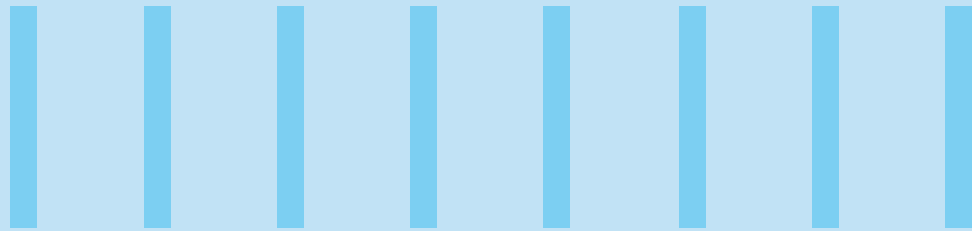


DATA ECONOMY IN DIGITAL ERA

– a perspective on new data economy and how it is shaping newer opportunities for nations, society and enterprises



Digital-born companies have challenged large long-established businesses across industries with newer data, AI-powered experiences, products/services. Sustained competitive advantage through customer ownership and seller power has since been significantly challenged and overturned. Customers are taking to newer AI and data-powered products/services in their pursuit of better experiences and exponentially higher value. This has triggered every company to challenge status-quo, unleash themselves from very structure of industry and embrace transformation in the new world. Data and AI have shaped themselves into a major economic force that is at the epicenter of transformation of every industry; through 3 horizons. Data, in the first horizon, was the key ingredient

in driving more data-driven decisions. Data, in the second horizon, is playing a transformational role in the enterprises' pursuit of being Data Native Digital Native enterprise. We believe the world is shifting to a new plane, the third horizon; whose fundamentals are very different from previous frame. A new economy has just been born, the Data economy. This will drive industry disruption, new business models, net new demand and catalyze governments' role towards shaping the future of Enterprises, Society and Economy. Yet, large enterprises have struggled to adapt in the face of digital disrupters. They need to adopt a balanced business and technology approach that delivers faster outcomes.



This PoV provides a perspective for understanding and winning in the new data economy.



1. Demand in the new data economy

Data economy is shaping a new social fabric enhancing citizens' and consumers' lives through new data-driven products/services. The 2 key constituents of the new data economy – consumers and citizens (society) are driving the need for data-driven products/services (e.g. personalized medicine) and improving quality and sustainability of life (e.g. use AI to augment visual capabilities for blind, make goods/services more affordable and accessible).

These drive “net new” economic activities that range from mass produced services (such as re-purposed drug molecule), to mass customized services (such as prediction of an onset of a disease in a region), and to hyper-personalized services (such as personalized medicine) opening immense possibilities and space for new business creation.



2. Industry disruption through data driven positive externalities

Sixth force in Michael porter's five forces model? Data disrupts the industry structure. We see the following patterns in how data disrupts the five forces. All these are industry line shifting/disrupting phenomena

Products to solutions: You are your own complement! e.g. A home automation player (from air-filter to air-quality)

Rise of new competitors: Enterprises in the industry value chain targeting end-customer value e.g. Leading Healthcare firm; medical devices to end-patient outcome; governs insurers, healthcare providers, fitness trainers, dieticians

Competitors to collaborators: e.g. 6 utility companies sharing data to serve customer better

Complement/substitutes from unrelated industry: Industry boundaries blurring with players entering non-adjacent industries. e.g. Aircraft manufacturer/Drone market, Leading EU Bank/Leading Telecom firm,

Mortgage company/Property sellers

Data natives as new entrants: New entrants focused on collecting and owning data disrupting existing players e.g. docsynk, wanda, facebook, youtube; analyze video watching stats on “how-to” videos for new home automation ideas.



3. Data leads enterprises to new Digital roadmap

Data footprint created by digital is analyzed for improvements and is usually seen as an exhaust to digital engine. However, the play for data has leaped forward to open new digital pathways like marketplaces, connecting the unconnected leading to new possibilities in uncharted territories.

- Data creates new wire-frames of digital (Data at the epicenter of Digital transformation): digital natives use cloud-connected device to engage consumers while data natives know consumers' digital trail to send real-time alerts, better use of existing products, recommend new product trials, better customer value management

- Leading to Industry 5.0? Leverage the digital connectivity (IOT) of Industry 4.0 to create enhanced data-driven fabric of intelligent machines that can improve the productivity of the digital network in which they operate
- Connecting the unconnected: Bringing unrelated domains together, more unrelated the domains are, higher the value
- Exchanges and value distributors: Internal/external marketplaces, data natives enabling discovery, distribution of value
- Data the new CEO: empowering, agile, learning, intelligent and visionary. Data happens to business engendering innumerable new opportunities and ideas not previously thought



4. Technology disruptions fueling the data economy

Manufacturing economy was driven by Industrial revolution and services economy by knowledge and skills; Data economy is powered by confluence of technology-led disruptions that not only are producing ever more data but also are end-points consuming data to create newer experiences. e.g. digitization, IoT, compute

& storage on the cloud, edge-computing, blockchain, quantum computing, AI, social/mobile, smart devices (Google Home/Alexa/Nest). 5G is driving up bandwidth at lower rates while open source provides access to best in class libraries. Data Exchanges enable pooling of data.

All of these together has enabled data availability (supply) and consumption (demand) at population scale; at real-time.



5. Governance for the new data economy

Governments are strategically building data/AI powered economy that will drive their future GDP growth and enhance the nations' competitiveness. They are creating platforms, monitoring ethical use, promoting democratization, data sharing and portability while protecting sovereignty, data privacy and security. Global enterprises such as Facebook and google have been on the watch list w.r.t. transnational data-use/share practices. At the same time, governments have significantly opened up "data markets" through OpenData initiative (Public good) for start-ups to innovate new products/services that help serve the citizens and consumers alike.



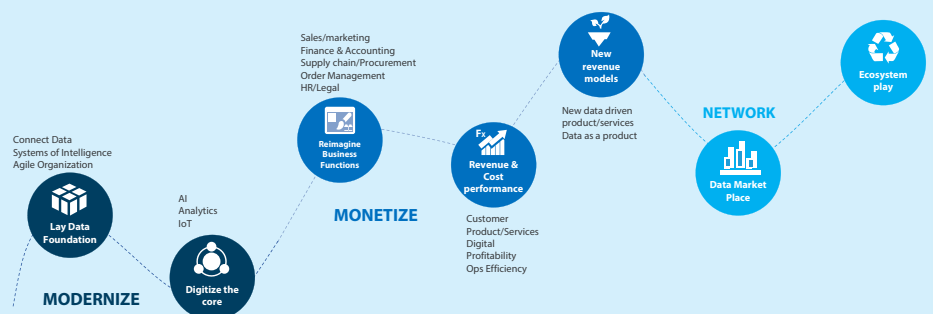
6. Multipliers in the data economy

- Time value of data: From instantaneous/momentary insights to learnable/predictive insights over a period of time
- Data to knowledge: Self learning prophecy; digital brain; system keeps learning as data keeps changing
- Data is the new dictionary: Semantics
- AI: new eyes (image/video/text) and ears (speech) of the data economy
- Automation: the digital operator
- Open + Sharing+ portability: allows for movement of data that's lifeblood of the data economy
- Ethics + Privacy + security: fundamental fabric that protects the integrity of the data economy

In summary, these fundamentals coupled with business environment governed and promoted by governments, enterprises have tremendous opportunities to establish leadership and sustained competitive advantage in the new economy.

Execution Blueprint

There is a need for enterprises to take an agile, additive yet enterprise-grade approach in order to capitalize on the opportunities in the data economy. We recommend enterprises to adopt a modernize-monetize-network approach that ensures focused execution in line with the big picture. This is not necessarily a sequential approach but is more indicative of enterprise's navigation in the data economy.



Why Infosys?

We help enterprises monetize data by navigating their journey through the data economy to achieve New revenue models, Operational efficiency, Better experiences and mitigate risks.

1. Speed to market: Investments in solutions, partnerships and deep expertise can deliver 40-50% faster time to market

2. Outcome focused: rather than just delivering technology. Navigate the journey from Advisory to Design to Delivery

3. Flexible models: Align clients' costs/ investments to value delivered through as-a-service, outcome based models

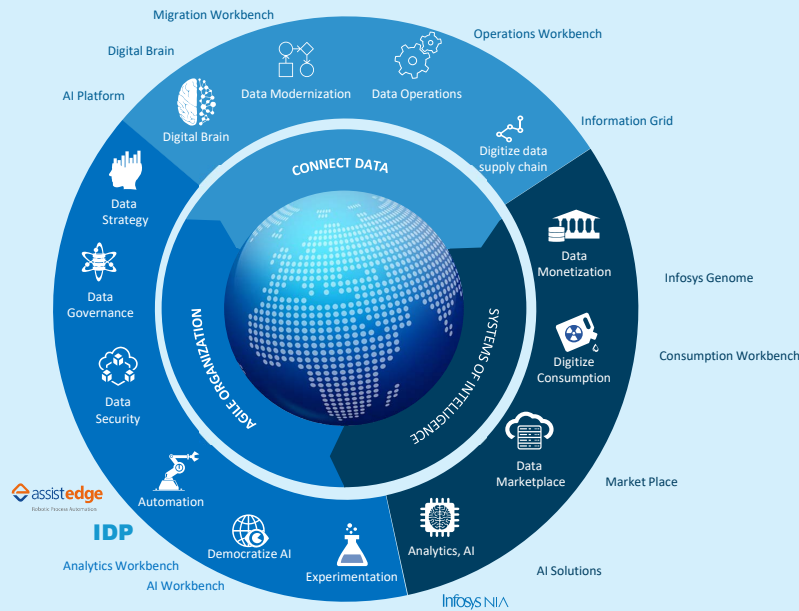
4. Free up Capital: 40-50% cost reduction in legacy footprint (people costs, licenses, overheads), digitizing insights generation and consumption thus

creating an investment corpus for data-led transformation initiatives.

5. Capability: Best-in-class People, Thought leadership

6. Capacity: Build niche, future skills for us and our clients through our localization focus

7. Harness Ecosystem of strategic partnerships with tech majors, start-ups, academia, data providers, talent ecosystem



Infosys Enterprise capability framework, Offerings

Infosys has invested in an organizational capability framework that helps customers navigate their journey in the new data economy in a holistic yet iterative manner. This helps enterprises with faster time-to-value, reduced risk through best practices and reduced waste in business-technology cycles. This framework addresses the capabilities across 3 dimensions – Connect Data (context), Systems of Intelligence that helps create and consume intelligence for outcomes and Agile Organization that enables strategy to execution; agility through scale, democratization and automation; learning and adaptation.

Our offerings can enable our clients to take advantage of opportunities presented by the new data economy.

Customer delight is the product
Immersive superior and continuous engagement

Powered by Infosys genome solution, boundary less data platform, digital brain, analytics/ consumption workbench coupled with Data consulting.

Secure against data breaches/theft/privacy violation strong data governance and compliance practices
Infosys GDPR solution

Next frontiers Discovered now through experimentation and innovation

Powered by Infosys experimentation platform + digital brain + design thinking + hackathons.

See business in 4k customer, product/services, suppliers, assets through data driven enrichment.
Delivered by Infosys genome solution.

Forge new models Data shifting balance of power in every industry e.g customer becoming partners.

Powered by Infosys data marketplace along with data partnerships.

Digital work force

Powered by bots, digital brain, embedded analytics engines, automation, digital refactoring of human workforce (innovation hubs, digital studios).

Future tested decisions

Powered by Infosys Data labs and monetization/ analytics

For more information, contact askus@infosys.com

Infosys
Navigate your next

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