

KIST Newsletter

● Volume 5
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● February 2023

Continuing Good Practices

Engaging – Implementing – Sharing

KIST, a distinctive educational institution, purposefully and creatively connects all its stakeholders, especially students. Committed to educational excellence, the institution maintains top scholastic standards yielding fantastic results.

We are now back to continue our legacy with this mega-event. The KIST Fair 2023 (on 20 Magh 2079 BS) hosts a hugely popular Inter-School Art & Craft Competition with an expected participation of around 45 top schools of the Valley. We do our best each day!

The past tells us there would be numerous visitors. They are connected in one way or another with different schools and colleges of Kathmandu or the educational fraternity of Nepal if not abroad. The Fair is always open to the discerning among the public.

The COVID-19 pandemic posed enormous challenges, yet we transcended them. Now, it is important that there is a resurgence of our celebrated good practices enabling stakeholder engagement, fostering social dialogue, and sharing lessons learned. This key Fair accordingly offers interesting Intercollege Management and IT project competitions.

This occasion is a determined and well-planned endeavour to remain fully active as a reputed, long-standing institution. We forever foster student talent through focused curricular and wide-ranging extracurricular and co-curricular activities. We expect the keen participation of over a dozen colleges in these competitions.

Notably, innovative, original products showcased here address recent curricula of different academic levels. They reflect the fact that education in Nepalese Universities has standard curricula and global recognition. Such activities incorporating students' hands-on learning definitely makes them fit for fine futures anywhere.

We feel these projects, models, and presentations exhibited in the Fair build the self-confidence of competing aspiring professionals. Further, they display merit: true worth scholastically and socially. A number of Esports are also being conducted in keeping with contemporary tastes of progressive, perceptive, educated youth.

Significantly, there's great news for our fans and graduates! We are launching MIT (Master of Information Technology) this year at KIST. This will engage our committed stakeholders in keeping us at the very top educationally, and help social transformation simultaneously strengthening social cohesion through cutting-edge course contribution.

We, at KIST, motivate youngsters to seek better understanding of this complex world and become successful, proficient citizens. Certainly, this Fair shall nobly guide us...

KIST's sound work ethos promotes the soft-power of blended learning and goal management. Alongside, KIST Community activities closely bond its stakeholders, managers, faculty, staff, students, parents, guardians, and supporters.

Excellence is our way of life...



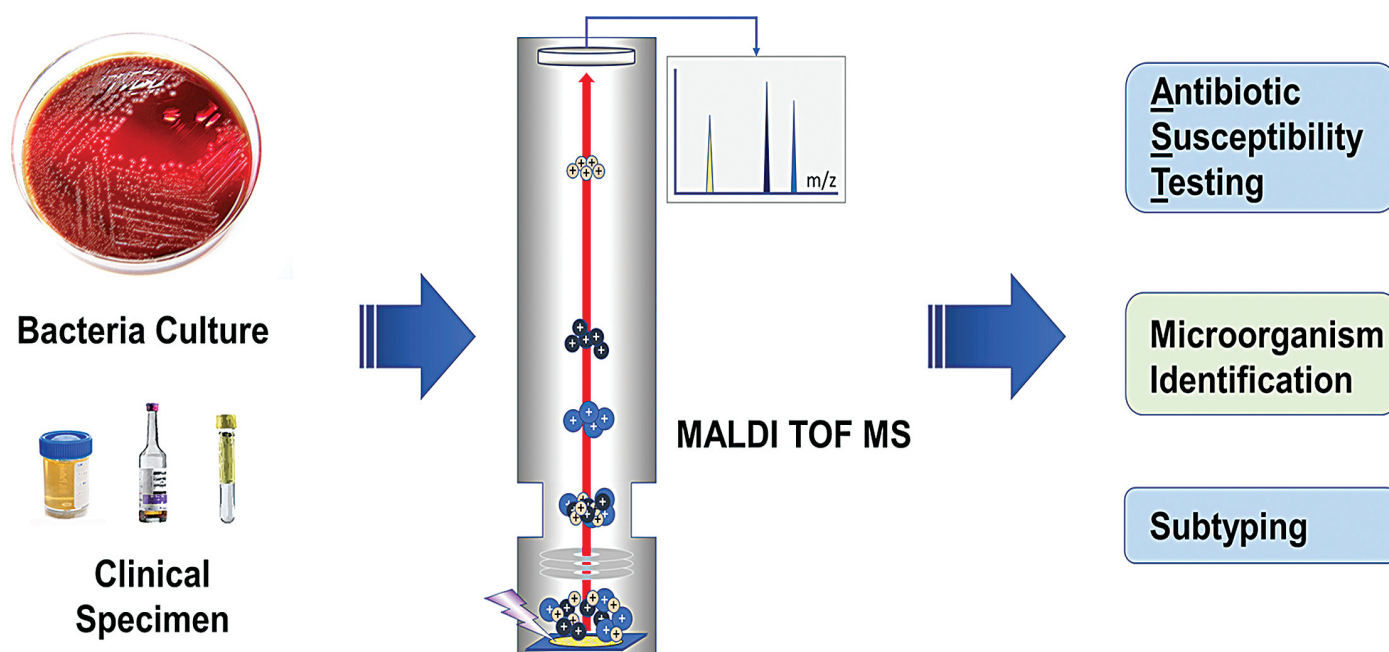
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Frontiers of Microbiology

Early Detection of Pandemic

Dipti Shrestha, PhD



The recent global COVID-19 pandemic had a significant impact on ideas about hygiene, human microbes, and human health. Microorganism evolution and the threat of disease it poses to both people and animals have existed since the early 18th century. Microorganisms are living things that are invisible to the unaided eye. It contains pathogens that cause a variety of hazardous diseases, such as bacteria, viruses, fungus, protozoa, and actinomycetes. The 2019 outbreak made it simple for the overall public to comprehend microorganisms.

The infectious disease causing organisms must be found in order to treat any disease. Infectious disease diagnosis is not always simple. It can be challenging to identify the infecting organisms. The traditional technique of diagnosis is isolating, identifying, and testing the specific organisms for antibiotic susceptibility, which typically takes three to seven days. Conventional diagnostic techniques have been replaced by modern technology. The most popular technology utilized globally is PCR, which is employed in many rapid diagnosis techniques. The most popular, dependable, and illuminating method to reflect the full properties of any organism and the diseases it causes is molecular techniques (using DNA, RNA, and plasmids).

Modern molecular techniques have now supplanted conventional approaches in the developed world because they offer quick, accurate, and comprehensive information about diseases. The more quickly diseases are diagnosed, the faster they can be treated. The molecular

approaches employ more complex procedures, such as PCR, sequencing, Minion, bio-analyzers, MALDI-TOF MS, etc., that can produce data quickly. Even cutting-edge molecular approaches can identify strains and antibiotic resistance early on.

Speaking of Nepal, it is still among the least developed countries, and the microbiology lab has minimal resources in addition to a dearth of cutting-edge and modern tools. Even during the COVID-19 outbreak, the government was not efficient in deploying microbiologists, such as university graduates, and providing complete lab facilities for the general public. The suspension of manpower and lack of resources has acceptable justifications because diagnosis and therapy are ridiculous issues for a legitimate public platform.

Since Nepal is far behind in terms of modern technology, policymakers must enhance and manage the efficient use of resources and manpower in order to establish a microbiological laboratory there. It is time to modernize the development of the infrastructure in microbiology labs and to increase the number of microbiologists using the appropriate platform.

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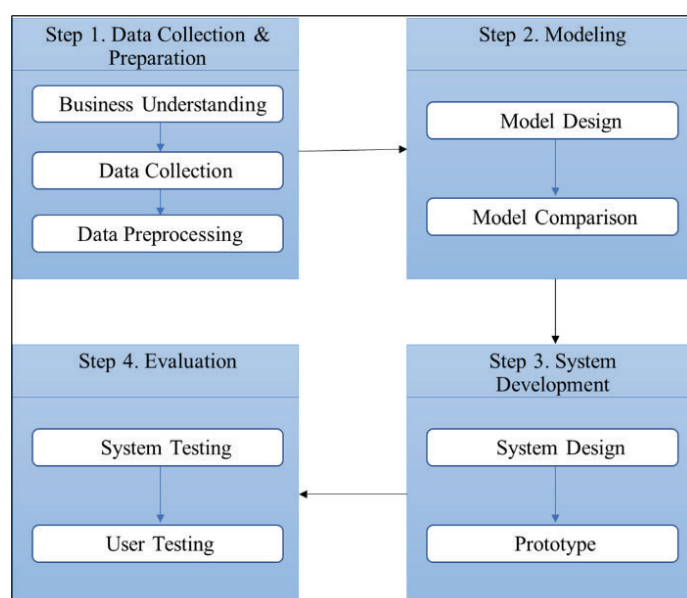
Applications of Data Analysis in Healthcare

Alok Aryal

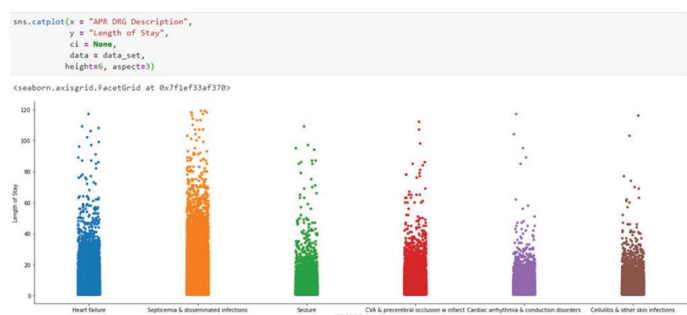
As is well known, data analysis is frequently applied across a variety of fields. Both hospital management and patients benefit from the use of data analysis in the healthcare industry. The article discusses how data analysis may be used in hospitals and how it can help them predict demand and patient needs to find estimated costs. Here is just a small example of it.

Length of Stay is one of the factors that influence the hospital performance as well as it helps hospital organization for better resource utilization with anticipating the demand as well as insurance companies can know about the patients stay if they claim for it. Also predicting total expenses of patient stay will benefit patients to plan beforehand as well.

The overall objective of the experiment is to conduct an analysis and develop a more accurate model for multiple diseases and with multiple hospitals to predict length of stay and also total expenses for the stay of the patient. The use of regression models was done to compare different machine learning models. There are four steps in the methodology: Data collection and preparation, model building, implementation and evaluation. Below is the figure of the methodology followed during this research.



While performing data analysis, few fields were chosen to check the relationship with length of stay. Below we can see one of them. It is the relationship with a diagnosis related group.



After analysis, the model development phase comes where

different regression models are used to compare the data after performing other data processing. We needed to perform some hyperparameter tuning to yield the best result when comparing different machine learning models. Out of all the models compared, XGBoost Regression yielded the best result for Length of Stay which was the primary output variable and used the same model for predicting total charges for patients as well. For comparison of models the metric of MSE and RMSE was chosen. Out of all the variables the most impactful predictor for both Length of Stay and Total Charges was CCS Procedure according to our study. Implementation of the system was done through Flask and deployed on the web. The trained model is used for implementation purposes. The system evaluation is done with giving value to test the model whether it gives the desired output or not for predicting length of stay and the total expenses both. Main limitation of study is the dataset does not contain date of discharge or date of admission which would have made the research more insightful with greater analysis.

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Deepfake

A Digital Challenge

Nabin Adhikari

Introduction

Artificial intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence. Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns, and make decisions with minimal human intervention. Deep learning is a subset of machine learning where artificial neural networks, algorithms inspired by the human brain, learn from large amounts of data.

Recent public concern is about fake images and videos including facial information generated by digital manipulation, in particular with Deepfake methods. The very popular term "Deepfake" is referred to a deep learning-based technique able to create fake images and videos

Deepfake relies on the technology of deep learning. Through the algorithm of deep learning, it can identify the photos of different angles, postures and expressions of the target characters (such as celebrities, politicians, etc.), and then continuously train to automatically generate the fake pictures, and cover them to the faces of the original video characters to form the "Deepfake videos".

This has become a social challenge as they are difficult to distinguish from an authentic image and impossible to distinguish by human eye. They have been negatively used to trick the society by creating fake news and misleading pictures and videos. Because machines are generating perfect images these days, it has become difficult to distinguish the machine generated images from the originals.

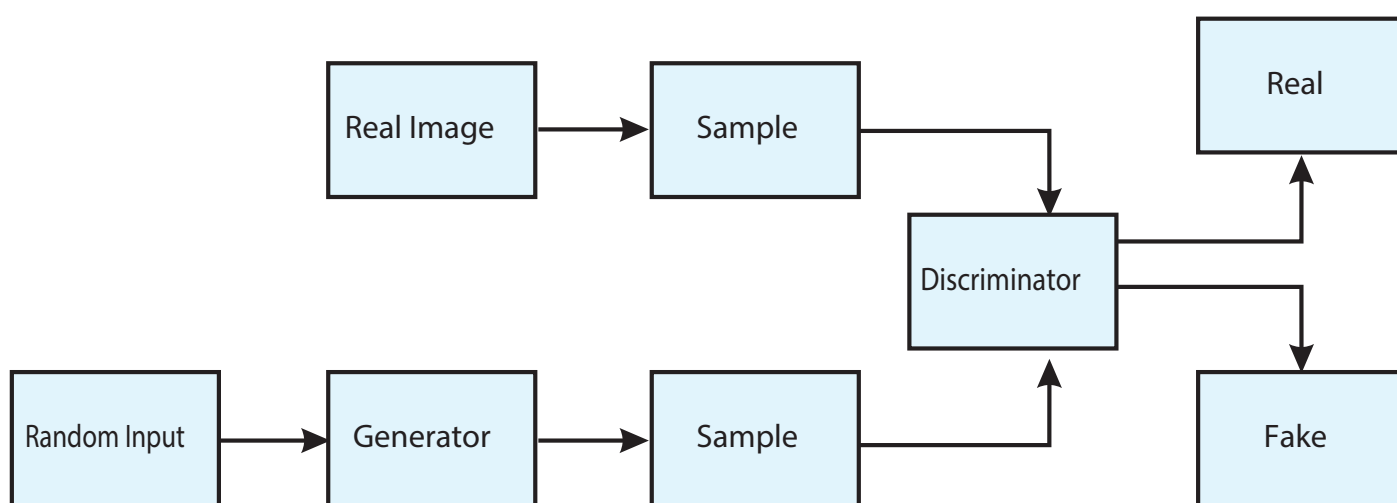


Figure: GAN Architecture

by swapping the face of a person by the face of another person.

Nowadays, it is becoming increasingly easy to automatically synthesize non-existent faces or manipulate a real face of one person in an image/video, because of: i) the accessibility to large-scale public data, and ii) the evolution of deep learning techniques that eliminate many manual editing steps such as Autoencoders (AE) and Generative Adversarial Networks (GAN).

Generative Adversarial Networks (GANs)

A Generative Adversarial Network (GAN) is a special type of deep learning, which is what we call Convolution Neural Networks (CNN). GANs are a form of deep neural network that has been commonly used to generate deep fake. Among many advantages, one advantage of GANs is that it is capable to learn from a set of training data set and create a sample of data with the same features and characteristics.

GANs can be used to swipe a “real” image or the video of a person with that of a “fake” one.

The Generative Adversarial Network (GAN) has the following two parts:

- **Generator:** Generator is trained to generate the fake data by incorporating the fake data from the discriminator and make the discriminator classify its output as real.
- **Discriminator:** Discriminator learns to distinguish the generator’s fake data and real data.

Both generator and discriminator are trained simultaneously in an adversarial process, where the generator tries to produce fake sample which can fool the discriminator and discriminator tries to identify the sample correctly from the training dataset or the generator. The main objective of generator is to generate the sample which are indistinguishable from the training dataset to the discriminator and discriminator’s objective is to truly identify the sample is from generator or the training dataset. Both the generator and discriminator are updated based on their performance during training.

Deepfake Image/Video Detection Model

Deepfake image/video detection is the process of identifying deepfake images/videos that have been artificially generated using machine learning algorithms. Some techniques that have been developed for detecting deepfake images/videos, including:

Metadata Analysis: Analyze the metadata of the image/video to check for inconsistencies or anomalies that may indicate that the image/video has been manipulated.

Pixel Analysis: Analyze the pixels of the image for signs of tampering or manipulation, such as distorted or stretched pixels.

Audio analysis: Analyze the audio of the video to detect any discrepancies or abnormalities that may indicate that the audio has been manipulated.

Frame analysis: Analyze the individual frames of the video to look for signs of tampering or manipulation, such as distorted or stretched pixels.

Deep Learning: Deep learning techniques are used to train models to detect deepfake images/videos. These models are trained on large datasets of real and fake images/videos and can learn to recognize patterns and features that are indicative of a deepfake.

Machine learning: Machine learning algorithms can be trained to recognize patterns in deepfake images/videos and identify them as such. These models typically require a large dataset of both real and fake images/videos to be effective.

Watermarking: One technique that has been proposed for detecting deepfake images/videos is to embed a digital watermark into the image/video that is not visible to the

human eye. This watermark can be used to verify the authenticity of the image/video.

Conclusion

A deepfake is a digital image/video of real person that has been edited to generate extremely realistic but not true depiction of them doing or saying that they did not actually do or say. This realistic can be achieved by using AI, Machine Learning and Deep Learning techniques, which makes difficult to distinguish real and fake images/videos. Deepfake have the potential to be misused in different ways and cause significant damage as they are used to create fake news, false pornographic videos, targeting celebrities and politicians, harassments, social insulting documents, reputational damage, sexual exploitation, identity theft.

There are different deepfake detection techniques which can be used to detect real or fake images/videos. Using only one technique may not be effective to detect deepfake in many cases. So different deepfake detection techniques can be used combinedly to get the best result.

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JavaScript

A Modern Necessity

Sarwesh Maharjan

With the modernization and quick advancement of technology, we were exposed to the most recent technological advancements in AI and were treated to a one-of-a-kind website design. Microsoft office suite is currently being replaced with the Google office suite experience. As technology advances, so do the programming languages that enable this paradigm. JavaScript was one of the old programming languages launched with the web, along with HTML, CSS, and PHP. JavaScript, like many of us in the programming industry, had a humble beginning. It began as a language to help front-end design and make web pages more dynamic and has progressed to the point where it can manage system-to-system calls in addition to handling the backend server.

Background

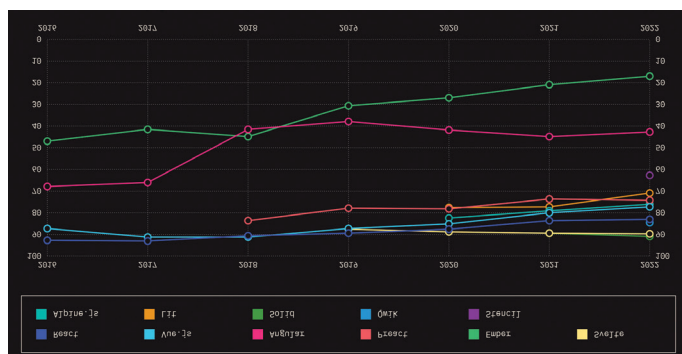
Brendan Eich invented JavaScript in 1995. In terms of history, JavaScript was initially utilized as a programming language for the frontend of the web. It was used to enhance the UI part of web development by adding interaction and interactivity. Following that, the Google Chrome team improved JavaScript to handle the backend as well by developing a V8 engine, which was capable of complying with JavaScript in machine language. With the release of this new engine, JavaScript was able to conduct backend compilation and database interaction correctly. Node.js was created to manage the process of executing JavaScript as a backend programming language with the new capability. JavaScript has created an ecosystem in the present technological world that can handle everything from browsers to desktops to mobile apps. One advantage of utilizing JavaScript is that programmers may concentrate on solving business challenges rather than learning many programming languages in order to build an effective solution.

Types of JavaScript

Over time, JavaScript has grown to include newer and improved versions of the language. The latest version of ES6 is more powerful and efficient than earlier versions. There are also other popular JavaScript frameworks, such as React, Vue, and Angular for the frontend, Node.js and Express for the backend, and Nestjs, and Nextjs for full-stack development. As you can see, JavaScript has a wide range of applications and is frequently utilized.

React and Node.js is the most basic JS frameworks, with lightweight applications that may be adjusted to the demands of the user or the company. Vue JS is a lightweight JS library with framework features. Express JS is a backend JS library with characteristics similar to Vue JS. Angular JS is a powerful front-end JS framework. NextJS and nest JS are back-end JS libraries that provide front-end and back-end features to programmers. Gatsby-js is a blog or writer's static website generator.

Frontend Framework

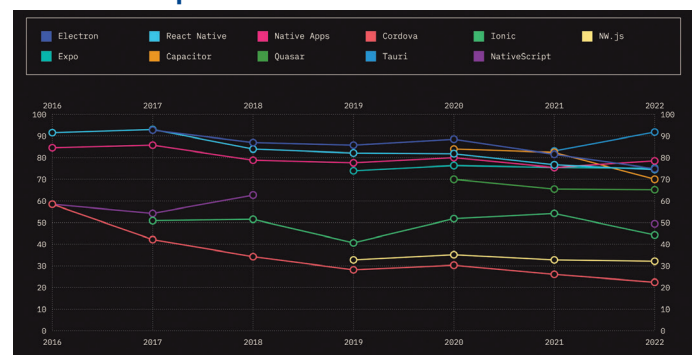


Backend Framework

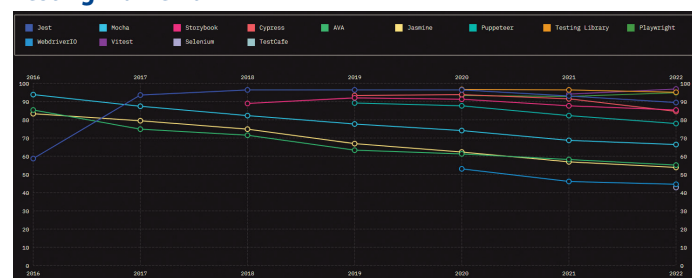


JavaScript is a popular programming language that is also utilized in React Native mobile applications. React Native enables developers to establish a unified programming language ecosystem that spans mobile and web pages. This enables small businesses and freelance developers to leverage their JavaScript expertise to sell their businesses in a variety of development areas. This gives programmers a good opportunity to apply their expertise to a variety of business concerns across the application. Furthermore, JavaScript contains extensive unit and integration testing, guaranteeing that your code is always in working order and resilient. This enables folks who do not want to be developers to work as Quality Assurance Engineers.

Mobile Development Framework

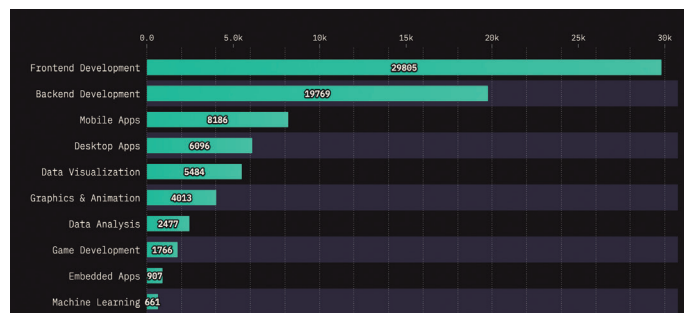


Testing Framework



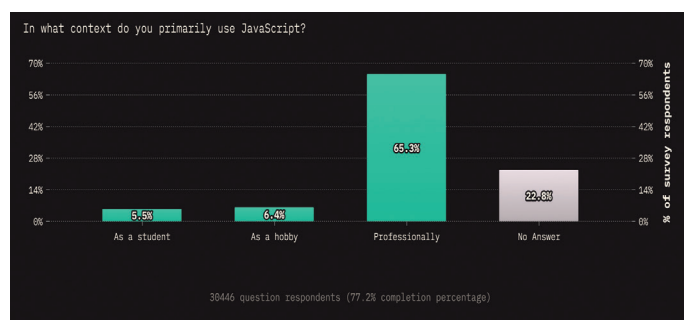
Because it may pose complications during development, JavaScript programmers often detest the language's feature that permits any variable to be of any type. This problem is solved by TypeScript, a new language that JavaScript writers may use to make variables have a static data type.

Current Scope of Javascript



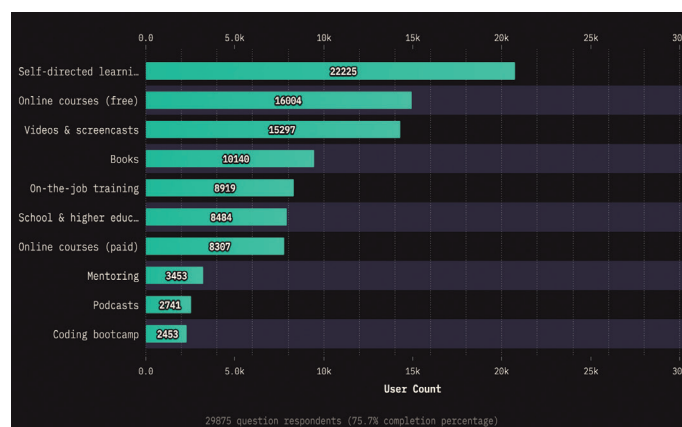
JavaScript is a flexible programming language that is utilized in a wide range of disciplines, including online and mobile development. Understanding JavaScript can help you get a job in a variety of sectors. JavaScript developers may expect to earn between Rs. 25,000 and Rs. 60,000 per month.

It allows you to demonstrate your expertise and originality to a possible customer. Simple game portfolios or interactive portfolios have been established by specific portfolios across the world. Furthermore, because of its short learning curve, you can essentially accomplish much of the theoretical knowledge yourself. JavaScript may also be a language that exposes you to another programming language. In the present Nepalese sector, if you want to work for a customer abroad, you are likely to utilize JavaScript for development. With this in mind, many of the vacant positions in the Nepalese market are connected to JavaScript or full stack. Another advantage of JavaScript is the usage of RESTful API, which is used and exploited by many of the websites available on the internet. Although API may be used in any other programming language, JavaScript is designed to make API usage as simple as possible. Another advantage of JavaScript is its enormous community, which assists you in resolving any JavaScript difficulties you may encounter, as well as various course and instructional videos for JavaScript, which allow you fast become an industry-standard developer with portfolio application to do so. Because JavaScript is the only feasible alternative for front-end programming, its market penetration will grow over time.



JavaScript engineers are in high demand due to the language's continuous popularity and substantial speed advancements in browsers. TypeScript, which offers a lower learning curve than JavaScript, is also suggested. While you can learn JavaScript in just

two weeks and be ready to work, you may want to look at some open-source projects to help you develop your programming abilities, and critical thinking skills, and work in big settings.



Future in JavaScript

We examined the current situation of JavaScript and discovered that it is highly popular and strong, with new upgrades being issued on a regular basis. We also learned about a new processing package that can speed up JavaScript by up to five times, which may be handy for developing larger, more sophisticated apps. Because of its broad use, JavaScript is being developed swiftly and effectively, and it can handle any sort of system demand.

Previously, TypeScript removed some of JavaScript's drawbacks, and now a new processing library on the market is fixing its performance drawbacks. Furthermore, Microsoft owns typescript and NPM, and their development will continue to increase over time. Another characteristic of JavaScript is its extensive library, which is not present in any other programming language.

Conclusion

For good reason, JavaScript remains the most popular web development language. It features a vast code library that may be used to construct a wide range of apps. JavaScript is also a simple language to learn, making it a popular choice for novices. Furthermore, JavaScript has a strong developer community that can assist you with any challenges you may find. JavaScript is extremely adaptable and can be utilized for a wide range of jobs, making it a popular choice among developers. JavaScript is in great demand, and fresh developers are always welcome. If you have no prior expertise with web programming, JavaScript is an excellent place to begin.

Reference

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Monetary Policy – Post-Covid

Effectiveness of & Challenges to Economic Growth & Stability in Nepal

Kriti Phuyal

Background

According to Edward Shapiro, “Monetary Policy is the exercise of the central bank’s control over the money supply as an instrument for achieving the objectives of economic policy.” Here, monetary refers to anything that has to do with money, while policy is the umbrella term for laws and rules. Monetary policy is the policy adopted by a nation’s central bank to control the overall quantity of money in circulation, promote economic growth, and put into action policies like raising interest rates and changing bank reserve requirements. Monetary Policy can be categorized into contractionary and expansionary monetary policy; expansionary policy is intended to increase the money supply in an economy whereas contractionary policy is intended to decrease it. Full employment, economic growth, price stability, exchange rate stability, balance of payment stability, neutrality of money are the goals/objectives of monetary Policy.

Moreover, the Central Bank of Nepal likewise sets monetary policy. Every year, the Nepal Rastra Bank (NRB) releases monetary policy. With the founding of Nepal Rastra Bank in 1956, central banking in Nepal was established, but it wasn’t until the middle of the 1960s that monetary policy was actually implemented through the employment of policy instruments. Similarly, after the implementation of the Structural Adjustment Program in the middle of the 1980s, major changes were made to the evolution of the monetary policy in Nepal. The NRB steadily switched from using direct instruments of monetary policy to using indirect market-based instruments. The Nepalese Monetary Policy framework has largely remained unchanged since the explicit introduction of the policy in 2002, notwithstanding some adjustments to the policy documents. For instance, between 2003 and 2005, the operating objective for NDA was defined. The goal of monetary policy in 2009/10 included the inclusion of financial stability. Additionally, the monetary policy for 2013/14 was intended to keep inflation within a predetermined range, maintain stability in the external and financial sectors, make use of credit in the productive sector, and increase financial inclusion. Since 2016/17, the growth of financial access is positive even though inflation is still at a low level. The external sector is, nevertheless, under pressure. Input from stakeholders, and consideration of the national and global economic outlook were all taken into account when formulating the monetary policy for 2018/19. The Fifteenth Plan of the GoN was also taken into consideration when developing the strategy for 2020/21, therefore developed at a period when the entire globe was experiencing economic and humanitarian issues related to the COVID-19.

This study attempts to analyse the monetary policy of Nepal, specifically to analyse the economic situation of Nepal, to examine the money supply and the inflation in Nepal, to identify the problems and prospects of monetary policy in Nepal, to study about different macroeconomic indicators and to pinpoint Nepal’s monetary policy’s issues and future potential.

Meanwhile, the study has adopted descriptive analysis of

secondary data, as well as a qualitative technique to investigate the problems. Therefore, it is based on data published by various government organization like NRB, Nepal Economic Forum, and NBSM. From the documents, facts, information, and policies were taken out, calculated, and presented in a logical sequence.

Monetary Policy FY 2022/23

The monetary policy for the fiscal year 2022/2023 was announced by Governor of Nepal Rastra Bank CA Maha Prasad Adhikari on July 22, 2022 while taking into consideration the macroeconomic environment at the time. The preceding two monetary policies were expansionary in nature but because of the monetary policy’s laxity and the rising cost of petroleum products, inflation increased from 4.4% at the start of the FY (mid-August 2021) to 8.6% by the close of the preceding FY (mid-June, 2022). This fiscal year, the NRB has tightened monetary policy in response to the slowing economy and the rising inflation rate.

Monetary Policy Stance

When there is a high credit-to-GDP ratio, the goal of monetary policy will be to move credit to the productive sector rather than encourage credit expansion. There will be a progressive reduction in the lax regulatory measures implemented during the COVID-19 infection, and they will be implemented in compliance with responsible regulatory norms. The refinance will be re-evaluated so that only the productive industries—such as agriculture, exports, and the severely impacted regions that haven’t yet recovered from the COVID pandemic—would be eligible for it. Similarly, there will be gradual minimization over-centralization of credit and expand availability to credit for domestic small and medium-sized businesses. By expanding financial literacy, financial access, and financial inclusion, digitizing payments and financial transactions will broaden the scope of monetary policy.

Structure and Target of Monetary Policy

The monetary policy has been restrained by the fixed exchange rate with the Indian Rupee and the current strategic structure of the monetary policy. Loans to the private sector are anticipated to expand at a rate of 12.6%, while the broad money supply is predicted to grow at a rate of 12%. The goal is to maintain inflation at 7% while achieving 8% economic growth. Over the import and export of goods and services for the next seven months, forex will be kept. The rates within the interest rate corridor have been raised by 1.5% points to promote macroeconomic stability while keeping the bank rate at 8.5%, the policy rate at 7.0%, and the deposit collection rate at 5.5%. When banks and other financial institutions borrow money from the Central Bank, their interest rate will be higher. An arrangement will be formed to open a repo or reverse repo if the weighted average interest rate of interbank transactions is more than 2% points lower than the policy rate. Additionally, preparations will be made to open deposits if the weighted average interest rate of interbank transactions declines by more than 3% points in comparison to the policy rate. It will be possible to continue using other open market technologies.

By the end of 2079 Poush, commercial banks and financial institutions must maintain a SLR of 12%, while development banks and financial institutions must maintain an SLR of 10%. Likewise, CRR has been increased from 3% to 4%.

Financial sector reform and regulatory regime

The Counter Cyclic Capital Buffer, which was suspended due to the Covid-19 epidemic, will be implemented from Shrawan 2080. Commercial banks and microfinance institutions who merge within their own categories or are acquired by the Poush end 2079 while performing joint operations will receive rebates and facilities connected to merger and acquisitions from NRB. When granting credit up to Rs. 20 million to the productive sectors, banks and financial institutions are permitted to set the interest rate by adding a maximum of 2% points of premium to the base rate. When necessary, coordination with the appropriate agencies would be used to strengthen the international coordination framework regarding the prevention of financial investment in money laundering and terrorist operations. To promote green financing, a draft of green taxonomy will be created, which will include reporting climate risk, issuing green bonds, recognizing capital needs, etc. Migrant employees who want foreign money must have a bank account with a balance in Nepali rupees, per NRB regulations. The NRB's refinancing program and any concessional loans provided to COVID-19-affected industries will be gradually paid back. Celebrating the year that electronic payment transactions were promoted. To gauge the actual state of financial access in the context of expanding the reach of the financial sector in Nepal, a financial inclusion index will be developed.

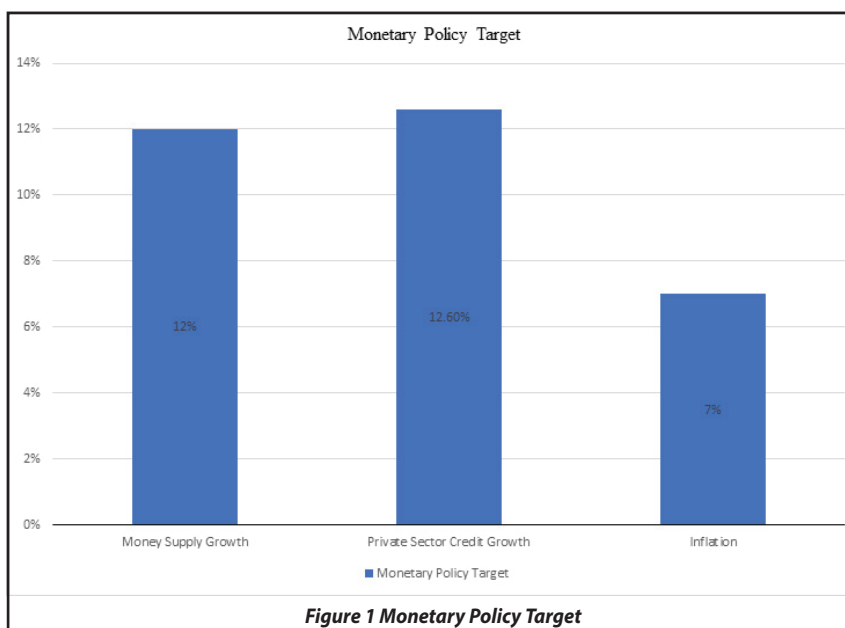
Findings

Hence, the study found that inflation needs to be restricted to 7% in accordance to the Central Bank as suggested by the government annual budget plan. Also, the Central Bank has increased the CRR for banks and financial institutions from three to four percent. Likewise, the SLR for commercial banks, development banks and finance companies has gone up to 12, 10 and 10 per cents respectively from the existing 10, 8 and 7 per cents. NRB has lowered its credit expansion from 19% to 12% further arguing it resulted in the swallowed imports. Similarly, the monetary policy last year introduced an additional limit of Rs.40 million on the margin-nature loans against the collateral of shares. However, the new policy has removed this and kept it at Rs.120 million from the entire financial system instead. If any banks or financial institutions are merging, their share transactions will not be suspended. If we want to exchange foreign currencies, from now onwards, we need to have a bank account. Refinancing for COVID-hit businesses will continue, but the amount will reduce.

Conclusion

Lastly, Monetary Policy FY 2079/80 is a document that everyone had their sights set on, believing it would offer the country's many problems some relief such as the ongoing liquidity issue and the stability of the external sector—magical remedies. The policy, which attempts to contain inflation by limiting the money supply, has been dubbed “contractionary” by economists. Different economic sectors will be significantly impacted by the policy. Therefore, by increasing interest rates, the monetary policy has adopted a cautious tightening strategy to support macroeconomic stability while preserving price and external sector stability. Given that the targets for loan expansion have been reduced

in order to account for the rising trade deficit and inflation, the liquidity situation is predicted to remain tight. The policy chosen will be able to keep inflation within the budget's target, although obtaining an 8% economic growth rate in the upcoming fiscal year may prove difficult. To increase the capacity of the economy's productive sector and decrease the country's reliance on imports, a special emphasis has been



placed on doing so. In the long run, encouraging the growth of the productive sector will help to create jobs and produce sustainable economic growth. As a result, the monetary policy has taken into account the trade-off between economic growth and stability and has placed a higher priority on economic stability, paying particular attention to the productive sector in order to increase the economy's capacity for production and achieve sustainable economic growth.

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Literature

A Threshold for Humanity

Mukunda Raj Kandel

Few centuries ago, people vividly had two options: involving in adventures and undergoing literature. The love of literature successively brought the people close to humanity and societies who learned to value humans and mark their glorious presence in the beautiful earth within the vast universe. People discovered numerous reasons for writing and reading in which humans always stood as the central figures and substances. Divine power and unidentified mysteries became the matters of curiosity but reading and writing for humans, and identifying their complications remained the primary concerns. Along with the writing of fantasy, societal incidents and human realities, people developed literature and it subsequently served for humanity.

Oxford Dictionary defines humanity as 'the quality of being kind to people and animals by making sure that they do not suffer more than is necessary; the quality of being humane.' Literature is transparently concerned with two parties: writers and the readers. 'Why do people write?' can be an inquisitive interrogation. "Of all forms of art, the question of truth has been raised most often in the context of literature" (Huemer, 233). Humans are the concoctions of multiple feelings and emotions that get revealed according to the situations that strike them, and stimulate them to. Collection and revelation of these various motifs stand as the subjects for literature. And the readers embrace themselves with the characters when they justly match each other in terms of their corresponding stories. Further, in the words of Huemer, "... literature turns into a niche phenomenon" (234) that decides the reasons of reading of human affairs which trains the readers to cultivate merciful minds.

Literature is never composed in the vacuity and it is never away from the human societies. In the due course of time, individuals learn to be critical readers and creative thinkers- great qualities they acquire after being voracious readers. According to Guth, "Literature serves in its most basic function as an extension and enrichment of experience. Other major functions are its capacity both to intensify and to reorder experience" (55). Since experiences and struggles in the life differ among individuals, that normally cannot be generalized but they should be individualized, although they teach and train the people to share the things in some common understanding. Nevertheless, literature not only entertains and involves the readers in their pastimes but also trains them about coping with diverse sense of humanity- one of its major functions. Furthermore, we see many people around the world have been performing the play of their lives playing their respective roles better than the reel actors which can be understood only after reading the literature. We have both sympathy and forgiveness upon them.

It is a big nightmare to imagine how the world would be without literature where there is no aesthetic sense and artistic merit. It is a written work considered having superior enduring creative power to persuade the humans for humanity. "Literature, therefore, gives its readers an opportunity to travel across the globe to acquire information about other peoples' culture, infrastructure, health, technology, and climate among others" (Selden, 10). Besides imparting pleasures, various experiences, information, thoughts and feeling of empathy, it keeps an ability to infer numerous aspects of human societies from politics, language, culture, art, economy, religions, history, and rituals to its reader through poetry, novels stories, biographies, autobiographies, etc. According to Compagnon, "The stories that are captured in literary work are mostly captivating and not only they amaze

but also give the readers the feel of what the characters in the story are going through" (13). The readers begin to visualize 'humans' among the poor, unhappy, aged, beggars, and deserted people in the society after they undergo the literature. Equally, people will understand whether the sword or the pen is mightier. Making oneself stronger avoiding numerous upheavals in the course of life (for these obstacles appear quite in common) is very important thing for new changes is another lesson the people achieve. Moreover, the readers will fathom and distinguish the differences of love, lust and infatuation. So, Compagnon further writes, "... literature presents peoples' perceptions and morals" (13). Therefore, sometimes, it is too challenging to select right books of literature to develop a sense of humanity. And once it is done, we get a good sense of cognitive progress.

Literature is the reflection of society. It reflects life. It plays an extraordinarily imperative role right from the antiquity. In addition to alerting us, it cannot escape any age from human history and the contemporary social affairs, so it reflects the society when it was composed. Humans of the particular time must have faced countless impediments and hard complications which get reflected in the existing composition of the piece of writing. These obstructions obviously are of humans whose ailments must have lasted longer or shorter, but the empathy we feel generated within, provoke the readers to shower upon the characters in the human societies. It is said that readers are sympathetic people who are habituated to see the presence of God in every living being (through the characters of the literary creations), especially in humans. They cannot go blindfolded to these infirmities of the humans. And consequently, literature appeals and wakes up our senses making us all-encompassing which honours the truth through our rightful attainments of the literary objectives.

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Our purpose has been to encourage very young artists to find a platform downtown to put on show their talent through diverse artistic exhibits. Pupils from an array of schools – private, governmental, or charitable – across the Valley take part. Recognition aplenty!

Fascinatingly engaging, this inter-institutional annual event, veritably a cornucopia of creative endeavor, is invariably a glorious experience for all of us.



As customary, the annual KIST Fair 2076 – a wonderful flurry of activities – held on Saturday, December 7, 2019 was a treasured event attended by the best in the educational field.

Significantly, the *Inter-College SciTech Competition* and *Interschool Art & Craft Competition* had keen participants from Kathmandu's finest colleges and schools. Notably, the *Imagineering Competition* was a resounding success with all the pragmatic creativity exhibited.

Forever widening our innovative outreach, we included numerous new items such as *Inter-College Robotics Competition*, *KIST Datathon Competition*, *KIST FIFA Competition*, and *KIST Counter-Strike Competition* for the delight of all who visit this grand edu-oriented occasion.

Likewise, this Fair – incorporating the soft-power of blended learning – on Friday, February 3, 2023, should prove to be another special entertainment gala & learning bonanza for youngsters & budding professionals with scholastic zest, innovative skills, and intellectual curiosity tempered with a just balance of ethics and rationality in their approach to Life now and the Future.

Welcome All Who Wish to Come!



Events

- Inter-College Management & IT Project Competition
- Inter-School Art & Craft Competition
- Intra-College Science & Technology Project Competition
- Intra-College Management Project Competition
- Intra-College IT Project Competition
- Intra-College Imagineering Competition
- KIST FIFA Competition



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