

Innovation

South Africa | 07 June 2018 | Initiative

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POSSIBILITIES AND PRIORITIES

The imperative for change What constrains established banks and insurers from innovating around customer need? KPMG research suggests that while insurers are aware of the threats to their businesses from outside providers, they are unduly preoccupied with internal issues. They tend to be focused on incremental innovation – changes to operational processes, for example – rather than reaching customers in completely new ways.¹

KPMG asked insurers to identify the greatest opportunity to be tackled over the next two years. The most common responses to this question concerned incremental operational improvements:

- > the potential to improve operational processes and the use of technology (60%)
- > integrating digital technology into business objectives (52%)
- > using customer data analytics to improve underwriting, pricing and marketing (48%)

Some 65% identified regulation as the biggest challenge over the next two years. Only 28% described competition from new entrants as their most significant challenge, and only 24% an inability to innovate. These insurers appear to be deeply focused on their own problems and processes.

Do they realise what needs to change? On the whole, they appear to. The same study picks out the culture of an organisation as a key determinant of its approach to innovation. Some 51% of companies surveyed indicated they had embarked on cultural change programmes over the last five years, specifically to improve innovation.

Successful insurers frequently recognise the need to look outside their organisations. Spanish insurer MAPFRE, for example, collaborates with outside companies and distributors to develop innovative approaches to market problems. AIG encourages entrepreneurial activity in each of its 100 countries of operation and has appointed a chief science officer to enhance the use of evidence-based decision-making. Some 54% of surveyed insurers indicate that their primary motivation for partnering and collaboration is access to new ideas and talent. They recognise the limits of depending on their own people and processes for these ideas.

A PWC report on insurtech, the use of technology in insurance, suggests that a large proportion of insurers recognise the threat of technology competitors to their business models, describing insurtech as transformative rather than purely disruptive.² Problems remain in driving the change. Seven out of eight insurers (87%) consider the hiring and retention of talent as a constraint on their ability to innovate. Some 84% of respondents expect to partner with financial technology (fintech) companies over the next three to five years. Examples of this can be found in two UK insurers: Liverpool Victoria, with UX Lab and Aviva, with The Garage.³

Models and examples of innovation

Deloitte identifies the following three distinctive frameworks for digital innovation in insurance markets:⁴

- > Peer-to-peer insurance: a model of risk-sharing by like-minded people that avoids the use of an insurance company to cover risk individually (Friendsurance in Germany is an example⁵).
- > On-demand insurance: provides cover only for those periods when it's needed.
- > Index insurance: pays benefits based on the outcome of a predetermined index, commonly a weather index applied to agriculture risk. (The Land Bank appears to have made good progress along these lines in South Africa.)

The Deloitte report also provides these examples of innovation in financial services:

- > **BIMA**, operating in a number of African countries, provides simple insurance through a combination of local agents and mobile technology.

- > **Cornerstone-Airtel** provides life and hospital insurance to customers in Nigeria, using mobile technology for end-to-end processing.
- > **MobiLife** provides funeral cover entirely through mobile telephony, paying benefits not as cash but as grocery vouchers, and never lapsing customers' policies.
- > **ACRE Africa**, in Tanzania and Kenya, insures input costs (seed and fertiliser), not the lost harvest, and pays out based on weather indices.
- > **JUMO** connects customers in Pakistan and a number of African countries to a range of mobile financial services providers that offer credit and savings products.

The Deloitte report emphasises the potential for improved customer-centricity through technological innovation. The reason for this is simple: the product offering is built around the needs of the customer. We return to this below.

Platforms such as Moven prove that when technology enables people to engage naturally with the right information at the right time, customer outcomes and the customer experience can be improved. Moven is a fintech financial services provider.⁶ It partners with traditional banks and other vendors to provide digital banking services.

Innovation must start with the customer.

In 2016, Moven partnered with Toronto–Dominion Bank, Canada's second-largest bank, to launch its MySpend app. The bank simply wanted to offer more information to customers who use their phones to check account balances. But its ease of use caught on and within nine months the app had more than 850 000 registered users. Customers who are using the app reduce their spending by around 4% to 8%, with frequent users seeing the greatest impact.⁷ That's an impressive result, and proof that when a service is built around the needs of the customer, change is possible. Incorporating services such as these into a holistic financial well-being offering will be critically important to keep engagement high and outcomes on the right path.

South Africa is also contributing to financial services innovation. Incubation hub AlphaCode counts among its members a number of start-ups looking to turn the industry upside down.⁸ **Mobbisurance**, for example, uses satellite imagery to provide crop insurance to mobile farmers. **JaSure** provides tailored, on-demand short-term insurance solutions. **Riovic** brings together seekers of low-premium insurance and investors willing to back their risk. **InvestSure** protects investors against losses attributable to misleading acts by the management of a company.

Business-to-business offerings are being developed as well. **Spookfish AutoAssess** streamlines the claims assessment process by predicting the cost of vehicle repair using photographs of the damage. **wiCover** aims to enhance insurance operations by providing flexible cloud-based platforms for the information technology underpinning these operational systems.

Building markets for long-term saving in the low-income sector is proving more challenging. While a great deal of progress is being made in several pilot social security arrangements across the world, many of which involve partnerships with the private sector, the sustainability of business models remains a challenge. In the informal space, village savings and loan associations are community groups that typically pool their savings then lend to fellow villagers from their resources, running their activities over the cycle of one year.⁹ These schemes seem to thrive because they are based on the bonds of trust that hold a community together. While not-for-profit organisations may assist with some of the disciplines of recordkeeping, this model, which exists across a number of countries and cultures, appears to defy the entry or participation criteria of formal institutions.

The solution to the problem of low take-up is, at heart, the same in savings as it is in insurance. Entities must get closer to their customers to understand what might work. Kasebele and Lopez report on a study undertaken for a large bank in Tanzania.¹⁰ The researchers considered three different savings products and tested these with customers, emphasising the importance of further engagement and planning with stakeholders.

Priorities

Innovation must start with the customer. A sustainable proposition that contributes to well-being is built on the effective delivery of an appropriate solution to an identified need.

What should financial services providers do to enhance their contribution to customer well-being? Five thoughts emerge from our discussions in this section:

- > **Put the customer first.** This is so obvious that everybody says it. Doing it with conviction, however, takes a great deal of hard work, perseverance and genuine customer-centricity. Financial services providers must deliver products that meet identified customer needs efficiently and are priced for the success of all parties.
- > **Rebuild trust through engagement.** To have a chance of gaining the trust of customers, company leaders must engage with them. It is not possible to identify needs from a desk. The same applies to workers: employee benefits should be structured to fit what employees say they actually need. Engagement also helps to put into operation innovative ways to meet customer needs – for example, early saving to accelerate access to property markets.
- > **Build customer communities.** One way to grow the trust of customers is to foster a sense of community by providing them with the touchpoints and ancillary products or services that they want and need. Though technology should not be regarded as the perfect solution to all problems, it must surely play a part in this regard.
- > **Create products that embed the learning experience.** Consider the example in the **Case Study: Transport trade-offs** later on where we create an employee benefit that helps an employee navigate the complex process of buying a car.
- > **Show a contribution to social priorities.** If companies cannot show their contribution to social priorities, then the financial sector should not be surprised at public-servant views

that government is solely able to play this role. Evidence in this regard should not, however, be regarded as primarily a tool for lobbying. Companies should be able and willing to show the same to their customers: that their products raise customer and community well-being.

We conclude by emphasising the importance of identifying and meeting customer needs. A common thread in the analysis of local and international development is that successful innovation starts with the customer:

Insurers can be more customer-centric and should be doing more to involve their customers throughout their innovation cycle – from ideation through to development and commercialization – to ensure that they constantly focus on aligning their investment in innovation with customer expectations. At the end of the day, that is a good way to top-line growth. (Julo Hernandez, Global Head of Customer Centre of Excellence, KPMG)¹¹

Companies serious about involving their customers in the design process should consider the techniques of human-centred design and rapid product development presented by organisations such as IDEO.

Much of what passes for innovation in South Africa's financial markets is rather spuriously described as customer-centric but actually serves another purpose. The many conditions covered under critical illness policies, for example, marginally improve protection but greatly increase the difficulty of assessing value for money and choosing between alternatives. The same applies to the complexity of many life policies. An excessive range of investment choices on savings platforms serves the interests of a minority of well-informed customers but greatly enhances opportunities for their financial advisers. These designs may improve the profitability of products or, by strengthening the position of intermediaries, increase the potential for sales, but they are seldom truly in the interests of customers.

The simple, perhaps uncomfortable, reality is that not enough of the entities operating in South Africa's financial markets build their businesses around the needs of their customers. Where need is considered at all, the level of understanding of this need is generally overestimated by providers. Insufficient effort is put into the imperative that understanding intrinsic needs calls for long walks alongside customers.

This is particularly problematic in low-income communities, those parts of South Africa's market that matter the most. This helps to explain why the use of informal-economy solutions to common financial challenges – borrowing, saving and insurance, in particular – is so prevalent. If South Africa's financial brands, based in Sandton and Cape Town, expect to play a continued part in providing social protection and social mobility to low-income customers and enhancing their wellbeing, then they have to be prepared to walk with them in Alexandra, Khayelitsha, Cala and Giyani.

Transport trade-offs

Case study by Shivesh Maharaj, Anne Cabot-Alletzhauser and Estelle Viljoen

JD Vance tells a compelling story in his best-selling memoir *Hillbilly Elegy* that illustrates how dependent social mobility is on knowing how to navigate financial decision-making. His story relates how he grew up in a dirt-poor coal-mining community in southeastern Kentucky. At the age of 18, his future prospects look grim, given the level of dysfunctional family and community life he has had to endure. Substance abuse, marital abuse, child abuse, and the constancy of extreme poverty and family trauma all combine to provide a powerful headwind. But then a miracle occurs, and when we next see Vance, he is graduating from Yale Law School and is about ready to embark on an extremely promising career in law.

What was the catalyst for such a dramatic turn in his life's fortunes? It is perhaps too neat to suggest that the transformative agent was simply joining the Marine Corps. But it's what the Marines provided him as his employer that made the critical difference. Unlike the civilian world, the Marines make an assumption that as new graduates, their recruits still have a lot to learn about maintaining their physical, emotional and financial well-being. If they are going to have a high-functioning defence force, it's critical that both their recruits and their families have access to whatever resources or support that will help them achieve that end. This includes teaching them how to make prudent financial decisions with the salary they receive from the government.

Vance provides a particularly effective example of this process when he describes how his boss reacted to the news that he wanted to buy a car with his first salary:

*He sent an older marine to supervise as I shopped for my first car so that I'd end up with a practical car, like a Toyota or Honda, not the BMW I wanted. When I nearly agreed to finance that purchase through the car dealership with a 21% interest-rate loan, my chaperone blew a gasket and ordered me to call Navy Fed and get a second quote (it was less than half the interest). I had no idea that people did these things. Compare banks? I thought they were all the same. Shop around for a loan? I felt so lucky to get a loan that I was ready to pull the trigger immediately. But the Marine Corps demanded that I think strategically about these decisions, **and then they taught me how to do so.***

This sort of employer engagement might seem incredibly paternalistic. But consider the South African context. As Richard Wilkinson and Kate Pickett have highlighted, the more unequal a society, the more likely it is that material possessions will play a critical role in defining one's status.¹² We have already defined South Africa as being one of the world's most unequal societies.¹³ Car ownership in South Africa plays a far greater role than simply buying a mode of transportation. Car ownership defines one's social mobility aspirations. At the same time, the financial burden of this aspirational overstretch could set in motion the first of the barriers to any future social mobility.

In a recent survey published by Statistics South Africa, it was noted that **fewer than two out of ten black African households own a motor vehicle in working condition, while more than nine in ten of white households own a vehicle in working condition.**¹⁴ The long way that South Africa has to go to redress this imbalance means that many more families will be buying their first ever car. This is usually the second biggest purchase in a person's life, next to a house. It needs careful consideration and deeper questioning around the needs that a vehicle fulfils.

In *Benefits Barometer 2017: 'Changing world of work'*, we spoke at length in of the '[Cost of commuting](#)' and the options available to both employers and employees for addressing those costs. In this edition of *Benefits Barometer*, we also introduce some novel solutions that employers are already considering to provide an intriguing alternative (See Case study: [Go Metro flex](#)). In this chapter, the discussion has a distinctly different focus. Here we are addressing the issue of how an employer could facilitate a process that helps employees consider their consumption choices more effectively.

Could we not find a way to capture a similar process to the US armed forces, where helping employees navigate the complex world of financial decision-making can translate into a more effective deployment of their income?

What follows is an example of what such a decisionmaking process could look like. With the rapidly changing dynamics around transportation options, perhaps a better discussion would be to help individuals determine whether car ownership is even a requirement in the first place. Imagine the incredible boost to social mobility that could be achieved if we were able to start dialling back one of the primary contributors to early debt crises: aspirational car buying. This type of financial educational framework could easily become a valuable addition to any financial well-being programme that the employer might subscribe to.

So you want to buy a car? Let's help you think this one through.

So you think it would be amazing to use that new income you are getting to buy a car? Let's just think this one through a bit. Let's start with a provocative question of whether you even need to own a car, if you simply need to get around.

With the advent of the connected world, and development of amazing services such as Uber and Taxify, more millennials and likeminded people are opting not to buy cars at all but rather make use of these pay-as-you-use services to meet their transport needs. Services such as buses and the local minibus taxi do still remain popular. However, these services are preferred by those who do not have the option to buy a vehicle, so it's an affordability rather than a trade-off decision.

Coming back to Uber, many individuals consider this a cheaper option than owning a car, as both direct and indirect costs of vehicle ownership are avoided. Let's explore this idea and find out if this is really the case.

Costs of vehicle ownership

Many of the costs of vehicle ownership are actually hidden, and first-time buyers are often surprised when faced with these bills. Common costs that are well known are:

- > monthly payments
- > fuel costs
- > tyre replacement
- > insurance costs

Other less considered bills include:

- > parking costs
- > costs of services if you buy a car without a service plan
- > excess payments in the event of an insurance claim
- > costs of tracking device if required by the insurer
- > cleaning bill
- > unexpected replacement of a tyre
- > licensing fees
- > unexpected fuel price increases

The above costs are usually not considered until the event occurs, and then lays even the most carefully constructed budget bare.

Comparing costs

Though the above list of costs of owning a car may be a surprise, and may also seem a bit excessive, very few of us would know the cost comparison with a real alternative, Uber.

In this cost comparison we need to look at a persona and use typical travel assumptions to establish benchmarks. These costs would vary from person to person, so please remember to take your personal circumstances into account when making a decision.

We will be working out a comparison for Thulani, a 22-year-old administrator who works in Sandton and lives 21 kilometres from his place of employment. Thulani works a typical five-day week and goes out to visit friends every Saturday evening (a 40 km round trip) after doing his weekly shopping at the local mall (16 km round trip). He goes to church on Sundays (30 km round trip) and goes to the movies every Thursday after work (22 km round trip). This would equate to a total of 1 452 kilometres a month and 16 626 kilometres a year.

Thulani uses Uber for all his travel needs and is considering buying a car 'for convenience'. His car of choice would be a manual VW Polo Vivo, Comfortline.

Costs that Thulani would have to consider:

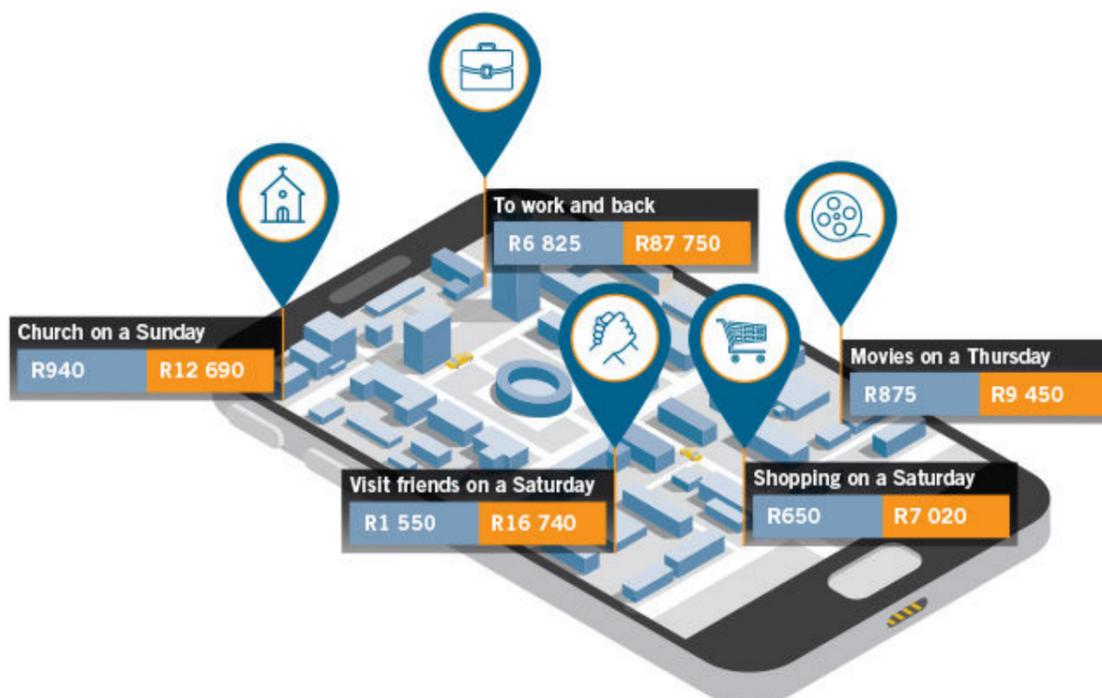
Cost type	Cost detail	Cost per month	Annual cost
Monthly repayment	R192 000 cost of vehicle, over 60 months, at an average rate of prime plus 2% (12%), no deposit plus R57 monthly charge	R4 327	R51 935
Fuel costs	6.1 litres for 100 km at R14.72 a litre	R1 304	R14 929
Tyre replacement	Assume every 40 000 km he has to replace the entire set. Portion allocated to current usage (R630 a tyre plus R300 alignment and balancing)	R102	R1 172
Insurance costs	R620 a month (average)	R620	R7 440
Parking	Once a week at the mall at R10 a trip	R40	R540
Service costs	Assumed covered by the motor plan	R0	R0
Insurance claim	Once in 5 years at average excess cost	R50	R600
Tracking device	Average entry-level device	R99	R1 188
Cleaning bill	Washed twice a month at the local car wash	R140	R1 680
Replacement of a tyre	1 tyre replaced from pothole damage in 5 years	R32	R126
Licensing fees	R600 a year	R50	R600
Fuel price increases	Unknown and not considered in this calculation	-	-



Total monthly cost: **R6 764** Total yearly cost: **R80 210**

Source: Volkswagen South Africa¹⁵ (cost of car and fuel consumption). Other costs based on average pricing based on research.

The average assumed cost of owning the car would cost Thulani around R6 764 a month, or R80 210 a year. Should he have done all the travelling by Uber, what would this have cost him? The rough estimated costs for Thulani below show that, at the current pricing, he would be better off buying a car than taking an Uber.



Assumptions

Monthly cost: 21 workdays and 9 weekend days
Yearly cost: 270 workdays and 95 weekend days

Total monthly cost: **R10 840**
 Total yearly cost: **R133 650**

Source: Uber¹⁶

Taking into account your own circumstances

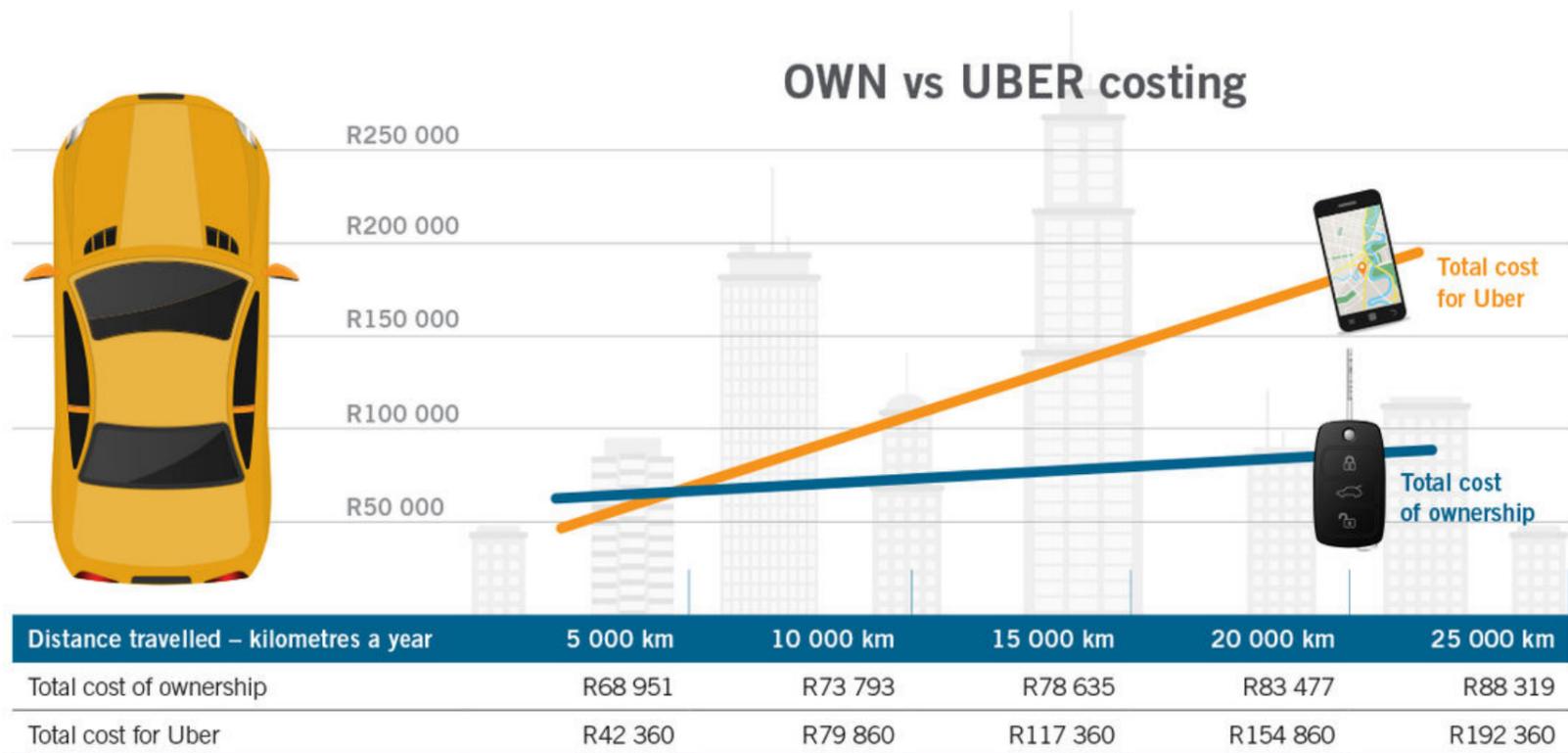
As advised earlier, you would have to consider your own circumstances when deciding whether to buy a car or take an Uber. Given the disclosed Uber rates (excluding time surcharges in case of traffic), the base rate of a trip is R5 with a cost of R7.50 a kilometre. This means the breakeven number of kilometres you have to travel in a year to make Uber more economical would be less than 10 047, assuming that you still do the same number of trips as Thulani does.

There are a few other considerations you may want to take into account when making a decision, which may change the results of the analysis based on your personal circumstances. These are:

- > **a. Your social structure.** Uber and other ride-hailing services can take up to four people comfortably per trip. The cost per person therefore decreases when more people share the costs of the trip. Take this into account when making a choice.

Jargon buster

Ride-hailing means booking rides and paying for a car service on a smartphone app with a transportation network company such as Uber or Lyft.

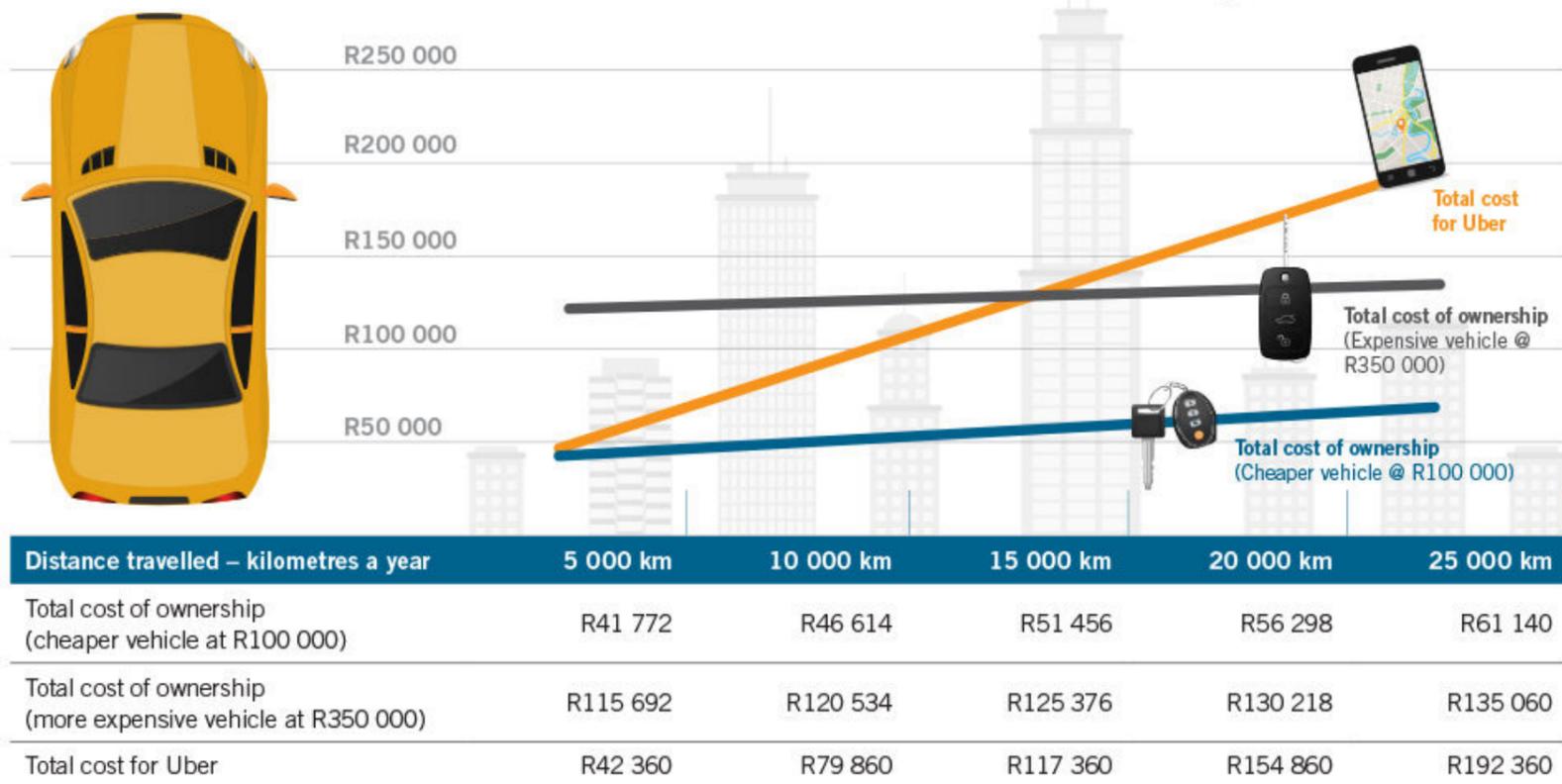


- > **b. Your family structure and travel needs.** Transporting kids to school and extracurricular activities requires flexibility and increased waiting times per trip. This may have negative unintended consequences on the cost of an Uber ride that charges for waiting periods as well. A family car is probably the most convenient and flexible in this case.
- > **c. The type of car you consider.** Our analysis considers a new Polo Vivo. Should you choose to buy a second-hand, cheaper vehicle, the calculation would have to be revised to consider the cheaper monthly cost, and also the additional servicing costs, as the vehicle would probably not come with a standard service plan which covers costs of service.

Should you decide to buy a more expensive vehicle, you would have to consider the increased costs of ownership.

The cost of ownership profile could look like this:

OWN vs UBER costing



The table on the previous page compares the cost of taking an Uber with the cost of buying two types of vehicles, one for R100 000 and the other for R350 000.

As can be seen from the graph, the cheaper vehicle is a better choice from almost the outset, while the more expensive vehicle becomes more cost effective at 16 227 km.

- > **d. Travel apart from regular travel.** For travel such as long-distance road trips for holidays, you would either use public long-distance transport such as air or bus travel, or hire a vehicle. This would have to be added to the consideration based on your personal circumstances.

This analysis is not meant to be definitive, but rather to assist you in analysing your personal circumstances. There could be a longer list of circumstances and costs, such as the cost of acquiring and renewing a driver's licence, which would be negligible in the long run but significant in the shorter term.

Difference between buying used or new – cheap or expensive

Making the right decision

Rather than looking in isolation at the choice of vehicle to buy, take all financial factors affecting the family into account:

- > Assess your household budget, including income and expenditure
- > Provide for longer-term expenditure that may arise, such as holiday saving or a burst geyser
- > Understand your retirement goals

Bringing this information together should paint a holistic picture of a household's finances and the size of purchase that will enable you to meet both current and future needs.

George Simitopoulos, the CEO of carfin.co.za, argues that while banks generally recommend that the price of your car should not be more than 30% of your income, 25% is probably a better benchmark since insurance, maintenance and fuel costs are likely to push it up to 30%.¹⁷ But this might not be a particularly meaningful yardstick if your bank has suggested that your housing costs should also approximate 30% of your income, and the sum total of these two factors makes it impossible to get by. The key issue will be your total budget picture, so in this context these rules of thumb are not particularly helpful.

Simitopoulos also quotes another rule of thumb that people earning roughly between R10 000 and R20 000 a month should limit themselves to buying second-hand cars, and those earning up to R50 000 should look at smaller new cars. The suggestion is that only those who earn over R150 000 a month should consider four-wheel drive or sports cars.

Finally, he points out that: 'Banks and car dealerships are incentivised according to whatever interest they charge you so the higher the interest, the higher the commissions. We estimate that a large percentage of people are overpaying, especially first-time buyers who are buying into instalments, not interest rates.'¹⁸

And if we didn't buy that car?

A factor that often gets ignored is what happens if we look at the consequences of those decisions from a different perspective. What if we looked at the consequences over a long term? Or what if we looked at the multiplier effect of using that money to invest in something that could add value over time as opposed to investing in what is, in effect, a depreciating asset? Or what if we used that money rather to save for retirement? What are the consequences?

If we look at the two vehicles we considered in the analysis, one for R100 000 and one for R350 000, and consider that the average person would buy their first vehicle at age 23, and replace their vehicle every five years, this would result in the average person owning eight vehicles in their working life.

If we consider the differential between the two decisions maintained at R250 000 for all these purchases, and assume the interest rate remains at 12%, this would allow the individual to save approximately R5 500 a month. Over 40 years at a growth rate of 8%, this would translate to a savings balance of approximately R19.2 million over their working life.

This would be a significant addition to their retirement saving.

How else could we use this potential saving to improve quality of life and at the same time enhance retirement outcomes? One of the most reliable predictors of income in South Africa is level of education.

The following analysis was conducted with Statistics South Africa data, using the Analytico Earnings Analysis Model™ with a total sample size of 717 364 individuals with educational outcomes of Grade 8 to bachelor's level. It was based on median gross income a month in October 2016 terms. According to Analytico, the figures below are what one could reasonably expect to earn on entering the labour market given the grouped qualifications:

- > **No schooling:** R1 704
- > **Some primary (Grade 1–7 incomplete) education:** R1 867
- > **Completed primary school (Grade 7):** R1 946
- > **Some secondary education (Grade 8–Grade 12 incomplete):** R2 660
- > **Grade 12:** R4 977
- > **Grade 12 with certificate:** R8 326
- > **Grade 12 with diploma:** R13 378
- > **Bachelor's degree:** R21 527¹⁹

This suggests that investing in yourself before investing in vehicles could allow you to afford finer things in life, and with that potentially a more expensive vehicle while you save optimally toward a successful retirement. This deferral of enjoyment could be one of the most important decisions you could make.

Would a likely saving of R5 500 a month be sufficient to pay for higher education?

Table 4.5.1: Average fee for first-year studies at popular universities in South Africa

University	BA	BCom	BSc	LLB	BEng
University of Cape Town	R53 440	R64 890	R58 400	R54 350	R61 220
University of the Witwatersrand	R44 890	R46 795	R47 920	R43 640	R61 810
Stellenbosch University	R39 696	R41 030	R48 096	R47 270	R55 296
University of KwaZulu-Natal	R38 500	R36 580	R38 300	R37 758	R44 700
University of Pretoria*	R36 000 (R38 880)	R42 000 (R45 360)	R44 000 (R47 520)	R37 000 (R39 960)	R46 000 (R49 680)
Rhodes University	R43 390	R47 472	R45 140	R48 673	-
University of Johannesburg*	R36 650 (R39 580)	R37 500 (R40 500)	R44 000 (R47 520)	R34 150 (R36 880)	R41 600 (R44 930)
North-West University	R39 300	R39 300	R42 600	R46 100	R49 900

*2017 fees with adjustments

Source: Fin²⁴

The potential savings of R66 000 a year could easily cover the cost of most tertiary courses to post-graduate level, and allow the individual a potential increase in earnings of up to 400% a year.

Financial freedom can only be achieved if we separate the practicality of getting around from the emotion of buying a vehicle and making the decision to delay enjoyment for a much better outcome. As Marcel Housel argues in his article *The Psychology of Money*:

Wealth, in fact, is what you don't see. It's the cars not purchased. The diamonds not bought. The renovations postponed, the clothes forgone and the first-class upgrade declined. It's assets in the bank that haven't yet been converted into the stuff you see... the truth is, yes, people need to be told that. When most people say they want to be a millionaire, what they really mean is 'I want to spend a million dollars,' which is literally the opposite of being a millionaire. This is especially true for young people. A key use of wealth is using it to control your time and providing you with options. Financial assets on a balance sheet offer that. But they come at the direct expense of showing people how much wealth you have with material stuff.²⁰

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