THE IMPORTANCE OF MATHEMATICS IN SOLVING SOCIO-ECONOMIC & TECHNOLOGICAL CHALLENGES.

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INTRODUCTION:

Mathematics shouldn't be boring, we just haven't agreed it's just another language; The language of innovation, inventions & creativity.

Mathematics can be used to improve our understanding of the world around us. For example, mathematics can be used to study the spread of diseases, the impact of climate change, and the behavior of financial markets. This understanding can be used to develop policies and solutions that improve our lives.



7 Greatest Usefulness Of Mathematics:

1. Mathematics helps in analyzing underlying patterns and predict future events. E.g. during COVID-19, the mutations nature of the virus was discovered using mathematical tools.

2. It helps in problem-solving, critical thinking and in overcoming wicked, Complex problems like the speed of Tsunami and tornado.



3. Math helps in understanding Climate change vis-a-vis the future of humanity.

4. Math helps considerably in abstract or Spatial thinking and power of deep reasoning and wisdom.

5. Math aids effective communication skills because Math is precise and exact good mathematicians are powerful and direct communicators, no unnecessary flesh, no hyperbole, no waste.



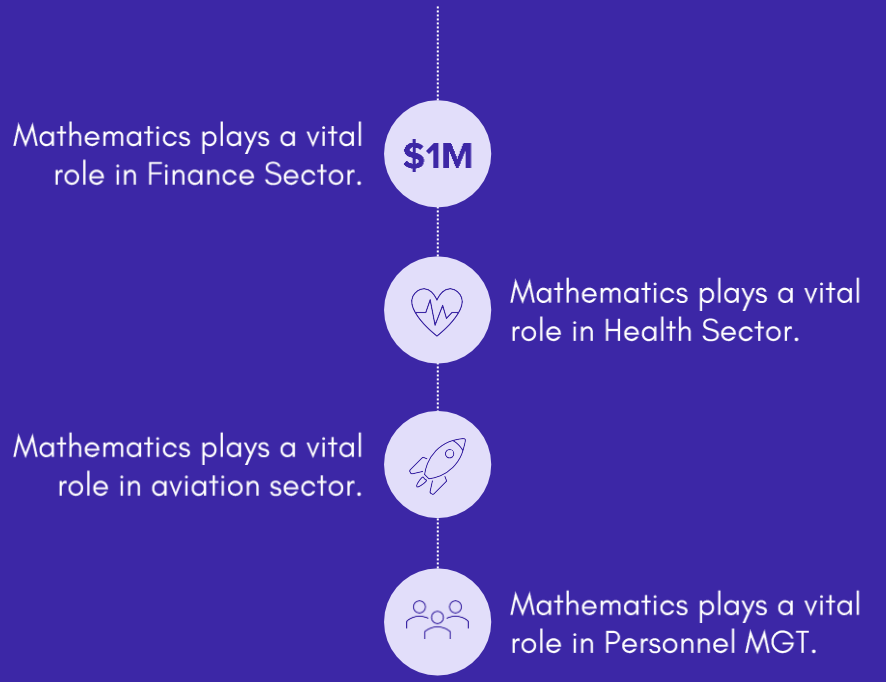
6. Math is the best Brain Tonic that exists in nature. It improves working memory, visual processing and psychological reasoning. It is the most effective way of building mental discipline and mental magnitude.

7. Finally, to understand the way both the visible world and the vast universe work, mathematics is the most veritable compass.

WHY MATHS?

Students would always need solid Math Skills as they head to the Future.

VITAL TO THE STRONGEST OF INDUSTRIES



Let's break it down a bit more

SOCIO-ECONOMIC IMPORTANCE

Mathematical models
for informed socio-economic decision-making.

Optimization techniques
for resource allocation and cost minimization.

Statistical analysis
to address socio-economic disparities.

TECHNOLOGICAL IMPORTANCE

Optimization Methods
for efficient technological resource allocation.

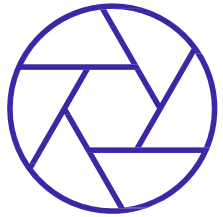
For Data Analysis
and machine learning in technology.

Mathematical Simulations
for predicting technological processes and outcomes.

The possibilities for using mathematics to solve socio-economic and technological challenges are endless. But in order to realize these possibilities, we need to invest in mathematics education.

Mathematics happens to play a very vital role in

DIGITAL MANAGEMENT



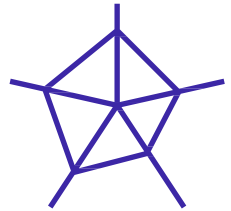
Mathematics has revolutionized digital mgt. in the technology industry, empowering efficient data-driven decision-making and optimization.

HUMAN MANAGEMENT



Mathematics provides a quantitative foundation for managing people, optimize processes, and create an environment that fosters relationship.

SOCIAL MANAGEMENT



Mathematics aids social Mgt. through quantitative tools, predictive models, and evidence-based policies, fostering positive societal change.

A quick run-through on a few historical moments' Mathematics brought about:

The history of mathematics is intriguing. It explores the origins of mathematical discoveries and procedures. Although mathematics as an organized science did not exist until the classical Greek period from 600 to 300 BC, there were prior civilizations such as Egypt and other countries that made notable contributions.

GREEK MATHEMATICIANS

Greek mathematicians contributed greatly to mathematics, creating important theorems, algorithms, and theories such as the Pythagorean Theorem, Euclidean Algorithm, Theory of Proportions, Theory of Numbers, Method of Exhaustion, Conic Sections, Golden Ratio, Trigonometric Functions, Calculus, and Non-Euclidean Geometries. These inventions have had a profound and lasting impact on the development of mathematics and science.

ANCIENT EGYPTIAN MATHEMATICIANS

The ancient Egyptians developed important mathematical concepts such as The Decimal System, Fractions, and Geometry. The decimal system, which is the most commonly used method of counting in the world, was created by the Egyptians. Fractions were used to measure and divide quantities, while Geometry was used to construct structures such as Pyramids and Temples.

Some other significant contribution made to the development of **Mathematics** include:

ARAB MATHEMATICIANS

Arab Mathematicians made significant contributions to the development of mathematics, including the widely used Arabic numeral system, Algebra, and Trigonometry.

Algebra is one of the most important branches of Math which is applied in various fields of study like Physics, Chemistry, Biology, Biotechnology, architecture, medicine, Finance etc. With Mathematics we can make decisions based on Data and verifiable fact and was developed by Al-Khwarizmi.

Trigonometry, which deals with the relationships between angles and sides of triangles, was developed by Al-Battani.

WESTERN MATHEMATICIANS

Today, Western civilization is built on the foundations of mathematics. Mathematics is an essential part of our lives, from building homes to running businesses. It is the language of science and technology, and has enabled the modern world to collect, analyze, and interpret data, analyze change and motion, and develop Computers and their Applications.

In Summary

We need to make sure that all students have access to a high-quality mathematics education, regardless of their background. We also need to support the development of new mathematics curricula that are relevant to the challenges of the 21st century.

I believe that Mathematics is essential for solving the challenges of our time…

And I am committed to working with our youths to ensure that mathematics and its applications (technology) is used to create a better future for all.



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