



The financial impact of digital transformation: evidence and analysis



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About this report

This report examines the impact of digital transformation on financial performance. We assess whether software-based transformation is having a financial impact, and consider what a successfully executed digital transformation strategy might deliver.

This report provides:

- an overarching digital transformation index for 40 major operator groups worldwide, with rankings based on four areas: network virtualisation, cost transformation, customer experience and new services.
- a deeper analysis of financial performance measures that are expected to be impacted by digital transformation
- a cold, statistically-driven analysis of the trends that suggest that digital transformation initiatives are having an impact – or could have an impact – on financial performance.

The report will be of particular value for operators wishing to square the messages they are sending to the industry analyst community with those that they send to investors.

It is based on several sources, including:

- Analysys Mason's internal *Telecoms Software and Networks* research practice
- interviews with operator groups worldwide.

KEY QUESTIONS ANSWERED IN THIS REPORT

- How important is digital transformation to operators? Is it genuinely transformational or does it simply represent the latest set of incremental changes to processes and products?
- What is the evidence that digital transformation strategies are having a positive impact on the following areas of operators' financial performance?
 - profitability, productivity and cash flow
 - the balance of assets in businesses
 - their valuation.
- What should a successfully executed digital transformation strategy deliver in financial terms?

WHO SHOULD READ THIS REPORT

- Strategy teams within operator groups
- It will be of particular value for operators wishing to square the messages they are sending to the industry analyst community with those they send to investors. Our recommendations are geared towards this.

Executive summary

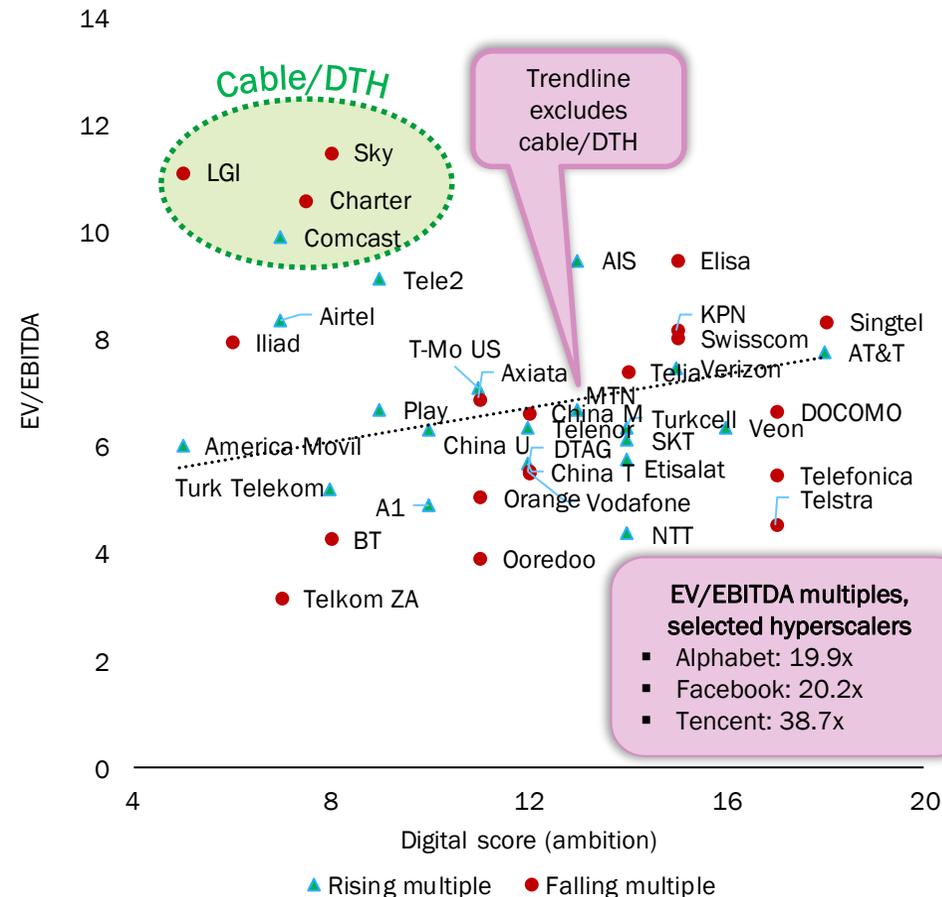
Digital transformation (DTx) is considered to be critical to operators' long-term strategies, but it is difficult for operators to articulate what tangible financial effects DTx is having. Analysys Mason's research suggests an emerging correlation between DTx ambition and productivity measures and cash generation.

This report ranks operators by achievement and ambition in DTx: in network virtualisation, cost transformation, digital experience and digital services. It shows if, where and to what extent DTx is beginning to have an effect on a number of largely financial outcomes. We see some effects particularly in productivity measures. Ultimately, operators want a higher valuation. We see a weak correlation between ambition and valuation multiples, but believe this is justified by some of the general positive correlations we see. High valuations of pure ServiceCos and pure NetCos serve to indicate, however, that the vertically integrated model may limit progress.

KEY RECOMMENDATIONS

1. Operators need to emphasise the direction of travel more than absolute achievements.
2. Operators should not say digital transformation when they mean something less.
3. Productivity measures should be highlighted by operators seeking to give guidance on DTx progress.

Figure 1: Digital scores (ambition) versus enterprise value/EBITDA multiple, FY2017



Source: Analysys Mason

Operators want digital transformation programmes to deliver in financial terms

Operators consider digital transformation to be critical and they all want some sort of financial payback. However, the extent to which DTx delivers in key financial areas has been unclear.

'True believers' consider DTx to be a means of transforming the nature and financial performance of their businesses. Enthusiastic digitalising operators wish to position themselves as technology companies on a par with – if not in terms of scale, then in terms of financial performance – tech giants. They want to achieve a business that delivers more growth, faster returns on the basis of a better balance of digital assets (such as data, platforms and intellectual property/software) to physical assets (including physical infrastructure, networks and spectrum). They believe that on that basis they can achieve radical transformation of their cost-base.

The rest to a greater or lesser extent consider DTx to be one of a number of means to specific ends – ends that do not in themselves represent new thinking for operators. The fundamental nature of what they do and sell will not greatly change. For these operators, there is no burning ambition to be a tech business, but they nevertheless recognise that there is much to learn about the *modus operandi* of hyperscalers that will deliver financial advantage.

What remains unclear is whether any of the changes of DTx are actually having much financial impact. While it is early to be measuring this, it is not premature. We should expect to see the beginnings of shifts in performance.

Figure 2: Sample contrasting operator views on DTx, anonymised, 2018

“It is pivotal we are seen as not just a tech business, but as a platform company.”¹

“Aim to deliver 5–10% top-line CAGR, 2–3ppt EBITDA margin gain over 3 years.”³

“It is not important we are seen as a tech business, but there is much to learn.”²

“Achieving in-market scale, not digital transformation, is key to cost savings, and M&A is key.”⁴

¹ Question: *What business aims do you hope to achieve with digital transformation?*; ² Question: *Is it important you are seen as a tech business, or is this not pivotal?*; ³ Question: *What are principal financial targets of DTx?*; ⁴ Question: *How important is DTx in your overall strategy?*

We map financial and operational metrics onto a digital transformation index for a set of 40 operator groups worldwide

An index that measures ambition and achievement in the four aspects of digital transformation is plotted against financial performance to test the extent to which commitment relates to expected financial outcomes.

The index is a set of rankings based on four areas: network virtualisation, cost transformation, customer experience and new services.

It was created on the basis of what operators aim to do and what they have done, not on financial outcomes.

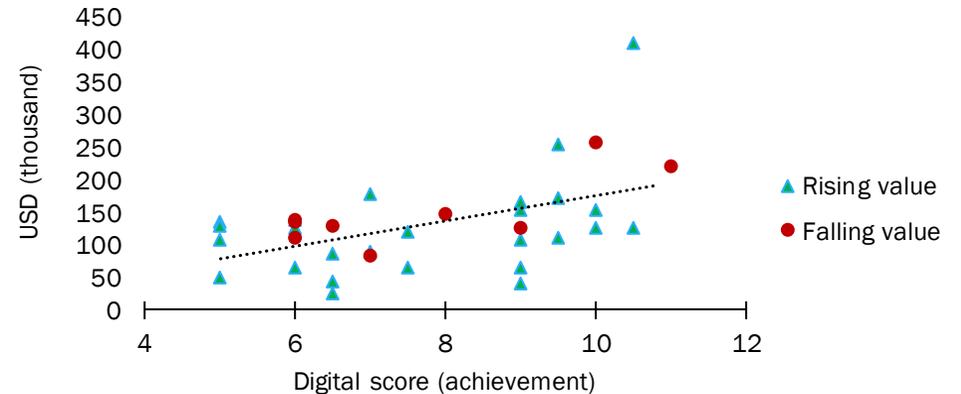
Against this, we measure sets of financial and operational KPIs taken over 4 years to show actual performance and change in performance over time, including

- profitability
- productivity
- capital intensity and cash flow and cash generation
- balance of assets
- digital service revenue
- valuation.

What our research suggests is the beginnings of change and some emerging correlations between DTx ambition and productivity measures and cash generation.

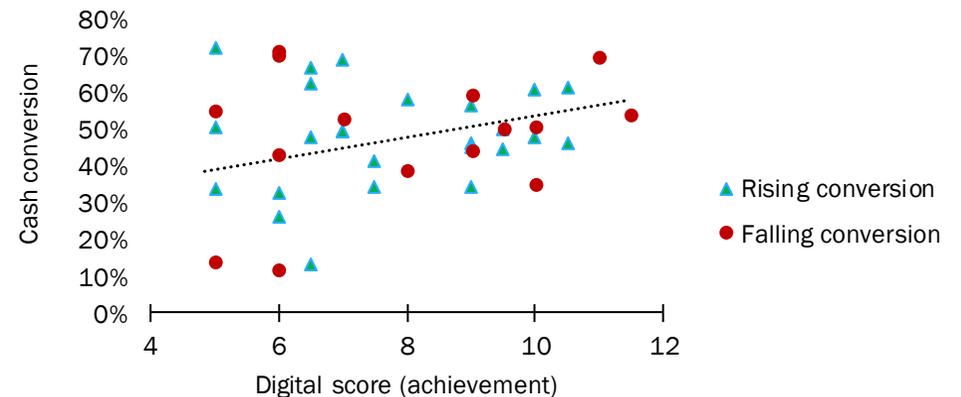
¹ Please see slide 17 for a definition of, and more detail about, value-added per employee (VA).

Figure 3: Digital score and value-added per employee¹



Source: Analysys Mason

Figure 4: Digital score and cash conversion



Source: Analysys Mason

Recommendations



1

Operators need to emphasise the direction of travel more than absolute achievements.

Unsurprisingly, many of the operators that have embraced the idea of digital transformation most fervently are those with poor productivity metrics such as low value-added per employee or profit per employee, or simply those with margins under greatest threat. These operators are the ones that need to change most. Benchmarking on absolute values is sometimes not kind to them. However, in terms of change, digital champions tend to score well.



2

Operators should not say digital transformation when they mean something else.

Digital transformation is an overused term, but it is appropriate to use if operators believe that a financial transformation is within their grasp. The principal drivers of digital transformation are not new because operators have always looked for ways to reduce costs and revenue growth has been slack for years. Previous 'transformations' promised much and delivered little more than deflation: lower costs competed away. They should not appear to promise more than they can deliver, and should not label every cost reduction exercise 'digital transformation'.



3

Productivity measures should be highlighted by operators seeking to give guidance on progress.

Productivity is central to DTx, and it is a major macro-economic problem, especially in developed economies. Among telecoms operators it is in productivity measures here where the shift from exploitation of physical assets to development of intellectual / digital assets can be seen reasonably clearly. Value-added per employee and value-added per employment cost should be increasingly important KPIs.



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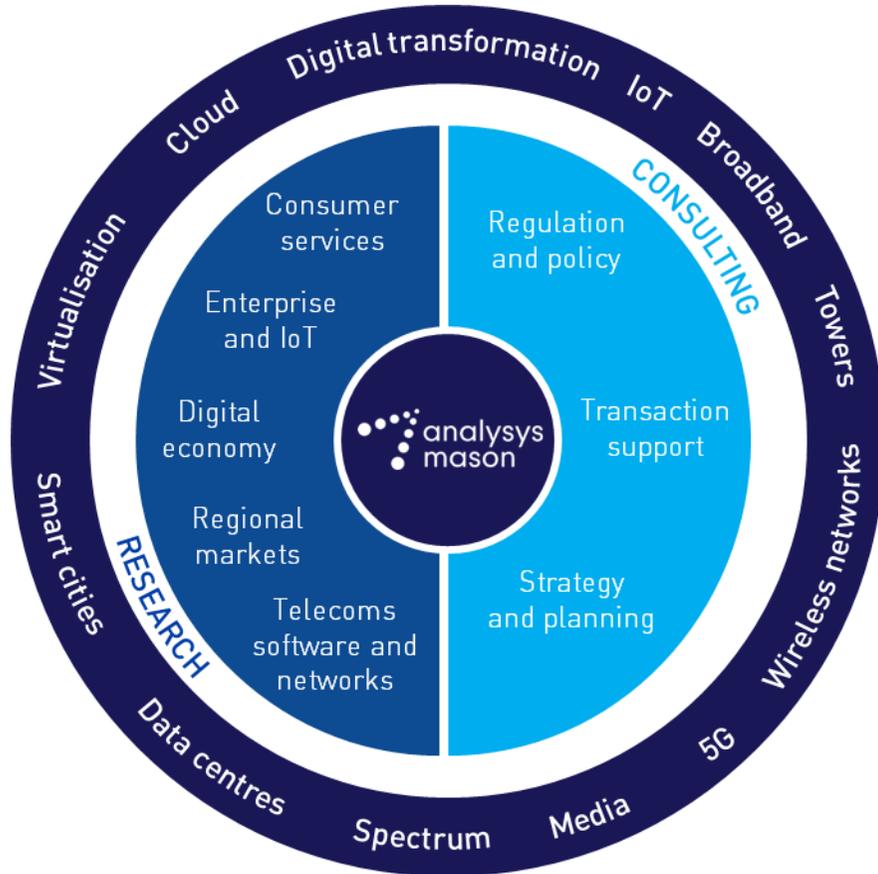
About the author



Rupert Wood (Research Director) is the lead analyst for our *Operator Investment Strategies*, *Network Traffic* and *Spectrum* research programmes. His research covers the following areas: the evolution of operators' investment priorities; operator business structures; business models for FTTx and convergence; fixed broadband technology; the economic impact of digital transformation; capex forecasting; and network traffic forecasting. He has extensive experience of advising senior management on strategic issues. Rupert has a PhD from the University of Cambridge, where he was a Lecturer before joining Analysys Mason.

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