



# Technology: Subservient to Humanity

This is an age of Hybrid Technologies, where different inventions are combined together to augment collective benefits and enjoy the synergistic impact. It is a never-ending endeavor to create advanced versions of existing processes to evolve better and more efficient automation and robotics. Improvement in technologies is achieved through continuous, strenuous research and development involving huge costs. Therefore, the boon of technology comes with a price tag. The advantages of technology are mostly enjoyed by those who can afford the services, while its collateral damages are mainly borne by the poor. Every technological breakthrough brings about negative side effects as well, simply because the quest for speed, productivity, growth, and prosperity often leaves the safety factor inconsequential. Information technology has grown fast, but so have cybercrime, security risks, environmental damage, dependence, and job displacement.

Nature has its own set pattern. Initially, human activities were close to nature, but technological advancements slowly impeded it and ultimately led to environmental defiance, causing huge damage to human life. The blame lies solely with the human factor, which failed to respect the sophistication and kinetics of nature disrupted during the process. A factory emits carbon harmful to human life but was allowed to continue until it caused impairments in the form of smog. The world still remembers the Great Smog of London in 1952, which killed 12,000 people. By not addressing such negative side effects of technology, the atmosphere is already in the grip of global warming, disturbing the balance of nature and potentially causing irreparable damage to the globe. In 2022, Pakistan faced huge destruction from unprecedented floods, causing 1,740 human deaths, along with losses of property and livestock, totaling around US\$30 billion. This underscores the urgent need for preventive measures.

## Financial Technology (Fintech)

Entire human activity is engaged in the pursuit of money, as it "makes the mare go." Managing money effectively

brings financial stability and guarantees success. Therefore, financial managers are constantly seeking improved measures to utilize financial data through Fintech innovations and Data Analysis for better returns on business ventures. A careful study of every financial transaction reveals much about an organization's

operations. Most complicated calculations, real-time operations, analysis, and relationships have already been automated, bringing advantages and ease to human life. There were times when accountants and bank officials would spend extra hours balancing and verifying various statements, and these professions were known for late office hours.

Fintech represents financial innovation aimed at improving services in the financial sector, mainly banking, insurance, and investment. It is a hybrid technology that leverages synergy, where the benefits are greater than the sum of its parts. It is widely applied in the banking sector, where all transactions are conducted online without personal contact. In car insurance, you can pay as you go via smartphone or a black-box fitted in the car, and investments are made through the internet. Fintech has significant advantages, including product delivery without physical boundaries, multiple choices at cheaper prices, and the ability for companies to store vast customer information for personalized services.



However, Fintech also carries risks due to the lack of personal contact between buyers and sellers, creating opportunities for fraud.

There are over 448 Fintech companies in Pakistan, with a market value of over US\$500 million. The sector is expanding rapidly but faces obstacles such as ambiguous government policies, lack of awareness, and low investment. To expand Fintech, the government must declare a clear long-term policy, encourage online banking and digital payment systems, and discourage cash transactions (though currently, the government is considering increasing cash transaction limits from 2 to 25 lakh rupees – Jang, 24th July 2025). With a population of 240 million, mobile phone subscribers exceed 193 million. The State Bank of Pakistan aims for digital payments of US\$36 billion by the end of 2025. Digital banking services, along with personal account management and expanded banking services, will gradually reduce the grey economy.

Every organization records each financial transaction in an accepted format to track the sources and uses of funds. This generates a heap of accounting data, which can be used for various purposes, especially to assess organizational efficiency and maintain sustainability.

### The Growing Role of Data Analysis

Data Analysis is rapidly expanding across industries due to its valuable applications in decision-making, supported by logic, trends, and reasoning. It ensures decisions are fruitful, customers are satisfied, costs of production are controlled, and efficiency is improved. Data points are interrelated; for example, electricity consumption and direct labor costs have important relationships with the number of units produced. Intelligent data analysis leads to innovation—new methods and techniques provide a competitive edge, making an organization smarter in its industry.

By analyzing data, efficiency is improved, and decisions are informed not just by experience, intuition, or market trends, but by figures generated from past actions and results. This allows modifications as necessary, minimizing further risks. Workflow bottlenecks and repetitive tasks are identified, enabling automation and reducing labor costs and time. Data analysis also helps in inventory control by optimizing stock and improves supply chain management.

### Management Accounting and Organizational Efficiency

Management accountants have the expertise to leverage Fintech and Data Analysis, as every financial transaction passes under their review. For example, a single Aging Schedule of Accounts Receivable can significantly improve cash flow by:

- Advising the receivable collection team to follow up on old receivables.
- Reviewing credit limits of overdue customers to minimize bad debts.
- Extending discounts to early payers.
- Reviewing credit policies.

Fintech and Data Analysis are valuable tools for sustainable growth, enabling digital transaction records, automated record-keeping, and online billing. Management accountants can achieve significant improvements through:

- **Efficient Operations:** Automating manual work and reducing costs.
- **Fruitful Decision-Making:** Basing decisions on logic, facts, and past trends.
- **Customer Knowledge:** Using historical data to understand customer behavior and preferences.
- **Financial Inclusion:** Providing access to financial services, especially for the underserved.

Economies of developing countries can benefit from adopting Fintech and Data Analysis approaches. In Pakistan, around 200 state enterprises suffer huge losses, costing taxpayers over Rs. 2 billion per day. These units face serious management issues. Confidently applying Fintech and Data Analysis techniques can help improve their performance.

### Conclusion

Pakistan's financial landscape is rapidly growing with Fintech and Data Analysis innovations. The State Bank of Pakistan fosters collaboration with Fintech organizations, while digital companies facilitate online payments, particularly in remote areas and abroad. Small businesses and individuals are using digital lending facilities. AI-powered Data Analysis has become a useful tool to enhance risk management, improve audit performance, provide business insights, benefit investors and stakeholders, boost creativity, and ensure true returns on investments.

Physical inventions have provided the foundation, while smart and mindful usage through Fintech and Data Analysis has maximized their impact on human progress and welfare. These technologies serve humanity by augmenting efficiency and productivity.

**About the Author: Syed Shamim Ahmed** is a Fellow member of ICMA. He retired as General Manager Finance from the Karachi Port Trust (KPT) where he served for around 22 years in various positions. He was also a member of the Karachi Dock Labour Board for 7 years. After earning his MBA from IBA Karachi, he began his career at Citibank before moving to Awami Autos (now Pak Suzuki).