For over more than two decades companies have been urged to “digitalise” to avoid being left behind. The specific technology innovations introduced by the digital revolution such as mobile, apps, “the cloud”, 3D printing, Big Data, and now AI are shaking up the world, as well as organisations, private or public.

Three examples illustrate the change. First, Tim Berners-Lee, a British scientist, invented the world wide web (WWW) in 1989, while working at CERN, as their website tells us. It was originally invented for automated information sharing between scientists of institutes and universities around the world. It increasingly allows the world to exchange, from messages to complex data, film, and video.

A second example is the COVID epidemic that governments have decreed we were now to exiting from, though, yesterday, France and Germany combined announced over 400,000 new cases, slightly below the level of South Korea. When scientists started to look for a vaccine in early 2020, they were careful not to make any hard promises on delivery dates. The fastest any vaccine had been developed was in the 60s: from viral sampling to approval the mumps vaccine took 4 years.

Chinese scientists released the SARS-CoV-2 genome on the web in Jan 2020. The basic research on DNA vaccines had started 25 years earlier, aimed at developing cancer vaccines. The 2002 SARS and the 2012 MERS epidemics provided plenty of valuable information that was willingly shared. Previous infectious and lethal diseases motivated the creation of improved international infrastructures to speed vaccine development. The funding by the Coalition for Epidemic Preparedness Innovations (CEPI), launched at the Davos Forum in January 2017, benefited the Moderna and AstraZeneca vaccines. Vaccine development was supercharged by operation Warp Speed which invested 10 billion $ in accelerating phase I, II, and III trials, now in parallel.

The economic devastation that the world was contemplating liberated these sums and the world came together like never before. On December 2, 2021 the vaccine developed by pharma giant Pfizer, in collaboration with the German BioNTech, became the first fully tested vaccine approved for emergency use. This is the capability of the global digital world when it sets its sights on a problem. This capability is needed for fighting climate change. Unfortunately, the urgency is completely missing for now.

A final comment illustrates the modern world in dramatic ways. Ukraine has been attacked by a Russian army still applying XXth century tactics of mass destruction and mass sacrifice. Ukrainians, using a host of modern weapons (guided by drones providing intelligence on enemy forces), are currently holding back a much superior army by being technologically superior, greatly more committed, better trained, and much more informed than its adversary. On the other side, the Russian government is keeping its population in the dark, cut off from the world, fed by propaganda practices that take the best out of XXth
century Nazi and Communist playbooks, levelling entire cities, Aleppo, Grozhny or Leningrad-style. The aim of the XXIth century should be to use technology to save people from poverty and disease, and to ensure human survival by fighting global warming.

**Business is Digital and Digital is Business**

The digital journey has entered a land where there is no longer a distinction between digital and business: business has become digital. However, in this passage a fracture is being revealed: top corporate leaders across the globe are insufficiently directing the digitalisation of their companies. The best example of a company that missed its transformation to the digital world may be General Electric (GE).

GE had become a hallmark of business excellence, with its stellar business processes, epitomized by the so-called Work-Out, CEO review, and corporate strategic processes, and by its CEOs, all elected to “CEO of the Year” status. Wall Street became wrongly convinced that GE could not fail, and wrongly gave Jack Welch’s successor, Jeff Immelt, favourable billing for many years. But GE was missing the digital revolution, and Jack Welch, the infallible, after having eliminated a number of potential successors, had settled on Immelt, who came from the white goods sector. For sure, he was not the man to lead GE into the digital century.

Worse, rather than investing these monies into innovation, GE returned billions in dividends to shareholders. GE had become a financial company, its industry a front for its financial services arm. GE Capital largely funded customers to buy GE technology and services, with good margins. It all would unravel in time. Immelt belonged to a category of leaders for whom digital still seemed unclear and at worst confusing. His strategic moves would prove this. Old world.

The GE Board, used to approving bonuses and dividends that would prove undeserved, revealed useless in steering the company to less troubled waters. Its appointment of John Flannery, also a GE insider and old-timer, proved equally fruitless. It was only under Flannery’s successor that the decision to end the corporate story was made. GE radically transformed itself by splitting the former giant into 3 separate companies: electrical equipment, health, and aeronautics. These entities will now face the digital world on their own.

**Start at the Beginning: Make the Board Digital-savvy**

One paradox regarding boards is that, though responsible for the present and the future, boards are often the result of past leadership.

A prototypical case often practised in family firms, and not only in them, is to invite the former CEO onto the board, or worse to ask him or her to be the Chair. A human tendency for such a Chair is to defend and extend their record of leadership in the new position. This typically puts the new CEO into assuming a subservient position more akin to COO. It also extrapolates the past, which science shows us to be dangerous.

Another example concerns mergers. One often sees also the two boards merge, as was done when HP and Compaq merged. That led to major dysfunctions in this board played out over a decade until a break-up was decided. A much better idea would have been to reconstitute the board with the most performing previous board members providing continuity, joined with new members bringing proven expertise in getting corporate mergers to successfully face the future.

The same holds in the new digital context. Past board members are often not digital-savvy. For a while, the line about digitalization from headhunting firms was to ensure the presence of one digital director. The aim now should be to extend such competence to the entire board. That would typically call for the addition of at least several new board members with digital competencies relevant to the company and not present amongst the existing board members.

**A thorough understanding of the Challenges and Opportunities offered by a rapidly evolving Digital context**

An essential starting point on a company’s digital journey is a thorough and grounded understanding of how digitalisation impacts the external business environment, as well as the challenges and opportunities faced by the organisation. That view and assessment are critical as it determines the direction of a company’s thinking and action. Conglomerates with a more traditional and centralised way of doing business may find this exercise more challenging as the Board of GE experienced. Relying largely on knowledge obtained from general reports and consultants, often written from a non-digital perspective and not necessarily one that fits the company, would be a sign confirming this to be the case.

One complexity in this regard is a result that we developed in a report, co-authored with Liri Andersson, entitled The Real Impact of Digital as seen from the Virtual Coalface. We found that “digital” does not have a universal meaning, quite the opposite: we identified 20 key categories of engagement in digital with multiple subcategories of varying levels of complexity. There is no “one-size-fits-all” or right way to do digital. That then is also the first challenge of a company’s leadership: find the right opportunity that digital creates for true customisation of a company’s offering, business model and processes, and formulate the corporate transformation that allows the company to capture this opportunity.
From a Change in Mission to Changes in Operations

The organisational implications of digital are many. Digitalisation may require a radical review of the firm’s mission, both industrially and geographically, as well as the potential adjustment of its business models and methods.

Digitalisation must therefore be driven from the top, with full buy-in from the management. The challenges to achieving this are not geographical, but heavily dependent on an open-minded leadership team, prepared for a potentially disruptive approach to change. Starting with its own membership.

The most radical corporate change is a change in mission, which is the board’s first responsibility. One organisation that faced digital disruption head-on is Schibsted, a Norwegian family-owned business founded in 1839 as a two-newspaper firm. The company and its board decided to embrace the internet some twenty years ago, challenging all assumptions about the business the firm was in and disrupting every aspect of the organisation: mission, business model, processes, products, people and culture. This undertaking laid the foundation for today’s thriving company: a successful global multimedia, technology-driven business with 5,000 employees with operations in thirty countries on five continents and a market capitalisation as of March 2022 of 5.8 billion $.

Success in a digitalised economy requires a lean and agile corporate structure fuelled by continuous collaboration and ongoing conversations across layers in the organisation - shareholders, boards, executives, managers and “frontline” employees as well as with customers. A corporate culture that breaks down hierarchical barriers is key, allowing for a free flow of information, communication, ideas, and feedback throughout the business.

Business strategy in the digital age must become a continuous process, where strategy formulation and execution happen simultaneously, ideally in a seamless feedback loop. The speed and complexity of digital decision-making mean data is playing an increasingly strategic role.

India here is well positioned, as the country benefits from an advanced data-driven and analytical culture. Multinationals with a presence in India, as well as local firms, benefit from affordable and talented local companies for data management and analytics to support leadership in their decision-making process. A likely outcome is that the growing Indian IT sector will be complemented by a growing “data and insight” mining sector – a key capability in digitalisation.

Digital technology is not going to be a differentiator, people equipped with more technology will – and that starts at the Board level

The digital revolution, like every revolution, can be viewed either as a catastrophe or as a world of opportunity with a need to reboot a firm’s future. How it is perceived, in our view, largely depends on whether vital allegiances and power lie with the old order or with the new.

As with any large-scale organisational and cultural change, digitalisation will never take hold unless leadership drives it. Indian firms looking to survive the digital revolution will face the same challenges as their global counterparts, which amounts to translating the impact of digital to their industry, firm, and day-to-day work. It is a formidable challenge.

For this to happen, a reshaping, if not a disruption, of the board function and of the monolithic organisational structures is necessary, where boards and executives ensure that the ability to understand, adapt and change is built into the very fabric of a more focused, integrated and collaborative organisation.

Digitalisation will undoubtedly force organisations to attain unprecedented levels of innovation, competence, and collaboration – with fundamentally positive results for both firms and society.

The digital promise for India is of the same impressive size as its continent. India could become a digital force ... if its boards play a successful digital game.

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