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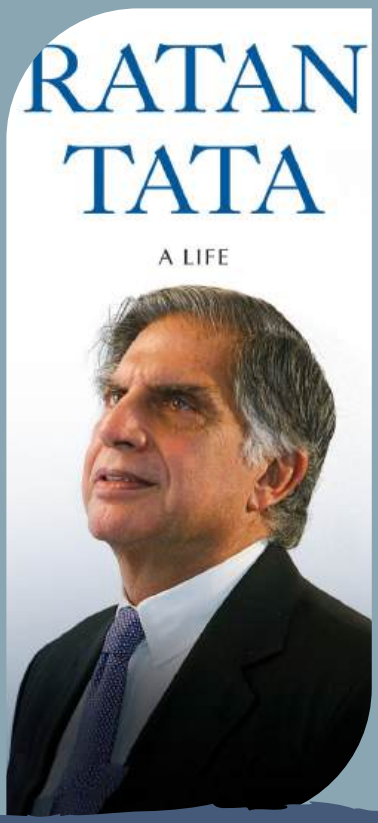

INSIGHTS BY INFOMATRIX

VOL.1 #ISSUE 3

ABVSME (JNU)

TABLE OF CONTENT

Ratan Naval Tata 1937-2024

RATAN NAVAL TATA (28 DECEMBER 1937 – 9 OCTOBER 2024) WAS AN INDIAN INDUSTRIALIST AND PHILANTHROPIST WHO SERVED AS CHAIRMAN OF TATA GROUP AND TATA SONS FROM 1991 TO 2012, AND THEN AS INTERIM CHAIRMAN FROM OCTOBER 2016 THROUGH FEBRUARY 2017. IN 2008, HE RECEIVED THE PADMA VIBHUSHAN, THE SECOND HIGHEST CIVILIAN HONOUR IN INDIA. RATAN HAD PREVIOUSLY RECEIVED THE PADMA BHUSHAN, THE THIRD HIGHEST CIVILIAN HONOUR, IN 2000.

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A Tech-Tastic Journey - From the Desk of the Editor

Welcome to the third edition of Infomatrix, your go-to source for all things tech! In this issue, we're taking you on a thrilling ride through the intersection of technology and culture.

Remember the days when Ratan Tata, the visionary behind some of India's most iconic brands, was shaping the future? Well, his legacy continues to inspire us as we navigate the ever-evolving tech landscape.
We're pitching deep into the eternal debate: does technology shape society, or does society shape technology? From the philosophical musings of thinkers like Edward Tylor to the practical applications of AI and quantum computing, we're exploring it all.

India is emerging as a global tech powerhouse, with cities like Bengaluru and Hyderabad becoming hubs of innovation. We're highlighting the groundbreaking work being done in AI, quantum computing, and sustainable tech, and exploring how these advancements are reshaping our world.

While technology is rapidly transforming our lives, it's essential to preserve our cultural heritage. We're exploring the delicate balance between tradition and innovation, and how we can leverage technology to enhance our cultural experiences.
So, whether you're a tech enthusiast, a culture buff, or simply curious about the future, Infomatrix has something for you. We'll be sharing insightful articles, thought-provoking quizzes, and engaging discussions.
Let's explore the exciting possibilities that lie ahead and work together to shape a future where technology and culture coexist harmoniously.

Happy Reading!

PEEK AROUND THE WORLD

PEEK AROUND THE WORLD

India to get Centre of excellence in quantum and 6G technologies

In an effort to bolster India's position in the sphere of quantum and 6G technologies, the Telecom Centre of Excellence (TCOE) India and Visvesvaraya Technological University (VTU) in Karnataka have joined.

Salesforce launches AI suite Agentforce to boost employee productivity

Salesforce stated that its customer companies Open table, Saks, and Wiley are already using this tool.

Nasscom announces cohort of 37 GenAI startups for its foundry programme

On average, startups in the cohort are two years old and have already raised $750,000 from institutional investors, Nasscom said.
Technology industry association Nasscom on Thursday announced the selection of 37 Generative AI startups for the second cohort of its Generative AI Foundry programme.

Brigitte Schwartz

Brigitte is a dedicated staff member at our charity organisation. She is known for her passion and commitment to helping others.

Brigitte has been with us for several years and has played a crucial role in fundraising efforts and coordinating events.

Tamil Nadu emerging as India's AI hub, attracting major investments and projects from Google, Amazon and more

From Google's PAyPal, tech giants are flocking to the state, volstering its ecosystem and driving innovation.

Cummins India launches IT global competency centre in Pune

cummins' GCC in Balewadi, Pune, uses AI, ML and RPA, with 55% women to promote gender diversity. The staff includes engineers, product owners, and tech leads. Vishwanathan and Newsome highlight its role in IT transformation and collaboration.

Infosys, IIT Madras, others join AI Alliance

Founded in 2023, the AI Alliance is a global community technology developers, researchers an industry leaders dedicated to advancing safe and responsible AI throuh open innovation.

'World can bet on India when chips are down': PM Modi as he inaugurates Semicon India 2024

PM Modi highlighted that India's semiconductor industry is unique and the government has created a supportive environment for it.

TCS opens delivery centre in Poland, to double headcount to 1200

Poland is home to one of the largest European technology talent pools and the centre will tap into the growing Polish Information and Communication Technology (ICT) talent pool to support the needs of customers in niche technology skills and cognitive business and domain.

Banks up tech hiring with RBI pushing for enhanced risk management

In response to the RBI's increasing focus on financial sector stability, banks are bulking up their technology capabilities by expanding their tech teams and increasing IT investments. This comes amid the growing importance of cybersecurity and the need to adopt AI-driven services.

UP govt plans Rs. 33.5k crore boost to IT and ITeS hubs

A senior UP government official said the state has identified five cities viz. Noida, Lucknow, Kanpur, Varanasi, and Prayagraj (Allahabad) to develop such hubs.

Govt may allow more computer capacity based on required: IT secretary

The government may look at creating more "computer capacity" through viability gap funding after building high-tech capability under the Rs 10,372crore India AI mission, Electronics and IT Secretary S Krishnan said on Thursday.

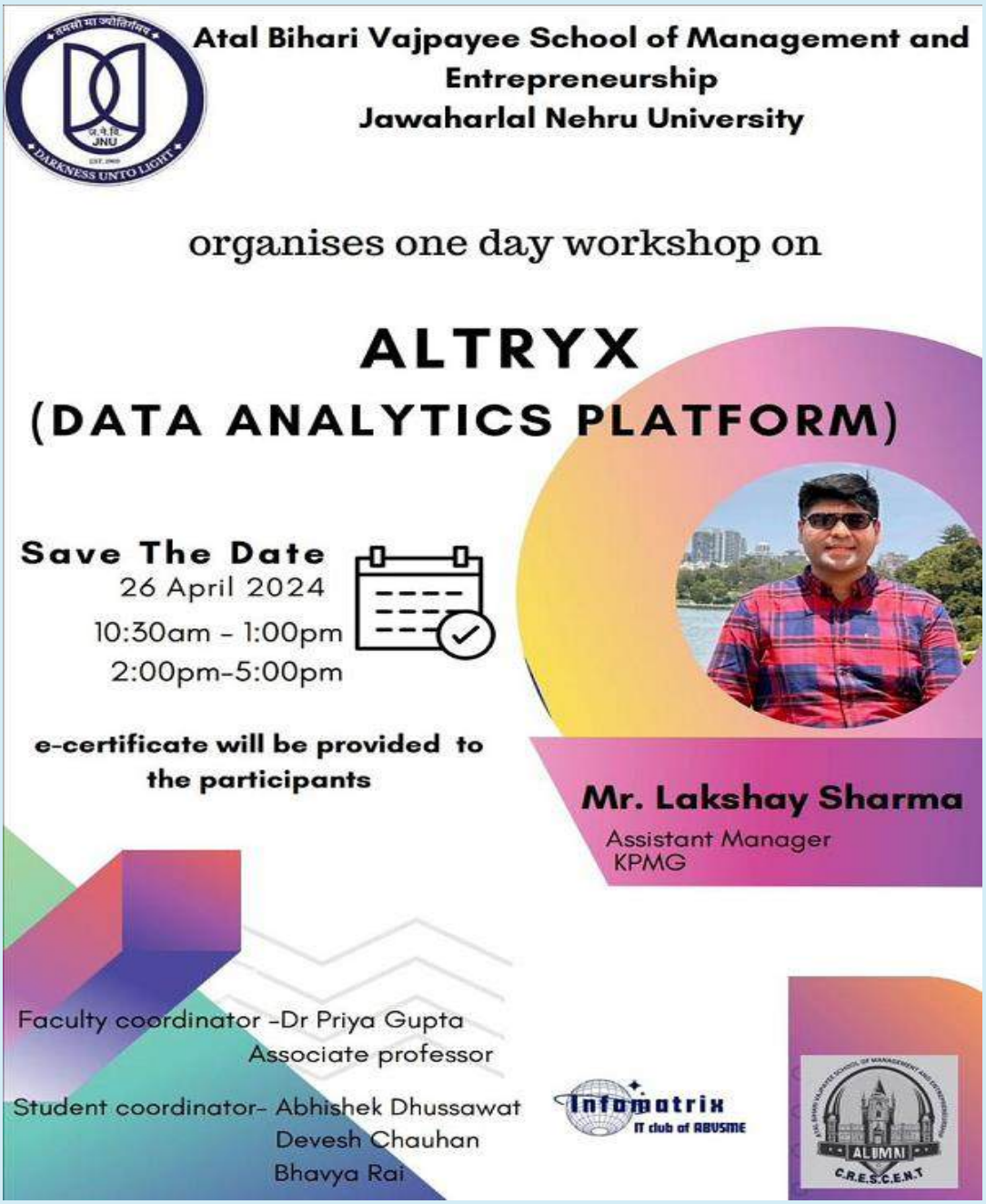
HCLTech tops TIME's World's Best Companies 2024 list among Indian firms

Indian IT firm HCLTech has been named the no.1 India-headquartered company in TIME magazine's World's Best Companies 2024 list. The Noida-headquartered firm has also secured a place in the global top 10 list within the Professional Services category.

Google brings AI answers in Search to new countries

- Alphabet expanded its AI-generated search summaries to six more countries, addressing previous inaccuracies. Initially launched in the U.S., the AI Overviews faced criticism for errors but has since been updated.
- The feature was widely panned after screenshots of factually inaccurate answers circulated across the internet, such as a pizza recipe that listed glue as an ingredient and an answer wrongly stating that former U.S. President Barack Obama is Muslim.
- AI Overviews is now coming to the Brazil, India, Indonesia, Japan, Mexico and Britain, in local languages such as Portuguese and Hindi.

IT CLUB
ACTIVITIES



POWER BI WORKSHOP

Infomatrix
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Guest Speaker:

Dr. Ajay Chauhan

Director at Research Shiksha.

POWER BI

DATE: 24-25th September
TIME: 10:30 AM - 1:30 PM.

The session will cover the following topics:

- Importing data into Power BI
- Data cleaning, transformation, and loading in Power BI
- Designing a semantic model in Power BI
- Creating measures, calculated tables, and columns in Power BI Desktop models
- Utilizing DAX time intelligence functions
- Optimizing model performance
- Designing Power BI reports and dashboards
- Conducting analytics in Power BI\Visualizing geospatial data and creating animations
- Leveraging maps for insights, adding custom geocoding, and shaping data for point-to-point mapping
- Animating maps using the Pages Shelf or slider filters

"Developing Skills in Using Power BI for Data Analytics and Visualization"

- **Registration Link**

https://forms.gle/eWGVvhho1wNQySBDA

FACULTY CO-ORDINATORS

- Dr. Priya Gupta

STUDENT CO-ORDINATORS

- Devesh chauhan
- Priyanshu Gupta
- Bhawna

An e-certificate will be issued to all participants who register and attend both days of the event.

“CO-OPERATIVE COMPETITORS – THE EVOLUTION OF THE PROLIFERATION OF TECHNOLOGY OVER CULTURAL NOTIONS OF MODERN-DAY SOCIETIES.

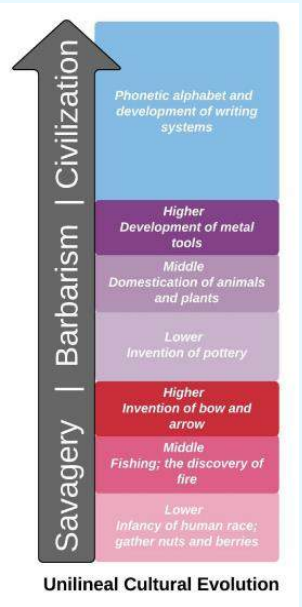
“Co-operative Competitors – The evolution of the proliferation of technology over cultural notions of modern-day societies.”

The Greek Philosopher Aristotle once famously said, “Man is a social animal.” Not only does this idea conform to the macro aspects of what culture entails, it also considers the minute yet profoundly significant details of what culture means to us as a civilization. From the age of fire (also an invention of the ancient man) to the advent of Artificial Intelligence, the term evolution has stayed intact and so has been the evergreen discourse of striking a balance between “technology” and “culture,” or as one might put – preservation of authenticity in the times of global exchange of ideas.

Defining Cultural and Technological evolution In understanding the relationship between culture and technology, one must first undertake
the tedious task of defining what culture truly is. While some call it a collective set of behavioral traits exhibited by a set of people, some call it a collection of ideas followed by a wide range of people. British anthropologist Edward Tylor is famously known for his contribution to the field of cultural evolution and its dimensions. He famously defined culture as “the complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities acquired by man as a member of society” (1871). One could argue for the latter being a more inclusive and comprehensive way of defining such a broad idea, Tylor further complemented his concept of culture with his theory of “cultural evolution,” through his idea of unilineal evolution. According to him, the evolution of culture happened through 3 stages: Savagery – Barbarism – Civilization. The idea was further enhanced by American Anthropologist Lewis Henry Morgan, who subdivided the stages of Savagery and Barbarism into 3 categories namely upper–middle – and lower. The model though was based on the growth in various technological characteristics, it was seen as a highly Western-centric one.

Know the terms –

- Unilineal Evolution - refers to the idea that there is a set sequence of stages that all groups will pass through at some point, although the pace of progress through these stages will vary greatly.
- Social Darwinism – Spencer’s idea of “survival of the fittest” applied to various socio-political arenas of life.
- Cultural Relativism – having no universal parameters to measure a culture and to measure relative to their context, without any external norms or values.



Unilineal Cultural Evolution

(Source – Libre Texts)

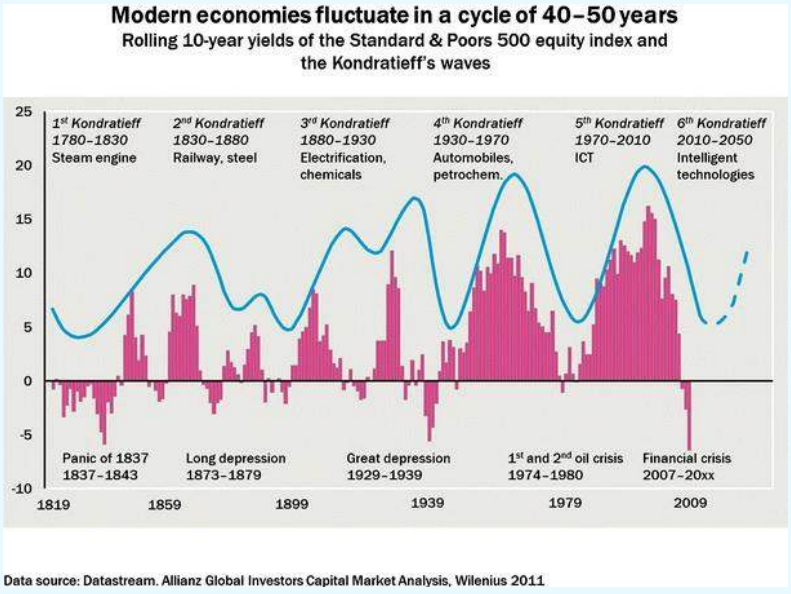
Another idea given to describe the cultural evolution has been that of Herbert Spencer, in his theory of Social Darwinism. The theory largely focuses on the concept of "survival of the fittest" given by Charles Darwin and applies it to cultures to assert why certain cultures and their people prosper while others do not.

In 1887, French Anthropologist Franz Boas, articulated his concept of cultural relativism (he did not coin the term) according to which, a civilization is not something absolute, but rather relative. Our ideas and conceptions are only limited to the point to which our civilization goes. The concept, while highly accepted amongst modern-day sociologists, considers the increasing amount of cultural diversity that is prospering and how one can drastically reduce certain prejudices related to any cultures and norms associated with them.

While culture is something that often acts as a binding agent, it also facilitates the overall ideological and moral development of a large group of people. A prominent example of the same is the concept of "Vasudeva Kutumbakam" that India follows and preaches on the global stage. A prominent aspect of the growing influence of culture can be seen in the growth of the economy as well, with sectors like Hospitality and Tourism (especially spiritual tourism) contributing a decent share to the GDP.

While India has a long history of its cultural evolution, the technological aspect has been one that in recent times has taken, both the subcontinent as well as the entire world by a shockwave of astonishment. From having the earliest evidence of fire and man-made citadels dating back to Harrapan times to AI-generated graphics and texts, man has come a long way, all thanks to the advent of a "global means of connection."

The evolution of technology can, to its best ability, be seen through the lens of the impact it created in the world over time since it is something, the manifestations of which are visible to the naked eye. A model of technology's impact on the global economy was given by the soviet economist Nikolai Kondratieff in his 1925 book titled "The major economic cycles". According to his analysis, various products, especially related to agriculture and copper showed a pattern in economic cycles and were self-repetitive. He believed that technological evolution had a major role to play in these betterments and hence he mapped out a wave-like plot, giving the theory of technological evolution and its impact.



The aforementioned diagram mentions 6 distinct cycles, each one of them having a large impact, here in the context of the S&P 500 in the US. The point of interest here happens to be the gradual evolution of technology through the years (which would further help us understand its impact on culture).

One might want to vouge for the fact that the 5th and 6th Kondratieff waves have had the biggest impact on Indian culture and its spread to the entire world (discussed later). Apart from that, the general observations in technological evolution involve the advent of critical technologies, one that has largely homogenized the cultural aspect, for example, the eating habits and dressing sense of people have been massively impacted by the coming up of ICT and globalization. Building up the debate – impact of technological innovations on culture. A rather conflicting, yet fundamental to our understanding of the modern-day world around us, the theoretical perspectives of the same can be understood by two very distinct theories, namely the Technological Determinism theory and the Social Construction of Technology Theory. The former was given by Norwegian sociologist Thorstein Veblen, who suggested that society is shaped by technology, and it dictates the way society transforms itself. Building upon the said concept, Canadian philosopher Marshall McLuhan envisaged that because of technology, people, culture, and economics will grow and evolve consequently and that “Media technologies impact us, change our perception, and ultimately change our world.” The latter (SCT) is an idea developed during the 1980s that advocates for the fact that instead of technology shaping society, it’s the society that shapes the technology. Perhaps the biggest practical manifestation has been globalization, technology’s greatest gift to humanity. Not only the world is a “global village” in modern times, but the movement of ideas and beliefs has been greatly facilitated by technology. Before discussing the various agents of globalization, it is equally important to understand the concept of cultural dissemination in the context of modern times. Based on the ideas of Robert Axelrod, the theory describes how one culture slowly but steadily, adapts certain traits of a different culture and vice versa. A very naïve example of the same could be the successful exchange of cuisines from different parts of India, be it the popularity of Dosas in Rajasthan or Kadhi Rice in Tamil Nadu, the large migration of Indians to countries like Canada, the UK, and the US can be a seen a prominent manifestation of cultural dissemination amongst macro cultures. Agents of technological innovation affecting culture Among the many agents of technological innovations, the Internet and other allied communication technologies are the foremost mentioned in terms of their impact. While India is taking a strong leap towards technologies like 6G, the internet has facilitated the vast exchange of ideas and information throughout the globe, conforming to the ideas of Marshall McLuhan (Global Village) and Steve Harvey (Time Space Compression). Not only has it led to the creation of a capitalist system that has been completely unheard of, but it has also contributed to the global economy beyond consideration. From the proliferation of mobile phones in the poorest regions of the world to the system of video conferencing and recently, metaverse. Never did the world see such a large-scale movement of cultures across borders. ICT has been one such area that has facilitated the development of culture by and large by bringing out ancient methods of community organization and by empowering nations, and by empowering nations specifically LDCs to make their mark on the global stage through their cultural aspect, for example, countries of Sahel Region and South Asia are known for, at least in the cultural notion, to be highly hospitable.

Recently UNWTO announced 'Tourism for Development Fund' for Least Developed Countries supporting projects in LDCs with at least €10 million until 2030 in collaboration with the TUI Care Foundation.

As for India, ICT did not only alter the very essence of India's employment story, it provided for a generational wealth of IT engineers and allied technical people that became India's greatest asset in terms of export, for example, the CEOs of Alphabet, Microsoft, Chanel, etc are Indians. Secondly,

Aviation proved to be the biggest aid of globalization and bridging the gap between distant geographical cultures. Its biggest achievement perhaps has been the successful assimilation of (certain aspects of) distinct cultures into one another that would otherwise not have been possible. A prominent example of the same is the different management models that were exchanged as a result of executives traveling from one country to another. For example, the Japanese concept of Kaizen and Jidoka (by Toyota) got paired with the US concept of Super Market System (by Lockheed Martin) in the global business context.

As for India, the advent of spiritual tourism to places like Varanasi, Mathura, Haridwar, etc, proved cardinal in the development of its grassroots economy and micro industries. Apart from that, it facilitated the exchange of both ideas and people from one part of India to another, creating a "common culture" that is fostered within the subcontinent.

Thirdly, Media and allied mass communication methods. While it is closely linked with the internet at a macro level, the role of media has been perhaps the greatest when taken into consideration its impact on shaping the ideas of the youth. The birth of social media applications like Instagram and Snapchat, not only created a sense of "responsibility" amongst the youth to be visible to the world, but it also led to the diffusion of many prestigious yet undiscovered forms of art and culture across. For example, Coke Studio Pakistan and the rise of Independent Media are two prominent examples. As for India, it ranks No. 1 in the list of countries by total users with over 400 million Instagram users. On the periphery, one might want to argue that the "Westernization" of Indian society has been facilitated by media agents like social media, for example, the increase in "pub culture", "alcoholism", and increased "consumerism" among the youth.

Fourthly, closely related to Ricardo's concept of "economies of scale", the increased technological advancements gave every nation a "functional specialization", thereby affecting the overall culture in that society, largely oriented towards their specialization. Another way to analyze the overall impact of

technology on culture is through Hofstede cultural
dimensions given by Dutch psychologist Geoff Hofstede. To start with, is the dimension of individualism vs collectivism. While the Western way of "isolated man" has been the at forefront as far as the classical liberal discourse is concerned, the communitarian discourse largely sees society as an inseparable part of man, and the interactions between the two form the basis for the latter's development. A similar idea was articulated was Lee Yuan Kew in the form of "Asiatic values." Technology did not only lead to the exchange of such seminal ideas, it also facilitated a more balanced approach to global development.

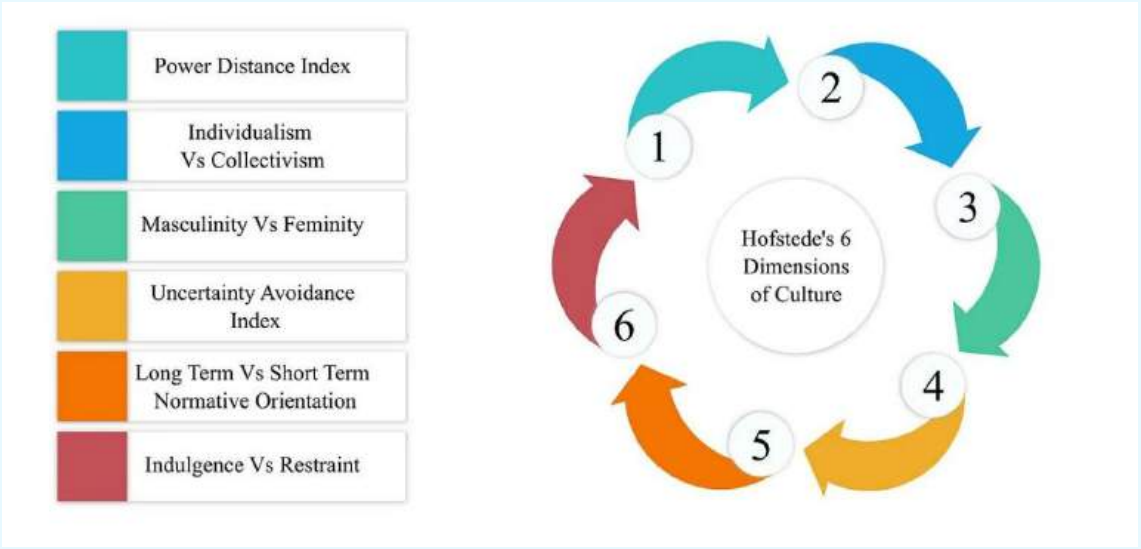
Secondly, the power distance dimension. While the cultures having high power index support traits like authority hierarchy and inequality, the opposite prefers decentralization and power distribution. Technological innovations did bring the aspect of individual development to the forefront, making them more self-reliant and less in need of cultural validation. People are being far more equipped to

take up decentralized roles of power through skilled means facilitated by innovations like online education and universal access to quality education on the Internet.

Thirdly, uncertainty avoidance. While a high uncertainty avoidance favors risk-aversive behavior, which is facilitated by strict rules and regulations, the opposite has a relatively higher risk appetite which is often a result of lenient rules and regulations. Technology has played a key role in evolving good governance models and promoting more avenues of risk-taking behavior such as entrepreneurship through both digital and offline initiatives like the Stand up India scheme, Atal incubators to UDYAM portal.

Fourthly, masculinity vs femininity. While the dimension with "prevalent traits" associated with both genders, technology has not only helped raise the percolation of ideologies like feminism to the global masses, it has also taken emerging issues like gender sensitization, gender fluidity, and well-established issues like patriarchy and violence against women to the global stages. For example, the month of June is celebrated as Pride Month, and a 2.5x increase in women occupying C-suite positions (McKinsey and Company report, 2024).

Fifthly, long-term vs short-term orientation. In long-term orientation, values like persistence, endurance, frugality, savings, sustained growth, and adaptability take center stage while Short-term orientation emphasizes quick results and respect for tradition. Technology, through its advancements in healthcare and allied services, has not only impacted the life expectancy of humans but improved their overall efficiency through the exchange of methods, from Yoga to Meditation. Sixth, Indulgence vs Restraint. Indulgence indicates that society allows relatively free gratification related to enjoying life and having fun. Restraint indicates that society suppresses gratification of needs and regulates it through social norms. An offbeat but highly relevant example is how countries in the modern world are being portrayed according to their cultural traits. While countries like Maldives and Thailand might consider themselves as "indulgent" and countries like Japan as "restraint", either of the two types have used contextual technological innovations to complement their cultures, be it the casinos of Vegas and Bangkok or the work pods of Tokyo.

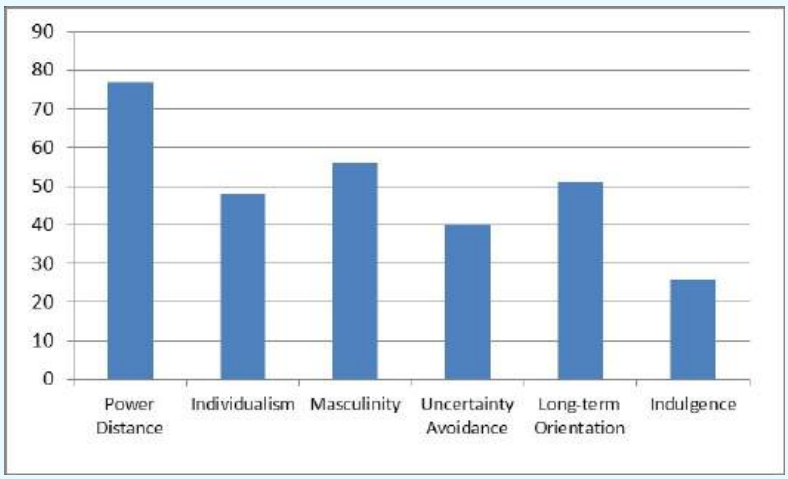


Source - (Nickerson, 2023)

Indian Context

Dr Jaishankar, India's EAM, once called "Lord Hanuman" as the greatest diplomat ever. Such has been the stronghold of India's strong cultural roots meeting with modern-day advancements. India has had a rich tradition of both spiritual and cultural teachings from eminent personalities, from Lord Krishna's verses in the Gita to the teachings of Guru Nanak, India has the innate advantage of a repository of ancient texts that forms the basis of our modern-day systems, for example the mottos of our key institutions like that of Supreme Court are taken from Upanishads.

Amalgamating culture and technology in the Indian context has always been a challenge considering the huge socio-economic gap and lack of access to resources amongst the poorest. With that being said, innovations like UPI and Arogya Setu proved to be both successful and widely used throughout the nation. The debate takes place due to the conflict between the values of sticking to one's roots and being a part of the larger picture. One might argue that globalization did lead to our culture being vulnerable to the world but on the flip side, it opened the Pandora's box for the Indian model of growth and development to infuse with the development models of other nations. For example, India's environmental movements like that of Chipko became a global case study. Culture by its very essence has given India an image of its own which has been widely accepted globally. A practical manifestation of the same was during the G20 summit last year in New Delhi. From the times of JL Nehru conceiving the idea of Non-alignment to PM Modi's idea of Multi- alignment, there has been a consistent effort to harness the Indian values of tolerance, inclusivity, and peace to help make India a frontrunner in the geopolitical setup. Mentioned below are India's scores on the cultural dimensions of the Hofstede model.



Source - Tiwari, Rajnish. (2017). Frugality in Indian Context: What Makes India a Lead Market for Affordable Excellence?

Conclusion

The world as it stands today, is perhaps more volatile than ever before and the use of mere technology or culture per se has not reaped many benefits. Effective measures for global development and solutions for the most peculiar problems, be it waging wars or environmental concerns can be solved by effective "co-habitation" of culture along with technology with the latter facilitating the rise of the former's values and morals to the global stage.

Kushagra Khare
(ABVSME, JNU)

IT QUIZ

QUIZ TIME

1. What does HTTP stand for?

a) HyperText Transfer Process

b) HyperText Transfer Protocol

c) Hyper Transfer Text Protocol

d) HighText Transfer Protocol

2. Which programming language is primarily used for web development on the client-side?

a) Java

b) Python

c) JavaScript

d) C++

3. What is the main function of a firewall in a computer network?

a) To cool down the CPU

b) To prevent unauthorized access

c) To store data

d) To connect to the internet

4. Which of the following is a relational database management system (RDBMS)?

a) MongoDB

b) MySQL

c) Redis

d) Cassandra

5. What does "GUI" stand for in computing?

a) Graphical User Interaction

b) General User Interaction

c) Graphical User Interface

d) General Usage Interface

6. Which one of the following is an example of cloud storage?

a) Dropbox

b) GitHub

c) Notepad

d) Microsoft Word

7. What is the primary function of an IP address?

a) To identify a specific computer on a network

b) To speed up internet browsing

c) To store website passwords

d) To act as a firewall

8. Which company developed the Android operating system?

a) Microsoft

b) Google

c) Apple

d) IBM

9. What is the smallest unit of data in computing?

a) Byte

b) Bit

c) Nibble

d) Kilobyte

10. In programming, which of the following is NOT a looping structure?

a) for

b) while

c) if

d) do-while

11. What does IT stand for?

a) International Technology

b) Information Technology

c) Internet Technology

d) Information Theory

12. Which component is known as the "brain" of the computer?

a) RAM

b) Hard Drive

c) CPU

d) Motherboard

13. What is the primary function of a router?

a) Storage

b) Connectivity

c) Processing

d) Signals

14. Which of the following is not an operating system?

a) Windows 10

b) macOS

c) Microsoft Office

d) Linux

15. Which cable is used to connect a hard drive to a motherboard?

a) SATA Cable

b) HDMI Cable

c) Ethernet Cable

d) USB cable

16. What is the name of the area in California where many of the world's largest tech companies are headquartered?

a) Hi-Tech Valley

b) Silicon Valley

c) Techno Park

d) Central Valley

17. What does the acronym "RAM" stand for?

a) Random Access Memory

b) Read Access Memory

c) Run Access Memory

d) Real-time Access Memory

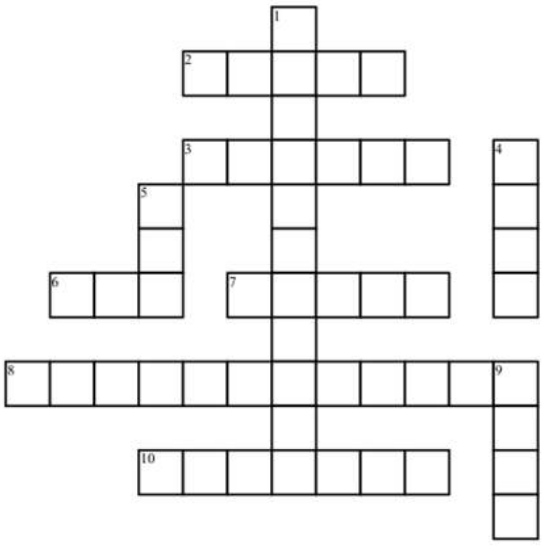
18. Which of the following is a type of malware?

- a) Firewall
- b) Antivirus
- c) Trojan Horse
- d) Browser

Crossword

Across

2. Something that most websites have starting with L
3. what is the most popular search engine?
6. what do you use to add a paragraph?
7. a search engine begging with Y
8. What does www stand for?
10. Tim _____-Lee



Down

1. What do websites contain?
4. makes up the layout and structure for your website
5. What do you use to underline?
9. what search engine is starts with B and ends in G

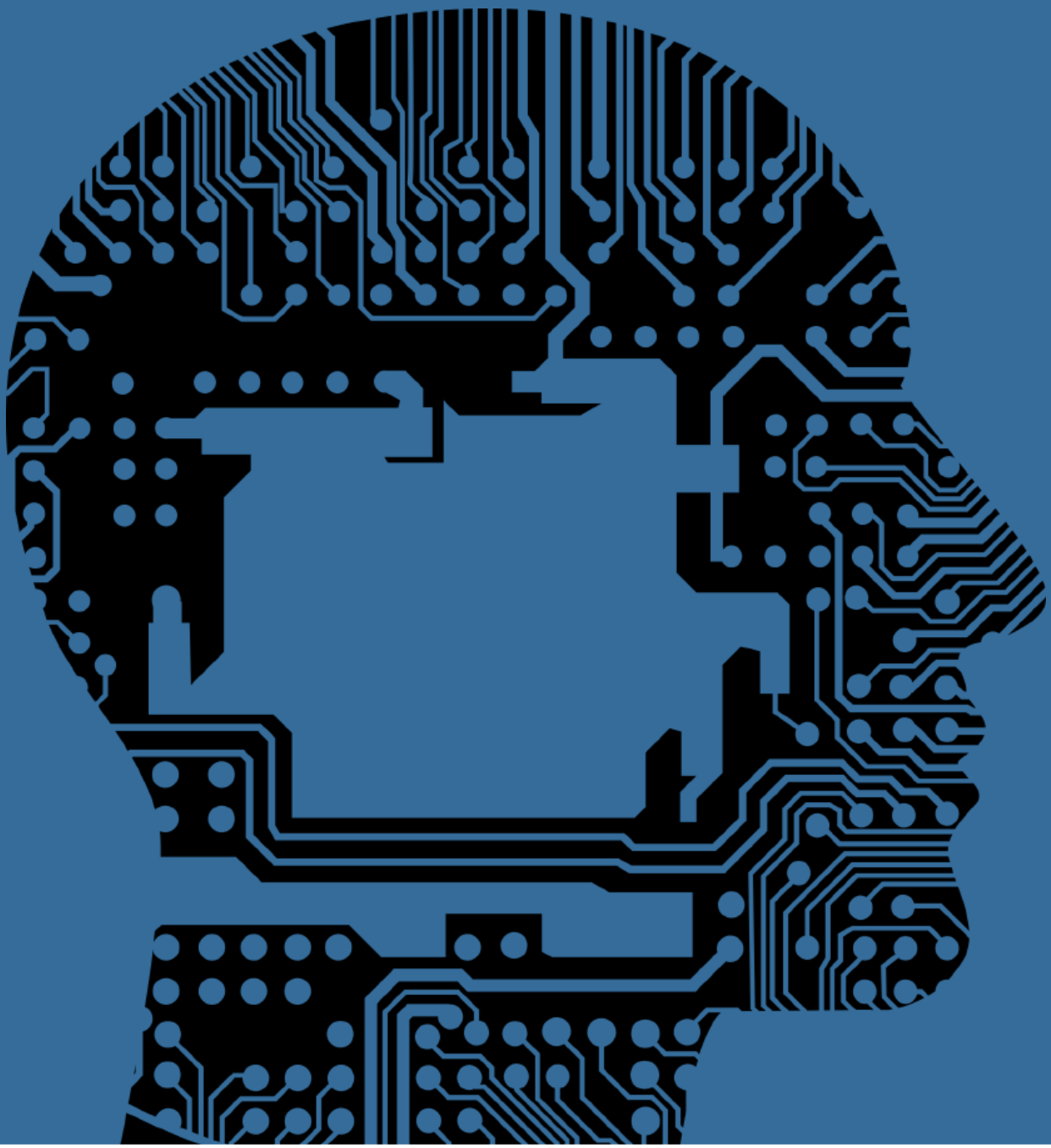
IT Quiz Answers

1.	**b) HyperText Transfer Protocol**
2.	**c) JavaScript**
3.	**b) To prevent unauthorized access**
4.	**b) MySQL**
5.	**c) Graphical User Interface**
6.	**a) Dropbox**
7.	**a) To identify a specific computer on a network**
8.	**b) Google**
9.	**b) Bit**
10.	**c) if**
11.	**b) Information Technology**
12.	**c) CPU**
13.	**b) Connectivity**
14.	**c) Microsoft Office**
15.	**a) SATA Cable**
16.	**b) Silicon Valley**
17.	**a) Random Access Memory**
18.	**c) Trojan Horse**

Crossword Answers

2 links
1 information
3 google
4 html
6 tag
5 tag
7 yahoo
9 bing
8 world wide web
10 berners

ETHICS OF ARTIFICIAL INTELLIGENCE



Abstract to the case –

This next generation of AI will reshape every software category and every business, including our own. Although this new era promises great opportunity, it demands even greater responsibility from companies like ours", were the words of the current CEO of Microsoft, Satya Nadella when asked about the impact of AI. What was supposed to be a normal innovation proved to be a technology that took the world by storm, potentially changing its course of evolution. While the first part of the case would deal with theoretical paradigms involving AI, the second part would be a collection of certain industry specific rules and regulations which would be followed by questions to the reader to put themselves into the shoes of an AI lawmaker and identifying the key threats.
Keywords – Artificial Intelligence, Critical technology, Ethics.

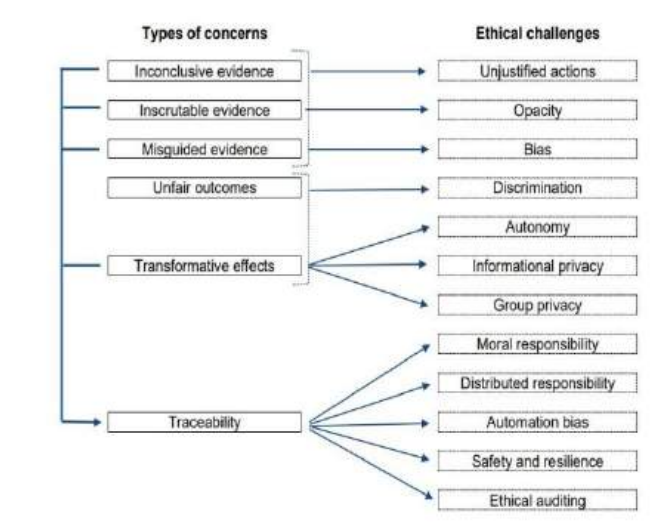
What is artificial intelligence – Historical Background.

Artificial intelligence (AI) is a technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy.

Though the groundwork for harnessing computer intelligence was being carried out for the better part of the first half of the 20th century, it was during the early 1950s that a British Mathematician named Alan Turing published his work titled "Computer Machinery and Intelligence" in the year 1950. Commonly referred to as the "Turing test", it was meant to test computer Intelligence.

However, the term Artificial intelligence was formally coined in the year 1956 by the US mathematician John McCarthy who used it in one of his workshops in Dartmouth. In the year 1979 the association for American Artificial Intelligence (AAAI) was founded. The inaugural meeting of which took place in the year 1980 at Stanford (Tableau).

Mapping out the concerns



(Mittelstadt, 2022) The various epistemological concerns associated with Artificial Intelligence as suggested by (Mittelstadt, 2022) ranges from concerns about systematic biases developed by the technology, the problem of "black box" with AI (essentially referring to the opaqueness in the process between input and the output),concerns about privacy of individuals among many others.

Furthermore (Muller, Fall 2023 Edition) considers key debates like Manipulation of behavior, and Automation and Employment into consideration. The author further states that the more common ethical problems in automated vehicles such as speeding, risky overtaking, not keeping a safe distance, etc. are classic problems of pursuing personal interest vs. the common good. On the issue of autonomous weapons, according to the author the main threat is not the use of such weapons in conventional warfare, but in asymmetric conflicts or by nonstate agents, including criminals.

According to (Ahmed SF, 2023) the most important ethical guidelines for developing educational AI systems well-being,ensuring workplace safety, trustworthiness, fairness, honoring, intellectual property rights, privacy, and confidentiality. Recently the advent of generative AI has brought with itself the grave issue of deepfakes and other generated fake content.

One of the earliest attempts at developing a pan globe framework for AI was carried out by UNESCO. The policy areas for effective implementation include introducing Ethical Impact Assessment, Ethical Governance, Gender, Economy and Labour, Education and Research, Development, Environment and Ecosystem and many more (UNESCO, 2021).

The four core values which lays the foundation for AI systems are human rights, living in peaceful societies, ensuring diversity and environment.

(UNESCO , 2021)

Furthermore,the European Union in the year 2023 came up its AI regulation Act that classifies AI models based on the degree of risk they carry namely unacceptable risk,high risklimited risk, and minimal risk AI systems. The systems are then being regulated in proportion to the risk that they possess. (EU, 2022) The act came into force in august 2024, though most of its parts would come into force 2 years after.

The Hong Kong government formulated it's AI governance law based on a 3 layer defense line including a project team, a project steering committee and a Chief Information Officer to regulate the AImodels. (DPO, 2024)

The United States has outlined 5 key principles namely safe and effective systems,algorithmic,discrimination,protections , data privacy, notice and explanation and human alternatives, consideration, and fallback in

their blueprint for an AI Bill of Rights. (OSTP, 2022)

In the Indian context, Niti Aayog launched a National Strategy for Artificial Intelligence that focused on regulating the role of AI in areas namely Healthcare, Smart cities, agriculture, smart cities, and smart mobility.

AI though India lacks a dedicated legislation, legislations like that of the IT act 2000 has been used to counter threats like deep fakes (sec 66D and 66E).

Furthermore, The Information Technology (Intermediary Guidelines and Digital Media Ethics Code), 2021 and the Digital Data Protection Act 2023 have been enacted to safeguard digital personal data and ensuring accountability. (PIB, 2024)

Conclusion

While there are mounting concerns over the unethical use of Artificial Intelligence, there has been considerable efforts undertaken from both national governments and international bodies to mitigate the immoral use of critical technologies like AI.

While we still face evolving threats, the question further comes down on achieving a global universalization of laws pertaining to judicious and moral use of AI.

Question for the Reader to Ponder –

In the Indian Context, what areas are critical in the development of the ethical development procedures for AI and why?

Q2) Consider yourself to be an Indian lawmaker. How would you approach the situation of increasing cases of Deepfakes and Digital Morphing?

Q3) Prepare a sample policy document for highlighting the state of AI in India and potential solutions to the problems involving AI

Q4) Highlight the role of AI in venturing into the fields of high human employment and the negative impact their unethical use might have.

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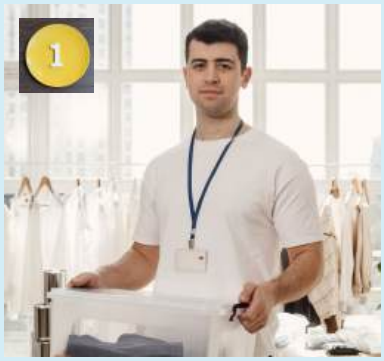
CASE STUDY

Alex the Lizard Tycoon: A Tale of Scales and Profits



A Slithery Good Business

Alex, our scaly entrepreneur, is the proud owner of a pet store specializing in the most exotic lizards this side of the Serengeti. Each of these little critters fetches a cool $25, making them quite the cash cows. But, like any good business owner, Alex knows the importance of a solid supply chain.

Let's Crunch Some Numbers

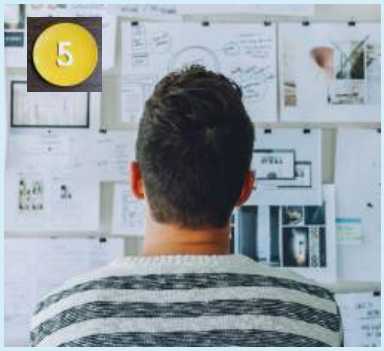
We've whipped up an Excel model to help Alex (and you) visualize his profit potential. By plugging in different demand scenarios, we can see how his profits fluctuate.

Join us to resolve the mysteries of Alex's lizard empire and learn some valuable lessons about supply chain management, pricing strategies, and the art of turning a profit.

The Lizard Supply Chain

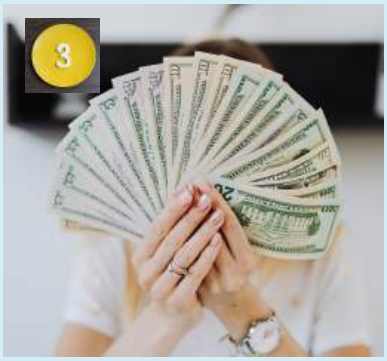
Alex has two main suppliers:

- **Supplier A:** The reliable one, offering up to 50 lizards a month at a reasonable $5 each.
- **Supplier B:** The more expensive option, but with unlimited supply at a steeper $10 per lizard.



What-If Scenarios:

- **Scenario 1: The Chill 30:** If Alex sells 30 lizards, he'll source them all from Supplier A, pocketing a tidy profit.
- **Scenario 2: The Sweet Spot 50:** Selling 50 lizards maxes out Supplier A's capacity, but it's still a profitable venture.
- **Scenario 3: The Risky 70:** To meet this demand, Alex needs to turn to Supplier B for the extra 20 lizards, which can eat into his profits.



The Profit Puzzle

To maximize his profits, Alex needs to figure out the optimal number of lizards to buy from each supplier based on monthly demand. It's a balancing act, like juggling a bunch of geckos!

A Visual Feast

We've also created a snazzy graph to illustrate the relationship between lizard sales and profits. You'll see how the profit curve takes a dip when demand exceeds Supplier A's capacity.

Sensitivity Analysis: A What-If Extravaganza

To further optimize his business, Alex can experiment with different variables:

- **Price Hike:** What if he raises the selling price to $30?
- **Supplier Discount:** What if Supplier B offers a discount of $2 per lizard?

The Big Questions

- How does Alex's profit change as demand fluctuates?
- What's the magic number of lizard sales to break even with Supplier B's higher price?
- How would a price drop to $20 impact his bottom line?

LAUNCH DAY

INFOMATRIX NEWSLETTER

THIRD EDITION

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THANK YOU

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