

General Purpose Mobile Model

The Telzed mobile model is a new approach to cost modelling. It has novel features and sophisticated techniques but, unusually, it is designed to be developed and optimized by the user, not the consulting firm.

So the user can employ their own teams to define local-values. This provides major financial benefits through avoiding major projects by external firms, though these can of course be hired if desired.

The model has widespread application

The model assists with pricing, strategic decisions, regulatory cost analysis, analysis of alternative network plans, planning for 2G or 3G termination, assessing the impact of 5G, evaluating investment decisions etc. So operators, regulators, industry analysts, financial investors, economists and business managers can gain better understandings of the costs, trends, risks, impacts and diverse outcomes from the many possible future scenarios. Detailed solid financial insights are vital.

Mobile telecom is facing major challenges from huge traffic volume growth. This needs new investment to enhance capacity, usually using 4G and 5G. Yet revenues per Gbyte falls and ARPUs are often static or declining. This implies a “data-caused cost crisis” in the future that needs urgent evaluation. Business failure *is* a possibility.

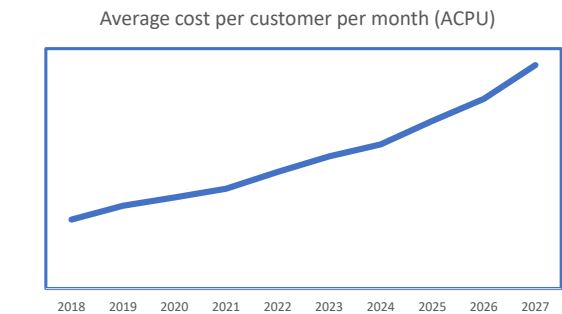
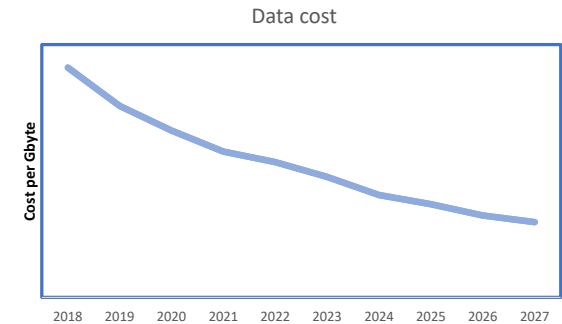
The Telzed model

This is supplied with a comprehensive manual that details how to use and develop the model, including how to obtain and enter the input data. The manual also provides extensive discussions and guidance on costing and technical/economics factors.

It addresses the need for models that users can develop and understand without extensive external support. Its application is not regulatory focused, yet it meets that need. It provides the flexibility needed for business management decisions. The focus is on realistic network/demand/cost modelling to reflect practical network designs.

Users benefit from better understandings of the cost structures and the issues facing both mobile and FWA operators – obtained from qualitative and quantitative results.

The model is supplied with support and is pre-populated with user’s own numbers. A Telzed version with default values is also supplied.



The model can provide the numbers to show how prices must evolve to meet the rising demand with falling unit cost. under multiple scenarios. How could 4G and 5G, and even FWA, evolve? Share Base Stations on existing masts or deploy new small masts sites?



Model Specification

General

Multi--year Bottom Up

Recent past may be included for calibration

Demand for multi-years enables forward looking costs per year, that are also averaged

Long Run Incremental Costing ensure economically valid costs

Any 2/3/4/5G technology, singly or in any combination

Both Traffic-demand driven and rural Coverage driven (area) network designs

Specific features

Tilted annuity and multi-year values ensure valid results even with large-traffic variations per year

Base-case and future years are modelled

Methods to calibrate with actual networks existing today or to known plans

Multiple operational cost options for staff and vendors, including staff numbers or total opex values for any element

Optional inclusion of Business Sustaining (Common Costs of management) and Retail Costs of Sale

Detailed features

Average costs over multiple years

User defined evolutions of network traffic between 2/3/4/5G

Engineering factors drive network design – base station capacity, mast size, base-station site-sharing, sharing with other operators, mix of owned sites with rented masts, network resilience, busy hour demand and predicted future growth

Daisy chain transmission and direct links to mast sites

Microwave, leased lines and fibre options for transmission

Core network nodes and distances to suit the country

Links to other operators and Global Internet

Negligible calculation times (PC dependent)

Results graphs and demonstrations of options of analysis for users to further develop

Pure LRIC or full LR(A)IC voice termination

Cost recovery (pricing) using user-defined price trends that still ensures correct total costs are recovered

Voice, messages, data and IoT

Flexes automatically with (say) 20% or 50% per annum data growth

Special/unique features

Fixed Price for model, documentation and support. No contract to build and collect values. The user benefits from low costs and flexibility on how to proceed

User's teams can complete the model with their own data, using the guidance on how to change inputs, collect values and to develop the model

Default values are a reasonable start/default but are not operator/country specific

User manual includes guides on the model Excel, including costing and modelling discussions

Open Excel, without macros, "offset functions" or large array formulae that can be hard to use/trace

Designed to counter some approaches that are non-transparent, slow and cannot be maintained by the user

Rapid/easy to analyse scenarios like 2G or 3G termination, stand-alone 5G masts or shared with existing, using more/less 4G sites

Optional Fixed Wireless Access model can be supplied

For details contact: Roger Steele CEO

Telzed (rogersteele@telzed.com)

**This model is potentially different
and better, than any you may
have seen**