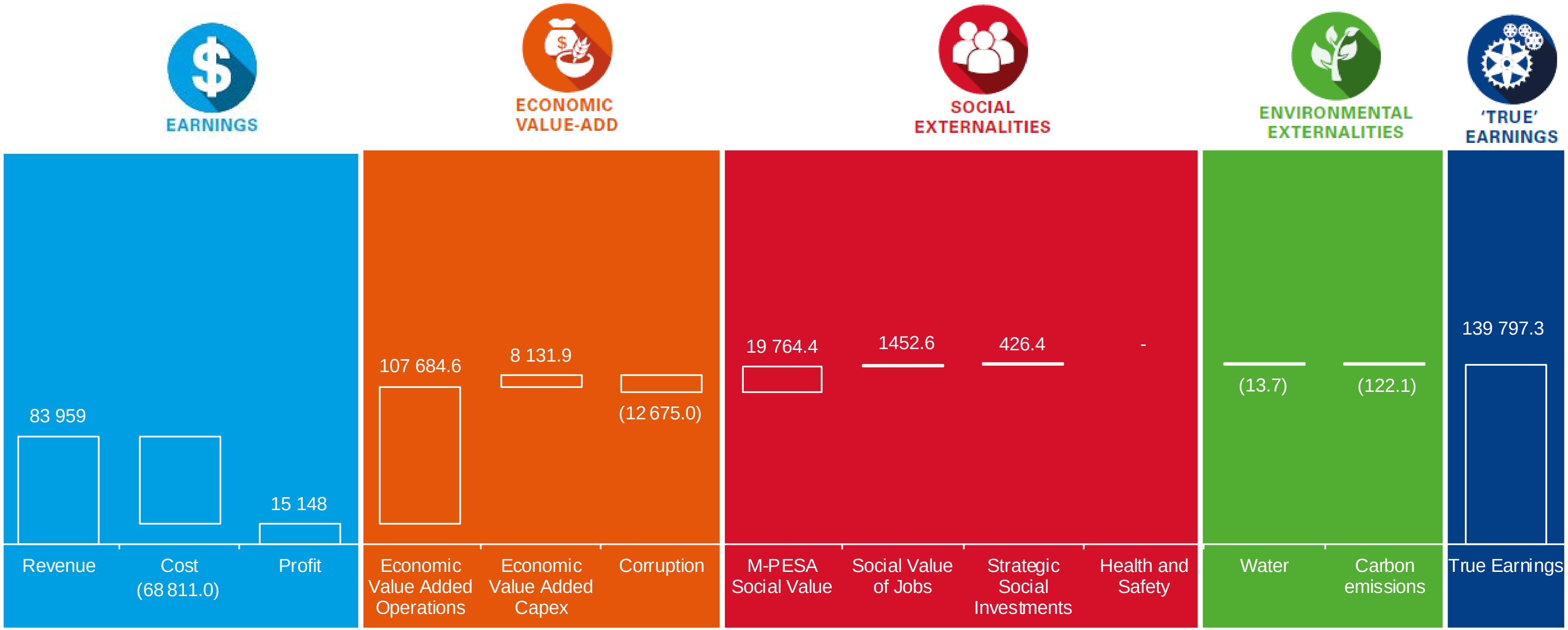
2009/10



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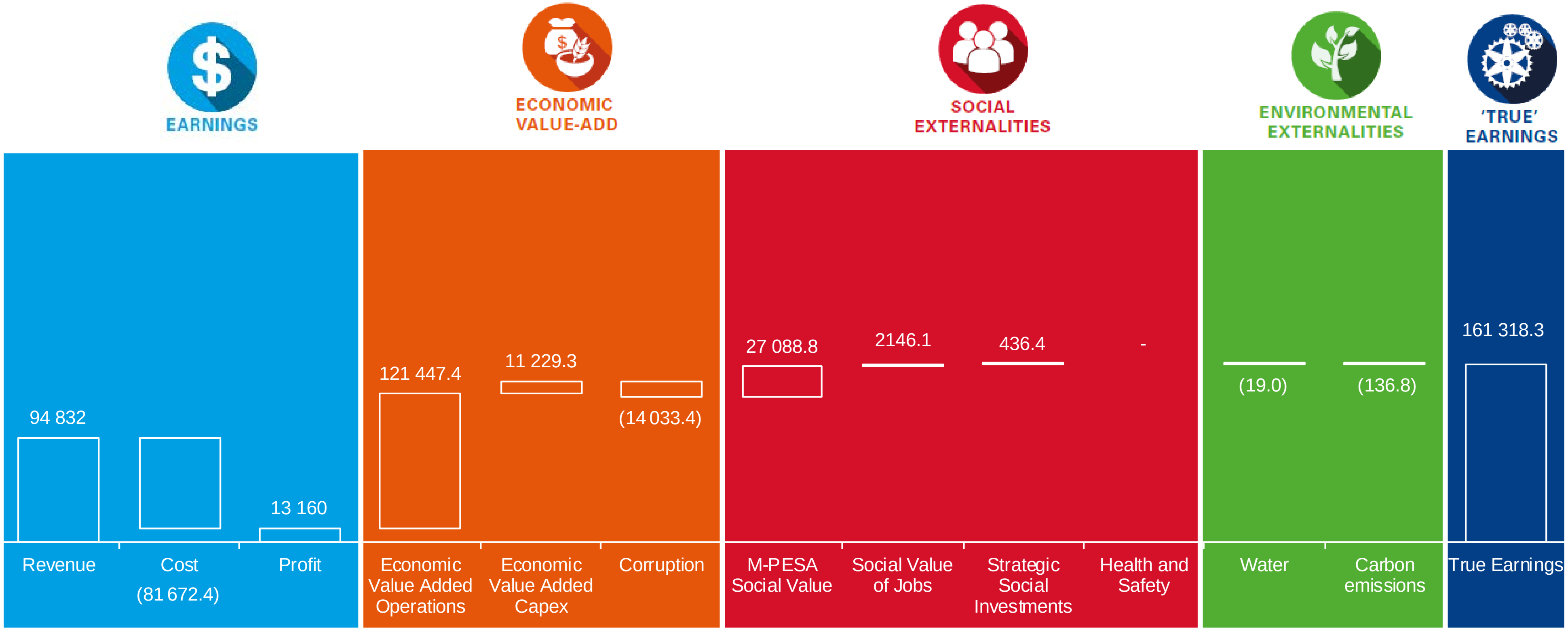
2010/11



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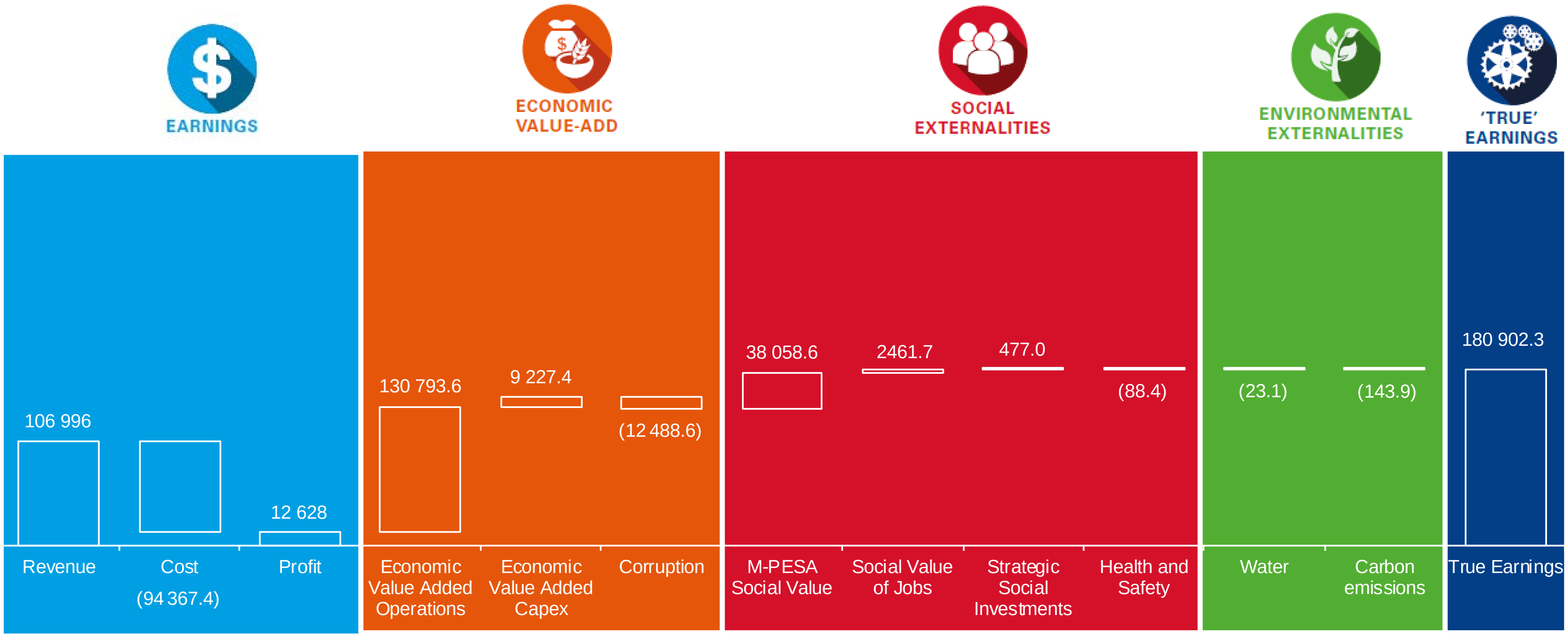
2011/12



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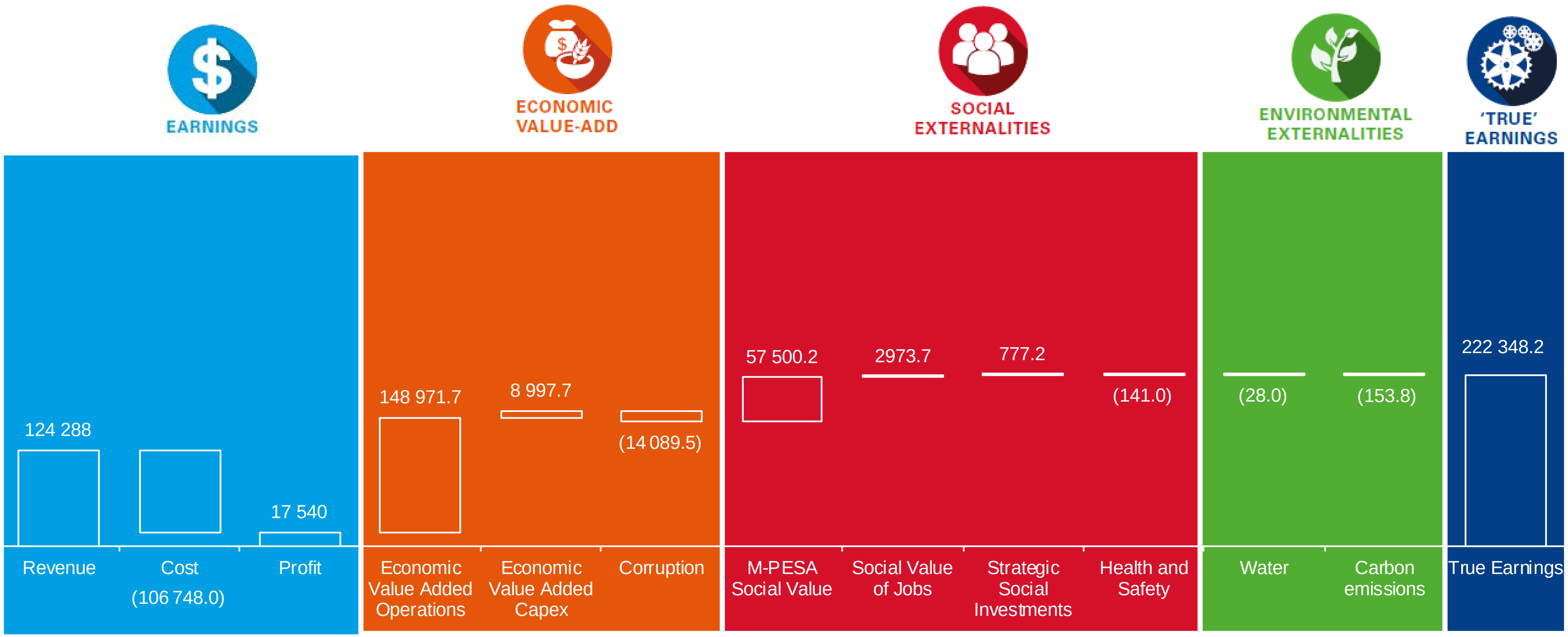
2012/13



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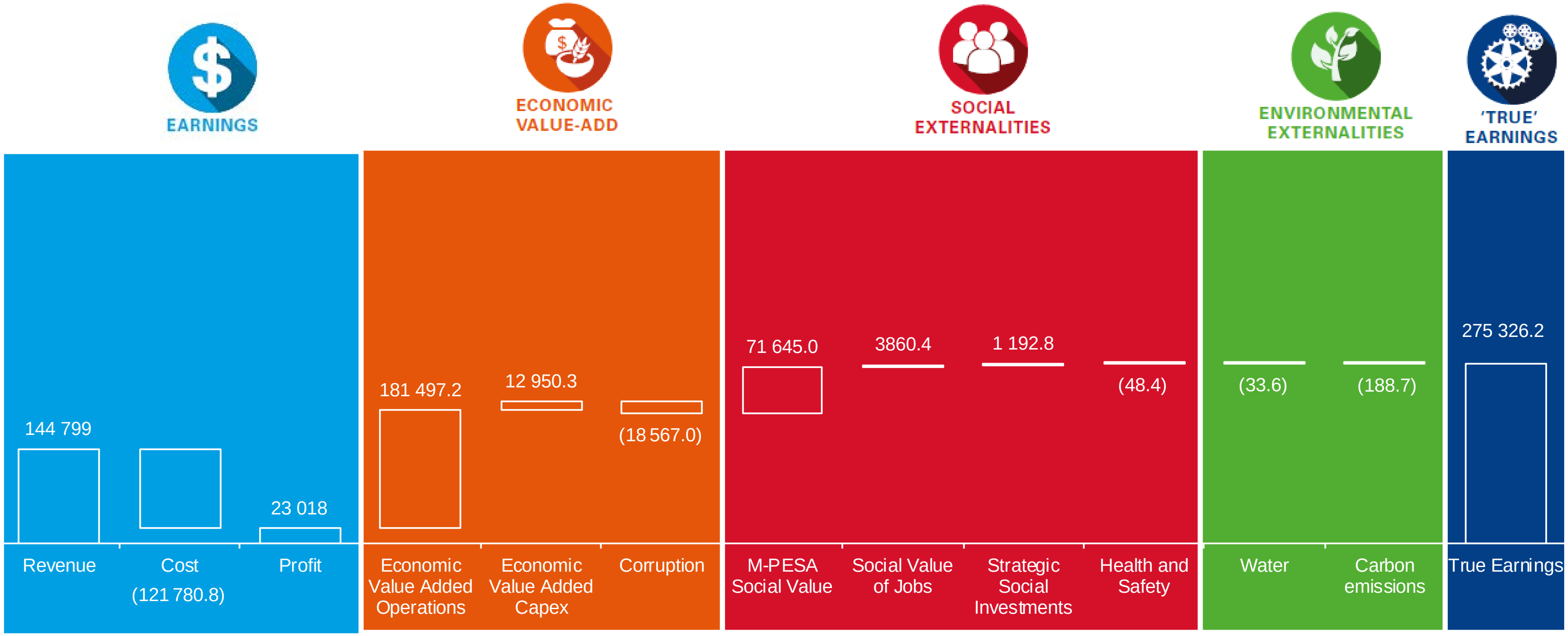
2013/14



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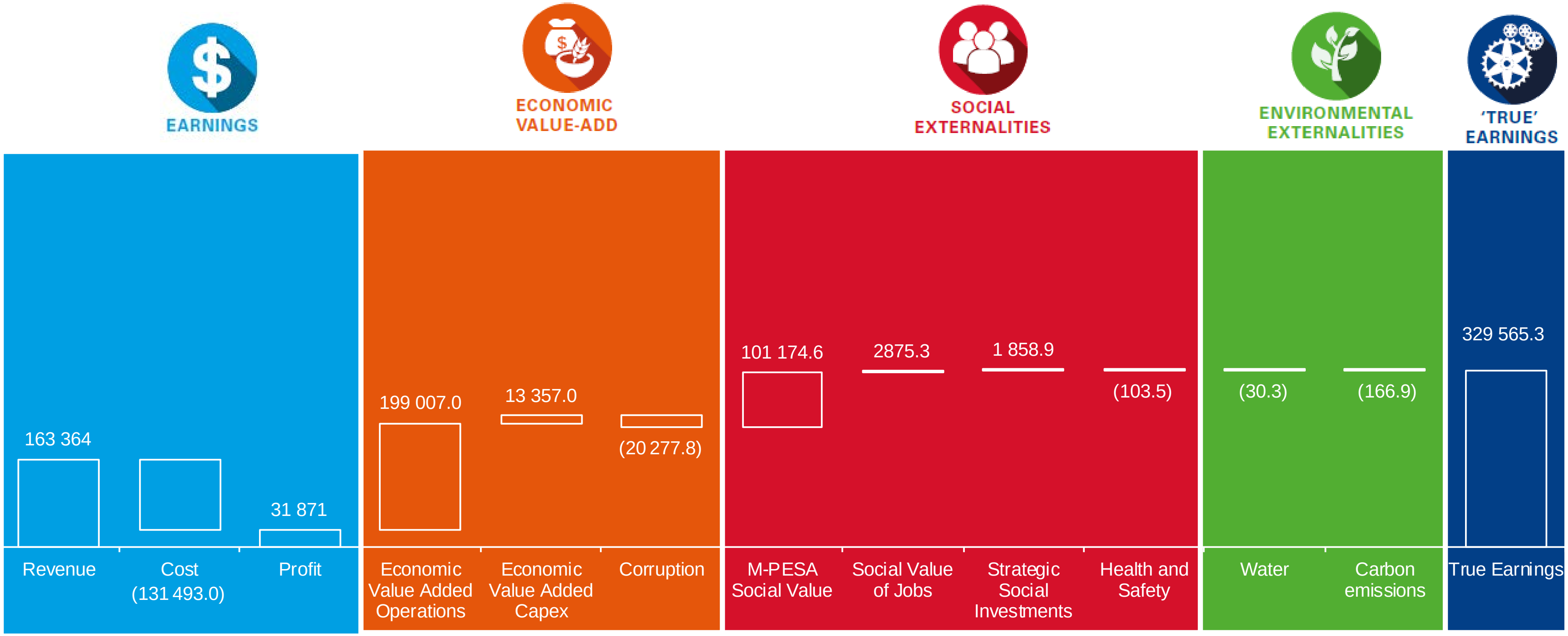
2014/15



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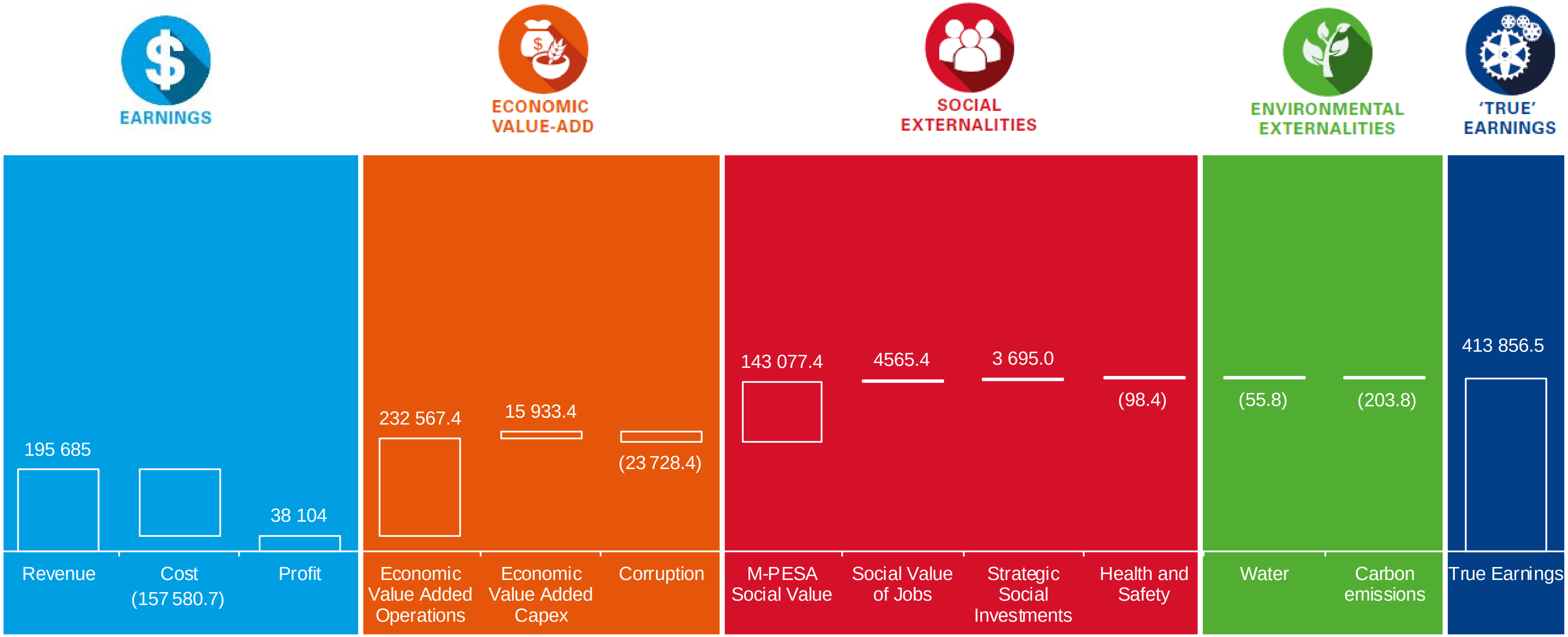
2015/16



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