

Enhanced Pyramid Image Fusion on Visible and Infrared images at Pixel and Feature Levels

B Ashalatha¹

Research Scholar, Krishna University
Machilipatnam, Andhra Pradesh, India
latha009asha@gmail.com

Dr. Babu Reddy²

Assistant Professor Computer Science,
Krishna University
Machilipatnam, Andhra Pradesh, India
m_babureddy@yahoo.com

Abstract— In today's Technology Advancements, Multi Scale Image Fusion plays a crucial role in the Digital Image Processing field. Various features of Multi- Scale Image Fusion are applied in areas such as Image Classification, Remote Vision, Medical Imaging, Satellite Imaging and Forensic Sciences. Multi-Scale Image Fusion can be described as combining the best features of two or more images which are at different resolution levels and getting a single coherent Fused Image. Laplacian Pyramid is a Multi-Scale Resolution technique, in which low resolution images are fused to produce a high resolution images. But the resultant high resolution image is a blurred image when compared to original images. This Paper provides a new method to remove the blurriness from the high resolution image using Wiener Filter. This method worked on Pyramid Image Fusion on Visible Images, Infrared Images and combination of Visible and Infrared Images at Pixel and Feature levels using Simple Average and PCA (Principle Component Analysis) methods. The Experimental results showed better PSNR (Peak Signal to Noise Ratio) Values than the Multi Scale Fusion process using Laplacian Pyramid

KEYWORDS: Multi -Scale Resolution, Pyramid, Pixel Level, Feature Level, PCA.

I. INTRODUCTION

The application areas of Multi-Scale Resolution include Image Classification, Remote Vision, Medical Imaging, Satellite Imaging and Forensic Sciences.

Image Classification: It is a very active Research topic which has stimulated researches in many important areas of Computer Vision, including Feature Extraction and Feature Fusion, the generation of Visual Vocabulary, the quantization of visual patches to produce visual words pooling methods and classification.

Remote Vision: To meet the different needs of present day scenarios we are taking help from Remote Sensors. These Remote Sensors are designed in such a way to view or capture the scene repetitively and consistently at different environments. All these Images are analyzed by using Multi-Scale Image Fusion Process.

Medical Imaging: Image Fusion has become a common term used in Medical Diagnostics and treatment. Whenever Multiple Images of a Patient at different conditions are

available and the multiple images are combined to get more informative Fused Image using Multi- Scale Fusion Process.

Satellite Imaging: Satellites capture several images from various frequency bands. These images are also processed by Multi- Scale Image Fusion methods.

Forensic Science: In Forensic Sciences Forensic examinations are performed not on a single image but the combination of images with different resolutions to obtain useful and needy information[1-6].

II Multi-Scale Representation format using Pyramid Technique

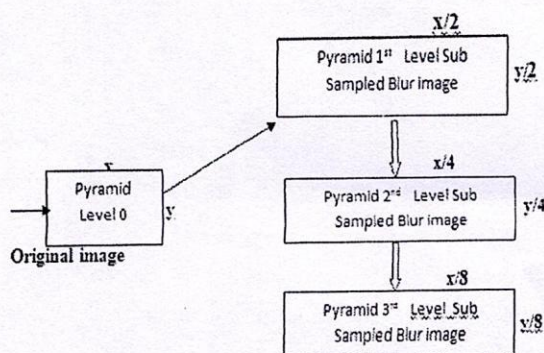


Figure 1: Pyramid Construction

Pyramid Technique in Image Fusion is a Multi- Scale Image Fusion technique. The Pyramid images are constructed and reconstructed recursively by using recursive image processing

Pyramid construction:

The original image is the finest image considered as Level-0 Image. If this image is convolved and filtered down once by a factor of 2, Level-1 is obtained. If Level-1 Image is convolved and filtered down second time by the same factor Level-2 Image is obtained. In this way convolving and down filtering is applied recursively up to n (n value is based on the decomposition level) as many times as the user wants. The

Image Fusion at Pixel and Feature Levels Based on Pyramid Imaging

B.Ashalatha¹

Research Scholar, CSE dept.
Krishna University
Machilipatnam, Andhra Pradesh, India
latha009asha@gmail.com

Dr. M. BabuReddy²

Assistant Professor, CSE dept.
Krishna University
Machilipatnam, Andhra Pradesh, India
m_babureddy@yahoo.com

Abstract— Advancement in the recent technology affects a wide research in the field of Image Fusion. It is the more researched challenges in Computer vision, remote sensing, Medical Imaging, and Target Recognition. The idea behind the image fusion is merging complementary and redundant information from multiple images in such a way, as to retain the most desirable characteristics of every image. The single fused image is relatively high informative when compared to the original images. The Laplacian pyramid method is a Multi-resolution method, in which low resolution images are fused to produce a high resolution image. This paper mainly worked on multi resolution images of same scene and provides results of performance measures namely mean, standard deviation, entropy, Peak Signal to Noise Ratio at Pixel-Level fusion, Feature-Level fusion using techniques like Simple average method, Principle Component Analysis method based on Laplacian pyramid levels of images. Results also include Histograms of both source images and fused output image. These results show higher resolution and better features than the original images

Keywords— Image Fusion, Pixel-Level, Feature-Level, Pyramid, Simple average, PCA.

I INTRODUCTION

Multi-resolution image fusion finds applications in the areas of computer vision, remote sensing, medical imaging and target recognition.

Target Recognition: Target Recognition is a problem in Computer Vision. It deals with determining whether or not the image contains some specific Object or Feature. For this one or more images are processed to get the better quality image. Image Fusion Techniques are applied on the selected images, so that one can easily recognize the specified Object or Feature from the images.

Remote Sensing: An Important domain in the Remote Sensing image fusion is the Multi- resolution image fusion. The Process includes resizing the low resolution Multi-

Spectral images to the same size and fusion operation is carried out.

Medical Imaging: Image Fusion has become a common term used within medical diagnostics and treatment. Whenever multiple images of a patient are available, these are combined to get fused image. This fused image contains additional information than the combined individual images which helps in better diagnostics and treatment to the patient [1-6].

Multi-resolution image fusion can be carried out at three different levels. Image level also known as Pixel -Level, Feature-Level, Decision-Level or Symbol-Level. Pixel-Level is lowest level of fusion it is based on pixel by pixel merging. That is individual pixels are selected from each source image and fusion is performed. The fusion process combines each pixel intensities of source images. Feature-Level is middle level of fusion it is based on extraction of salient features of source images. It involves Processing of features. Features are specific structures in the image such as points, edges or objects. The extraction of features involves detecting the edges of objects present in the images. After extracting the features fusion process combines all features of the source images. The fusion process is performed on the reduced selected features instead of entire image. The selected features are expected to contain the relevant information from the input image. This Feature-Level fusion is very useful when performing analysis on complex data. The Decision-Level of fusion is highest level of fusion it involves combining information from multiple systems to give a fused information. [7][8][9].

II PYRAMID STRUCTURE AND LEVELS OF IMAGE FUSION

Pyramids are very useful for representing images. Pyramid representation is a type of multi scale representation developed by the computer vision, image processing and signal processing community. This representation is used in

LOCATION BASED USER PROFILE MOBILE APPLICATION ACCESS

¹T.Neelima chowdary
M.Tech in CSE

²CH.Anupama
Asst. prof in Dept of MCA

³Dr.D.Haritha
Prof in Dept of CSE

Dept of CSE, S.R.K Institute Of Technology, Enikepadu, Krishna dist, AP, India

ABSTRACT: With the tremendous development in computational power, features availability and storage capacity, smart phones have become part of the livelihood of many youngsters and students. Mobile phone overuse is becoming syndrome seen among certain Students and Institutions are becoming helpless in reducing its negative influence on their students. Institutions responsibility has increased to ensure the access permissions and security. In this paper we present a policy-based application LUPMAA for enforcing security and access profiles of applications and data on the Android platform. In this, it is possible to define distinct Access and Security Profiles among the users of the Wi-Fi within an organization. Access profile defines a set of policies that control the applications and data access. Profiles are predefined; they can be specified, modified and applied at any time. One of the main characteristics of LUPMAA is the dynamic switching from one profile to another based on the location of access of the Wi-Fi. The feasibility of our proposal is evident from a thorough set of experiments using our implementation of LUPMAA.

KEYWORDS: One Time Password (OTP), LUPMAA, Wi-Fi Router, Social networks, IEEE 802.11, Public Wi-Fi access, Secured Apps, Bytes.

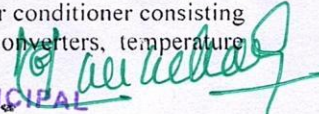
1. INTRODUCTION:

The usage of smart phones has increased rapidly in recent years, and this has brought about addiction. Kent State University researchers worked on the negative relationship between Smartphone use and academic performance in college students. They found that the smart phones were distracting students from learning. Online social networking, texting, gaming and streaming videos was common uses of the college students. With all of this entertainment available on the phone, many users are focusing less on studies because of their constant connection with the device. Within the campus the institutions should not restrict the usage of Smart phones by the students. Now a day's Wi-Fi has become so prevalent on college campuses. Despite this positive scenario, since users can use third-party applications on their smart phones, several security and access concerns may arise most of the Colleges are reluctant to provide free Wi-Fi on Campus, because of student's miss-use/overuse with Wi-Fi by using Social networks, Online Shopping Apps Etc. So it is necessary that only educational apps can be accessed to students. Therefore Institutions have to ensure the availability of Wi-Fi to all stake holders despite of providing controlled access based on user profile and location profile.

One possible solution to this problem is identification and differentiation of the users based on their profile by keeping applications and data related to education from the other recreational applications and private/personal data. Within the same location, different kinds of stakeholders might exist: one type of users for example could be only restricted to educational applications; a second type of users for example faculty could be allowed to use all applications except those blocked by the admin. As long as recreational applications are not accessible to users of the first type the risk of degradation in academic performance can be greatly reduced. Similar scenario can be extended to location based instead of user profile based access.

2. LITERATURE REVIEW

Wireless Mesh Networks (WMN for short) are a good example of the common phrase "necessity is the mother of invention" meaning that the requirements usually give rise to ingenious solutions". Vasseur and Dunkels (2010) observations were that in the beginning of the century the urban population is only 13 per cent of the world population and later by the middle of the century it increased to 70 per cent, and is also increasing constantly. In 2002 Yen-Shin Lai et al. [1] proposed an Wi-Fi based monitoring and control of fuzzy inverter for air conditioner consisting of client/server, PLC, D/A converters, temperature


PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA

NATIONAL INTELLIGENCE GRID

1. Dr D. Haritha

Professor in CSE department
SRK Institute of Technology
Vijayawada, Krishna Dt, AP, India
harithadasari@rediffmail.com

Abstract—National Intelligence Grid (NATGRID) aims to provide a real time information sharing platform between Intelligence Agencies and Organizations of E-Governance of India. NATGRID deals with the database integration of different Government, Quasi-Government and Private Organizations of E-Governance in India. This paper aims to provide a framework for integrating various departments and for providing the information access to 11 Indian Investigation agencies like National Investigation Agency (NIA), Intelligence Bureau, Research and Analysis Wing etc.. The NATGRID uses Aadhaar ID, which is a 12-digit unique number issued by the Unique Identification Authority of India (UIDAI) for integration. The intelligence agencies are given the privileges to access only the respective necessary databases based on their functionalities. The agencies can also interact with the other agencies and can share the critical information. This paper addresses the analysis and design of the NATGRID System. The necessary architectural design and implementation is addressed.

1. INTRODUCTION

National Intelligence Grid (NATGRID) Project has become an essential requirement for robust and effective Intelligence Agencies and Law Enforcement functions in India in the present scenario of increased global terrorism. Terror activities like 26/11 Mumbai attacks have created the vision for the design and implementation of NATGRID. The intelligence agencies can track a person's identity (whereabouts) and activities using the information available through the NATGRID and can take necessary defensive steps to prevent terror and illegal activities. There is a need to network all the databases that contain vital information and intelligence. Identifying the significance of this project central government sanctioned an amount of 2800 crores.

National Intelligence Grid (NATGRID) Project is one of the most ambitious Intelligence Information Gathering Project of India. The National Intelligence Grid (NATGRID) project pools information from 21 categories of departments including railway, air travel, income tax, phone calls, credit card, bank account, visa[2,9,11] and immigration records[7], property records and the driving licenses of citizens[3,4]. Access to the combined data will be

2. Ch. Praneeth

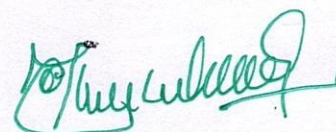
Asst. Professor in CSE department
SRK Institute of Technology
Vijayawada, Krishna Dt, AP, India
chpraneeth@hotmail.com

given to 11 agencies, including the Research and Analysis Wing, the Intelligence Bureau, the Enforcement Directorate, the National Investigation Agency, the Central Bureau of Investigation, the Directorate of Air Intelligence, the Directorate of Naval Intelligence, the Directorate of Revenue Intelligence[5,6], the National Security Council (NSC) and the Narcotics Control Bureau. All the authorized agencies will be hooked up to each other as also with government departments.

This project enables security and intelligence agencies to get vital information at the press of a button. This system helps the government agencies combat terror and threats to internal security by generating "actionable" intelligence through search and retrieval from the networked databases. This also helps to prevent corruption, fraudulent, money laundering, financial crimes and illegal activities.

Today, each department's database stands alone. It neither accesses information from another database nor talks with. The investigation agencies are supposed to get appropriate permissions to gather information from the respective government organization that leads to more delay[8]. While overcoming all such hindrances to track or monitor the individual or organizational activities, the agencies are unable to take preventive steps and the criminals are getting escaped due to non-concrete establishment of the evidence for the criminal activity. Under NATGRID, 21 sets of databases will be networked to enable the intelligence/enforcement agencies for faster and secure access to desired information.

The need for such an information sharing framework in the country is also necessitated by the facts like India's population size, the technical maturity of its IT-enabled infrastructure and the multiple types of threats attacking the IT Infrastructure[1]. In other countries where the terrorism is significant, either the size of the population helps for easier controls or the countries already have a suitable IT-enabled system that forms the basic skeleton on which an effective counter-terror information framework can be designed.



PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA

NATIONAL INTELLIGENCE GRID

1. Dr D. Haritha

Professor in CSE department
SRK Institute of Technology
Vijayawada, Krishna Dt, AP, India
harithadasari@rediffmail.com

2. Ch. Praneeth

Asst. Professor in CSE department
SRK Institute of Technology
Vijayawada, Krishna Dt, AP, India
chpraneeth@hotmail.com

Abstract—National Intelligence Grid (NATGRID) aims to provide a real time information sharing platform between Intelligence Agencies and Organizations of E-Governance of India. NATGRID deals with the database integration of different Government, Quasi-Government and Private Organizations of E-Governance in India. This paper aims to provide a framework for integrating various departments and for providing the information access to 11 Indian Investigation agencies like National Investigation Agency (NIA), Intelligence Bureau, Research and Analysis Wing etc.. The NATGRID uses Aadhaar ID, which is a 12-digit unique number issued by the Unique Identification Authority of India (UIDAI) for integration. The intelligence agencies are given the privileges to access only the respective necessary databases based on their functionalities. The agencies can also interact with the other agencies and can share the critical information. This paper addresses the analysis and design of the NATGRID System. The necessary architectural design and implementation is addressed.

1. INTRODUCTION

National Intelligence Grid (NATGRID) Project has become an essential requirement for robust and effective Intelligence Agencies and Law Enforcement functions in India in the present scenario of increased global terrorism. Terror activities like 26/11 Mumbai attacks have created the vision for the design and implementation of NATGRID. The intelligence agencies can track a person's identity (whereabouts) and activities using the information available through the NATGRID and can take necessary defensive steps to prevent terror and illegal activities. There is a need to network all the databases that contain vital information and intelligence. Identifying the significance of this project central government sanctioned an amount of 2800 crores.

National Intelligence Grid (NATGRID) Project is one of the most ambitious Intelligence Information Gathering Project of India. The National Intelligence Grid (NATGRID) project pools information from 21 categories of departments including railway, air travel, income tax, phone calls, credit card, bank account, visa[2,9,11] and immigration records[7], property records and the driving licenses of citizens[3,4]. Access to the combined data will be

given to 11 agencies, including the Research and Analysis Wing, the Intelligence Bureau, the Enforcement Directorate, the National Investigation Agency, the Central Bureau of Investigation, the Directorate of Air Intelligence, the Directorate of Naval Intelligence, the Directorate of Revenue Intelligence[5,6], the National Security Council (NSC) and the Narcotics Control Bureau. All the authorized agencies will be hooked up to each other as also with government departments.

This project enables security and intelligence agencies to get vital information at the press of a button. This system helps the government agencies combat terror and threats to internal security by generating "actionable" intelligence through search and retrieval from the networked databases. This also helps to prevent corruption, fraudulent, money laundering, financial crimes and illegal activities.

Today, each department's database stands alone. It neither accesses information from another database nor talks with. The investigation agencies are supposed to get appropriate permissions to gather information from the respective government organization that leads to more delay[8]. While overcoming all such hindrances to track or monitor the individual or organizational activities, the agencies are unable to take preventive steps and the criminals are getting escaped due to non-concrete establishment of the evidence for the criminal activity. Under NATGRID, 21 sets of databases will be networked to enable the intelligence/enforcement agencies for faster and secure access to desired information.

The need for such an information sharing framework in the country is also necessitated by the facts like India's population size, the technical maturity of its IT-enabled infrastructure and the multiple types of threats attacking the IT Infrastructure[1]. In other countries where the terrorism is significant, either the size of the population helps for easier controls or the countries already have a suitable IT-enabled system that forms the basic skeleton on which an effective counter-terror information framework can be designed.

PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA

Analysis of Energy Efficiency in WSN by Considering SHM Application

Pawan Kumar*, Merugu Naresh Babu**, Dr Kota Solomon Raju***
Dr Sudhir Kumar Sharma**** Vaibhav Jain*

*Assistant Professor, Vaish College of Engineering, Rohtak. **Assistant Professor, SRK Institute of Technology, Vijayawada, AP.

*** Principal Scientist, DSG Group, CSIR-CEERI, Pilani, Rajasthan. ****Professor & HOD Dept of ECE, Jaipur National University, Jaipur.

Abstract: The Wireless Sensor Network is composed of a significant number of autonomous nodes deployed in an extensive or remote area. In WSN, the sensor nodes have a limited transmission range, processing speed and storage capabilities as well as their energy resources are also limited. In WSN all nodes are not directly connected. The primary objective for all kind of WSN is to enhance and optimize the network lifetime i.e. to minimize the energy consumption in the WSN. There are lots of applications of WSN out of which this research paper focuses upon the Structural Health Monitoring application in which 50 Meter bridge has been taken as a test application for the simulation purpose.

Keywords: Castalia, Routing Protocols, SHM, WSN.

1. INTRODUCTION

Wireless Sensor Network is the wireless network which is the combination of autonomous sensors to monitor or control environment conditions like temperature, pressure, humidity, motion, heat, sound, light, electromagnetic field, vibration, images, pollutants etc.[1-7].The popularity of WSN has increased due to growth in Micro-Electro-Mechanical Systems (MEMS) technology. The concept of wireless sensor network is based on a simple equation: Sensing + CPU + Radio = Thousands of potential applications [8].There are limited resources like energy, size, memory, computational power, communication range, bandwidth in a sensor node. There are large no of sensor nodes which are distributed over an area of interest for collecting the information. So these nodes communicate with each other either directly or through intermediate nodes and thus form a network. So each node works as a router.

The concept of routing is to provide the path or route between sources to sink via intermediate nodes. The motive of the routing in the network layer is to find out the minimum cost path for the packets from source to the sink. Routing protocols specifies how routers (sensor nodes) communicate with each other. Routing algorithm chooses the routes between nodes. If WSNs nodes are more powerful in terms of their computation and communication resources, then it is beneficial to utilize for complex algorithms and as gateways to other networks. [9].



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

Published under licence by IOP Publishing Ltd

1

PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA

A Metamorphosis Approach to Automatic Bell Ringing System

^[1]P.Bhagya Raju, ^[2]S.Suresh, ^[3]D.Mashusudana Rao, ^[4]M.Rithvik, ^[5]Sudhakar Reddy
^{[1][2][3][4][5]} Assistant Professor, SRK Institute of Technology
^[1]pb.raj587@gmail.com, ^[2]Sunakarasuresh9@gmail.com, ^[3]madhu.dontha@gmail.com,
^[4]rithvikmadugula@gmail.com

Abstract— Bell is the basic requirement for any educational institutions in INDIA. This concept is already available in the market a bell is designed using a microcontroller but here we are going to make the automatic bell ringing system as a software and also we are going to describe how this service can attain the market by using the E-Commerce Strategies. This idea might look like a small thing but it can make or recreate its width until it takes place as a local system it cannot evolve as a global system.

Index Terms— E Commerce, bell, metamorphosis, technology.

INTRODUCTION

Technology with its width is going to change day by day So it's going to evolve its depth and its width can also be evaluated but to bring a revolution from this evolution a new technology must born. Technology can be born without the technology. It's a contradicting statement because a technology can be evolved where there is no existing technology or where we do not have a technology Simply we can say that where there is a necessity there we need a technology.

In the above statements we came to know that technology evolution is going to be evolved its path from time to time in order to bring it to a common man there is a great difficulty that takes place in practical.

Whatever new ideas and products that are being evolved today this is because of their interventions to design a quality product in a cost effective manner. This has become a great task to us in achieving this task we are going to several modules to make our visionary ideas into mission.

In this regard technology making to taking has been a great challenge and the marketing modules also plays a key role in taking up the technology to a common man's hand.

The technology that we are using now is not meant for wide range of usage to us it is meant for the public and by the public.

The necessity We mean how we are going to metamorphosis an existing automatic bell ringing system has been presented in this paper as a representation. This might look like a small idea but its vision is so wider that includes E Commerce strategies from taking to proceeding

in the public environment in making a college or school to take a step forward towards as an initiative of building an innovative technology with cost effective product.

When the technology is at one instinct we can use it widely but here we are going to present a paper that technologies are presented.

Bell is the basic requirement in every school or college but here an automatic bell has been invented with a software perhaps there might be several programs who have done this before.

Here we are just going to modify them by using recent tools called scratch and construct2d. So here we present a brief history of those two tools in literature survey.

LITERATURE SURVEY

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, **sprites** (objects) are manipulated on the **stage** (background) using various **scripts** (small program segments). Each sprite has its own set of scripts to control its behaviors and how it interacts with other sprites and events. Programming consists of snapping together individual blocks of preexisting actions to create a script. A program can be as simple as a single block or consist of multiple blocks stacked together that will run as a unit.

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, **sprites** (objects) are

A Metamorphosis Approach to Automatic Bell Ringing System

^[1]P.Bhagya Raju, ^[2]S.Suresh, ^[3]D.Mashusudana Rao, ^[4]M.Rithvik, ^[5]Sudhakar Reddy
^{[1][2][3][4][5]} Assistant Professor, SRK Institute of Technology
^[1]pb.raj587@gmail.com, ^[2]Sunakarasuresh9@gmail.com, ^[3]madhu.dontha@gmail.com,
^[4]rithvikmadugula@gmail.com

Abstract— Bell is the basic requirement for any educational institutions in INDIA. This concept is already available in the market a bell is designed using a microcontroller but here we are going to make the automatic bell ringing system as a software and also we are going to describe how this service can attain the market by using the E-Commerce Strategies .This idea might look like a small thing but it can make or recreate its width until it takes place as a local system it cannot evolve as a global system.

Index Terms— E Commerce, bell, metamorphosis, technology.

INTRODUCTION

Technology with its width is going to change day by day So it's going to evolve its depth and its width can also be evaluated but to bring a revolution from this evolution a new technology must born. Technology can be born without the technology. It's a contradicting statement because a technology can be evolved where there is no existing technology or where we do not have a technology Simply we can say that where there is a necessity there we need a technology.

In the above statements we came to know that technology evolution is going to be evolved its path from time to time in order to bring it to a common man there is a great difficulty that takes place in practical.

Whatever new ideas and products that are being evolved today this is because of their interventions to design a quality product in a cost effective manner .This has become a great task to us in achieving this task we are going to several modules to make our visionary ideas into mission.

In this regard technology making to taking has been a great challenge and the marketing modules also plays a key role in taking up the technology to a common man's hand.

The technology that we are using now is not meant for wide range of usage to us it is meant for the public and by the public.

The necessity We mean how we are going to metamorphosis an existing automatic bell ringing system has been presented in this paper as a representation. This might look like a small idea but its vision is so wider that includes E Commerce strategies from taking to proceeding

in the public environment in making a college or school to take a step forward towards as an initiative of building an innovative technology with cost effective product.

When the technology is at one instinct we can use it widely but here we are going to present a paper that technologies are presented.

Bell is the basic requirement in every school or college but here an automatic bell has been invented with a software perhaps there might be several programs who have done this before.

Here we are just going to modify them by using recent tools called scratch and construct2d.So here we present a brief history of those two tools in literature survey.

LITERATURE SURVEY

Scratch is a simple environment designed by the Kindergarten Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are manipulated on the stage (background) using various scripts (small program segments). Each sprite has its own set of scripts to control its behaviors and how it interacts with other sprites and events. Programming consists of snapping together individual blocks of preexisting actions to create a script. A program can be as simple as a single block or consist of multiple blocks stacked together that will run as a unit.

Scratch is a simple environment designed by the Kindergarten Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are

A Metamorphosis Approach to Automatic Bell Ringing System

^[1]P.Bhagya Raju, ^[2]S.Suresh, ^[3]D.Mashusudana Rao, ^[4]M.Rithvik, ^[5]Sudhakar Reddy
^{[1][2][3][4][5]} Assistant Professor, SRK Institute of Technology
^[1]pb.raj587@gmail.com, ^[2]Sunakarasuresh9@gmail.com, ^[3]madhu.dontha@gmail.com,
^[4]rithvikmadugula@gmail.com

Abstract— Bell is the basic requirement for any educational institutions in INDIA. This concept is already available in the market a bell is designed using a microcontroller but here we are going to make the automatic bell ringing system as a software and also we are going to describe how this service can attain the market by using the E-Commerce Strategies .This idea might look like a small thing but it can make or recreate its width until it takes place as a local system it cannot evolve as a global system.

Index Terms— E Commerce, bell, metamorphosis, technology.

INTRODUCTION

Technology with its width is going to change day by day So it's going to evolve its depth and its width can also be evaluated but to bring a revolution from this evolution a new technology must born. Technology can be born without the technology. It's a contradicting statement because a technology can be evolved where there is no existing technology or where we do not have a technology Simply we can say that where there is a necessity there we need a technology.

In the above statements we came to know that technology evolution is going to be evolved its path from time to time in order to bring it to a common man there is a

has become a great task to us in achieving this task we are going to several modules to make our visionary ideas into mission.

In this regard technology making to taking has been a great challenge and the marketing modules also plays a key role in taking up the technology to a common man's hand.

The technology that we are using now is not meant for wide range of usage to us it is meant for the public and by the public.

The necessity We mean how we are going to metamorphosis an existing automatic bell ringing system has been presented in this paper as a representation. This might look like a small idea but its vision is so wider that includes E Commerce strategies from taking to proceeding

in the public environment in making a college or school to take a step forward towards as an initiative of building an innovative technology with cost effective product.

When the technology is at one instinct we can use it widely but here we are going to present a paper that technologies are presented.

Bell is the basic requirement in every school or college but here an automatic bell has been invented with a software perhaps there might be several programs who have done this before.

Here we are just going to modify them by using recent tools called scratch and construct2d. So here we present a brief history of those two tools in literature survey.

LITERATURE SURVEY

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are manipulated on the stage (background) using various scripts (small program segments). Each sprite has its own set of scripts to control its behaviors and how it interacts with other sprites and events. Programming consists of snapping together individual blocks of preexisting actions to create a script. A program can be as simple as a single block or consist of multiple blocks stacked together that will run as a unit.

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are

A Metamorphosis Approach to Automatic Bell Ringing System

^[1]P.Bhagya Raju, ^[2]S.Suresh, ^[3]D.Mashusudana Rao, ^[4]M.Rithvik, ^[5]Sudhakar Reddy
^{[1][2][3][4][5]} Assistant Professor, SRK Institute of Technology
^[1]pb.raj587@gmail.com, ^[2]Sunakarasuresh9@gmail.com, ^[3]madhu.dontha@gmail.com,
^[4]rithvikmadugula@gmail.com

Abstract— Bell is the basic requirement for any educational institutions in INDIA. This concept is already available in the market a bell is designed using a microcontroller but here we are going to make the automatic bell ringing system as a software and also we are going to describe how this service can attain the market by using the E-Commerce Strategies. This idea might look like a small thing but it can make or recreate its width until it takes place as a local system it cannot evolve as a global system.

Index Terms— E Commerce, bell, metamorphosis, technology.

INTRODUCTION

Technology with its width is going to change day by day So it's going to evolve its depth and its width can also be evaluated but to bring a revolution from this evolution a new technology must born. Technology can be born without the technology. It's a contradicting statement because a technology can be evolved where there is no existing technology or where we do not have a technology Simply we can say that where there is a necessity there we need a technology.

In the above statements we came to know that technology evolution is going to be evolved its path from time to time in order to bring it to a common man there is a great difficulty that takes place in practical.

Whatever new ideas and products that are being evolved today this is because of their interventions to design a quality product in a cost effective manner. This has become a great task to us in achieving this task we are going to several modules to make our visionary ideas into mission.

In this regard technology making to taking has been a great challenge and the marketing modules also plays a key role in taking up the technology to a common man's hand.

The technology that we are using now is not meant for wide range of usage to us it is meant for the public and by the public.

The necessity We mean how we are going to metamorphosis an existing automatic bell ringing system has been presented in this paper as a representation. This might look like a small idea but its vision is so wider that includes E Commerce strategies from taking to proceeding

in the public environment in making a college or school to take a step forward towards as an initiative of building an innovative technology with cost effective product.

When the technology is at one instinct we can use it widely but here we are going to present a paper that technologies are presented.

Bell is the basic requirement in every school or college but here an automatic bell has been invented with a software perhaps there might be several programs who have done this before.

Here we are just going to modify them by using recent tools called scratch and construct2d. So here we present a brief history of those two tools in literature survey.

LITERATURE SURVEY

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are manipulated on the stage (background) using various scripts (small program segments). Each sprite has its own set of scripts to control its behaviors and how it interacts with other sprites and events. Programming consists of snapping together individual blocks of preexisting actions to create a script. A program can be as simple as a single block or consist of multiple blocks stacked together that will run as a unit.

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are

A Metamorphosis Approach to Automatic Bell Ringing System

^[1]P.Bhagya Raju, ^[2]S.Suresh, ^[3]D.Mashusudana Rao, ^[4]M.Rithvik, ^[5]Sudhakar Reddy
^{[1][2][3][4][5]} Assistant Professor, SRK Institute of Technology
^[1]pb.raj587@gmail.com, ^[2]Sunakarasuresh9@gmail.com, ^[3]madhu.dontha@gmail.com,
^[4]rithvikmadugula@gmail.com

Abstract— Bell is the basic requirement for any educational institutions in INDIA. This concept is already available in the market a bell is designed using a microcontroller but here we are going to make the automatic bell ringing system as a software and also we are going to describe how this service can attain the market by using the E-Commerce Strategies. This idea might look like a small thing but it can make or recreate its width until it takes place as a local system it cannot evolve as a global system.

Index Terms— E Commerce, bell, metamorphosis, technology.

INTRODUCTION

Technology with its width is going to change day by day So it's going to evolve its depth and its width can also be evaluated but to bring a revolution from this evolution a new technology must born. Technology can be born without the technology. It's a contradicting statement because a technology can be evolved where there is no existing technology or where we do not have a technology Simply we can say that where there is a necessity there we need a technology.

In the above statements we came to know that technology evolution is going to be evolved its path from time to time in order to bring it to a common man there is a great difficulty that takes place in practical.

Whatever new ideas and products that are being evolved today this is because of their interventions to design a quality product in a cost effective manner. This has become a great task to us in achieving this task we are going to several modules to make our visionary ideas into mission.

In this regard technology making to taking has been a great challenge and the marketing modules also plays a key role in taking up the technology to a common man's hand.

The technology that we are using now is not meant for wide range of usage to us it is meant for the public and by the public.

The necessity We mean how we are going to metamorphosis an existing automatic bell ringing system has been presented in this paper as a representation. This might look like a small idea but its vision is so wider that includes E Commerce strategies from taking to proceeding

in the public environment in making a college or school to take a step forward towards as an initiative of building an innovative technology with cost effective product.

When the technology is at one instinct we can use it widely but here we are going to present a paper that technologies are presented.

Bell is the basic requirement in every school or college but here an automatic bell has been invented with a software perhaps there might be several programs who have done this before.

Here we are just going to modify them by using recent tools called scratch and construct2d. So here we present a brief history of those two tools in literature survey.

LITERATURE SURVEY

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are manipulated on the stage (background) using various scripts (small program segments). Each sprite has its own set of scripts to control its behaviors and how it interacts with other sprites and events. Programming consists of snapping together individual blocks of preexisting actions to create a script. A program can be as simple as a single block or consist of multiple blocks stacked together that will run as a unit.

Scratch is a simple environment designed by the Kindergarden Lifelong Learning Group at MIT to introduce some basic programming concepts in a fun and interactive manner. In Scratch, sprites (objects) are

A Foolproof Authentication Mechanism for Mobile And Pervasive Computing

G.Apparao¹, N.S.R.K.Prasad²

Assistant Professor, SRK Institute of Technology, Vijayawada, Andhra Pradesh¹.
Assistant Professor, GURU Nanak Institutions Technical Campus, Ibrahimpatnam, Telangana².
appuprem05@gmail.com¹, nsrpk04mtech@gmail.com²

Abstract - Portable Computing is an innovation that permits transmission of information, voice and video by means of a PC or some other remote empowered gadget without being associated with an altered physical connection. With today's innovation, numerous applications depend on the presence of little gadgets that can trade data and structure correspondence systems. In a huge segment of such applications, the privacy and trustworthiness of the imparted messages are specifically noteworthy. In this work, we propose two novel systems for verifying short scrambled messages that are coordinated to meet the necessities of portable and pervasive applications. By exploiting the way that the message to be confirmed should likewise be scrambled, we propose provably secure validation codes that are more proficient than any message verification code in the writing. The key thought behind the proposed methods is to use the security that the encryption calculation can give to plan more effective validation components, instead of utilizing standalone verification primitives.

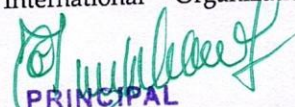
Keywords – Authentication, unconditional security, computational security, universal hash-function families, pervasive computing.

I. INTRODUCTION

Portable figuring is human-computer cooperation by which a PC is relied upon to be transported amid typical utilization. Portable processing includes versatile correspondence, portable equipment, and portable programming. Correspondence issues incorporate specially appointed and foundation systems and correspondence properties, conventions, information organizations and solid advances. Equipment incorporates cell phones or gadget segments. Versatile programming manages the attributes and prerequisites of portable applications. Protecting the honesty of messages traded over open channels is one of the exemplary objectives in cryptography and the writing is rich with message verification code (MAC) calculations that are intended for the sole reason for safeguarding message uprightness. Taking into account their security, MACs are either genuinely or computationally secure. Genuinely secure MACs give message honesty against falsifiers with boundless computational force. Then again, computationally secure MACs are just secure when counterfeiters have constrained computational force. A well-known class of genuinely secure confirmation depends on all inclusive hash-capacity families, spearheaded via Carter and Wegman[1]-[4]. From that point forward, the investigation of unequivocally secure message confirmation in view of all inclusive hash capacities has been drawing in exploration consideration, both from the configuration and examination stances (see, e.g., [5]-[11]). The fundamental idea considering unqualified security is that the confirmation key must be utilized to verify a set number of traded messages. Since the

administration of one-time keys is viewed as unrealistic in numerous applications, computationally secure MACs have turned into the strategy for decision for most genuine applications. In computationally secure MACs, keys can be utilized to verify a subjective number of messages. That is, subsequent to concurring on a key, real clients can trade a discretionary number of validated messages with the same key. Contingent upon the primary building square used to develop them, computationally secure MACs can be characterized into three fundamental classes: piece figure based, cryptographic hash capacity based, or all inclusive hash-work family based. CBC-MAC is a standout amongst the most known piece figure based MACs, indicated in the Federal Information Processing Standard Publication.113 [12] and the International Organization for Standardization ISO/IEC 9797-1 [13]. CMAC, an altered variant of CBC-MAC, is exhibited in the NIST extraordinary production 800-38B [4], which depended on the OMAC of [15]. Other piece figure based MACs incorporate, however are not restricted to, XOR-MAC [16] and PMAC [17]. The security of various MACs has been comprehensively examined (see, e.g., [18]-[2]).

The utilization of restricted cryptographic hash capacities for message verification was presented by Tsudik in [11]. A pervasive instance of the usage of iterated cryptographic hash limits in the blueprint of message affirmation codes is HMAC, which was proposed by Bellare et al. in [2]. HMAC was later embraced as a standard [13]. Another cryptographic hash limit based MAC is the MDx-MAC proposed by Preneel and Oorschot [20]. HMAC and two variations of MDx-MAC are determined in the International Organization for


PRINCIPAL

SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108.

Optimizing QOS in MANET USING swam HASO-AFSA Routing

¹A.Radhika Research scholar, Dept of Computer Science & Engineering, Rayalaseema university, kurnool ,India
² Dr.D.Haritha , Professor &Head , CSE Dept , S.R.K Institute of Technology, Vijayawada-3, AP, India

Abstract: A mobile ad-hoc network is a group of mobile nodes which can communicate between them without the help of any centralized infrastructure. It consists of number of mobile nodes with exceptional quality of self-managing and self-organizing network. Military operations and disaster management are the important applications of MANET. In preventing routing attacks routing protocols plays a significant role. Security attacks can be initiated towards any layer of the stack protocol. MANET'S distinctive characteristic like dynamic network topology, battery power and limited bandwidth makes routing a challenging task. Several researches are done in this area and many efficient routing protocols were proposed. But due to the presence of malicious node, these protocols are vulnerable to attacks. Therefore for establishing the attractive MANET, security is a major concern. In this work, hybrid swarm intelligence algorithms are employed to overcome the drawbacks of the previous approaches. Here, proposed a Hybrid ANT Swarm Optimization (HASO) algorithm with Artificial Fish Swarm Algorithm (AFSA) solve the problem of malicious node with the help of certification authority. This hybrid algorithm has immediate convergence and searching potential to solve the routing complication effectively. This modified protocol is compared with existing protocol by using various parameters i.e. packet delivery ratio, end-to-end delay and throughput. The results shows to increase in packet delivery ratio, throughput and decrease in end-to end delay show better performance of proposed work as compared existing.

Keywords: MANET, HASO, AFSA, BlackHole,

1 INTRODUCTION

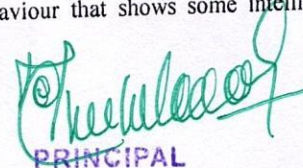
In recent years, Mobile Ad-hoc Network (MANET) comprises different wireless mobile nodes which are communicating with each other to form network. MANET is a collection of wireless mobile nodes forming temporary network and it does not have permanent infrastructure therefore it is called as infrastructure-less network [1]. Infrastructure less networks has no fixed routers; all nodes are capable of movement and can be connected dynamically in an arbitrary manner. Nodes of these networks function as routers which discover and maintain routes to other nodes in the network.

In Mobile Ad hoc Networks (MANET) each node has limited wireless transmission range, so the routing in MANETs depends on the cooperation of intermediate nodes. Two types of routing protocols have been defined for ad hoc networks: Table-driven protocol and On-demand routing protocol. Table driven protocols are proactive in nature and consume excessive network bandwidth. On the other hand, on demand routing protocol can exchange routing information only when needed. Ad-hoc On demand Distance Vector (AODV) [2] routing protocol is an on demand routing protocol that focuses on discovering the shortest path between two nodes with no consideration of the reliability of a node. The structure of an Ad-hoc network leads to some special kinds of attacks especially attacks on the connectedness of the network.

Most ad hoc routing protocols rely on implicit trust-your-neighbour relationship to route packets among participating nodes. This naive trust model allows malicious nodes and selfish nodes to paralyze the network. Selfish nodes do not directly damage other nodes but their effect cannot be underestimated. Security in the routing protocol is necessary in order to guard against these attacks but relatively little work has been done in securing ad hoc network routing protocols. Secure ad hoc network routing protocols are difficult to design, due to the high dynamic nature of the network. Some protocols have been proposed to secure the network from these attacks. Some of these protocols handle attacks by malicious nodes but not the selfish nodes and some handle selfish nodes nicely but malicious nodes not so nicely.

Routing in mobile ad hoc network faces additional problem and challenges when compared to routing in wired network with fixed infrastructure. There are different type of protocols have been developed to defend against various attacks on Mobile ad hoc network. The problem of routing face some factors such as low bandwidth, dynamic topology, high power consumption and high error rates. Dynamic Source Routing (DSR) protocol is a reactive protocol i.e. it determines the proper route only when a packet needs to be forwarded. The node flood the network with a route request and builds the required route from the responses it receives [3]. Destination-Sequenced Distance-Vector (DSDV) routing protocol is a proactive table driven algorithm based on classic Bellman-Ford routing. In proactive protocols, all nodes learn the network topology before a forward request comes in [4]. Hybrid routing protocol such as Zone Routing Protocol (ZRP) which is a protocol that initiates the route-determination procedure on-demand, but at limited search cost [5].

Swarm Intelligence (SI) is the collective behaviour of decentralized, self-organized systems, natural or artificial. The expression was introduced by Gerardo Beni and Jing Wang in 1989, in the content of cellular robotic systems [6]. The inspiration often comes from nature especially biological systems. Principle of SI is a multi-agent system that has self-organized behaviour that shows some intelligent behaviour.



PRINCIPAL

SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108.

Optimizing QOS in MANET USING swam HASO-AFSA Routing

¹A.Radhika Research scholar, Dept of Computer Science & Engineering, Rayalaseema university, kurnool ,India
²Dr.D.Haritha , Professor &Head , CSE Dept, S.R.K Institute of Technology, Vijayawada-3,AP,India

Abstract: A mobile ad-hoc network is a group of mobile nodes which can communicate between them without the help of any centralized infrastructure. It consists of number of mobile nodes with exceptional quality of self-managing and self-organizing network. Military operations and disaster management are the important applications of MANET. In preventing routing attacks routing protocols plays a significant role. Security attacks can be initiated towards any layer of the stack protocol. MANET'S distinctive characteristic like dynamic network topology, battery power and limited bandwidth makes routing a challenging task. Several researches are done in this area and many efficient routing protocols were proposed. But due to the presence of malicious node, these protocols are vulnerable to attacks. Therefore for establishing the attractive MANET, security is a major concern. In this work, hybrid swarm intelligence algorithms are employed to overcome the drawbacks of the previous approaches. Here, proposed a Hybrid ANT Swarm Optimization (HASO) algorithm with Artificial Fish Swarm Algorithm (AFSA) solve the problem of malicious node with the help of certification authority. This hybrid algorithm has immediate convergence and searching potential to solve the routing complication effectively. This modified protocol is compared with existing protocol by using various parameters i.e. packet delivery ratio, end-to-end delay and throughput. The results shows to increase in packet delivery ratio, throughput and decrease in end-to end delay show better performance of proposed work as compared existing.

Keywords: MANET, HASO, AFSA, BlackHole,

1 INTRODUCTION

In recent years, Mobile Ad-hoc Network (MANET) comprises different wireless mobile nodes which are communicating with each other to form network. MANET is a collection of wireless mobile nodes forming temporary network and it does not have permanent infrastructure therefore it is called as infrastructure-less network [1]. Infrastructure less networks has no fixed routers; all nodes are capable of movement and can be connected dynamically in an arbitrary manner. Nodes of these networks function as routers which discover and maintain routes to other nodes in the network.

In Mobile Ad hoc Networks (MANET) each node has limited wireless transmission range, so the routing in MANETs depends on the cooperation of intermediate nodes. Two types of routing protocols have been defined for ad hoc networks: Table-driven protocol and On-demand routing protocol. Table driven protocols are proactive in nature and consume excessive network bandwidth. On the other hand, on demand routing protocol can exchange routing information only when needed. Ad-hoc On demand Distance Vector (AODV) [2] routing protocol is an on demand routing protocol that focuses on discovering the shortest path between two nodes with no consideration of the reliability of a node. The structure of an Ad-hoc network leads to some special kinds of attacks especially attacks on the connectedness of the network.

Most ad hoc routing protocols rely on implicit trust-your-neighbour relationship to route packets among participating nodes. This naive trust model allows malicious nodes and selfish nodes to paralyze the network. Selfish nodes do not directly damage other nodes but their effect cannot be underestimated. Security in the routing protocol is necessary in order to guard against these attacks but relatively little work has been done in securing ad hoc network routing protocols. Secure ad hoc network routing protocols are difficult to design, due to the high dynamic nature of the network. Some protocols have been proposed to secure the network from these attacks. Some of these protocols handle attacks by malicious nodes but not the selfish nodes and some handle selfish nodes nicely but malicious nodes not so nicely.

Routing in mobile ad hoc network faces additional problem and challenges when compared to routing in wired network with fixed infrastructure. There are different type of protocols have been developed to defend against various attacks on Mobile ad hoc network. The problem of routing face some factors such as low bandwidth, dynamic topology, high power consumption and high error rates. Dynamic Source Routing (DSR) protocol is a reactive protocol i.e. it determines the proper route only when a packet needs to be forwarded. The node flood the network with a route request and builds the required route from the responses it receives [3]. Destination-Sequenced Distance-Vector (DSDV) routing protocol is a proactive table driven algorithm based on classic Bellman-Ford routing. In proactive protocols, all nodes learn the network topology before a forward request comes in [4]. Hybrid routing protocol such as Zone Routing Protocol (ZRP) which is a protocol that initiates the route-determination procedure on-demand, but at limited search cost [5].

Swarm Intelligence (SI) is the collective behaviour of decentralized, self-organized systems, natural or artificial. The expression was introduced by Gerardo Beni and Jing Wang in 1989, in the content of cellular robotic systems [6]. The inspiration often comes from nature especially biological systems. Principle of SI is a multi-agent system that has self-organized behaviour that shows some intelligent behaviour.



PRINCIPAL

SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108.

A Review: Performance analysis of various cryptographic symmetric algorithms

Mr. S Pratap Singh
Research scholar,
Rayalaseema University, Kurnool, AP, India

Dr. M. Ekambaram Naidu
Professor and Principal
SRK Institute of Technology, Vijayawada, AP, India

Abstract: This paper presents the performance analysis of various symmetric algorithms in cryptography, in terms of its behavior in different settings like different block size of data, different size keys, different datatypes, power consumption and their performance is evaluated in terms of memory utilization, CPU utilization, and their speed of execution.

Keywords: Symmetric algorithms, cryptography, DES, TDES, AES, BLOWFISH, asymmetric algorithm.

I. INTRODUCTION

As the information is an asset and communication through internet are growing fast, it is necessary to build more secure and reliable software application. Now a day, hacking of network application is becoming more common. It is necessary to protect such communication over the internet. Cryptography provides a wide variety of symmetric and asymmetric algorithms for secure communication purpose. This paper gives a very quick overview of cryptography along with a brief introduction of various compared secure encryption algorithms in order to understand the key difference between various compared algorithms.

A. Cryptography: Overview

Cryptography is usually combination of two words as "crypto + graphy" which means "the study of secret"[1]. Encryption is the process of converting plain text to cipher text ie "unhidden" to a coded text "hidden" to secure it against data thieves. It is represented as $C=E_k(P)$. The reverse of it is Decryption. Decryption is the process of converting a coded text or cipher text to plain text or hidden to unhidden text [1][2] it is represented as $P=D_k(C)$.

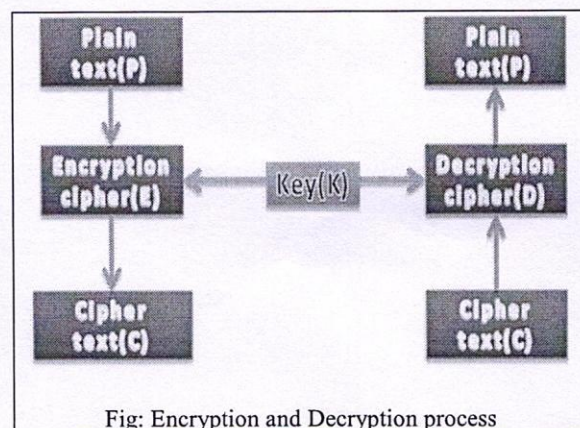


Fig: Encryption and Decryption process

B. Cryptography Goals

This section explains the main goals behind using Cryptography. Every security system must provide a bundle of security functions that can assure the secrecy of the system. These functions are usually referred to as the goals of the security system. These goals can be listed under the following main categories [1] [2] [3] Authentication, Secrecy/Confidentiality, Integrity, Non-Repudiation, Availability, Access Control.

C. Block Ciphers and Stream Ciphers

One of the main categorization methods for encryption techniques commonly used is based on the form of the input data they operate on. The two types are Block Cipher and Stream Cipher. This section discusses the main features in the two types, operation mode, and compares between them in terms of security and performance.

Farming is a tedious job when carried out manually. With the advent of technology various researches are done in this field. The innovative idea is to automate the process of seedsowing, to reduce the human labor and to increase the speed with consistent quality. The Unmanned Mobile Robots are employed to serve this purpose. The location of the Autonomous Ground Vehicle in a vast area can be tracked with the help of GPS and its position can be monitored through a remote device. A prototype has been designed for precise seed sowing process. The inter-seed distance is maintained by the use of servomotor. The Vehicle is controlled by ATMEGA328 microcontroller. The direction of the path to be followed is deduced by using a compass module. Speed and area optimization have been the areas of concern while designing the system. Keywords- GPS, Autonomous Ground Vehicle and compass module.

Implementing of Global Adaptive Algorithm in Read Write Access of Flash Storage Systems by managing Spatial and Temporal Localities

1. S.M Shamsheer Daula, Research Scholar [PP.ECE.18], Rayalaseema University, A.P, India, 518007,
Asst. Professor, Dept of ECE G Pulla Reddy Engineering College (Autonomous)

Email: shamsheerdaula@gmail.com 2. Dr. K E Sreenivasa Murthy, Professor & Head, G Pullaiah College of Engineering, Kurnool

The performance of embedded systems are observed by Design and efficiency of a system always maintain a trade-off relation. The data cache level have come with an introduction of reducing the addressing time to locate the effective storage, which directly shows a proportionality in time and energy access. However, at stages of mapping the level of expected speed reduces due to overwhelmed page clusters or repeated called and pending access layers. Many replacement approaches have shown their essence in improvising the mapping standards. This work has three level of presentations, the first and second choose a choice of prominent algorithm in mapping speed with symmetric reading and writing speeds in both spatial & temporal localities and other to show energy reduction by showing speed enhancement. The techniques are near to precise in lowering and minimizing the access times of addressing during the cache handling. This allows suitable energy reduction with very least performance challenges. The results are given with comparisons of various algorithms and energy utilization


Prevention of Fire Accidents in Rail Transport

Dr. B. Vanajakshi¹, N. Mounika¹, P. Lakshmi Tirupathamma², and M. Venkata Pavan Kumar² *PSCMR CET, Vijayawada, India vanaja2birudu@gmail.com 1PSCMR CET, Vijayawada, India mounikaneelam.15@gmail.com

²*VCET, Vijayawada, India Peramlakshmi9495@gmail.com 2VVIT, Guntur, India pavanvikasece@gmail.com

Exemplary embodiment of the present disclosure is directed towards a systematic method for preventing fire in a rail transport. The system includes a flame detector detects fire at a critical fire point in compartments of a rail transport, a control unit receives the detected fire information from the flame detector for transmitting digital signals, an alarm unit notifies the detected fire information to the passengers through an alarm, a liquid-crystal display unit displays a fire presence compartment number of the rail transport, a power activation and deactivation unit deactivates a power of the rail transport and activates battery bulbs in the compartments of the rail transport, water sprinkling pipes splits the water in the fire presence compartments, a power relay unit controls the speed of the rail transport and an

21st & 22nd July, 2017, Guru Nanak Institutions, Hyderabad, Telangana, India

2

PRINCIPAL

SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108.

Performance Improvement of Single Phase Inverter using SPWM

Dr B Gavaskar Reddy¹, Dr L Maheswari², Adi Ganeswari Kale³

¹Professor & HOD, ²Professor, Dept. of EEE, GATES Institute of Technology, Gooty, Andhrapradesh, India

³Assistant Professor, Sai Ganapathi Engineering College, Kommadi, Vizag, Andhrapradesh, India

Abstract-This paper concentrates on modelling and simulation of single phase inverter as a frequency changer modulated by Pulse Width Modulation (PWM). An inverter is a circuit that converts DC sources to AC sources. Pulse Width Modulation is a method that utilization as an approach to abatement add up to harmonic distortion in inverter circuit. The model is executed utilizing MATLAB/Simulink software with the SimPower System Block Set in light of PC simulation. PC simulation assumes an imperative part in the plan, investigation, and assessment of force electronic converter and their controller. MATLAB is a successful instrument to examine a PWM inverter. Preferences of utilizing MATLAB are the accompanying: Faster reaction, accessibility of different simulation devices and utilitarian squares and the nonappearance of joining issues. Safe-replacement methodology need be actualized is to explain exchanging Transients. In this way, Insulated Gate Bipolar Transistor (IGBT) is use as exchanging gadgets. IGBT is ideal since it is anything but difficult to control and low misfortunes. The outcome from Simulink was checked utilizing MATLAB simulation.

Keywords: PWM, Duty cycle, Harmonics, THD, MATLAB SIMULINK

Introduction

The term harmonics alluded to Power quality in perfect world would mean how unadulterated the voltage is, the way immaculate the present waveform is in its sinusoidal frame. Control quality is essential to business and modern power framework outlines. In a perfect world, the electrical supply ought to be an impeccable sinusoidal waveform with no sort of distortion. On the off chance that the current or voltage waveforms are bended from its optimal frame it will be named as harmonic distortion. This harmonic distortion could come about on account of numerous reasons. In this day and age, prime significance is given by the specialists to determine a strategy to lessen the harmonic distortion. Harmonic distortion was less in the past when the plans of force frameworks were extremely basic and preservationist. Be that as it may, these days with the utilization of complex outlines in the business harmonic distortion has expanded also. This venture clarifies the impacts of Harmonics in the Power System and ventures to lessen the impacts of Harmonics. This venture will likewise clarify how Harmonic distortion is a standout amongst the most imperative issues connected with power quality and makes a few unsettling influences to the Power System. It incorporates the Harmonic diminishment strategies to enhance the power quality and it will likewise incorporate the simulation for the same. This venture additionally clarifies distinctive sorts of inverters that are utilized as a part of the Power System. Amid the change from DC to AC, harmonics influence the power quality a great deal. How harmonic diminishment will enhance the power quality will be clarified in detail. Clients (PUs). This crafty utilization of the range prompts to new difficulties to the changing accessible range. Utilizing a Trust-Worthy calculation, it enhances the reliability of the Spectrum sensing in CR-Networks.



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.
Published under licence by IOP Publishing Ltd

1

PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYANAGARA

Scanned by CamScanner

Power Quality Issues of Induction Generator for Wind Power Plants

Dr. B. Gavaskar Reddy, Professor & HOD, Dept. of EEE, GATES Institute of Technology, Gooty, Andhra Pradesh, India

Dr. L. Maheswari, Professor, Dept. of EEE, GATES Institute of Technology, Gooty, Andhra Pradesh, India

N. Devendranath Reddy, Associate Professor, Dept. of EEE, Shri Shiridi Sai Institute of Technology, Vadiyampet, Anantapur, India

Abstract- Induction generators associated with the nearby lattice may prompt to serious power quality issues, for example, flicker, voltage dip and so forth. Promote, unbalancing of the supply framework may contort the supply voltage at the point of common coupling (PCC). The power quality issues of an enlistment generator for installed era have been investigated in this venture. The conduct of the network with association/separation of the acceptance generator, variable wind speed operation, unbalancing, and symphonious infusion have been reproduced utilizing MATLAB. The voltage dip transients, harmonics, voltage flicker, voltage unbalance of the supply framework have been portrayed to find out the effect of enlistment generator power quality of the supply.

Keywords: Power quality, system reliability, induction generator, voltage drip, harmonics, wind power plant.

I. INTRODUCTION

Renewable sources, for example, wind energy, hydro, tidal, sun oriented and so forth are irregular in nature. While nourishing the client loads unwavering quality and quality of the supply are the imperative variables. There is expanding enthusiasm for the association of era to circulation organizes especially for the misuse of the new renewable energy sources, e.g. wind and little hydro. The renewable energy asset directs the area of this producing plant which is often in remote country territories where there is just unobtrusive limit in the dispersion circuits and constrained client loads, it is common for both altered speed wind turbines and some little hydro-plant to utilize asynchronous, enlistment generators. This is mostly because the vigorous nature and economy at specific sizes of enlistment machines additionally because of the exceptionally huge damping which they bring into the mechanical drive prepare. This inserted era plant is not ready to contribute responsive power and, truth be told, assumes no immediate part in keeping up the appropriation arrange voltage. As it is associated with high impedance circuits there is likewise the likelihood of voltage unsteadiness. A further vital element is that the essential enthusiasm of the administrators of the implanted era plant is the fare of kWh at least cost. In this way, when any plan is considered there is a powerful urge to diminish the capital cost, and thus the limit, of the association and any fortification of the dispersion arrange. Albeit neighbourhood power figure amendment might be connected to decrease the receptive power drawn by the generators this is just because

of rather straightforward charging systems for responsive power which may not create the most attractive impact for the voltage of the conveyance organize. As of late enthusiasm for the renewable sources of energy inserted in the nearby system has expanded as a result of decrease in vaporious discharge, energy productivity or judicious utilization of energy, deregulation or focused arrangement, and broadening of energy resources. Present day dispersion frameworks were intended to acknowledge mass power at the mass supply transformers and to disseminate it to clients. In this manner, the stream of both genuine power and receptive power was dependably from the higher to the lower voltage levels. Nonetheless, with huge entrance of installed era the power streams may get to be turned around and the dispersion system is no more drawn out detached providing loads yet a dynamic framework with power streams and voltages dictated by the era and in addition the heaps and. Distinctive power quality perspectives normally viewed as essential are transient voltage varieties and harmonics. Implanted era plants can bring about transient voltage minor departure from the system of generally extensive current changes amid association and detachment of the generator. The greatness of the present transients can to a substantial degree be constrained via watchful outline of the inserted era plant, although for single generators associated with feeble frameworks the transient voltage varieties brought about might be the impediment on their utilization instead of relentless state voltage rise. However, disengagement of the generators when working at full load may prompt to noteworthy, if rare, Voltage drops. Likewise, a few types of prime mover (e.g. altered speed wind turbines) may bring about cyclic varieties in the generator yield current, which can prompt to supposed flicker, an aggravation if not sufficiently controlled, unsatisfactory voltage twisting. Straightforwardly associated generators can likewise bring down the symphonious impedance of the circulation system thus lessen the system consonant voltage to the detriment of expanded consonant streams in the creating plants and conceivable issue because of symphonious reverberation. This is of specific significance if power calculate revision capacitor bank is associated with remunerate the enlistment generator. Implanted era is being associated progressively to dissemination systems. For some new renewable energy conspires this will include the association of acceptance generators to feeble rustic systems. It has been appeared by studies and ensuing

EFFECT OF CHEMICAL TREATMENT AND COUPLING AGENTS ON THE MECHANICAL PROPERTIES OF COIR/BANANA HYBRID COMPOSITE

P. Bhagya Lakshmi¹, Navuri Karteek², B. Satya Krishna³, H. Jeevan Rao⁴

¹Department of Mechanical Engineering,
SR K Institute of Technology, Vijayawada, A. P., India.
¹bhagyalakshmi5.poka@gmail.com

²Department of Mechanical Engineering,
Dhanekula Institute of Engineering & Technology, Ganguru, A. P., India.
²karteeknavuri@gmail.com

³Department of Mechanical Engineering,
Shri Vishnu Engineering College for Women, Bhimavaram, A. P. India.
³satya.krishna02@gmail.com

⁴Department of Aerospace Engineering,
Amity School of Engineering and Technology, Amity University, Mumbai, India.
⁴hjrao@mum.amity.edu

Abstract—Now a day's most of the structures are replacing with the composite materials due to their high strength to weight ratio in addition to good mechanical properties. The properties of the composite material will depend on the type of the fiber i.e., natural or synthetic, size of the fiber (Short or long) type of the resin and so on. In present days to achieve the specialized properties most of the industries are using the hybrid composites. The chemical or alkali treatment of fiber will affect the properties of the composite material. The coupling agents in the composite material also play the vital role in changing the properties of the composite material. In the present work the effect of the chemical treatment and coupling agents on the properties of the hybrid composite material were studied. Sodium hydroxide used as chemical treatment agent and maleic anhydride polypropylene (MAPP) used as coupling agent. Coir/banana short fiber hybrid composite with polypropylene matrix is used as composite material. The effect of these agents on the tensile strength, young's modulus, flexural strength, flexural modulus and impact strength were studied.

Keywords— Coir & Banana fiber, Hybrid composite, Polypropylene, Maleic anhydride Polypropylene (MAPP).

I. INTRODUCTION

Composite material usually defined as the mixture of two or more different materials. It consists of two matters; one is fiber which is discontinuous in nature, stiffer and stronger. The other one is matrix which is less stiff and weaker phase. Hybrid composite is one class of reinforced fiber composite consisting of more than one fiber and it are obtained by mixing two or more natural fibers with the single matrix. And this hybrid composite have higher strength properties compared to normal composite. Now a day's natural composite fibers are using in many applications as they have good properties when mixed with polymer matrix. The natural fibers are more usage when compared to artificial fibers (synthetic fibers) due to low cost better strength, modulus and environmental friendly etc. The new invention of natural fibers like banana, coir, cotton and jute have gained attention of researchers for achieving high strength to weight ratio and low cost materials. This material shows better electrical resistance, acoustics insulating properties and good thermal properties. In the present study, banana fiber and coir fiber are selected which are shown in the Fig. 1.

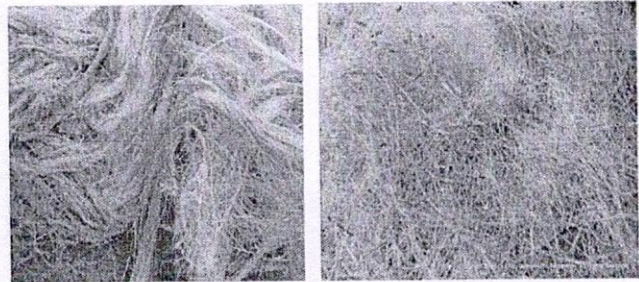


Fig. 1 Banana Fiber and Coir Fiber

The chopped banana and coir fiber are shown in the Fig. 2.

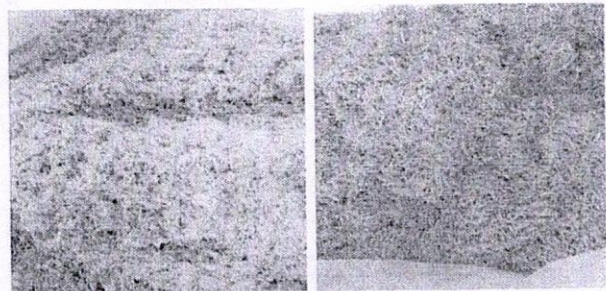


Fig. 2 Chopped Banana and coir Fiber

Salma siddika[1] studied the mechanical properties of jute & coir hybrid polypropylene composites. Samples of composites were made with fiber (by weight 5%,10%,15%,20%) and polypropylene with the help of hot press machine. Coir and jute were mixed at 1:1 ratio. The fabricated composites were tested for tensile, flexural, hardness and impact properties. Concluded that tensile strength is decreasing and other properties are increasing with increasing fiber weight percentage. and observed that 20% weight given better mechanical properties. Hemant patel [2] Evaluated the mechanical properties of banana and sisal hybrid epoxy composites. and composites were made by hand layup method with less amount of sisal. Concluded that 20%

2017



Intelligent Engineering Informatics pp 323-335 | Cite as

Analysis and Prototype Sequences of Face Recognition Techniques in Real-Time Picture Processing

Authors Authors and affiliations

G. D. K. Kishore, M. Babureddy

Conference paper
First Online: 11 April 2018

925 Downloads

Part of the [Advances in Intelligent Systems and Computing](#) book series (AISC, volume 695)

Abstract

The present-day implementation and demand of some real-time image processing applications are to be increased in various recent technologies. Some of these techniques are related to biometric applications such as fingerprint identification, face recognition, iris scan implementation, and speech identification; instead of all these techniques, face identification is an emerging concept in biometric applications with video summarization and surveillance, computer interaction with human being, face identification, and image databases in various applications to categorize face classification. In recent days, face identification is a rapid technology, which is a criminal forensic analysis, access control policy and prison dimensionality privacy with recent approaches. So, we have gone through formalized different

Log in to check access

Buy eBook

EUR 245.03

Buy paper (PDF)

EUR 24.95

- Instant download
- Readable on all devices
- Own it forever
- Local sales tax included if applicable

Buy Physical Book

[Learn about institutional subscriptions](#)

Cite paper

(Handwritten Signature)
PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA

Patron Engagement at Indian Multiplex: A Study with Special Reference to Vijayawada City

Sudheer Kumar J S

Assistant Professor

Department of Business Administration

S.R.K Institute of Technology, Vijayawada, Andhra Pradesh

E-mail: boon.sudheer@gmail.com,

Dr. A. Sathish Babu

Associate Professor

Department of Commerce & Business Administration

VRS & YRN P.G College, Chirala, Andhra Pradesh.

E-Mail: archanaadipudi@gmail.com

Abstract

Engagement of a customer is a process to foster interactions with customers about the services rendered at the company that can collaborate with the requirements of customers. Earlier a movie goer use to purchase a ticket in a long standing queue just before the commencement of film projection, looking for a parking place for his vehicle with tensed mind and during the interval time he has to rush for getting food items for family and so on. With the emergence of multiplexes, the concept of customer engagement is applied by multiplex players with critical analysis of the consumer behavior. Need for customer engagement have been raised as lot of factors influencing consumers to watch a movie, to search for multiplex, booking a ticket, availing services offered, gain experience.

This paper discusses about the need for customer engagement at multiplexes and different types of strategies applied by multiplex players in dealing with customers among different attributes.

Key words: Customer engagement, multiplex, patron, consumer behavior, attributes.

Introduction

Customer engagement acts as a connection among consumer and company while offering a product or service to them. As the mindset of various consumers differed, offering the same product or service to many in one means of communication is not possible in these days. Due to heavy competition in market, every company is now focusing on how to deal with consumers effectively and efficiently with the services available from their end. In this regard offering services to consumers by understanding their needs and fulfilling them effectively is a big challenge for many companies. It is also going to be one of the success mantra of their businesses. Simply, serving the same product or service to various consumers through different means of communication tends to be the concept of customer engagement. With the emergence of e-commerce and increase rate in usage of internet, several companies are offering services to their customers through online medium in the means of promoting products/services, sale, handling queries, feedback, complaints and grievance settlement.

Customer engagement practices of the companies also tend to be an important source of competitive advantage and results in customer loyalty. Applying this process in practice is a bit difficult to companies as there is no standard format for this to deal with consumers up to what extent to communicate and leaving discussions at what particular moment. Enhancing such parameters in

Conference Info

International Conference on New Frontiers of Engineering, Science, Management and Humanities (ICNFESMH-2017)
at (NITTTR) National Institute of Technical Teachers Training & Research, Chandigarh, India (MHRD, Govt. of India)
on 21st May 2017 ISBN: 978-81-934083-0-8

Brand Pruning-A Powerful Weapon for Corporate Success

*Dr. M. Veerabhadra Rao

Professor & Department of MBA, SRK Institute of Technology, Vijayawada

B.V.S.S. Subbarao

Research Scholar, Krishna University, Machilipatnam,

Abstract :

Brand Pruning can be defined as a process by which a company cuts off those brands, which have less contribution on its bottom-line or sometimes top line as well. This is almost a continuous process particularly for FMCG and white goods in India. The theoretical part of Brand Pruning is relatively new, although it has been practiced by many companies from ages and decades but non availability of a comprehensive literature is a major hindrance. The earliest records of advocating Brand Rationalization process can be traced in early 1930's; Neil McElroy was a manager who supervised the advertising for camay soap at Procter & Gamble. The consumer products giant ignored camay but spent money and paid attention on its flagship product, Ivory. Naturally, Ivory remained the leader while camay struggled for survival. Annoyed, McElroy drafted a three-page internal memo in May 1931. He argued that P7G should switch to a brand-based management system. Only then would each of its brands have a dedicated budget and managerial team and a fair shot at success in the marketplace. McElroy suggested that the company's brands would fight with each other for both resources and market share. Each "brand man's objective would be to ensure that his brand became a winner even if that happened at the expense of the business's other brands. However, McElroy did not carry the argument to its logical end." This paper shed a light on utility, process, rationalization and signs of brand pruning.

Keywords: Rationalization, signs of Brand Pruning, Utility, Portfolio Analysis Sheet.

INTRODUCTION

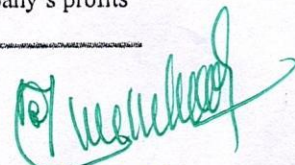
Brand Pruning can be defined as a process by which a company cuts off those brands, which have less contribution on its bottom-line or sometimes top line as well. This is almost a continuous process particularly for FMCG and white goods in India. The theoretical part of Brand Pruning is relatively new, although it has been practiced by many companies from ages and decades but non availability of a comprehensive literature is a major hindrance.

The earliest records of advocating Brand Rationalization process can be traced in early 1930's; Neil McElroy was a manager who supervised the advertising for camay soap at Procter & Gamble. The consumer products giant ignored camay but spent money and paid attention on its flagship product, Ivory. Naturally, Ivory remained the leader while camay struggled for survival. Annoyed, McElroy drafted a three-page internal memo in May 1931. He argued that P7G should switch to a brand-based management system. Only then would each of its brands have a dedicated budget and managerial team and a fair shot at success in the marketplace. McElroy suggested that the company's brands would fight with each other for both resources and market share. Each "brand man's objective would be to ensure that his brand became a winner even if that happened at the expense of the business's other brands. However, McElroy did not carry the argument to its logical end.

Diageo, the world's largest spirits company, sold 35 brands of liquor in some 170 countries in 1999. Just eight of those brands-Baileys liqueur, Captain Morgan rum, Cuervo tequila, Smirnoff vodka, Tanqueray gin, Guinness stout, and J&B and Johnnie Walker whiskeys provided the company with more than 50 percent of its sales and 70 percent of its profits.

Nestle marketed more than 8000 brands in 190 countries in 1996. Around 55 of them were global brands, 140-odd were regional brands, and the remaining 7,800 or so were local brands. The bulk of the company's profits came from around 200 brands, or 2.5 percent of the portfolio.


9 | Dr. M. Veerabhadra Rao, B.V.S.S. Subbarao



PRINCIPAL
SRK Institute of Technology
ENIKEPADU, VIJAYAWADA-521 108.

Brand Pruning-A Powerful Weapon for Corporate Success

***Dr. M. Veerabhadra Rao**

Professor &  Department of MBA, SRK Institute of Technology, Vijayawada

B.V.S.S. Subbarao

Research Scholar, Krishna University, Machilipatnam,

Abstract :

Brand Pruning can be defined as a process by which a company cuts off those brands, which have less contribution on its bottom-line or sometimes top line as well. This is almost a continuous process particularly for FMCG and white goods in India. The theoretical part of Brand Pruning is relatively new, although it has been practiced by many companies from ages and decades but non availability of a comprehensive literature is a major hindrance. The earliest records of advocating Brand Rationalization process can be traced in early 1930's. Neil McElroy was a manager who supervised the advertising for camay soap at Procter & Gamble. The consumer products giant ignored camay but spent money and paid attention on its flagship product, Ivory. Naturally, Ivory remained the leader while camay struggled for survival. Annoyed, McElroy drafted a three-page internal memo in May 1931. He argued that P7G should switch to a brand-based management system. Only then would each of its brands have a dedicated budget and managerial team and a fair shot at success in the marketplace. McElroy suggested that the company's brands would fight with each other for both resources and market share. Each "brand man's objective would be to ensure that his brand became a winner even if that happened at the expense of the business's other brands. However, McElroy did not carry the argument to its logical end." This paper shed a light on utility, process, rationalization and signs of brand pruning.

Keywords: Rationalization, signs of Brand Pruning, Utility, Portfolio Analysis Sheet.

INTRODUCTION

Brand Pruning can be defined as a process by which a company cuts off those brands, which have less contribution on its bottom-line or sometimes top line as well. This is almost a continuous process particularly for FMCG and white goods in India. The theoretical part of Brand Pruning is relatively new, although it has been practiced by many companies from ages and decades but non availability of a comprehensive literature is a major hindrance.

The earliest records of advocating Brand Rationalization process can be traced in early 1930's; Neil McElroy was a manager who supervised the advertising for camay soap at Procter & Gamble. The consumer products giant ignored camay but spent money and paid attention on its flagship product, Ivory. Naturally, Ivory remained the leader while camay struggled for survival. Annoyed, McElroy drafted a three-page internal memo in May 1931. He argued that P7G should switch to a brand-based management system. Only then would each of its brands have a dedicated budget and managerial team and a fair shot at success in the marketplace. McElroy suggested that the company's brands would fight with each other for both resources and market share. Each "brand man's objective would be to ensure that his brand became a winner even if that happened at the expense of the business's other brands. However, McElroy did not carry the argument to its logical end.

Diageo, the world's largest spirits company, sold 35 brands of liquor in some 170 countries in 1999. Just eight of those brands-Baileys liqueur, Captain Morgan rum, Cuervo tequila, Smirnoff vodka, Tanqueray gin, Guinness stout, and J&B and Johnnie Walker whiskeys provided the company with more than 50 percent of its sales and 70 percent of its profits.

Nestle marketed more than 8000 brands in 190 countries in 1996. Around 55 of them were global brands, 140-odd were regional brands, and the remaining 7,800 or so were local brands. The bulk of the company's profits came from around 200 brands, or 2.5 percent of the portfolio.

Role of XBRL in Financial Reporting

Sudheer Kumar J S*, Dr. A. SathishBabu**, Dr. M. Veerabhadra Rao***

Abstract

Financial reporting is a process of preparing the financial statements that reveal the financial position of an organization to the management, investors, regulatory authorities, government, etc. There are various methodologies followed by organizations in preparation of their financial statements. Several application software platforms such as Tally ERP packages, Marg, Saral are being used by companies in fulfilling their accounting needs. In this regard, there is a new platform about to crack the markets soon completely. It is XBRL (Extensible Business Reporting Language).

This paper highlights about the role of XBRL in business reporting with reference to financial data, significant usage of XBRL applications, potentiality, users of XBRL in global and Indian context. It also discusses about the advantages to various stakeholders of business by using XBRL and its corporate perspective.

Key words: Financial reporting, XBRL, Software, accounting needs, financial statement.

*Doctoral Research Scholar, Department of Commerce and Business Administration, Acharya Nagarjuna University, Guntur, Andhra Pradesh.

E-mail: boon.sudheer@gmail.com, Mobile: +91-9030179246.

** Associate Professor, Department of Commerce and Business Administration, VRS & YRN PG College, Chirala, Andhra Pradesh.

E-mail: archanaadipudi@gmail.com, Mobile: +91-9247431812

*** Professor, Department of Business Administration, SRK Institute of Technology, Vijayawada, Andhra Pradesh.

E-mail: saikrupa1012mvbr@gmail.com, Mobile: +91-9177343483

Introduction

Financial reporting is a vital part of corporate governance. Every company will present its financial position to their stake holders. It involves in disclosing the financial information of the company over a specific period of time to the management and public which helps in decision making. Apart from decision making, the company also can analyze that whether it is making concern to the objectives and overall strategies of company in managing finances. Also indicates the financial health position of the organization. It will also ensure the investors that the company is running in a good position to make investments, if not alert them to switch over their investments.

Meaning

Extensible Business Reporting Language (XBRL) is a standard means of communicating information between business and on the internet. It provides a major benefit in preparation, analysis, communication of business information to all those who have to create, transmit, use or analyze such information. XBRL gave rise to the digital business reporting globally managed by the not for profit consortium, XBRL International. It is used across the world in more than 50 countries with millions of documents created every year. It helps the organizations to report their financial data more rapidly, accurately and digitally. Through this platform, the users can obtain data, share, analyze and adding values to the data easily.

Features of XBRL

- ❖ XBRL allows the creation of reusable, authoritative definitions, called taxonomies that capture the meaning contained in all of the reporting terms used in a business report, as well as the relationships between all of the terms.

Role of XBRL in Financial Reporting

Sudheer Kumar J S*, Dr. A. SathishBabu**, Dr. M. Veerabhadra Rao***

Abstract

Financial reporting is a process of preparing the financial statements that reveal the financial position of an organization to the management, investors, regulatory authorities, government, etc. There are various methodologies followed by organizations in preparation of their financial statements. Several application software platforms such as Tally ERP packages, Marg, Saral are being used by companies in fulfilling their accounting needs. In this regard, there is a new platform about to crack the markets soon completely. It is XBRL (Extensible Business Reporting Language).

This paper highlights about the role of XBRL in business reporting with reference to financial data, significant usage of XBRL applications, potentiality, users of XBRL in global and Indian context. It also discusses about the advantages to various stakeholders of business by using XBRL and its corporate perspective.

Key words: Financial reporting, XBRL, Software, accounting needs, financial statement.

*Doctoral Research Scholar, Department of Commerce and Business Administration, Acharya Nagarjuna University, Guntur, Andhra Pradesh.

E-mail: boon.sudheer@gmail.com, Mobile: +91-9030179246.

** Associate Professor, Department of Commerce and Business Administration, VRS & YRN PG College, Chirala, Andhra Pradesh.

E-mail: archanaadipudi@gmail.com, Mobile: +91-9247431812

*** Professor, Department of Business Administration, SRK Institute of Technology, Vijayawada, Andhra Pradesh.

E-mail: saikrupa1012mvbr@gmail.com, Mobile: +91-9177343483

Introduction

Financial reporting is a vital part of corporate governance. Every company will present its financial position to their stake holders. It involves in disclosing the financial information of the company over a specific period of time to the management and public which helps in decision making. Apart from decision making, the company also can analyze that whether it is making concern to the objectives and overall strategies of company in managing finances. Also indicates the financial health position of the organization. It will also ensure the investors that the company is running in a good position to make investments, if not alert them to switch over their investments.

Meaning

Extensible Business Reporting Language (XBRL) is a standard means of communicating information between business and on the internet. It provides a major benefit in preparation, analysis, communication of business information to all those who have to create, transmit, use or analyze such information. XBRL gave rise to the digital business reporting globally managed by the not for profit consortium, XBRL International. It is used across the world in more than 50 countries with millions of documents created every year. It helps the organizations to report their financial data more rapidly, accurately and digitally. Through this platform, the users can obtain data, share, analyze and adding values to the data easily.

Features of XBRL


- ❖ XBRL allows the creation of reusable, authoritative definitions, called taxonomies that capture the meaning contained in all of the reporting terms used in a business report, as well as the relationships between all of the terms.

“Changing Dimensions of Research in Accountancy & Finance in the Current Scenario”
One Day National Conference, Organised by Department of Accountancy, RADAY College, Bhandup

ISBN: 978-93-86251-99-2

**FINANCIAL MANAGEMENT PRACTICES OF WOMEN SHG'S: A
CASE STUDY OF W.G. DISTRICT, ANDHRA PRADESH**

Dr. M. Veerabhadra Rao

Professor -MBA,
SRK Institute of Technology, Vijayawada.

Abstract

The Self Help Group is considered as a viable organization of the rural poor particularly women, who are the marginalized groups of our society due socio-economic constraints in the rural areas, for delivering micro credit in order to undertake entrepreneurial activities. If adequate self-employment can be generated for women in compatible with their roles in home-keeping, it will help increasing their economic, social and physical well-beings and ultimately free them from the clutches of subjugation. Microfinance has garnered significant worldwide attention as being a successful tool to meet this substantial demand for financial services by low-income micro entrepreneurs. Though the access to credit has been seen as a motivational factor behind the formation of Self Help Groups (SHGs), SHGs have a potential that goes beyond mere economics of loan management. SHGs ensure people's participation in the development process as these are the grass root level democratic institutions of rural people. An examination of various financial management aspects of the Self Help Groups is very important in order to make recommendations to ensure long run sustainability of these groups. This paper explains the Sample respondents response about various financial management aspects practiced in their groups.

Keywords: Self Help Groups, Micro Finance, Group Loan, updating books..

Introduction

It has been estimated that there are more than five hundred million economically active poor people in the world operating micro enterprises and small businesses. Most of them do not have access to adequate financial services. Microfinance has garnered significant worldwide attention as being a successful tool to meet this substantial demand for financial services by low-income micro entrepreneurs. It has evolved over the past quarter century across India into various operating forms and to a varying degree of success.

International Conference on Entrepreneurship and Management



**PRINCIPAL
SRK INSTITUTE OF TECHNOLOGY
ENIKEPADU, VIJAYAWADA**

Adsorption Decolorization Technique of Textile Dyes from Textile Effluents

T. V. Nagalakshmi^{*1}, K. A. Emmanuel²

¹Department of chemistry, Laki Reddy Bali Reddy College of Engineering, Mylavaram -521230, A.P., India.

²Department of Chemistry, Sir C.R.Reddy Autonomous College, Eluru-534 007, A.P., India.

Abstract

Water pollution is the one of the major problem faced by whole over the world. Textile effluents sewage directly enters water streams without any treatment. The color and the non-biodegradable nature of the spent dyebaths constitute serious environmental problems and various deleterious effects caused by them. In the present study to prepare activated carbon from Jack fruit waste then the prepared activated carbon is characterized by using different analytical techniques. The pore structures of the resulting carbon were analyzed using N_2 adsorption, and scanning electron microscope (SEM). Thermal stability of carbon was analyzed by thermogravimetric analysis (TGA) and temperature programmed desorption (TPD) studies. The nature of functional groups present on surface of activated carbons was analyzed by FTIR and XPS techniques. Finally the prepared activated carbon applied to decolorization of carcinogenic textile dyes from textile effluents by adsorption technique.

Key words: - Jack fruit waste, TGA, FTIR, XPS, textile dyes

1.1 Introduction:

Water is the most precious, limited natural resource on this biosphere which is essential to the survival of all living beings. Discharge of effluents from industrial processes adds hazardous chemicals to surface and ground water. Textile industries consume large volumes of water, dyes and auxiliary chemicals for processing of textiles. Due to incomplete exhaustion and washing operations, 10-20% of dyes were discharged into effluents [1]. Many of these dyes were toxic and carcinogenic thus affecting the aquatic biota and human health [2]. The world population was expected to be increased by 35% by 2050 [3]. This population growth will increase the production of clothes, which in turn, increases fresh water use. So conserving water and reducing water pollution will become a challenging and essential task for textile industries.

The aim of this study is to prepare activated carbon with good surface area and to introduce different surface functional groups onto the prepared carbon. As surface functional groups play a vital role in attracting different types of toxic substances and give feasibility for their adsorptive removal [4].

2.1 Material and Methods:

2.1.1 Material:

Jack fruit waste was collected from state horticulture mission, Paderu, Visakhapatnam, A.P., India. The rind and pulp waste of fruit was used as precursor for preparation of activated carbon. The waste was washed with hot distilled water to remove dirt and dehydrated at 110°C until constant weight was obtained. This dried waste was then cut into small pieces

2.1.2 Preparation of activated carbon:

Jack fruit wastewas mixed with K_2CO_3 solution in different impregnation ratio 1. Impregnation ratio (IR) was given by weight of K_2CO_3 (g) in solution/weight of Jack fruit waste in grams (g). This mixture was dehydrated in an oven overnight at 110°C. The impregnated Jack fruit waste was carbonized in uniform