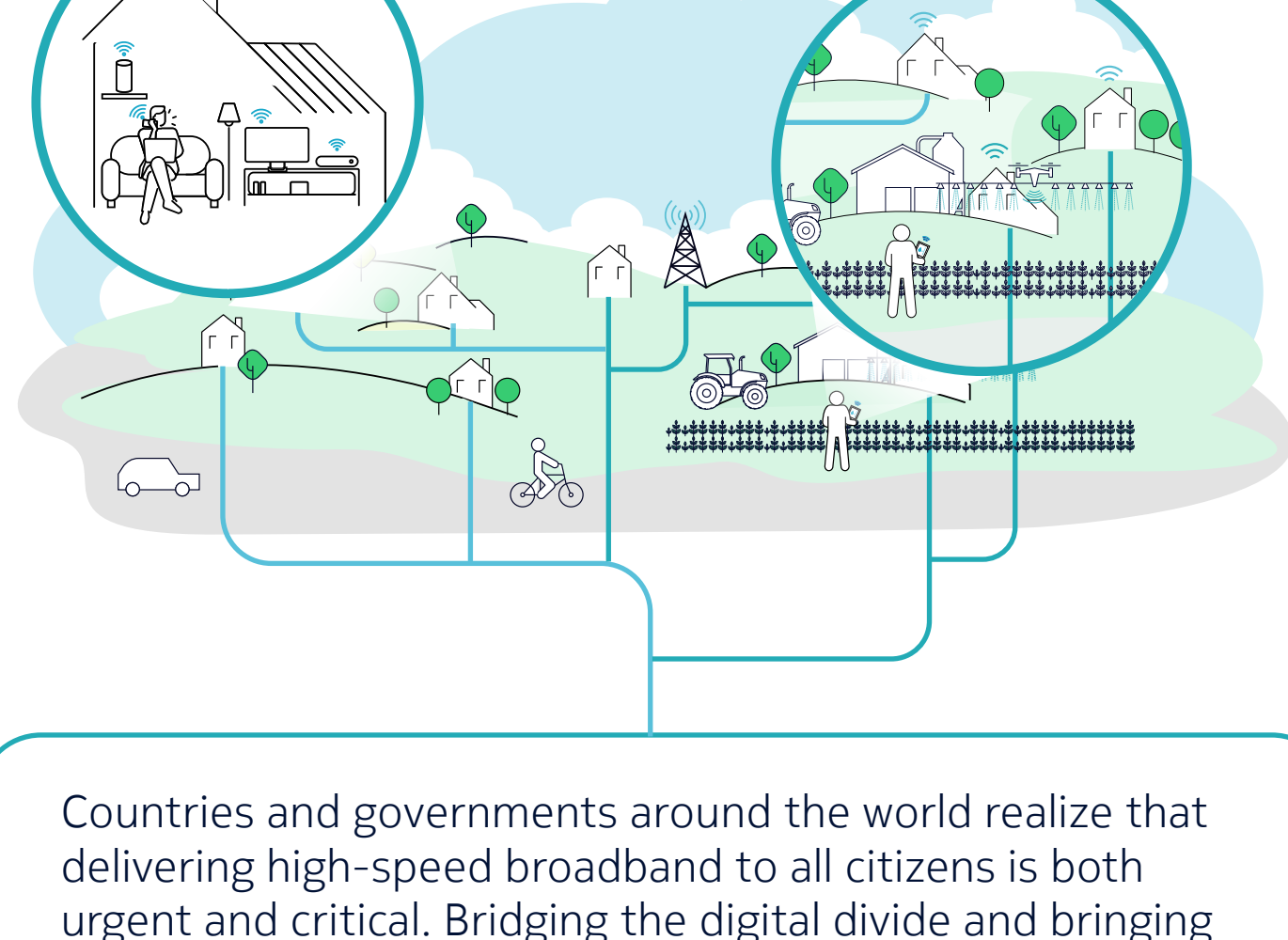


The top 3 myths about rural fiber broadband



Countries and governments around the world realize that delivering high-speed broadband to all citizens is both urgent and critical. Bridging the digital divide and bringing the socio-economic benefits of broadband to rural areas is a top priority. **But some old myths remain...**

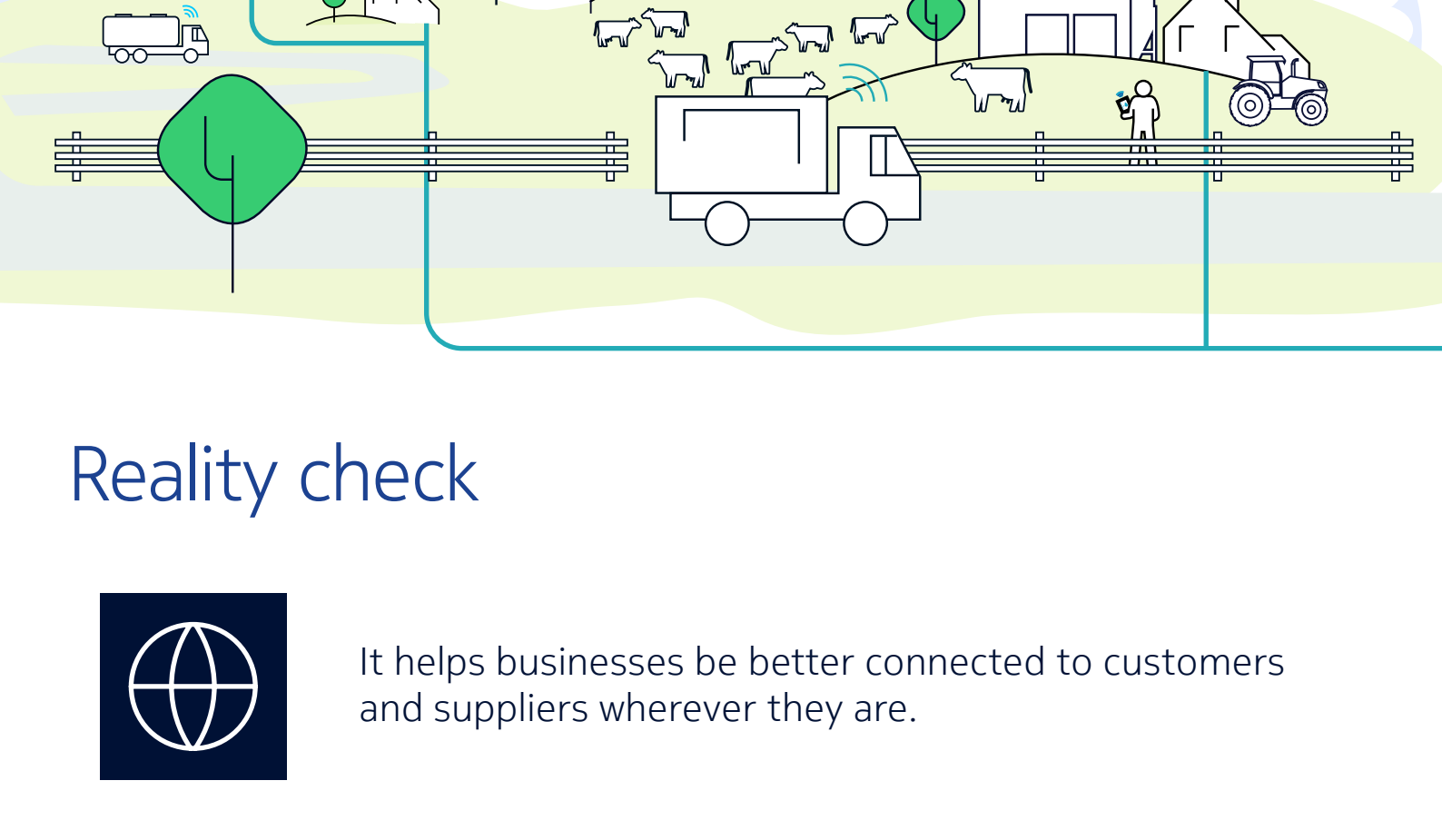
...let's bust them!

Myth 1

Customers in rural areas don't need high-speed broadband connectivity

Typically, fiber deployments have been focused on urban and suburban areas with a dense subscriber base. Demand is high, and so is the supply. Rural areas had to be happy with whatever broadband they could get.

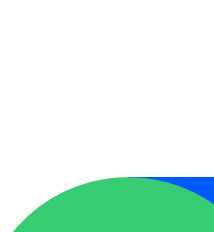
But rural areas are crying out for better connectivity. The demand for good broadband in rural areas is the same, if not bigger, because it makes a life-changing difference.



Reality check



It helps businesses be better connected to customers and suppliers wherever they are.



Some, like modern agricultural farms, need reliable, high-bandwidth connections to support their big data applications: high-resolution video and images that are analyzed in the cloud to aid automation, process flows, and decision-making.



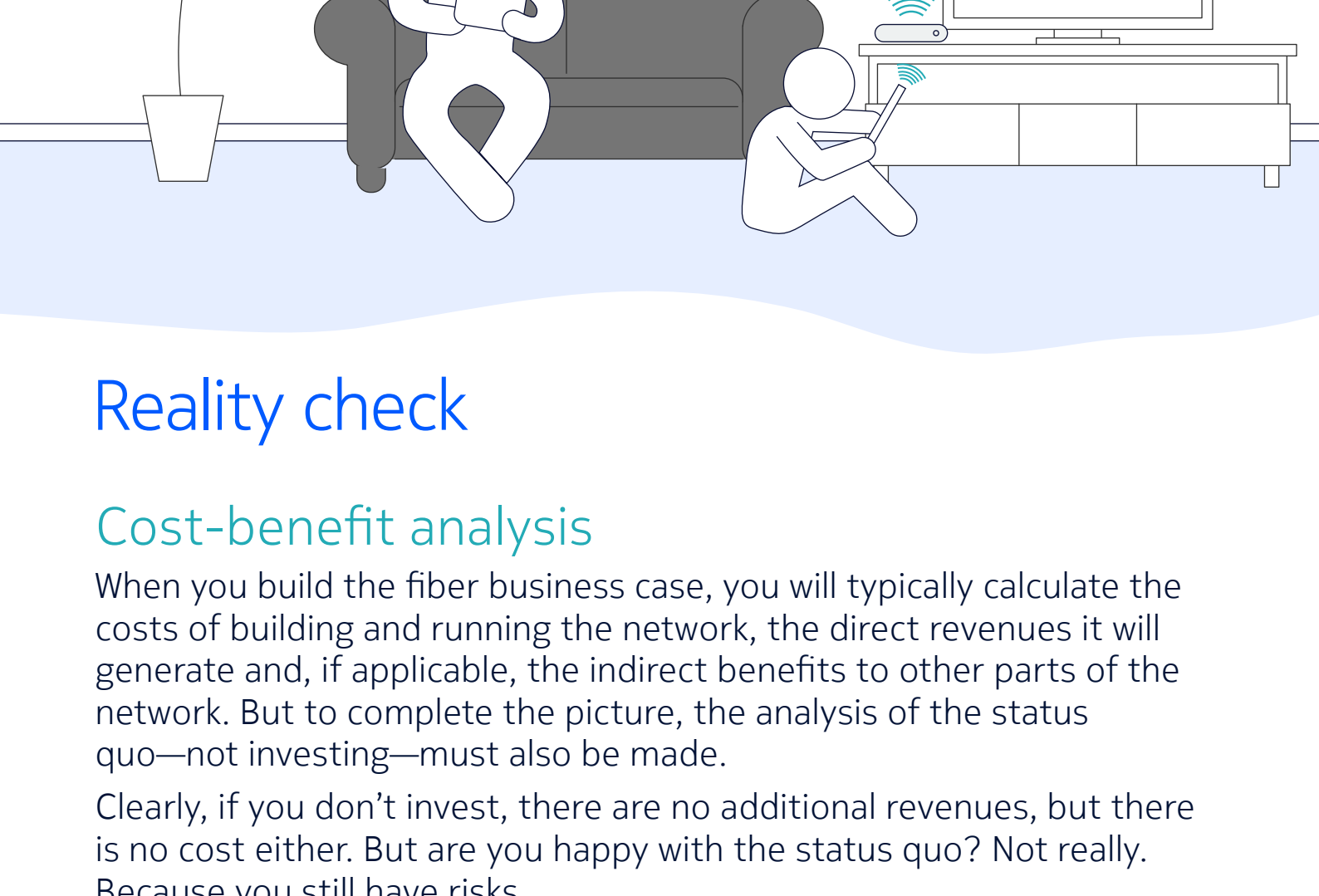
Citizens get better access to education, healthcare, entertainment, working from home and staying in touch with friends and family.

Myth 2

There is no compelling case for investing in rural broadband

Today, broadband is considered a life-enhancing necessity. For regional operators and governments, not investing in rural broadband is not an option.

But investment decisions always start with a cost-benefit analysis. So let's do that.



Reality check

Cost-benefit analysis

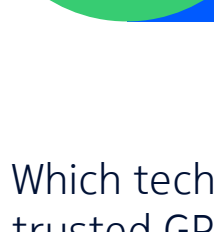
When you build the fiber business case, you will typically calculate the costs of building and running the network, the direct revenues it will generate and, if applicable, the indirect benefits to other parts of the network. But to complete the picture, the analysis of the status quo—not investing—must also be made.

Clearly, if you don't invest, there are no additional revenues, but there is no cost either. But are you happy with the status quo? Not really. Because you still have risks.



Competition

Areas where there is demand but no supply are highly attractive to competitors, especially disruptors and new entrants. That leads to loss of market share and a long-term threat from competitors expanding their footprint. Legacy DSL services can't compete against fiber, generally drawing only about 20% market share compared to 60% for high tier services.



Communities

There's a cost to communities as well. Governments care deeply about rural broadband because it brings socio-economic benefits for citizens, attracts businesses, and reverses population flows from rural to urban areas.

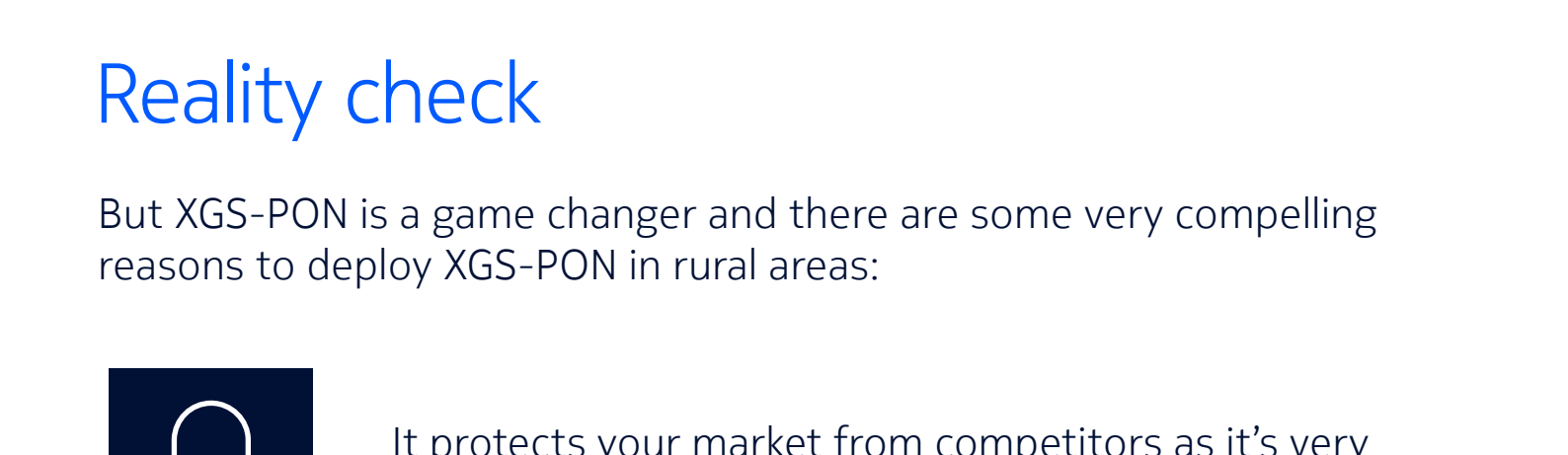
Not investing in rural broadband does not mean status quo: it means going backwards.

Myth 3

XGS-PON is overkill for rural areas

Which technology is the best for broadband in rural areas: tried and trusted GPON or an immediate move to 10G PON? Technology is tightly coupled with cost: how do you make a fiber deployment cost effective in a low-density rural setting? Fiber broadband in particular is a long-term endeavor: how do you make the network future-proof to avoid new cycles of investment any time soon?

GPON can provide competitive gigabit broadband services. Although the overall cost difference is small, GPON is still more cost efficient than XGS-PON thanks to lower cost ONTs.



Reality check

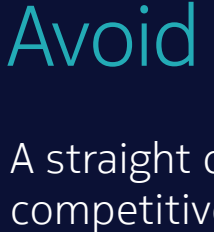
But XGS-PON is a game changer and there are some very compelling reasons to deploy XGS-PON in rural areas:



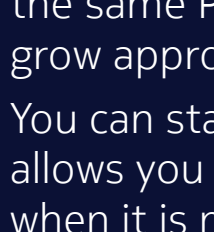
It protects your market from competitors as it's very hard for them to beat you on service quality.



It brings more revenues from higher paying customers, like businesses, including rural farms, manufacturing campuses and warehouses.



It can easily support 4G and 5G mobile transport on top, which provides a great opportunity to accelerate mobile coverage or create new revenues by leasing fiber capacity to a mobile provider.



The capacity of XGS-PON will be enough for many years, eliminating the need for near-term upgrades.

Avoid regrettable spend

A straight choice between GPON and XGS depends on the demand, competitive threat, and revenue opportunities. Luckily, there is a third, smarter option.

A multi-PON solution can serve both GPON and XGS-PON customers from the same PON port in the access node. As such, it allows true pay as you grow approach that eliminates an either/or decision and lowers risk.

You can start with more cost-efficient GPON ONT deployments, which allows you to offer competitive Gigabit services, and upgrade to XGS-PON when it is needed. The business case for a regional operator in UK shows that this approach has 25% lower TCO for 20% XGS-PON take rate.



When needed: remotely switch users to XGS-PON

Today: deploy GPON