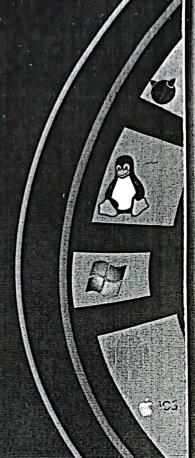
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### OPERATING SYSTEM

Principles & Concepts





**Authors** 

Dr. Seema Nath Jain

Dr. Mahesh Sharma

Dr. Satpal Arora

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#### CHAPTER SEVENTEEN



### Covid Pandemic Crisis On Media & Entertainment Industry

\*Ms. Nikita Jain, \*\*Dr. Seema Noth Jain, \*\*\*Dr. Anshika Rajvanshi



#### Introduction

The coronavirus pandemic is having a tremendous impact on sectors across India, including the music and entertainment Industry. Public meetings have been outlawed; and theatres, theatres, music festivals, plays, and concerts have been shuttered or cancelled permanently as a result of the virus's deployment of lockdowns across all states. The Bollywood business was struck hard almost immediately, with movie theatres closing throughout the country and key blockbusters being postponed. Even once the lockdowns are removed, the demand for social separation may become the norm, with major consequences for those in the entertainment business who rely on the creation and distribution of music, movies, and related live events to make a living. The pandemic's effects on these sectors might include reduced attendance at film festivals and music concerts, delays in film distribution, delayed or cancelled movie releases, and a reduction in on-location filming, Production companies, music labels, filmmakers, artists, and theatre owners, among others, will most certainly suffer financial consequences for months, if not years. The following are the significant legal issues:

#### **Chapter 15**

### How a Pandemic Could Change the 'Roadmap to Humanity'

Dr. Arun Gupta\* Anyshka Gupta\*\*

#### **ABSTRACT**

The SDGs, adopted by the UN Member States in 2015, is a roadmap for humanity. They encompass almost every aspect of human and planetary wellbeing and, if met, will provide a stable and prosperous life for every person and ensure the health of the planet.

However, the progress has been uneven in the last five years of implementation of the 2030 Agenda for Sustainable Development, and it needs a fillip. The world has not been on track to deliver the SDGs by 2030. COVID-19 has further reversed this progress and had a devastating impact on all 17 Goals. This chapter discusses how the pandemic may influence the SDGs and affect their implementation. If the world had been on track to achieve the 2030 Agenda, it would have also been better prepared to deal with such a pandemic.

Achieving the SDGs has become even more critical to make the countries better prepared for future pandemics and other unforeseen shocks. The paper suggests that, due to its wide scope and areas of influence, COVID-19 may also jeopardize the process of the implementation of the SDGs. To recover from the COVID-19 pandemic, we must put people at the centre of the response to achieve more equitable and resilient outcomes for all. Governments and businesses should heed the lessons learned from this wake-up call to formulate the kind of transitions needed to build a healthier, more resilient and sustainable world.

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#### ARTIFICIAL INTELLIGENCE AND LAW: AN EFFECTIVE AND EFFICIENT INSTRUMENT

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(GGSIP University), Delhi, India.

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Assistant Professor, Dept. of Law
Ideal Institute of Management & Technology
(GGSIP University) Delhi, India

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Artificial Intelligence (AI) is practically apply in all commerce and notable labors be able to witness in our routine life. E.g. chat bots, smart cars, IoT devices, healthcare, banking, and logistics and many more.

Simple examples for the use of AI in day to day life are Alexa and Siri which are ready to assist to ease the work. They can be illustrated as consumer Artificial Intelligence powered smart assistants. They are of help that requires unskilled tasks of an individual's life, thus one be capable of centering significant stuff. But, have we ever thought that AI can infiltrate the limitations of the by hand encumbered legal processes as well? Can it help professionals and advocates with mechanization, by sinking their time on repetitive responsibilities? Taking about why and how AI and law connects, the prime reason for the same is to craft inventive applications to computerized routinely procedure or working related to legal matters.

Artificial intelligence and the law cannot go hand in hand that too with synchronization. There could be many reasons, on among them could be immensely diverse attribute. In the current era, almost every legal practitioner is making use of Artificial intelligence in their day to day carry out procedures in which e-courts and use of software's are common which helps them to complete their responsibilities effectively and efficiently.

This paper provides a general introduction to the field of AI and Law. This paper aims to introduce to the way in which the increasing use of artificially intelligent technologies affects the law. Throughout the paper, the author showcases the potential benefits of using AI and also problematizes the potential risks of using AI in illegal contexts. This paper explore how AI can be used in legal practice, how AI can be employed to optimize existing legal processes.

Keywords- Artificial Intelligence, Criminal Law, and AI Powered Predictive Policing.

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Artificial Intelligence [AI] is a computer system which carries out every day job that usually requires human brains. Several AI are powered by machine learning, a few of them requires deep learning, understanding and research. This comes with learning, which involves garnering the rules and information for using the data. Due to data based service industries it has become very popular and necessity. [1]

The term intelligence has a long and complex history. The word itself derives from Latin *inter*, which means between, and *Legere*, which means to choose or literally to read. So one could say that being intelligent means literally to be able to draw distinctions between different things to understand or to comprehend oneself and the world around us. In 1956, AI was coined by

Hshama.

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### e-commerce Strategies & Legal Aspects

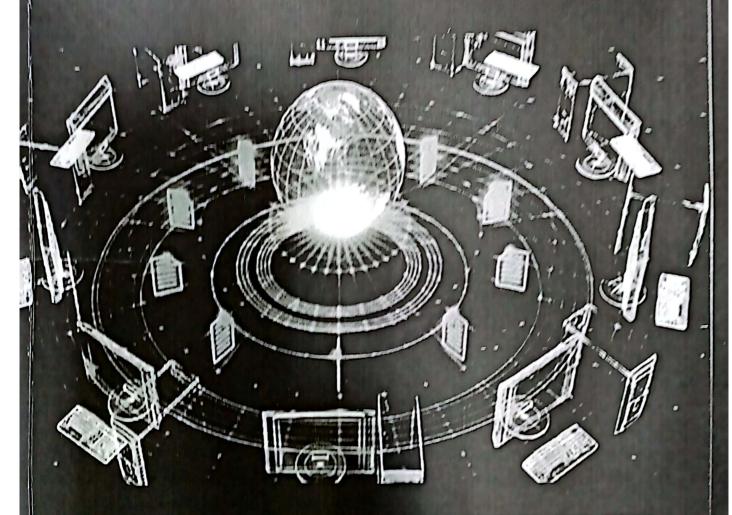




Dr. Mahesh Sharma

# COMPUTER NETWORKS

A Guide for Beginners



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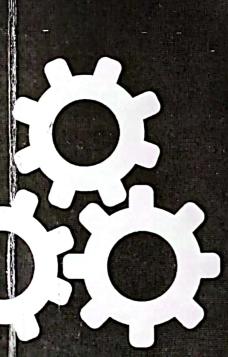
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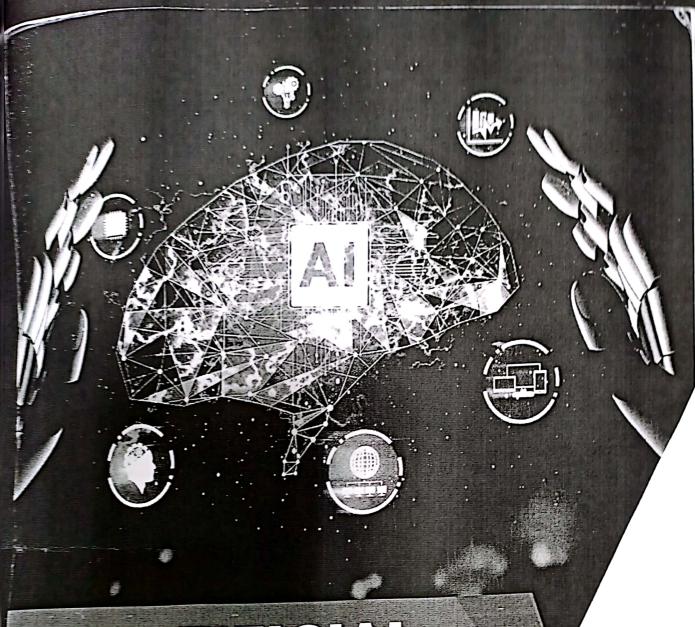
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# ARTIFICIAL INTELLIGENCE: A MODERN APPROACH

Dr. Mukta Jagdish Mr. L. Ganesh Babu Dr. Mahesh Sharma



### Chapter 9 Zero Customer Defection

Renu Yadav
Ideal Institute of Management and Technology, India

#### **ABSTRACT**

AI-oriented CRM has a bright future in business transformation. We're living in the age of the customer. Due to the proliferation of data, customers are more informed than ever. Armed with empowerment, customers are demanding that customer experience be put on a pedestal. According to research by Walker, customer experience is slated to overtake price and product as the key brand differentiator by the end of 2020. Quality is a buzz word. In this sharp, opportunistic, and calculating world, one can survive only if it is having not only good quality but a unique quality. As it is very well explained by Darwin that the mantra for success is "survival of fittest." Every organization has its own procedure of achieving its best quality and to sustain in this tough world. This chapter will not only discuss about the zero customer defection but also emphasize on the issues, problems, and trends of artificial intelligence in CRM and in turn zero customer defection.

#### INTRODUCTION

Technology blending into relationship management continues at a very rapid rate: Information technology and advanced analytics support omnipresent customer communication and increasing availability of customer data, in turn enabling firms to offer personalized services and crating customer relationships to grow more profitable customers (Rust and Huang, 2014, Gupta et al., 2020). At the heart of marketers' attention in this regard are the emerging technologies of artificial intelligence (AI), which refer to "a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through

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#### CHAPTER SEVENTEEN



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#### TATAL A

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A Bright Future or just a Fad

#### **CHAPTER 8**

# The Growth of Cryptocurrency in India: Its Challenges & Potential Impacts on Legislation

#### Dr Anshika Rajwanshi

Assistant Professor IIMT Delhi anshika.iimt@gmail.com

#### Introduction

There is no doubt that the era of information are technologies has created many golden opportunities in so of the fields that benefit from these technologies and on the financial and business sector. A prowing number activated virtual world concepts and created a new business pronument activated virtual world concepts and created a new business pronument. Thus, new types of trading, transact ons and currencies have been axising. One of the remarkable financial forms that have emerged in the past less years is Cryptocurrency.

Cryptocurrency can be defined as any medium of exchange aport from real world money, that can be used in many financial transactions are virtual or real transactions.

### CREATIVITY & WORKPLACE

S.

De Anthon Referented, Assistant Professor, Department of Management, HML.

#### ABSTRACT:

Treativity is seeing what everyone clse has seen and thinking what no one else has thought." Albert Einstein

The author believes that creativity is a collection of traits rather than a single trait. Intelligence, intense interest, knowledge, originality (ideat), creative instinct nonconformity courage, and persistence are basic elements of the cancept of creativity. Creativity can manifest itself in a variety of areas of life, and as surjous stayes, some of them are more prominent than where. The author trait is contribute the importance of Creativity at workplace which can result in significant works that kenefit society in a whole and bring fame for the excanization.

#### INTRODUCTION

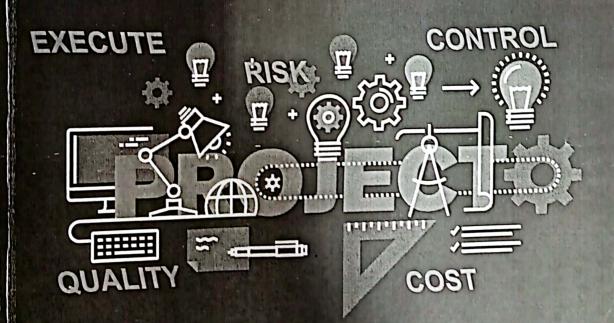
when we hear a word Creative we start thinking about different peoples are involved in various creative tasks such as actist paratechnegrapher an author may be a film maker or a chefor we start thinking decide who make things and we label them to creative type. But a realistic them to creative type But a realistic to the nucleonary of a prealist type and every one of us a creative type and differently the allowers as every it satisfacts.

**FIRST EDITION** 

### PROJECT MANAGEMENT

For the students of BBA as per GGSIPU Revised Syllabus

Nikita Jain





#### CHAPTER SEVENTEEN



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#### 18.

# Adaptive Lossless Dictionary Based Compression with Block Wise Data

Dr. Seema Gupta\*

#### Introduction

ompression of text is necessary for transmitted data from one end to other end and for storing it in the secondary storage device. Compression reduces the bandwidth of network and more importantly utilization of memory[7] resulting increased speed of processing. Lossless text compression, compress the data which matches with the original data and no information is lost in transmission where each bit of data is very important for analysis. Block sorting in lossless data compression algorithm is same as reversible transformation to a block of text input<sup>[14]</sup>. In this paper, we discuss dictionary based Lossless compression block wise, for generating dictionary for each block. In this process previous block's dictionary is used for the next block for generating binary code for each string generated, coming online. Atef<sup>[1]</sup> gave a new concept for a block based lossless compression using adaptive arithmetic coding and finite mixture model. Sarvenan<sup>[2]</sup> describedone pass compression using four schemes for phrase-match selection. An efficient

<sup>\*</sup>Associate Professor

### Machine learning for Internet of things: A Recapitulation

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Abstract - IoT is quickly becoming a popular field of IT and the digital world, presenting new research prospects in the ambit of devices and applications connected via internet. Several academics have previously proved their work in this field by employing Machine Learning techniques and algorithms as a subset of AI to fully implement large volumes of data. IOT is considered as a platform where devices are connected together through internet as a medium and by using sensors, data is captured which adds digital intelligence. Data can be access anytime and from anywhere. The need for such devices that can not only store data but also analyzeit and take quick action is growing by the day. Machine learning which makes smart system after adding intelligence to it, makes IOT more smart, responsive and action oriented. Using machine learning we can detect the slightest changes and warn against any type of malfunctioning. Predictive Analysis is added advantage which acts as gift from Machine learning to IOT. This analysis is done in real-time and the results can be displayed on the Smartphone in a few seconds. Though IOT and Machine leaning are powerful tools as an alone but combination of both the technologies is much more which is yet to be explored.

Keywords: Sensors, IoT data Analytics, Smart cities and Predictive Analysis, Machine Learning

#### I. INTRODUCTION

[27]In 1999 the phrase "Internet of Things", given by Kevin Ashton during a presentation at Procter & Gamble. Procter & Gamble's supply chain was taking advantage of Radio Frequency Identification for its business later it was found that "The Internet of Thing" is having a potential of much more. International Telecommunication Union introduce IoT in the year 2005. It is the network of things surrounded by object have internet connectivity as common path to exchange data and information. It allows objects to collect information using internet and store that on desired location that could be cloud also. Remotely data collection and storage is the beauty of IoT. Machine leaning is a subset of Artificial Intelligence in which human like analytical skills are expected by machine. This paper gives insight about role of IoT in medical, Industry, Smart Cities and Agriculture and after applying machine earning techniques what advantages could be achieved. The lata which is collected by IOT could be analyzed by supervised and unsupervised learning both but this paper will nore deals with supervised learning as it is appropriate to predict outcomes after processed data received. In the field of ertificial intelligence, the machine learning algorithm has brought about a significant improvement. The algorithm is divided into several groups, the most common of which is classification. The method for selecting train data from the sample data provided by the user is led by classification algorithms. As supervised learning stands out, decision making is at the core of every classification algorithm. Machine learning is widely acknowledged as a key component of embedded smart network management and service. The majority of IoT systems, in particular, are getting more heterogeneous, dynamic, and complicated, management challenging. Furthermore, in order to attract more clients, such IoT systems' services must be optimized in terms of performance and variability. Many experiments have progressed in the application of machine learning to IoT. As a result, we can see how machine technology can enhance the Internet of Things. Machine learning for IoT allows users to gain deep analytics and construct efficient intelligent IoT applications since it may provide feasible ways to mine the information and features inherent in IoT data.

Classification of Machine Learning Algorithm k nearest neighbor algorithm

KNN outputs the K nearest neighbors of the query from a dataset. KNN is "It is a non-parametric method applied for classification or regression". It is used when we want to map input to a continuous output. To find the closest neighbors, KNN implements a similarity metric. This similarity metric is frequently used to calculate the Euclidean between our unknown point and the other points in the dataset. The following is the general formula for Euclidean distance:

$$d(p,q)=d(q,p)=\sqrt{(q_1-p_1)^2+(q_2-p_2)^2+\cdots(q_n-p_n)^2}$$
 (1)

#### **Naive Bayes**

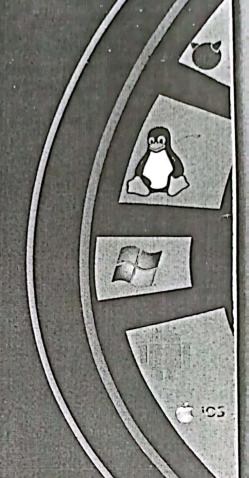
Naive Bayes algorithm predicts the probability which works upon classes and its attributes. This is generally used for text classification. Classify articles to various subjects they belong to. Even written emotions on a paper could also be judged by applying this logic. It is expressed as the following equation

$$P\left(\frac{A}{B}\right) = \frac{P\left(\frac{B}{A}\right) * P(A)}{P(B)} \tag{2}$$

The goal of the Nave Bayes algorithm is to select the classy y with the highest probability. Argmax is just an operation that

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# OPERATING SYSTEM Principles & Concepts





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#### Chapter 8

### Al and Customer Experience in the Fashion Industry

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#### **ABSTRACT**

This chapter portrays artificial intelligence with the improvement of customer experience on online and offline fashion purchases. The presence of AI in the retail business is turning into a vital part of the customer experience. AI attempts to disclose approaches to interpret with the end goal for organizations to make a genuine use out of them, either online or offline. Thus, with this research, the authors additionally give knowledge on how this experience of AI could be improved in later fashion purchases and how it will undoubtedly be part of the everyday customer experience.

#### INTRODUCTION

The Fourth industrial revolution introduced by the digital transformation is allowing the fashion industry, like many other sectors, to increase its capacity to produce and use data that was not previously technically or financially feasible. The most important impact on production and distribution is yet to come. In a recent interview (March

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# Improvement In Manpower Productivity By Using Training Within Industry- Job Methods (JM) (A Case Study Of Parason Group, India)

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IIMT Karkarduma

Abstract- Apart from multidimensional challenges and tough competition, due to lockdown, COVID-19 has also produced immense pressure on manufacturing industries to work with limited human resources to adhere the guidelines social distancing. During this tough time, companies are also facing the challenge to manage their fixed costs and semi variable costs, one of the significant costs is labor cost after material cost in manufacturing units. To raise human resource productivity is thrust area that is having a vast scope of improvement and resulting producing more with same labor hours or producing same with less labor hours. The present study, a case of Parason aims to work on TWI-JM to make the employees more productive and work process easier compared to the previous one. The case study focused on practical applications of Job Methods (JM) and for this purpose, a Job Breakdown sheet (JBS) was prepared to record the time of activities done on the shop floor before and after implementing "TWI-JM" technique. A questionnaire with 10 small questions was also prepared. The results achieved by the usage of Job Methods technique found selfexplanatory, the team achieved a significant productivity improvement of 27% per shift in machining section by reducing number of activities from 91 to 61 to complete one job on one lathe machine which resulted in short production cycle.

Keywords- Productivity Improvement, Process Simplification, Training within industry (TWI), Job Methods (JM), Job Breakdown Sheet (JBS), Method study

#### I. INTRODUCTION

The concept of TWI (Training within Industry) emerged during World War II in US, when the able bodied manpower from the companies drafted in to the military which resulted n shortage of skilled workforce in the companies. This ituation created shortage of skilled manpower in companies nd companies had to recruit less productive workers as nany of them were uneducated, ladies, farmers or people with normal skill set. The recruitment was huge and there was a need to produce quality products specially weapons and ammunition in most imperativeness to maintain the apply to win the war. To solve this problem United States repartment of War created TWI during 1940 to 1945. TWI

primarily started to serve the purpose of consulting to war allied companies later on become the most effective technique of skill transfer, process simplification and relationship building across the globe. Post war, famously known as four Horsemen, Mike Kane, Channing Dooley, Walter Dietz and Bill Conover established the TWI foundation to spread the practice across Europe and Asia. TWI equally received in other parts of world including Japan and India, in Japan due to war agreement of not to own army and any ammunition company the people who used to work there were forced to work in other companies, Japan used TWI to train these people on new processes with new products. US discontinued this practice after world war but Japan continued to practice, after many years when Donald A. Dinero published the book on TWI, it came known to the world, still in India we have very limited practitioners of this technique but slowly-slowly picking up. But again this pandemic, Covid-19 has created the same situation of shortage of skilled workforce on the shop floor as they migrated to their native places from the cities due to the life threatening disease. On the other hand organizations are not in the position to continue the processes with full-fledged workforce while demand of necessary items is constant and even it has increased for medicines and other type of medical assistance. In this situation, TWI can play the crucial role to increase the productivity of human resource that will result catering on time market demand in right quantities. So first needs to understand TWI which is having three pronged approaches, first one is called Job Instruction (JI) which focuses on rapid skill transfer, second is Job Methods (JM) which focuses on to improve existing processes by using available resources and third one is Job Relations (JR) which focuses on solving personal problems in analytical way to avoid distraction of employees from targeted goals. Under the TWI framework, the Job Methods (JM) is an approach which helps in improving existing methods of doing a job and changing the paradigm of individuals that the existing methods can be improved without resource limitations to improve overall process effectiveness. The JM provides an easier, effective and productive method of doing the same job in a smarter way which will increase the productivity of manpower. Presently entire world is seeking the ways to raise productivity of human resources as it is the most

By Hs. Anlander

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