Understanding Business 4.0™: The New-Age Transformation Paradigm
Business Behaviors

Business 4.0 is a framework of business behaviors that optimizes the digital advantage to create customer value. We have identified four business behaviors of digital leaders that help them monetize digital technologies. These include:

- **Creating exponential value**: Digital technologies have deconstructed traditional value creation concepts to unveil new opportunities of delivering value to customers. Big data, IoT, and AI allow linkages and cross-selling which make it imperative for businesses to look beyond incremental value and pre-defined revenue opportunities.

- **Driving mass personalization**: Digital technologies are enabling businesses to provide customization at scale. Analytics and big data tools allow a granular view of customer demands and almost infinite scope of segmentation across a range of variables. AI and IoT solutions drive personalization at scale, while 3D printing, still at a nascent stage, can actually turn the production cycle on its head by starting with the customer requirement.

- **Leveraging ecosystems**: Digital technologies are redefining industry boundaries and the competitive landscape. Businesses across industries are collaborating to deliver greater value to the customer. API-fication, analytics, digital platforms have taken collaboration to another level.

- **Embracing risk**: Digital technologies have enabled new levels of agility and flexibility allowing businesses to embrace risk. Adapting to a digital transformation requires large-scale restructuring and transformations, not only in the processes but also in business planning. Digital technologies have created a landscape that promises high returns on risks taken. And no growth for ‘safe’ options. To maximize digital advantage, businesses need to think big and focus on the potential value to the customer, rather than the risk involved.
Technology Pillars

We have also identified four technology pillars that enable these four Business 4.0 behaviors.

**Agile**: Agile has emerged from the confines of software development and has redefined the alignment of business and IT. Enterprise agile focuses on value streams rather than functional silos to drive the desired end customer experience. Agile transformation helps companies respond faster to customers and competitors, and become leaner, and more innovative. It also helps rehearse the future to take calculated and well-informed risks.

**Automation**: Powered by analytics and artificial intelligence, technology applications can monitor and control the production and delivery of products and services, unlocking unprecedented levels productivity and value. This approach to give machines the first right of refusal, which we call the Machine First™ approach, empowers humans to move away from mundane repetitive task to focus on areas where human intelligence is required.

**Intelligent**: Data science, cognitive capabilities, and natural language processing enable machines to understand and act autonomously. This allows never-before scale and automation allowing the use of machines for tasks which were earlier the preserve of humans. Intelligent processes have allowed organizations to create autonomous solutions which have taken human capability to unforeseen levels.

**Cloud**: Cloud provides shared pools of configurable IT resources and services over the Internet, harnessing abundant IT capabilities. On demand, flexible and scalable computing capabilities allow enterprises anytime, anywhere access and support global and mobile operations.
The Age of Abundance

Digital has also redrawn traditional concepts of static resources. Instead of making the best of scarce resources, enterprises can now harness abundance. This is a key enabler of Business 4.0. We have mapped this abundance across three basic building blocks of business growth—talent, capital, and capabilities.

**Talent:** The gig economy, enabled by digital has allowed companies access to abundant talent—at all skill levels. Mobility, scale, social, global access, and most importantly, the platform economy powered by digital, particularly cloud, automation, and analytics, make it possible to tap into almost infinite resources. This availability has helped businesses to come up with innovative business models.

**Capital:** Innovation is at a premium in the digital world, and developing it into commercial scale has become easier. While venture capital has spawned an ecosystem of capital support, governments and big companies are actively supporting startups and university incubators. Besides, agile, cloud, and blockchain facilitate proofs of concepts and pilots at a smaller scale with limited capital requirements before scaling them.

**Capabilities:** Companies are no longer thinking only within their in-house capabilities. Instead they are developing a partnership ecosystem with startups, suppliers, service providers, big and small companies, and even competitors. While cloud enables access to abundant computing capabilities, digital platforms and APIs allow access to functional capabilities such as e-tailing, GPS, and payment processing.
Business 4.0 at Work

While Business 4.0 champions more often than not use a combination of change behaviors, we have identified the most prominent success factors in their winning strategies.

How Google created exponential value

Google started off offering a simple search engine. The service was not even chargeable. But Google was not looking at only a linear value transaction. It monetized its mammoth user base first through paid search and then through Google ad words to become an integral hub for online advertising and marketing. It tracked user behavior and used it to generate leads for marketers. It leveraged user generated data for its GPS services. Google provided free email services at scale, and then monetized it through commercial use. It was this ability to see and tap value at exponential levels that has seen it spawn a wide variety of products and services and grow to a $32 billion company.

Converting the Mass Personalization Lead at Amazon

While many companies were still trying to understand how to use the enormous amounts of data that digital technologies generated, Amazon used advanced analytics to drive mass personalization. Instead of looking at traditional market segments such as gender, age, and income, it chose to create a segment of one – and break it up further. Customizing at scale was made possible with innovative use of automation, analytics, and artificial intelligence. If you buy a mobile phone, Amazon will offer you phone covers. It will show you what you were browsing last time to drive more conversions. This relentless pursuit of customer value has made it the world’s largest e-commerce marketplace as well as the most valuable public company.
Uber: A business model built on ecosystems

Uber is a transportation service provider that does not own a single vehicle. It operates in 785 cities and serves more than 100 million customers – all by leveraging an ecosystem of third-party cab owners. Uber leveraged the platform economy enabled by digital to disrupt the way the world commutes. The app-based service uses GPS to connect the rider and the cab and loops in payment service providers to offer quick and easy payments, besides dynamic pricing and a host of other freebies.

Embracing risk, the Netflix way

Netflix has scripted an amazing story of winning against odds in the fast-changing media space. Starting off as a successful online video store in 1998, it launched streaming services in 2007 and then took one of its biggest risks by getting into original programming in 2011. At the core of this decision is its unparalleled understanding of customer preferences, of the nuances that traditional demographic segmentation missed. The technology investments it made contributed no less; for instance in 2008 it made a complete shift to the cloud a move that helped give speed and scale as it was expanding geographically and seeing an exponential rise in streaming hours. The results of these moves have proved to be phenomenal; in the eight years that Netflix has been in original content, its subscriber base has grown from 25 million to 125 million, a 400 per cent rise.
About Tata Consultancy Services Ltd. (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world’s largest businesses in their transformation journeys for the past 50 years. TCS offers a consulting-led, cognitive-powered, integrated portfolio of IT, business and technology services, and engineering. This is delivered through its unique Location Independent Agile delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India’s largest multinational business group, TCS has over 417,000 of the world’s best-trained consultants in 46 countries. The company generated consolidated revenues of US $19.09 billion for year ended March 31, 2018 and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India. TCS’ proactive stance on climate change and award winning work with communities across the world have earned it a place on leading sustainability indices such as the Dow Jones Sustainability Index (DJSI), MSCI Global Sustainability Index and the FTSE4Good Emerging Index.

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