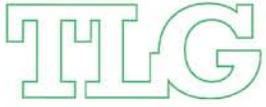


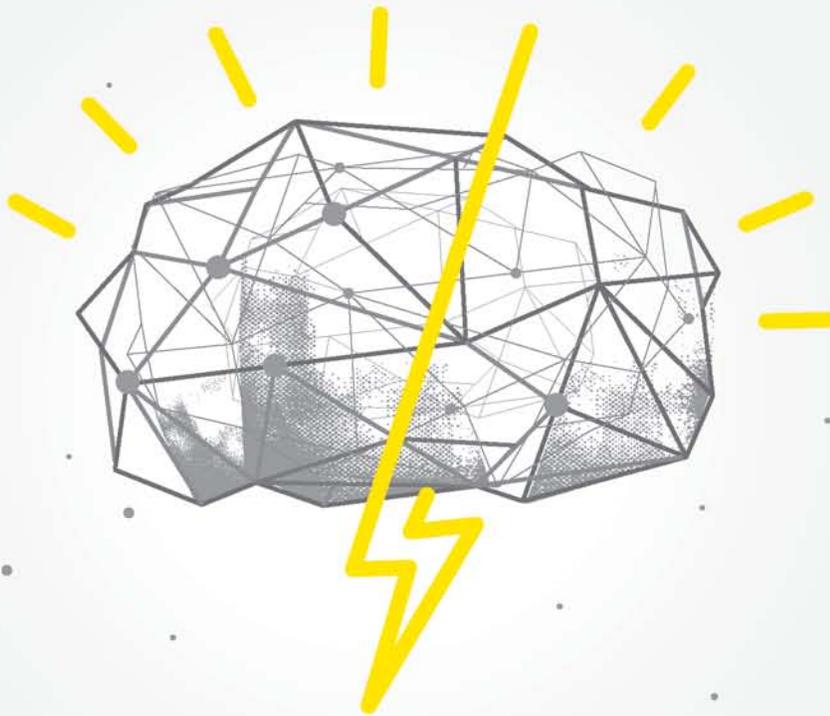
IN COLLABORATION WITH



WIPRO
Applying Thought

CLOUD POTENTIAL

The Opportunity to Invent and Reinvent Business



CLOUD POTENTIAL THE OPPORTUNITY TO INVENT AND REINVENT BUSINESS

The Cloud is a revolution. It is changing the way we think about IT, and about business and commerce.

A RESEARCH REPORT
BY WIPRO TECHNOLOGIES IN ASSOCIATION WITH TLG

Wipro's research for this report reveals how the Cloud is becoming integral to corporate strategy and is moving from the back office to the boardroom.

The Cloud is no longer seen as an improvement to IT infrastructure, a 'step change' that is simply making processes and systems more efficient. Rather, it is seen as a 'game changer'— a new technology that changes the way we do business.

The consensus amongst business leaders is that the Cloud is a transformative innovation and with that comes vast opportunities. As Vint Cerf, one of the internet's Founding Fathers declared, "I feel we are at the state in the cloud world now that we were in the internet world back in 1973."¹

Business leaders from diverse markets believe that those companies which make the Cloud central to their business model will be best placed to improve their competitive position.

This sentiment runs through the insights from senior business leaders across the sectors and the geographies, Britain, France, India and USA.

Business leaders seem to be consistent in saying that Cloud technology needs to be integrated as part of the business model. Moreover, companies that fail to integrate and innovate with the Cloud will be at a significant competitive disadvantage.

THE CLOUD OPPORTUNITY

The Cloud is having a profound impact on businesses across different sectors, at a strategic and operational level.

Although the innovation is at a relatively early stage, business believes that the economic benefits will be very significant. It is therefore seen as a positive disruptive force.

For some, the competitive advantage of investing in the Cloud can already be seen. For example, Amazon spent

1. Vint G. Cerf Keynote at Linux.conf.au 2011; <http://blip.tv/linuxconfau/keynote-vinton-g-cerf-4701647>

the last decade building an immense cloud-computing platform, which it is argued is the main driver behind the company's success.²

The survey supporting this report confirms the significance that business leaders across markets attribute to the Cloud, and reveals areas of difference and commonalities between them.

It is possible to distil several important insights from their responses. While there are possible broader economic, commercial and social opportunities from the Cloud, the lead insights and opportunities are specific to business.

THE COMMERCIAL OPPORTUNITY

The potential of the Cloud to disrupt is still evolving, but there is a clear expectation amongst business leaders that at one level it will create new efficiencies and even new supply chains (upstream). For example, business leaders are saying that it will “reduce operational expenses” and it “will save time”. (Finance Director, GB)

At another level, it promises to reinvent value-chains and customer propositions (downstream). This will be particularly pronounced, as the next generation becomes fully engaged in the global economy as they are so-called “technology natives”. Wipro's Chief Technology

Officer, Dr. Anurag Srivastava, captures this point when he describes how some business still feel Cloud adoption may be a choice, but “in a few years the next generation of consumers will force the Cloud onto businesses.” The next generation user and consumer is driven by experience, mobility and accessibility, “factors that new technology and the Cloud will deliver”.

The internet is responsible for a revolution in almost every aspect of our lives. It has hugely improved the customer experience and service through greater transparency and real time data, resulting in a greater diversity and strength of customer proposition. The Cloud is accelerating this trend. The debate amongst business leaders is the pace of that acceleration, not whether it will happen.

The commercial opportunities are two-fold: first, the chance to change the way a company works, by allowing for “greater collaboration”, “more creative processes” and ideas to be discussed in “real time” (FD, USA). Second, the chance to change the way a company competes, by enabling new services, or entrepreneurs, to enter existing markets with new offerings and reinvent or even create a sector.

Senior executives are clear: businesses that do not invest in the Cloud will lose out, and companies that build their products, operational systems and applications with the



2. “Jeff Bezos Owns the Web in More Way Than You Think”; Steven Levy; November 13, 2011 http://www.wired.com/magazine/2011/11/ff_bezos/all/

Cloud in mind, will gain a competitive advantage. Some two thirds of business leaders think that companies that do not invest in the Cloud will fail to innovate and “will lose market share” (see figure 1).

For many the challenge is how best to ‘operationalize’ a Cloud strategy. A key decision for business leaders is what price to pay for greater flexibility and faster systems; a hybrid; or, whether to simply opt for cheaper platforms. The answer to this involves deciding what sort of value the company wants to create.

ADOPTION DRIVERS

Business leaders say that it is ‘standardization’, or the removal of unnecessary customization, to achieve universal standards, that will drive adoption. Almost two-in-five of those leaders surveyed for this report, revealed this as being the key to driving cloud adoption with ‘process transformation’ being the lead benefit (see figure 2).

There is also a compelling business case in terms of labor mobility and management flexibility: “Cloud computing provides much more flexibility than past computing methods.” (IT Director, UK). These efficiencies are magnified for companies involved in extensive M&A programmes. It is repeatedly highlighted by business leaders that the Cloud offers unparalleled “flexibility” and will generate particular benefits for Executives “merging companies”.

There is considerable interest in how the Cloud is monitored and regulated. There is a feeling that it is

important to safeguard the Cloud from Government interference, in particular any kind of barriers. Capturing the mood of international business leaders, Wipro’s Dr. Anurag highlights how, “Cloud technology transcends borders, so it is important for governments to recognize the Cloud as a positive economic driver and not build regulatory barriers around the new technology.”

Equally, there is a feeling that an absence of regulation may also be unhelpful to growth. For instance, business leaders also spoke of the importance to have “clarity on licensing and regulatory policy” and for there to be “proper monitoring” especially in emerging markets to provide greater confidence about investing in such technologies. (IT Director, India)

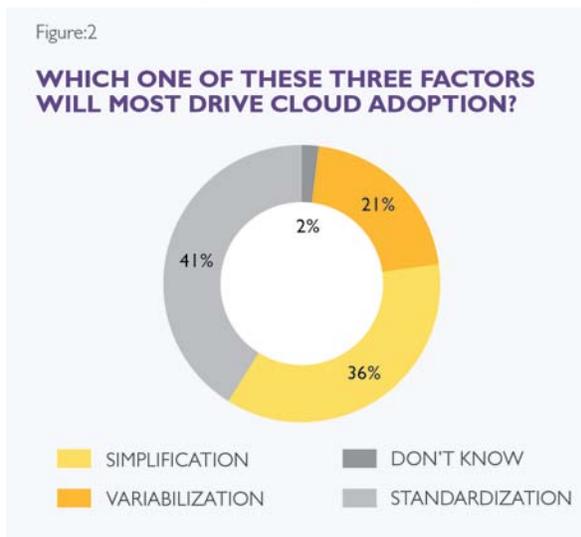
ADOPTION BARRIERS

Business leaders highlight four challenges for developing and realizing the potential of the Cloud.

First, technical: standardizing the Cloud for customers, to minimize and even remove unnecessary customization to try and achieve some universal standards. Second, educational: raising the level of the skills base among employees.

Third, a hybrid, of a technical and cultural concern: addressing corporate concerns about security. This is the most significant challenge and threat to the development of the Cloud as an enabler of growth and innovation. Over 2/3 of respondents feel that security concerns are the biggest barriers to Cloud adoption, and 3/4 look for security in their Cloud service provider.

Although on this issue there seems to be divergent views, with some Executives concerned about legal and jurisdiction based issues, while others have concerns about transparency. One CIO expressed both concerns, “In some cases we are not sure where the data actually is and there



2/3

OF THE RESPONDENTS FEEL THAT SECURITY CONCERNS ARE THE BIGGEST BARRIERS TO CLOUD ADOPTION

3/4

OF THE RESPONDENTS LOOK FOR SECURITY IN THEIR CLOUD SERVICE PROVIDER

is also regulatory and compliance issues. Data recovery becomes difficult.” (CIO, USA).

The fourth barrier is potentially the most problematic: the economy. As most of the Euro-zone struggles to reduce public sector deficits and to stimulate growth, low levels of confidence in the private sector; increases cautious corporate behavior. As such this reduces corporate venturing and investment in R&D, including technologies, such as the Cloud. Wipro have observed regional variances, which Wipro CTO Dr. Anurag, claims is less to do with “technological acceptance” and more to do with “economic factors”, with Europe being cautious compared to America and Asia.

THE ECONOMIC OPPORTUNITY

Business leaders attach critical significance to the Cloud for giving them the power to generate greater efficiencies and economies so overheads can be reduced.

For instance, “Cloud computing allows the business to scale up and down the IT requirement as and when required. This supports business growth without requiring expensive changes to existing IT systems”. (IT Director, USA) This enables companies to remain competitive which has a positive impact upon shareholder value, coupled with broader socio-economic benefits, such as higher employment.

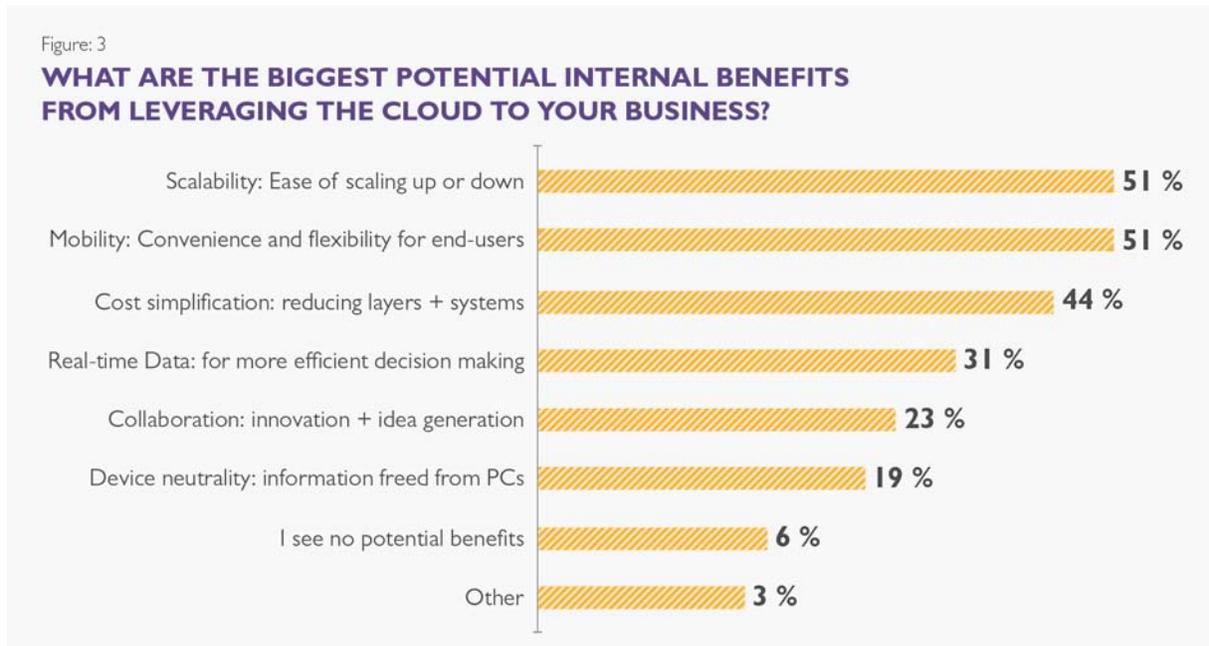
BY ENABLING COMPANIES TO COPE WITH VARYING MARKET CONDITIONS, THE CLOUD IS PART OF A MORE SUSTAINABLE BUSINESS ENVIRONMENT. THIS IS A FORM OF ECONOMIC VALUE CREATION.

Most notably, it also gives Executives the power to control the business exposure to changing economic climates. In other words, they can ‘scale-up’ and down. This flexibility provides business managers with opportunities to manage their cost base. This is seen as the biggest potential benefit from the Cloud, across all geographies, Britain, France, USA and India (see figure 3).

So at one level, by enabling companies to cope with varying market conditions, the Cloud is part of a more sustainable business environment. This is a form of economic value creation.

This process becomes more profound when considering the potential for the Cloud to generate new industries and supply chains that will arise through entrepreneurs. This economic value could generate jobs and GDP growth.

It will also highlight the capability and capacity of the private sector to adapt and lead. As Dr. Anurag, highlights,



“Cloud technology has the potential to create completely new business models and SMEs and start-ups will embrace them.”

— Dr. Anurag Srivastava,
Chief Technology Officer and
Senior Vice President, Wipro Global IT Business

“Cloud technology has the potential to create completely new business models and SMEs and start-ups will embrace them.” As for big business, the challenges and rewards are greater, as he says for, “...large enterprises it poses a challenge because they have well-established business models and rarely embrace innovation at a fast pace.”

THE LABOUR OPPORTUNITY

Implicit in business leaders' support for the Cloud is the capacity to enhance globalization both in terms of speed and efficiency and the localization of data and labour.

For instance, the Cloud is widely recognized by business leaders as the tool that provides operational benefits. There is a consensus that it offers huge potential through assisting scalability and mobility, added convenience and flexibility for end users.

There is also a consensus that IT and the Cloud means the location of service providers is not a key issue, with only

one in seven business leaders citing it as a factor. They are more concerned with innovation and delivery then location (see figure 4).

There are two dimensions to this. First, teams are not tied to offices and offices are not tied to teams. This benefit is constantly cited by business leaders. For instance, “Cloud computing helps business to become mobile, our employees can access work related information from anywhere”. (CIO, USA)

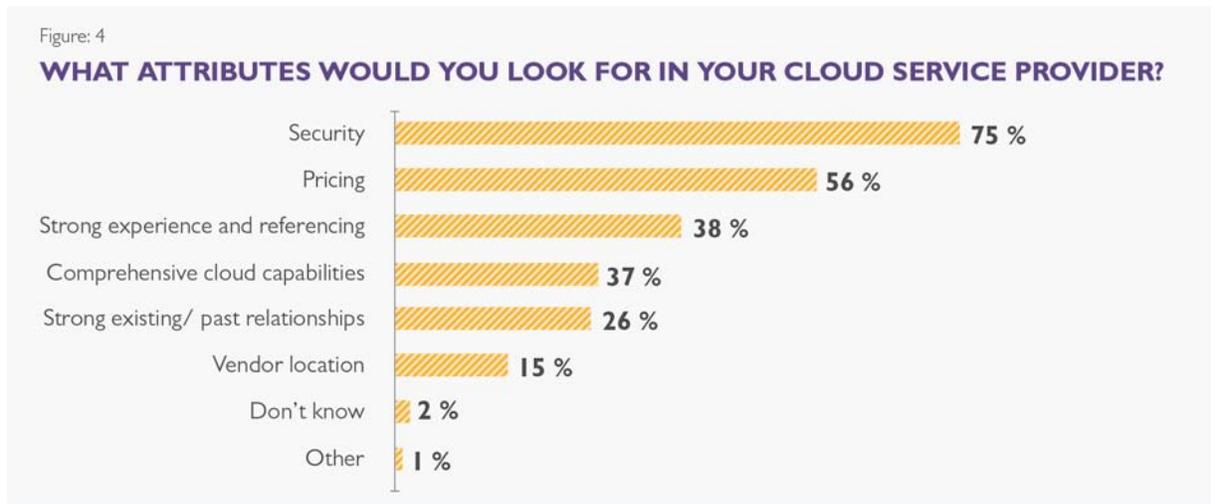
Second, and less common-place, is the recognition of the power of collaboration. This is a very important dimension for business looking for new solutions. It is developing new ways of thinking and working as institutions source ideas.

Business leaders recognize, “it allows for a greater sense of collaboration between staff”, plus a “more creative process on ideas” with the benefit that conversations can be had in ‘real time’ (Chief Financial Officer, USA). There are two ways to implement this approach. First, from across and within organizations; second, and more ambitious, companies can look outside and take a more of an ‘open source’ approach.

THE SOCIAL OPPORTUNITY

The potential for the Cloud to change the way we do business is matched by its potential to change the way we live our lives. Cloud technology offers businesses and civil society an opportunity to transform expectations at an economic and social level.

Business leaders from all markets spoke about the “power”



it gives to employees and consumers. Together this has the potential to create more exciting and user-friendly interfaces, products, services and breakthroughs.

The Cloud represents a paradigm shift in terms of building capacity to transcend social and commercial boundaries to reinvent known models. Conversely, businesses and governments without a Cloud strategy are missing an opportunity.

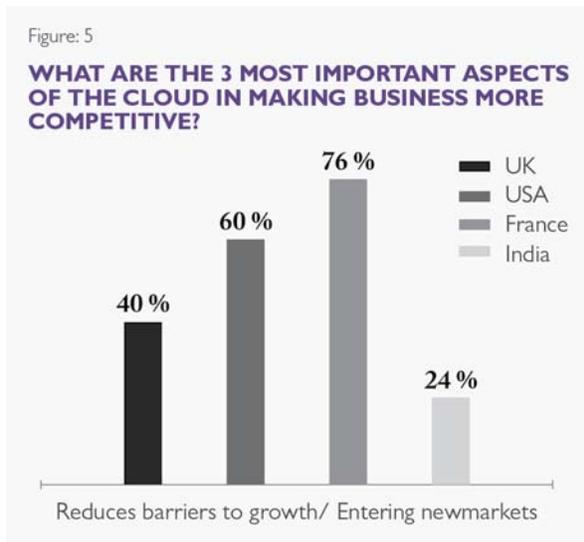
SUMMARY: A GLOBAL ECONOMY

As the findings in this report demonstrate, business leaders are united about the potential of the Cloud. Not only does it have the potential to significantly improve capacity and flexibility, but it also has the opportunity to generate new competitive advantages, transform business prospects and generate economic value.

Underpinning this optimism and sense of opportunity, are three trends along regional lines about how business leaders view aspects and advantages of the Cloud.

First, The US and UK converge on many issues, whereas business leaders in France often represent an outlier view. For example, on the issue of investment in skills and security concerns close to two-thirds of leaders from France think that greater investment in skills and talent will help them generate greater value from the Cloud, versus a quarter of Executives from the USA.

There are interesting difference of emphasis about the advantages of the Cloud between business leaders in India and the Western markets.



Leaders from India see “improvement of current offering” and “improvement of value proposition” as key aspects of the Cloud, whereas, leaders from US, UK and France put bigger emphasis on “growth/ entering new markets”. This confirms a broader commercial view that the Euro zone and North America offers less growth potential than developing markets (see figure 5).

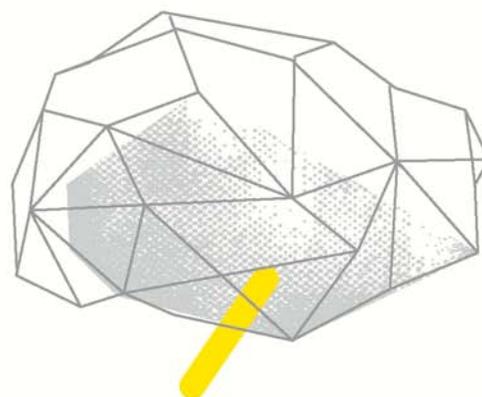
Plus, it is interesting to note that Indian business leaders place less stress on the Cloud’s capacity to drive innovation in IT, compared to their ‘western’ counterparts. The fact that Executives in UK, USA and France are more enthused by the impact within the sector, may reflect a greater novelty factor as compared to the Indian market.

The common positions are greater than the differences, both in terms of the benefits and the concerns, notably security. The Cloud is helping to make a positive reality of globalization, delivering greater benefits and generating greater value. This is a trend which if it continues to grow will connect ideas, institutions and individual users in diverse markets to help meet shared objectives. ■

THE CLOUD IN NUMBERS

WHAT BUSINESS LEADERS THINK:

- » 1 in 2 respondents think that the Cloud is making businesses more competitive by improving their ‘value proposition’
- » 9 out of 10 respondents from France see security as the main attribute of their Cloud service provider
- » Over a third of respondents think that the Cloud will be central to improving customer satisfaction
- » 9 out of 10 business leaders from France are planning to invest in Private or Hybrid Cloud services
- » 2 in 5 respondents from the US identified regulatory barriers as the biggest impediment to Cloud adoption
- » 1 in 2 business leaders in India believe real-time data is the biggest benefit from the Cloud
- » Over a quarter of respondents from India think that greater use of external expertise would help them generate greater value from the Cloud



IN CONVERSATION WITH PETER J HOLLIDAY

VICE PRESIDENT, BUSINESS PARTNERING EMERGING MARKETS CONSUMER AND COMMERCIAL IT, GSK

What are the benefits of cloud computing for GSK?

The benefits are savings on Capex, more flexibility on number and type of users, ability to downsize internal IT systems, and efficient use of staff's time.

I would also add that the SaaS delivery model stops endless internal debates about software customization, which goes away if you buy a standard service from a vendor. However there are issues that SaaS doesn't solve, for example data migration, systems integration and business change.

Do you agree that security concerns are the biggest barrier to Cloud adoption? What would make you feel more secure about investing and using the Cloud?

There are certainly concerns about the security of some Cloud-based services. Both the virtual and physical security are important - understanding exactly what our Cloud service provider is hosting and where, would make us feel more secure.

How do your customers benefit from your company using the Cloud, if at all?

Our suppliers find it easier when they work on the same Cloud-based platforms as we do.

Regulation barriers play a role in cloud adoption according to our survey, have you faced this issue?

Yes, governments have to be comfortable with how and where you are storing and processing their citizens' data.

Certification of SaaS providers, common hosting/ security standards, and universal definition of 'personal' data would help businesses and governments.

METHODOLOGY

The research firm YouGov, based in London, managed the survey.

YouGov surveyed one hundred CXOs in four countries- USA, UK, France and India. The respondents came from private sector companies, both privately owned and publicly listed, with operations in more than one country and with a turnover of more than \$250 million. All of the respondents were either based at the company headquarters or at the main operational office of the company.

The interviews were conducted offline by telephone, during June 2012.

ABOUT WIPRO TECHNOLOGIES

Wipro Technologies, the global IT business of Wipro Limited (NYSE:WIT), is a leading information technology, consulting and outsourcing company that delivers solutions to enable its clients do business better. Wipro Technologies delivers winning business out -comes through its deep industry experience and a 360-degree view of "business through technology" — helping clients create successful and adaptive businesses. A company recognized globally for its comprehensive portfolio of services, a practitioner's approach to delivering innovation and an organization-wide commitment to sustainability, Wipro Technologies has 135,000 employees and clients across 54 countries.

For more information, please visit www.wipro.com

ABOUT WCIR

Wipro set up the Council for Industry Research, comprising domain and technology experts from the organization, to address the needs of customers. It specifically looks at innovative strategies that will help them gain competitive advantage in the market. The Council in collaboration with leading academic institutions and industry bodies studies market trends to equip organizations with insights that facilitate their IT and business strategies.

For more information, please visit <http://www.wipro.com/insights/business-research/>

ABOUT TLG

TLG advises multi-national companies on developing and generating recognition for leadership to provide growth opportunities.

The headquarters is in London and has a network of offices in Brazil, Russia and India. TLG advises clients on smart content, platforms and media relations to build brand advocates and competitive advantages.

TLG publishes The Index of Thought Leaders in Europe, Asia, USA, South America and in China from 2013. For more information, see: tlgpartners.com/thought-leadership



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