

The landscape is changing in Testing, Inspection & Certification. It's time for vision and confidence.



Testing times

In our last review of the TIC sector (which we called TIC-TOCK), we identified several emerging trends, such as the superiority of focus over pure scale and the changing basis of competition, with implications for both organic growth and M&A priorities.

These trends have since been borne out in the performance and stated strategies of major players - and our latest study shows that the divergence between winners and losers has further increased.

The fundamental attractiveness of the sector for players and investors remains high, but the market is changing rapidly:

- Customer expectations continue to escalate
- End-sector growth remains highly variable, with former star areas encountering significant head winds
- Competitive lines are becoming increasingly blurred
- Emerging markets cannot be ignored
- No-one is immune from digital disruption

Consequently, we are seeing a dramatic increase in the number of players with falling revenues.

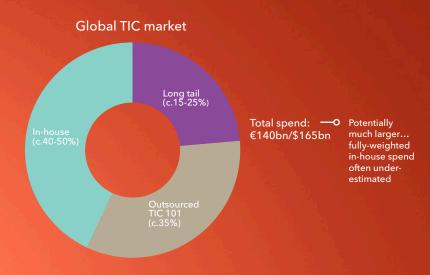
In this review, we discuss the winning formula that we believe should be deployed in the face of this rapid change, and the importance of thinking about the 'end game' in order to future-proof your business.



TIC 101 Methodology

The "TIC 101" is our proprietary database of the leading global providers of Testing, Inspection, and Certification services. We last reviewed their performance in 2015.

SUMMARY OF THE TIC 101 (# COMPANIES)





¹ Size defined by latest revenues ² Presence in four macro regions Europe, North América, APAC, RoW ³ Very High = 13-14 sector verticals covered, High = 7-10, Medium = 5-6, Low = 3-4, Very Low =1-2

Shifting sands

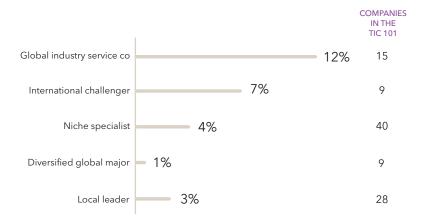
One of the most marked drivers of performance is the operating model in terms of the degree of sector focus and geographic reach.

Aggregate revenue growth of the TIC has remained healthy (averaging 7% pa for the period 2013-16), but this has been propped up by M&A and there are significant underlying variations.

Sector leadership has increasingly been rewarded, with Global Industry Service Companies (eg, Eurofins, Socotec, and Trigo) growing significantly above the 4% average last year.

On the other hand, underlying organic growth for the largest players has averaged low single digits in recent years.

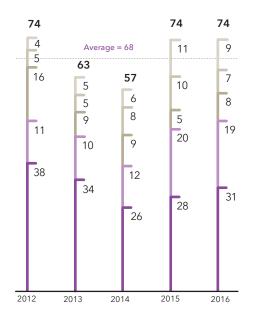
TIC 101 GROWTH BY SEGMENT 2015-2016 % YoY



See OC&C Insight "TIC-TOCK" for definition of these operating models

Sector leaders have demonstrated an ability to win in M&A (which in volume terms has remained as active as ever). They have increased their share from 15% to >25% of the c.70 published acquisitions by companies in the index each year.

TIC 101 M&A ACTIVITY 2012-2016 # published acquisitions



Niche specialist

Local champion

International Challenger

Global industry service co

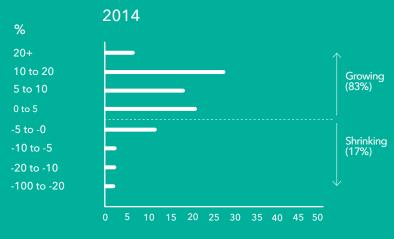
Diversified global major



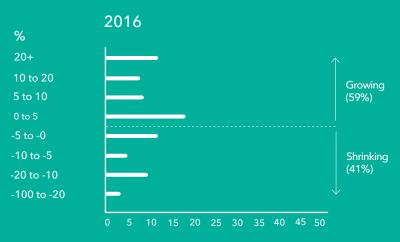
One of the most notable differences in recent years has been the increased divergence of performance, with strong growth still seen by the 'winners' in the sector, while the penalty for underperformance has increased: the proportion of companies with falling revenues grew from <20% in 2014 to >40% last year. This variation is greater than any segment differences can explain, indicating that outperformance is embedded: it reflects both choosing the right footprint and building sustainable competitive advantage.

DISTRIBUTION OF TIC 101 REVENUE GROWTH, 2014-2016

% OF COMPANIES







Winds of change

TIC has emerged 'above the radar' for customers, competitors and investors and this presents a new set of challenges and opportunities. Our research and conversations with leading executives reveals that they face four key challenges today:

1. CUSTOMER SOPHISTICATION

There has been a noticeable shift in customer buying behaviour. Increasingly customers are looking to consolidate suppliers, in part because they now can, and they are asking for more integrated, less transactional, service from TIC providers. In addition, customers themselves are often consolidating.

2. GROWTH VECTOR DISCONTINUITIES

Variations in sector growth are greater than ever, with the 'stars' of a few years ago witnessing significant head winds - Oil & Gas is a well-known case, but Aerospace is also now coming off a cycle high.

"Customers require advice on which test to perform and what it means - but aren't prepared to pay for it"

- Lab CEO

This is a great opportunity for today's leaders, but also presents challenges: procurement professionals, previously unheard of in what used to be mainly a technician-to-technician transaction, are more likely to be involved; and customers are demanding more, often for less.

AVERAGE GROWTH RATE BY END SECTOR, 2013-2016 % CAGR, average of leading players





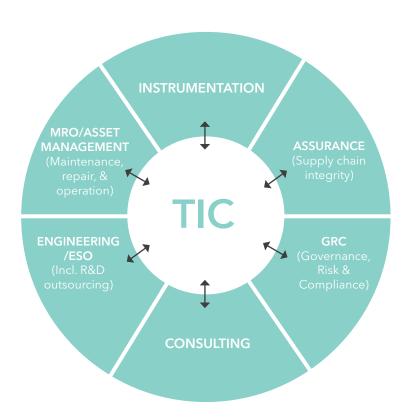
3. EMERGING MARKETS

Increasingly customer demand is shifting geographically, leading for example to Auto production moving to Brazil and Mexico; and Pharma production and R&D to India - and it is globalising too. The risk of losing out to local players is high, and the outsourcing opportunities are huge. According to one local expert, Chinese Government labs would be a Global Top 10 player in their own right if they were a commercial third party player.

Investment increasingly comes from Asia, too, with signature deals such as Baring Asia buying SAI, Shenzhenlisted JSTI buying Test America, and Horiba snapping up MIRA. There are currently three Asian headquartered players in the Top 50 (CTI and CAERI in China and KGS in Korea). How long will it be until one breaks into the Europe-dominated Top 10?

4. BLURRED LINES - NEW COMPETITORS

Just as TIC players are increasingly expanding how they define their offering (eg, adding Assurance to become ATIC, or Consulting to become TICC), so are players from adjacent business sectors expanding into traditional TIC territory.



A new world

The inevitability of digital disruption in the TIC sector is now clear. Whereas just a few years ago themes such as digital marketing, data analytics and futuristic technology like autonomous drones were often perceived as the preserve of the B2C world, there are now no corners of the industry that aren't aware of major changes coming, and the question is "how" and "when", not "if".

"In **10 years** I wouldn't want to have any labs."

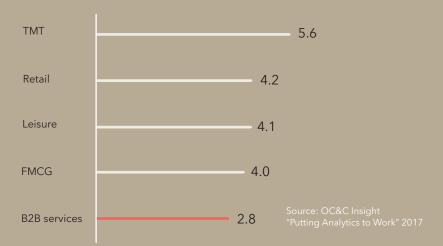
- TIC CEO

Yet, while TIC is ripe for digital disruption, most executives across the B2B sector feel seriously unprepared. In OC&C's Insight "Putting Analytics to Work" we saw that, when implemented, data analytics had a higher impact in B2B than in any other industry - but that capabilities in the sector today are the lowest.

% WHO SEE ADVANCED ANALYTICS AS HAVING A SUBSTANTIAL POSITIVE IMPACT

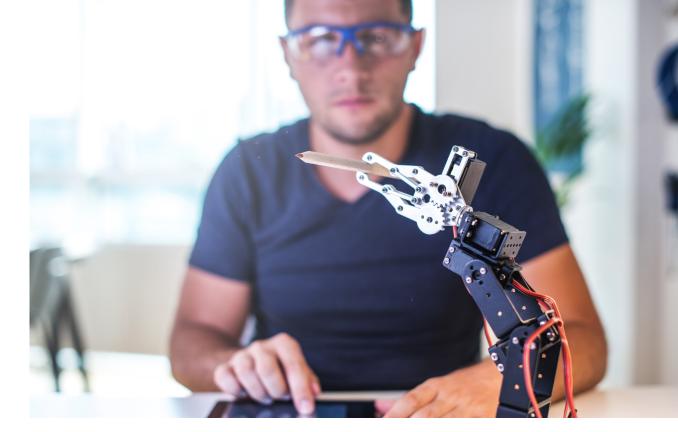


ADVANCED ANALYTICS CAPABILITY SCORE (1 LOW, 10 HIGH)



Part of the complexity is that technology affects both supply and demand, with implications for everything from customer acquisition and retention through to fundamental customer needs.

The ways in which technology is transforming the sector may be varied (as shown here) – what is clear is that no-one is immune.



KEY IMPACTS OF TECHNOLOGY ON TIC

THE DISRUPTORS...

NEW DEMAND



Cyber security now a major customer concern across industries

DELIVERY ECONOMICS



Asia Inspection disrupted an industry that previously appeared 'sewn up' by large global incumbents, annihilating barriers to entry through innovation

NEW **PROPOSITIONS**



CROs already well-established in Pharma

NEW **ENTRANTS**



Broker models in more commoditised testing - eq, Building in One platform (acquired by BV)

SUBSTITUTION



The Jaguar XE saloon was produced without using any prototypes during the aerodynamic engineering process

...AND THE TO-BE-DISRUPTED



Swathes of regulation and associated compliance to be worked out for autonomous transport - few TIC providers ready, some in denial



System certification (ISO) often a very manual, commoditised service, neglected by major players



Environmental testing traditionally a transactional 'test only' service - but data-led services potentially highly valuable



Incumbent providers often naïve about potential challengers - cf the 'Big 3' in consumer inspection



In contrast, General Motors built about 170 prototypes and drove a million miles during the test phase for its latest Chevrolet Malibu saloon

Where will it end?

As we pointed out in 2015, the winning formula in TIC demands customer centricity, commercial and operational excellence and the right footprint. While this remains true today, the rapid evolution of the market increasingly means that players must think carefully about what proposition they are building for tomorrow,

based on what fundamental need they are serving today and the economics of acquiring and serving customers.

Exactly what the 'end game' looks like will vary much more by sector than in today's TIC landscape. We see five broad models this could be:

INCREASINGLY RADICAL VS TODAY RADICAL VS TODAY RADICAL VS TODAY REASINGLY RADICAL VS TODAY REASINGLY RADICAL VS TODAY REASINGLY RADICAL VS TODAY THE FACTORY

PROPOSITION

'Last man standing' scale provider (or broker?) of highly routine mandatory testing

Manage asset availability and cost through inspection and maintenance operations

Manage - and reduce - risk across supply chain for OEMs

Outsource entire R&D (or at least the 'D') to accelerate cycle

Outsourced manufacturing (subcontracting as required)

WHERE?

- Environmental & Infrastructure
- Food & Agriculture
- Oil & Gas, Industrials
- Auto / Aerospace Fleets
- Construction
- Automotive Production
- Consumer Goods
- Life Sciences
- Automotive R&D

 New technologies (eg, autonomous vehicles)

We can already see these 'end games' emerging - such as increasing partnering of TIC labs with Engineering Services Outsourcers (ESOs) as they become more embedded in Auto and Aerospace supply chains. In fact, some have been around for a decade - such as Intertek's AIM division, which was founded when it acquired Aptech in 2009.

TIC players also have an important choice about how to participate, with options to buy, build or partner.

The only option not on the table is not to play at all.
Conventional TIC players that don't evolve their propositions risk being disintermediated by those who do.

What can be done?

So what are the new rules of engagement for success? It is increasingly clear that the "golden rules of B2B" - the success factors honed in more mature industries must apply.

1. CAN WE ACHIEVE LEADERSHIP, **NOT JUST SCALE?**

It is an unsurprising, but still often overlooked fact that different customers want different things. As customers have become increasingly sophisticated, the needs they expect to be met have diversified, with requirements varying significantly by sector, not just in terms of level and integration they expect.

realigned their business to sectors (on the surface at least) and the customer-centric operating model, with clarity on who their true 'sweet spot' customers are and how to serve them. Winning players aspire

2. CAN WE DELIVER OPERATIONAL AND COMMERCIAL EXCELLENCE?

Underpinning all of this must be a strong operational and commercial 'backbone' that reflects strategic alignment throughout the organisation, not just in reporting. Leading TIC players have traditionally been strong on financial aspects and footprint - ie, targeted M&A and capex investment - but have focused less on the commercial infrastructure. in particular systematic account management and commercial discipline. Most TIC players know that pricing represents a major latent opportunity, but it's one that hasn't been a priority before, or one that has often been considered opaque and hard to implement.

3. ARE WE DISCRIMINATING ABOUT 4. ARE WE CLEAR ABOUT OUR **OUR M&A OPPORTUNITIES?**

M&A remains critical in a sector which is still highly fragmented and where customers have a clear appetite for broader services. However, with multiples increasing and vendors ever more aware of their not just today's - and therefore options, more discriminating M&A is paramount: how will this acquisition improve my customer proposition? Why will I be a better parent company than anybody else? Is there an alternative (eg, partnering or organic build)? What should I divest?

END GAME?

All of the above needs to be put in place with a clear view of how your market will evolve over the next 5, 10, or 20 years and what that means for tomorrow's winning proposition, which capabilities and commercial models should be prioritised.

About OC&C

www.occstrategy.com

More than 30 years of unpicking the most complex business challenges with simple, uncommon sense.

More than 30 years of unpicking the most complex business challenges with simple, uncommon sense. We're an international consulting firm, but we've never seen size as an end in itself. Our expertise is focused on a few core specialisms, allowing us to deliver results that get noticed.

Our people are agile thinkers, cut from different cloths but united by a relentless curiosity and desire to solve problems.

To us, each client challenge is unique, so boilerplate solutions don't cut it. We interrogate a problem until we find its root. Then we develop a powerful way to solve it. We don't duck the difficult answers, we give clients the strategies they need.

Offices

Belo Horizonte

Hong Kong

Istanbul

London

Milan

Munich

New York

Paris

São Paulo

Shanghai

Warsaw

To explore these issues further, please contact us.

Bennet Summers, B2B Partner bennet.summers@occstrategy.com Vivek Madan, B2B Partner vivek.madan@occstrategy.com David Hosein, B2B Partner david.hosein@occstrategy.com

