August, 2018

Tilisi Research

The Warehousing Market in Kenya

> **31%** of the businesses surveyed have suffered commercial setbacks caused by the warehousing shortage in Kenya in the last five years”

research tree africa | Intelligence Reporting Company

Tilisi Logistics Park

Status of Warehousing

Size of facilities

Kenyan warehousing is primarily made up of small-scale godowns of between 1,076 to 3,200 sq ft, which is roughly the size of a three-bedroom house in Kenya.

This sizing contrasts with other global markets. In the US, the warehousing market is dominated by warehouses of an average 184,693 sq ft, equivalent to the size of three football pitches.

However, Kenyan operations are serving a much smaller market. In East Africa, a larger company typically needs 32,291 sq ft of storage space to meet regional needs, reports JLL.

Thus, of the Tilisi survey respondents, 46% are using less than 15,000 sq ft, while 55% are managing more than 15,000 sq ft and over half more than 40,000 sq ft.

Across the respondents, manufacturing and retailers were typically running the largest warehouses.

Ownership

Kenya has a higher proportion of owned warehouses than is the global norm, with 41% of the survey respondents reporting themselves as owners of their warehouses, and 46% solely renting. The balance of respondents reported running a mix of owned and rented warehousing.

Globally, while the balance between ownership and renting is shifting in favour of owning, renting dominates. An example in the US is Amazon, whose office space, physical stores, warehouses, and data centers now span 253m sq ft, up 42% in 2017 from a year earlier.

But while the total space rose by 42%, the amount of space owned doubled in 2017 to 14m sq ft from 7.2m sq ft a year earlier, lifting the percentage of space owned to 5.5% from 4.7% the year before.

However, in Kenya, warehouse the rental supply is limited – and development and ownership suffer unique barriers.

An investor needs to spend $43,000 to complete the necessary permit and registrations and get utility connections for a warehouse in Kenya, which is twice as high as in neighbouring countries, with similar structures in Tanzania costing around $24,000, and in Rwanda and Uganda around $21,500, according to the World Bank.

The cost becomes greater still for companies constructing Grade A warehousing or cold storage facilities.

Land prices are also generally higher in Kenya, with an acre of prime logistics land typically costing around Sh35m or $350,000.

However, larger companies prefer to own in order to secure long-term locations close to airports and ports. But for SMEs, the capital barriers are prohibitive, meaning such users tend to look for longer-term leases.

According to a report by Broll on renting commercial property across Kenya, Madagascar, Malawi, Mauritius, Namibia, Nigeria, Rwanda, South Africa and Zambia, the average lease period is typically 5 years and 1 month with fixed rentals and predetermined annual escalations.

This structure reflected strongly across the Tilisi survey respondents, with most rent rises triggered by predetermined lease agreement increments.

Rental prices

In Kenya, the average rental price per sq ft for warehousing is reported by Knight Frank at Sh44.6 per sq ft, which is higher than India, which stands at an average Sh22.0 per sq ft, but far lower than the US, at Sh750 per sq ft.

However, Kenyan warehouse rents have been rising at an accelerating rate, rising by 2.8% between 2013 and 2015, but by 11.5% between 2015 and 2017, as the country's warehousing shortage deepened. As a result, the average of current market prices is running notably higher than the average price paid by all users, with most warehouse users locked into historical leases at lower rates.

Thus, the Tilisi survey found the majority of warehouse renting companies (75%) paying below the average price of Sh45 per sq

Graph 1: What is your current storage space requirement?

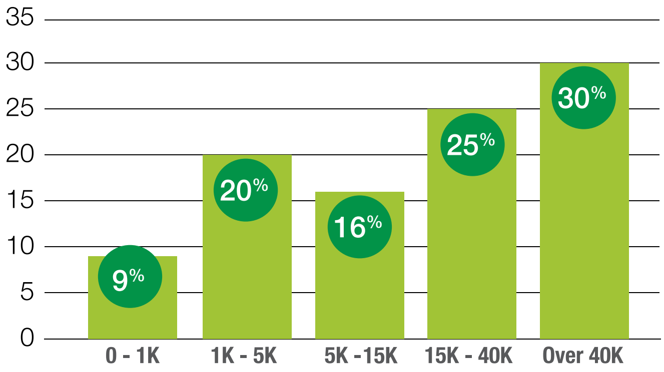


Table 1: Rental prices per sq ft

Year	Sh. per sq ft
2017	44.6
2015	40.0
2013	38.1

Source: Knight Frank Africa reports

Table 2: Rental spread across all respondents

Under Sh25 sq ft	15%
Sh25 - Sh35 per sq ft	35%
Sh35 - Sh45 per sq ft	28%
Sh45+ per sq ft	22%

Warehouse demand and shortages

Kenya is suffering from an acute shortage of warehousing. According to Broll, the current availability of warehousing in Kenya stands at 6.9m sq ft. JLL calculates, however, that demand is running at 23.7m sq ft.

Moreover, the rate of growth in demand for new warehousing appears to be accelerating.

The Tilisi survey found that 16% of respondents had sought new warehousing facilities in 2017/18, compared with 9% the previous year, 6% in 2015/16, and 5% in the two years prior to that.

Thus, in the last five years, more than a third of respondents had sought new facilities. However, more than half of those searches have been in the last one year.

The scale of this growth in demand contrasts sharply with the reported global growth in warehousing demand, reported by Allied Research at an average 3.48% a year.

Total demand figures additionally reveal sharper growth in East Africa than elsewhere in Africa, with the total warehousing needs in East Africa set to overtake the total for West Africa for the first time during 2018.

In this, Kenya leads in demand, as the emerging logistics hub for the region.

The Africa Industrial Report by JLL cited demanded space in Kenya in 2017 of 16m sq ft, the fifth largest among the Sub Saharan African countries surveyed and leading in East Africa.

Moreover, demand is rising rapidly.

A significant factor in this has been the growth of e-commerce, with a joint report by the Communications Authority of Kenya and the Kenya National Bureau of Statistics finding that 27% of Kenyan firms were now selling products online.

E-commerce is also rising in the region under its own brands, which include Africa Internet Group's Jumia, Kilimall International, Masoko, Aladin and PigiaMe among others.

By December 2017, Kenyans had spent Sh10bn on e-commerce platforms, up Sh7.6bn on 2014. This has created a rising need for easily accessible warehouses.

Improved infrastructure is also driving new warehousing needs.

The new Standard Gauge Railway has established an Inland Container Depot (ICD) in Embakasi-Nairobi that can handle 1,232 twenty-foot equivalent units daily. It is only yet receiving 648 containers a day but is becoming choked, with the Kenya International Freight and Warehousing Association reporting that 17,000 containers still remain uncollected.

The Kenya Railway Corporation has already issued public notices for shippers to speed up collection of their cargo so as to free up the facility, in moves that are expected to raise the demand for warehousing space around the area.

In contrast, however, warehouse supply in the country is still lagging. As a result, only 58% of the respondents who reported seeking new warehousing space in Kenya are now finding space within 6 months.

A further 21% have found new space, but it took longer than 6 months.

However, 21% of those seeking new warehousing report that they have been unable to find new space, even in more than six months.

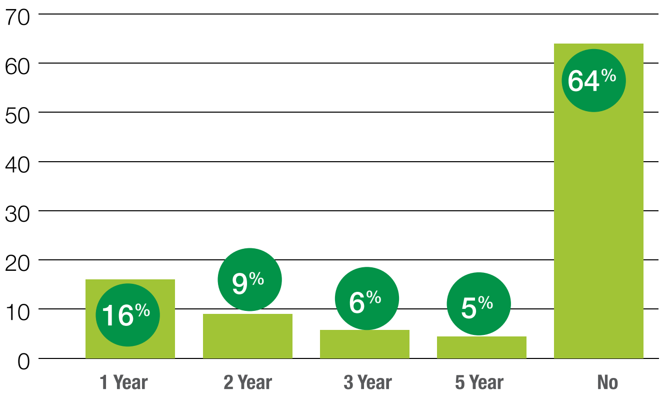
Thus, the sector is acquiring a degree of pent-up demand as companies search without resolution for extra space.

According to Knight Frank, this lack of an adequate supply of quality logistics space has pushed some firms to invest in their own custom-built facilities. The interim shortage in facilities has also acted as a considerable economic bottleneck.

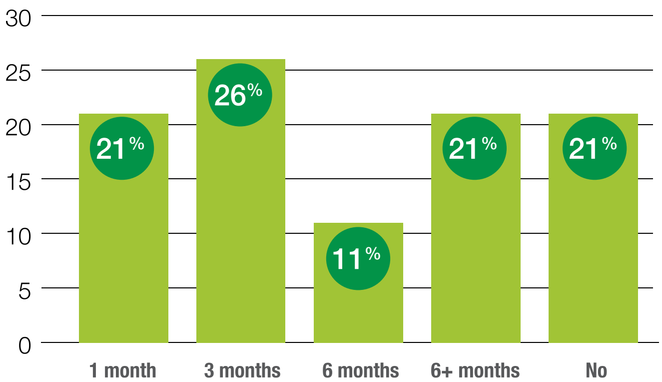
Only 14 % of the one third of Tilisi survey respondents who reported a warehousing search said that the search had no impact on their business. These businesses had planned for a warehouse search and most frequently moved ahead of any storage shortages in their search for new facilities.

However, the vast majority of companies seeking warehousing, being 31% of the total respondent base, suffered business damage.

Graph 2 Have you looked for new warehousing in the last 1 year, or 2, 3 or 5 years ago?



Graph 3: If you looked for new warehousing, did you find a new option within:



Some 43% reported consequent delays in meeting orders, and 29% reported lost sales. A further 14% said the difficulty and longevity of their search for new space delayed their expansion plans.

This impact is set to grow, based on the continuing above-average growth in logistics industry turnover in Kenya, which reached $9.4bn in 2015, having risen by an average 13% a year in the five years from 2010.

A significant growth driver in this expansion has been the growth in the retail industry. Thus, with Kenya's retail industry forecast to increase by 34% from 2015 to 2021, according to a report by international market research company Euromonitor, the pressure on warehousing and logistics is only set to become more acute.

Currently, Kenya's retail growth rate is the second fastest in Sub Saharan Africa, running only behind Cameroon's 58% from 2015 to 2021.

The rise of e-commerce is also set to create expanded warehousing needs.

Yet, across the respondents surveyed, retailers reported the longest planning timeline in ensuring adequate warehousing needs, at over 5 years' ahead, and no business disruption on unplanned shortages.

The impact of the Kenyan retail boom is, rather, being felt upstream, in sectors where planning is shorter term.

Impact most severe in pharmaceuticals

It has been the pharmaceutical industry that has most needed new warehousing in the last three years, with 71% of pharmaceutical industry respondents having searched for new warehousing in the last 5 years, and 43% of those in the last one year.

With pharmaceutical products most normally requiring high-grade warehousing that is temperature controlled, often with cold storage facilities, the particular sensitivity of the industry's storage needs has played to Kenya's shortage of high quality warehousing.

Thus, 40% of the pharmaceutical industry respondents searching for warehousing – equivalent to 29% of all pharmaceutical correspondents, reported having taken longer than 6 months to find new warehousing, or having not yet found any solution.

Moreover, of the 71% of pharmaceutical companies that have sought new warehousing in the last five years, none of them reported zero impact from the search.

The result for 20% of them was lost sales, while 40% reported delays in meeting demand, and a further 40% said the shortage and prolonged search had delayed their expansion.

Logistics and FMCG also held back

The logistics and FMCG industries have also both been held back by warehousing shortages, with 30% of respondents in both sectors having searched for new warehousing within the last three years.

Some 50% of logistics sector respondents reported a more than five year planning cycle on their warehousing and storage needs.

Yet only 11% of the logistics companies that searched for new warehousing in the last three years reported zero impact on their business.

A full 22% reported lost sales, and 56% said the shortage and search had caused delays in meeting demand, which was the highest proportion of delays across all sectors.

A further 11% said the shortages had delayed their expansion plans.

The Fast Moving Consumer Goods sector, made up substantially of local manufacturers, reported one of the higher rates of search for new warehousing, at 30% in the last three years, and the highest impact in lost sales.

Yet some 86% of FMCG respondents said they planned storage based on current needs, or for up to two years ahead.

However, of the FMCG respondents seeking new warehouses, 60% reported lost sales on the warehousing search, amounting to a severe impact at a macroeconomic level.

A further 20% reported delays in meeting demand, and only 20% reported no impact.

Horticulture uniquely warehouse-versatile

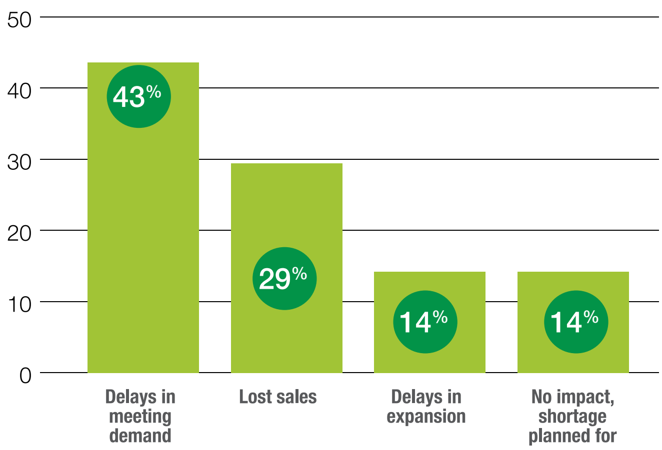
Of all the sectors surveyed, only the horticulture sector planned 100% of its storage based on current needs, used its own space for extra storage as it searched for new options, and reporting zero product impact from warehouse shortages and searches.

In agriculture, overall, however, inadequate storage has been cited as the cause of considerable losses, where not properly managed.

Last year, Kenya exported flowers worth Sh113.3bn. Yet research has shown that poor cold-chain management sees about 20% of the value of flowers wasted, equating to a loss of $100m (Sh10.3bn) for retailers, and considerable losses for producers.

It is perhaps the sheer scale of such immediate losses that has seen horticultural producers develop their own warehousing options and space in order to function.

Graph 4: Once you needed new warehousing, what was the impact on your business of your warehousing shortage/ search:



Tilisi Logistics Park

Warehousing Needs

In addressing the scale and nature of the warehousing shortages restricting Kenya's economic growth, Tilisi polled respondents across the five sectors of manufacturing, horticulture, pharmaceuticals, logistics, and retail on their dissatisfactions with their existing warehousing facilities.

With more than a quarter of respondents dissatisfied with their current warehousing, the issues they highlighted present clear guidance on the key factors needed in new warehousing.

Some 63% of the respondents who reported dissatisfaction with their existing warehousing saying that the inadequacies had generated delays for them in meeting their customers' demand.

By sector, the highest level of dissatisfaction with existing warehousing is in the pharmaceuticals industry, at 43% dissatisfaction, followed by FMCG/ manufacturing at 38%, and horticulture at 33%.

Only in retail are current facilities deemed fully adequate, while 90% of logistics and handling companies were also satisfied with their current warehousing facilities.

Access and location most vital needs

Of the respondents polled by Tilisi, 27% who cited current dissatisfaction named access as the greatest problem with their current warehousing, while 20% cited location, and a further 7% cited a combination of both.

A further 7% cited access and water as their greatest warehousing issues.

Thus, for almost two-thirds of respondents (61%), access and location were key issues creating problems in their current warehousing.

This emphasis is shared globally. A survey on the top factors influencing warehouse site selection by Area Development Magazine, found that 97.3% of respondents considered accessibility to be a very important factor.

In this, congested highways and poor access increase fuel consumption and accident rates and add time to journeys, increasing shipping costs.

Warehouse location also determines how easy it is for a company to distribute and receive goods.

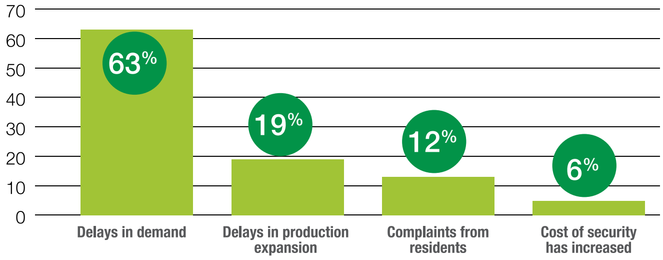
A study carried out by Supply Chain Process Improvement Inc, a US-based supply chain solution company, found that by selecting a strategic location, a company could save up to 2.7% of annual logistics costs.

In East Africa, by contrast, transport and freight costs are among the highest in the world, at more than 50% higher per kilometre than in Europe or the US, according to Trade Mark East Africa, as a result of poor infrastructure, technology and expertise, affecting road networks, warehousing facilities, and location.

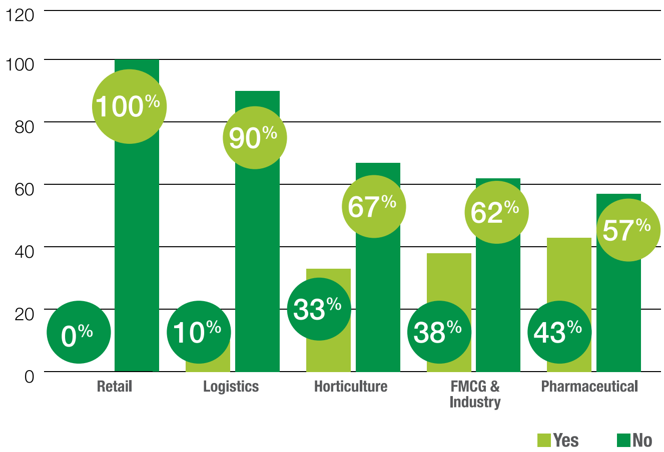
Indeed, according to a Knight Frank report, the high costs of poor warehousing in developing countries are the greatest contributor to high consumer goods prices, accounting for up to 50 - 75% of the retail cost of foods.

In this, one logistics cost metrics report found that truck loading, alone, accounts for 43.8% of costs incurred by logistics companies, with access a key factor in that.

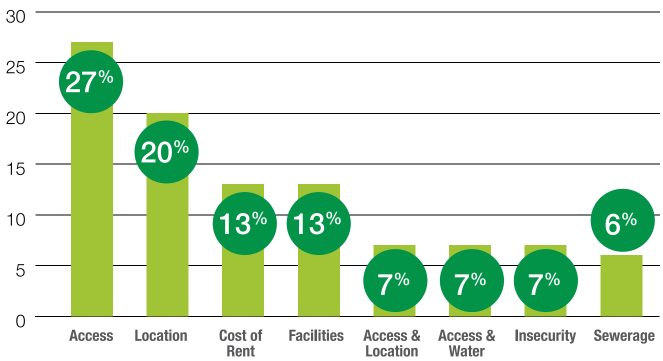
Graph 5: What has been the impact of these challenges on your business?



Graph 6: Are you satisfied with the quality of the warehouse you use?



Graph 7: If you are dissatisfied, which is your main problems with your current warehousing?



The cost of poor logistics infrastructure

India suffers from minimal interland connectivity, no dedicated freight corridor, the same railway line that takes passengers carrying freight, congestion at the ports, poor customs processing and service levels, fragmented transport, outdated warehousing, and minimal air cargo.

These infrastructure gaps mean logistics cost the country around 14% of GDP, calculated as a $65bn comparative disadvantage.

In emerging countries like Korea and China, where the rail and port freight capacity is adequate and there are growing levels of containerization for domestic and EXIM cargo, as well as an established transport industry, logistics cost around 10% of GDP.

In advanced countries, including Europe and the USA, logistics costs 7- 8% of GDP.

Warehousing and infrastructure

Road infrastructure is a key component in achieving logistics efficiencies along the supply chain.

According to one local logistics company, the logistics cycle between Mombasa and Nairobi used to take three to four days due to traffic congestion, while the rail cycle could take up to nine days, compared to its ideal cycle time of two days.

However, the new Eastern and Southern bypasses around Nairobi have made it possible for the company to reduce its cycle time to two days, enabling it to save up to 30% on its logistics costs.

The company's savings tie with analysis by Trademark East Africa pointing to savings ahead from the consequent logistic park developments now being built on Nairobi's new bypasses.

Already, new warehouse builds are emerging on Mombasa Road, Thika Road and in metro nodes touching the Northern, Southern and Eastern bypasses.

These new warehouses are typically offering improved designs and facilities, with many claiming Grade A status, compared with the predominantly Grade B and Grade C warehousing currently in use.

Warehouse Quality

This rise of Grade A warehousing facilities is another key issue for Kenya. The Tilisi survey found 13% of respondents reporting that the quality of the facilities represented the greatest problem with their current warehousing.

Key issues with the country's current warehousing facilities are:

Pallet height: Most godowns are built to a height of a few metres, typically 4 to 5 metres, limiting the scope for pallet stacking.

Local warehousing company, ALP, which runs warehouses built to the international standard warehouse height of 12m reports this is typically allowing users to stack pallets three times higher and reducing overall warehousing costs by 30%.

Unloading platforms are also frequently absent from current warehousing facilities, requiring companies to lift items individually or in small loads to truck loading height, which considerably slows loading and adds extra labour costs.

Energy costs: Few existing warehouses are built for energy efficiency, yet electricity in Kenya, and across East Africa, is more expensive than in many competing nations. Energy costs typically account for 15% of a warehouse's operating budget.

However, perishable goods, such as pharmaceuticals and horticulture, frequently need constant temperature storage and/or cold storage. In refrigerated warehouses, refrigeration accounts for 60% of the electricity used.

Energy saving measures in place in some of the new generation warehousing include international designs for air flow, insulated walls and roofs, and the use of solar power.

Water Availability

Water and drainage are cited by 21% of respondents as a key problem with existing warehousing. Some 7%, cite water availability as their most serious issue together with access. A further 7% cite water availability as their single most serious issue.

Finally, 7% cite drainage, run-off, and further 6% cite sewerage as the most serious problem with their existing warehousing.

Whilst water consumption is relatively low in warehousing compared to other sectors, the usage can still be considerable across freight and vehicle washing, washrooms, catering and cleaning operations, according to WaterScan, a UK based water management company.

Nationwide, Kenya's water supply remains low, at 647 cubic meters per capita, against the globally recommended threshold of 1,000 cubic meters per capita, with up to 43% of water generated in the country either lost or unaccounted for. Yet, few existing warehouses offer rain water harvesting or water recycling facilities.

WaterScan, however, reports that rainwater harvesting can reduce water consumption by up to 30%, making it a good option for warehousing with expansive roof areas. Water recycling can save a further 40%, reducing water bills.

Drainage

Rainy season flooding in and around Nairobi remains a severe issue. Poor drainage, and poor or absent sewage facilities, represent significant warehouse issues, with flooding able to cause considerable loss of stock and destruction of value, yet few existing warehouses have been built to be flood proof.

Security

Some 7% of respondents in the Tilisi survey cited security as their top dissatisfaction with their existing warehousing.

According to material handling equipment supplier, Cisco-Eagle, theft from warehouses costs companies more than $15bn annually.

This includes product theft, fraud such as false damage claims for goods, and false inventory and shipping counts.

Apart from the bonus of locating in a secure or secured area, companies often seek additional security facilities across alarm systems, CCTV and video surveillance facilities, and biometric entry systems, in order to secure their stocks against theft.

Warehouse Pricing

Against this backdrop, pricing is an issue on which companies take a variety of stances. Some 13% of the Tilisi respondents reported dissatisfaction with the running costs of their current warehousing and cited affordability as a key issue.

However, all of these respondents were in the FMCG/ manufacturing sector, with none of the respondents in horticulture, pharmaceuticals, logistics, or retail citing pricing as a key challenge in their existing warehousing.

For FMCG/ manufacturing short planning timelines for warehousing (86% on an ad hoc or less than two year basis), and the high cost to these businesses of shortages (60% lose sales), appears to have forced companies into higher priced space, with 50% of the FMCG/manufacturing respondents paying over Sh35 per sq ft, whereas all of the horticulture and retail respondents were paying below Sh35 per sq ft.

Only in pharmaceuticals was a similar proportion paying above Sh35 per sq ft, while in the logistics industry over 70% of respondents were paying over Sh35 per sq ft, but none of these cited affordability as a challenge with their existing warehousing.

In this, companies consider not only the direct cost of rental or owning, but also the cost of utilities such as electricity, labour, water and the services in managed warehouses, as well as the cost of transporting goods.

According to Feedvisor, a US software company, these combined costs are decisive in choosing a warehouse rather than rent alone

Indeed, a clear finding from the survey was that the majority of warehouse users are willing to pay higher rents for facilities that save them other operational costs.

On that basis, 61% of respondents said they would pay more for warehousing in a well-located logistics park with Grade A facilities.

Of the 39% unwilling to pay more for better facilities, the majority were SMEs.

The preference by larger companies for better facilities already play out in their choice of locations, with JLL reporting that large, sophisticated occupiers typically insist on leasing prime space for warehousing - normally in the best locations in industrial areas - even though such warehousing comes at a premium.

Observes JLL, such choices can reduce operational costs by up to 35%.

Across the respondents, 76% of manufacturing respondents say they would pay a premium, of which 29% would be willing to pay 10 – 15% extra for higher quality facilities in logistics parks.

The pharmaceuticals respondents were also more likely to pay a premium for facilities in logistics parks, with 71% saying they would pay more, but only 14% saying they would pay 10-15% more.

Methodology

The Tilisi Survey was carried out across three weeks in June 2018, with 200 respondents sampled, of whom 56 completed full interviews and provided comprehensive responses.

The interviews were conducted with company directors and operational managers across five industry sectors, being:

Graph 8: Sector distribution

37% FMCG/ Manufacturing/ Light Industries

36% Logistics Handling

12% Pharmaceuticals

11% Horticulture

4% Retail

Number of respondents

FMCG/Manufacturing	21
Logistics Handling	20
Pharmaceuticals	7
Horticultural	6
Retail	2

Key Contacts

E-mail : sales@tilisi.co.ke

Telephone : +254 714 845 474 / +254 733 845 474

Website : www.tilisi.co.ke

Tilisi
Logistics Park