



ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE

Ashish Joshi¹, Sachin Murab², Aniruddha A. Kolpyakwar³

¹ Student, Department of Computer Engineering

² HOD, Department of Computer Engineering

³ Asst. Professor, Department of Computer Engineering

Jagadambha College of Engineering & Technology, Yavatmal, Maharashtra, India.

ABSTRACT:

In today's digital World, the data management systems are becoming an essential need for the organizations and departments. Also, the lot of preference is given to the portability of system. The educational organizations have huge data of students which could make a heavy task to manage it all. So, we introduced an advanced management system which will help to manage this bulk data. The scope of this system is not only limited to data management system, but also we are expanding its capability to make this data available to students as per their convenience and at their fingertips. This system contains a web based panel for department to manage data and a mobile app for students. The system makes it possible to maintain students' data like daily attendance reports, test mark reports, the fee details, mobile number, email, etc. The panel can be used by one or more authenticated staff members through their separate personal logins. The system introduces various options for admin like uploading number of records directly using data files, which helps to reduce the time consumption, notifying students about the various events in department and also notifying students about low attendance or low performance in exams. The students can use an android application to see the notices, managing their attendance, performance and they can update their personal details. They can also ask their queries about academics directly from the app and get the resolution. Thus, this application definitely helps to reduce the paperwork and increase the transparency between students and the department.

Keywords: digital portable systems, management systems, mobile application for institute, student information system





DATA ACQUISITION AND STORAGE SYSTEM FOR CORPORATE DATABASE USING BIG DATA

Vivek M Kumbhare¹, Sachin A. Murab², Parag D. Thakare³

¹ Student of M.E.(CSE) IInd year

²HOD, Department of Computer Science & Engineering

³Asst. Professor, Department of Computer Engineering

Jagadambha College of Engineering & Technology, Yavatmal, Maharashtra, India.

ABSTRACT:

Big data based data acquisition as well as database system plays an important role in the design of corporate data platform. Mostly big data frameworks have been integrated data compression and data serialization method. These methods cannot meet the importance of corporate production information management for requiring time-consuming and mass storage. Based on the existing big data frameworks, we propose an enhanced corporate big data platform in order to reduce the data processing time while requiring fewer data storage space. Specifically, focuses on evaluating the impact of multiple compression and serialization methods on the big data platform performance and tries to choose optimal compression and serialization method for the corporate data platform. Compared to the methods integrated in the past years, the experimental results showed the data compression time of the platform has been reduced by 73.9% with a less than 96% the size of data compressed, furthermore, the data serialization time has been reduced by 80.8%. With the increasing amount of data, it takes less time to compare with benchmark methods. Big amount of data handling is very crucial to maintain so it is necessary to perform active compression methodology on this.

Keywords: Corporate data, Big data, Data compression & Data serialization.

Dr. Hemant M. Baradkar
Principal

Jagadambha College of Engineering &
Technology, Am Road, Khatol, Yavatmal

Vivek M Kumbhare, Sachin A. Murab, Parag D. Thakare





SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING

Nikita.D. Chandure¹, Prof.Sachin.A.Murab²,
Prof.Aniruddha.A.Kolypakwar³, Prof.P.D.Thakre⁴

¹ Department of Computer Engineering

^{2,3,4} Department of Computer Engineering, Jagadambha College of Engineering & Technology,
Yavatmal, Maharashtra, India

ABSTRACT:

Now a days the use of the cloud computing is on the peak where it is at public, personal level. The cloud service providers (CSP) provide the cloud server to the its end users. To regulate the working of cloud service providers in a fair way the concept of the data audit is emerged for its user. The company which does the data audit is called as third party auditor(TPA). The third party has some rights while it can misused the data while auditing by selling it to third party. TPA audits to check the data integrity. TPA can data audit of a user or a group of users. To maintain the data privacy of data of data owner we are going to use along with the user signature is document signature i.e the signature on each data content of user. In this we are going to solve this problem by performing various auto signature generation techniques over each and every file upload or share document by user with privacy preserving over cloud.

Keywords: CSP, TPA, data audit, signature, data integrity ,etc.

[1] INTRODUCTION

Cloud computing is a type of internet based computing that provides shared computer processing resources and data to computers and other devices on demand, and provide the storage space to the users to store their documents, images, songs etc, can also retrieve whenever they want.

Cloud Service Providers (CSP) provide the services to the users and also manage an





SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING

Nikita.D. Chandure¹, Prof.Sachin.A.Murab²,
Prof.Aniruddha.A.Kolypakwar³, Prof.P.D.Thakre⁴

¹ Department of Computer Engineering

^{2,3,4} Department of Computer Engineering, Jagadamba College of Engineering & Technology,
Yavatmal, Maharashtra, India

ABSTRACT:

Now a days the use of the cloud computing is on the peak where it is at public, personal level. The cloud service providers (CSP) provide the cloud server to the its end users. To regulate the working of cloud service providers in a fair way the concept of the data audit is emerged for its user. The company which does the data audit is called as third party auditor(TPA). The third party has some rights while it can misused the data while auditing by selling it to third party. TPA audits to check the data integrity. TPA can data audit of a user or a group of users. To maintain the data privacy of data of data owner we are going to use along with the user signature is document signature i.e the signature on each data content of user. In this we are going to solve this problem by performing various auto signature generation techniques over each and every file upload or share document by user with privacy preserving over cloud.

Keywords: CSP, TPA, data audit, signature, data integrity ,etc.

[1] INTRODUCTION

Cloud computing is a type of internet based computing that provides shared computer processing resources and data to computers and other devices on demand, and provide the storage space to the users to store their documents, images, songs etc, can also retrieve whenever they want.

Cloud Service Providers (CSP) provide the services to the users and also manage an

Nikita.D.Chandure, Prof.Sachin.A.Murab, Prof.Aniruddha.A.Kolypakwar and
Prof.P.D.Thakre





IOT BASED IRRIGATION SYSTEM USING ARDUINO

Rohini H. Chutki, Pratiksha G. Mamulkar, Bhavna S. Mahalle, Bhupendra S. Rathod, Ram

Kumar Solanki

Scholar, Professor

Department of Computer Engineering, Jagadambha College of Engineering & Technology, Yavatmal,
Maharashtra, India

gudduchatki0@gmail.com , P.mamulkr05@gmail.com,

mahallebhavna@gmail.com, dilkhushrathod111@gmail.com, hr.coet@gmail.com

ABSTRACT:

IOT plays an Important role in many field ,one of that agriculture is one field. Internet of Things is a milestone in the evolution of agriculture technology. In India, Agriculture is most important occupation for indian families.agriculture is adopted by many indian farmers. agriculture play important role for development in food production .India is one of the Scarce water resources in the world. Water is main resource for Agriculture.Irrigation is one method to supply water but in some cases, there will be lot of water wastage.In this regard to save water and time we have proposed title of project Automatic irrigation system using IOT based on arduino .Moisture sensor is used to take sensor reading of soil moisture, decision makin is controlled by user by using microcontroller.

Keyword: soil moisture sensor,microcontroller,IOT and Arduino.

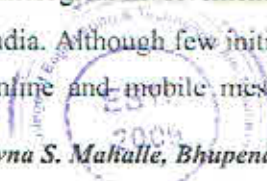
[1] INTRODUCTION

Agriculture is the major source of the largest population in India and is major contributor to Indian economy. However, technological involvement and its usability have to be grown still and cultivated for agro sector in India. Although few initiatives have also been taken by the Indian Government for providing online and mobile messaging services to farmers

Dr. Hemant M. Sanyal
Principal

Rohini H. Chutki, Pratiksha G. Mamulkar, Bhavna S. Mahalle, Bhupendra S. Rathod, Ram Kumar Solanki 1

Jagadambha College of Engineering &
Technology, Amli Road, Yavatmal, Maharashtra





e-Learning through LMS: New Era of Learning

Karishma P. Jaiswal¹, Prof A. A. Kolpyakwar²

¹Department of Computer Engineering ,JCOET,Yavatmal

² Assistant Professor, Department of Computer Engineering JCOET,Yavatmal

ABSTRACT:

E-learning is learning with ICT and digital media through guided participation in and across various socio-material and cultural practices in everyday life. People learn with ICT and digital media as an integrated aspect of using ICT and digital media in the everyday course of living – whether in school, at home or at work. E-learning is enacted in and enacts practices. Through these enactments, e-learning becomes both various ways to become more knowing about the world and to take part (participate) in the world. E-learning from this perspective must be viewed as associated with and not separated from practices of producing, spreading knowledge about, as well as using ICT and digital media concretely in everyday living. Following the implementation of Information and Communication Technologies in numerous segments of life, including the education system, the methods of teaching have significantly changed. Information and Communication Technologies have influenced the educational system which adapted to those trends and to the newer generations that spent their childhood playing with gadgets and learning at the same time. This is how the concept of e-learning and game-based learning emerged. Viewed in this way e-learning becomes an emergent, relational as well as empirically grounded concept that is formed through – and hence becomes an emerging effect of – everyday practices. In this paper, a very traditional learning method is discussed and some new methods with the integration of modern technology have been discussed. Also, in this paper, MOOC's that are designed as a collection of videos and other study materials are discussed.

Keywords: *e-learning system , ICT, digital media , MOOC, adaptive learning.*



Karishma P. Jaiswal , Prof A. A. Kolpyakwar

Dr. Hemant M. Barakkar

Principal,

Nadambha College of Engineering &

Yavatmal, Maharashtra



SECURE THIRD PARTY AUDITING OF USERS IN CLOUD COMPUTING

Nikita.D. Chandure¹, Prof.Sachin.A.Murab²,
Prof.Aniruddha.A.Kolypakwar³, Prof.P.D.Thakre⁴

¹ Department of Computer Engineering

^{2,3,4} Department of Computer Engineering, Jagadambha College of Engineering & Technology,
Yavatmal, Maharashtra, India

ABSTRACT:

Now a days the use of the cloud computing is on the peak where it is at public, personal level. The cloud service providers (CSP) provide the cloud server to the its end users. To regulate the working of cloud service providers in a fair way the concept of the data audit is emerged for its user. The company which does the data audit is called as third party auditor(TPA). The third party has some rights while it can misused the data while auditing by selling it to third party. TPA audits to check the data integrity. TPA can data audit of a user or a group of users. To maintain the data privacy of data of data owner we are going to use along with the user signature is document signature i.e the signature on each data content of user. In this we are going to solve this problem by performing various auto signature generation techniques over each and every file upload or share document by user with privacy preserving over cloud.

Keywords: CSP, TPA, data audit, signature, data integrity ,etc.

[1] INTRODUCTION

Cloud computing is a type of internet based computing that provides shared computer processing resources and data to computers and other devices on demand, and provide the storage space to the users to store their documents, images, songs etc. can also retrieve whenever they want.

Cloud Service Providers (CSP) provide the services to the users and also manage an


Dr. Nirmant M. Barathkar
Principal

Jagadambha College of Engineering & Technology, Arni Road, Kinhi, Yavatmal
Nikita.D.Chandure, Prof.Sachin.A.Murab, Prof.Aniruddha.A.Kolypakwar and
Prof.P.D.Thakre





ANDROID BASED STUDENT INFORMATION SYSTEM FOR EDUCATIONAL INSTITUTE

Ashish Joshi¹, Sachin Murab², Aniruddha A. Kolpyakwar³

¹ Student, Department of Computer Engineering

² HOD, Department of Computer Engineering

³ Asst. Professor, Department of Computer Engineering

Jagadambha College of Engineering & Technology, Yavatmal, Maharashtra, India.

ABSTRACT:

In today's digital World, the data management systems are becoming an essential need for the organizations and departments. Also, the lot of preference is given to the portability of system. The educational organizations have huge data of students which could make a heavy task to manage it all. So, we introduced an advanced management system which will help to manage this hulk data. The scope of this system is not only limited to data management system, but also we are expanding its capability to make this data available to students as per their convenience and at their fingertips. This system contains a web based panel for department to manage data and a mobile app for students. The system makes it possible to maintain students' data like daily attendance reports, test mark reports, the fee details, mobile number, email, etc. The panel can be used by one or more authenticated staff members through their separate personal logins. The system introduces various options for admin like uploading number of records directly using data files, which helps to reduce the time consumption, notifying students about the various events in department and also notifying students about low attendance or low performance in exams. The students can use an android application to see the notices, managing their attendance, performance and they can update their personal details. They can also ask their queries about academics directly from the app and get the resolution. Thus, this application definitely helps to reduce the paperwork and increase the transparency between students and the department.

Keywords: digital portable systems, management systems, mobile application for institute, student information system

Dr. Hemant M. Barjodekar
Principal

Jagadambha College of Engineering &
Technology, Arni Road, Kintli, Yavatmal

Ashish Joshi, Sachin Murab and Aniruddha Kolpyakwar





DATA ACQUISITION AND STORAGE SYSTEM FOR CORPORATE DATABASE USING BIG DATA

Vivek M Kumbhare¹, Sachin A. Murab², Parag D. Thakare³

¹ Student of M.E.(CSE) IInd year

²HOD, Department of Computer Science & Engineering

³Asst. Professor, Department of Computer Engineering

Jagadamba College of Engineering & Technology, Yavatmal, Maharashtra, India.

ABSTRACT:

Big data based data acquisition as well as database system plays an important role in the design of corporate data platform. Mostly big data frameworks have been integrated data compression and data serialization method. These methods cannot meet the importance of corporate production information management for requiring time-consuming and mass storage. Based on the existing big data frameworks, we propose an enhanced corporate big data platform in order to reduce the data processing time while requiring fewer data storage space. Specifically, focuses on evaluating the impact of multiple compression and serialization methods on the big data platform performance and tries to choose optimal compression and serialization method for the corporate data platform. Compared to the methods integrated in the past years, the experimental results showed the data compression time of the platform has been reduced by 73.9% with a less than 96% the size of data compressed, furthermore, the data serialization time has been reduced by 80.8%. With the increasing amount of data, it takes less time to compare with benchmark methods. Big amount of data handling is very crucial to maintain so it is necessary to perform active compression methodology on this.

Keywords: Corporate data, Big data, Data compression & Data serialization.


Dr. Nemant M. Barakar
Principal
Jagadamba College of Engineering &
Technology, Arni Road, Kinkh, Yavatmal

Vivek M Kumbhare, Sachin A. Murab, Parag D. Thakare





SURVEILLANCE USING FACIAL RECOGNITION

Jay R. Bhagat¹, Santoshi G. Tondare², Pallavi M. Atram³, Rushikesh D. Nachane⁴,
Nitin R. Upadhyay⁵, Kiran L. Chavhan⁶

¹Student of Department of Computer Engineering J.C.E.T. Yavatmal, India

²Student of Department of Computer Engineering J.C.E.T. Yavatmal, India

³Student of Department of Computer Engineering J.C.E.T. Yavatmal, India

⁴Student of Department of Computer Engineering J.C.E.T. Yavatmal, India

⁵Student of Department of Computer Engineering J.C.E.T. Yavatmal, India

⁶Faculty at Department of Computer Engineering J.C.E.T. Yavatmal, India

ABSTRACT:

In the coming era of digitization the human living nature is going to be much more depends on the digital appliances. And then there comes the part that plays a key role in the when using these digital machines is the security. In our common day life we are using some of the most used and not likely to be secure ways for the security purpose some of them are passwords, biometric scan, one time password (OTP) and retinal scan. But as the computing power grows and techniques are going to be proposed these methods are not going to be the as secure methods to keep us and the data and our self. For that purpose we need to develop some new way to keep surveillance and security i.e. the facial recognition technology which is the consider to be most secure and probably reliable of all of above. In this paper we have develop and given the whole plan of the facial recognition technology. The use of this technique can make the surveillance much secure than it was it has many application areas we can apply this technology in most of the available security techniques.

Keywords: digitization, data, secure, machine, surveillance, computing, application



Jay Bhagat, Santoshi Tondare, Rushikesh Nachane, Pallavi Atram, Nitin Upadhyay, Kiran L. Chavhan


Dr. Hemant M. Baradkar
Principal
Agadambha College of Engineering &
Technology, Warananagar, Dist. Solapur, Maharashtra



ARTIFICIAL INTELLIGENCE BASED EDGE COMPUTING PLATFORM FOR INDUSTRIAL APPLICATIONS

Ashwini P. Thokale¹, Prof.S.A. Murab²

¹Department of Computer Science and Engineering

²Department of Computer Science and Engineering Jagadambha College of Engineering & Technology,
Yavatmal, Maharashtra, India

ABSTRACT:

Cloud computing has limitations such as computational complexity and delay. Edge computing is efficient and has fair resource allocation such as power and battery lifetime in internet of things based industrial applications. Co-ordination of AI at the edge will remarkably improve the range and computational speed of IoT based devices in industries. To solve the problem of short battery lifetime, and delay, intolerant portable devices we propose in this paper a forward central dynamic and available approach (FCDA) by adapting running time of sensing and transmission processes in IoT based portable devices. A system level battery model by evaluating energy dissipation. A data reliability model for edge artificial intelligence based IoT devices.

Keywords: Industrial IoT, Edge Computing, AI, FCDA, Battery Model.

[1] INTRODUCTION



Ashwini P. Thokale and S.A. Murab

1

Dr. Hemant M. Sawadekar
Principal
Jagadambha College of Engineering &
Technology, Yavatmal, Maharashtra, India



USED BOOK PLATFORM

S.A Murab, Ashiwini Bhele, Monika Jaiswal, Shamal Thakre, The Nachiket Pisal

Jagadambha college of Engineering and Technology
Department of computer Engineering

Abstract- An online bookstore software projects that acts as a central database containing various books in stock along with their title, author and cost. This project is a website that acts as a central bookstore. This web project is developed using angular js, html as the front end and python, mysql as a back-end. The mysql database stores various book related details. A user visiting the website can see a wide range of books arranged in respective categories. The user may select desired book and view its price. The user may even search for specific books on the website. Once the user selects a book, he then has to fill in a form and the book is booked for the user. If user wants to sell a book he can add his details along with the details of books to be purchased. And our main intantation behind this project is to provide the books free to the students who are in need i.e poor.

Index Terms-



S.A Murab, Ashiwini Bhele, Monika Jaiswal, Shamal Thakre, The Nachiket Pisal

I. INTRODUCTION

E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business.

E-commerce shops have become part of our daily lives. Technological advancement has made it possible for people to sit in the convenience of their homes and still shop online without going to a physical shop.

An online bookstore software projects that acts as a central database containing various books in stock along with their title, author and cost. This project is a website and can be android app that acts as a central bookstore. This web project is developed using angular js, html as the front end and python, mysql as a back-end. The mysql database stores various book related details. A user visiting the website can see a wide range of old or new books arranged in respective categories. The user may select desired book



DEVELOPMENT OF ARCHITECTURE IN IMAGE PROCESSING USING STEGANOGRAPHY AND CRYPTOGRAPHY

Pawar Sukhvinderkaur Sevasingh

Anirudha Kolpyakwar(guide)

Department Of Computer Science And Engineering, Jcoet, Yavatmal, Maharashtra, India

Abstract-Steganography is the art and science of communicating in a way which hides the existence of the communication. In contrast to cryptography, where the enemy is allowed to detect, intercept and modify messages without being able to violate certain security premises guaranteed by a cryptosystem, the goal of steganography is to hide messages inside other harmless messages in a way that does not allow any enemy to even detect that there is a second secret message present." technique of hiding secret data within an ordinary, non-secret, file or message in order to avoid detection; the secret data is then extracted at its destination. The use of steganography can be combined with encryption as an extra step for hiding or protecting data. The word steganography itself originated in Greece and means "covered writing". during important historic events of our past, steganography was often used to trade personal secrets, plan covert operations and send political espionage information cryptography is associated with the process of converting ordinary text into unintelligible text and vice-versa. It is a method of storing and transmitting data in a particular form so that only those for whom it is intended can read and process it. cryptography not only protects data

from theft or alteration, but can also be used for user authentication. Thus preventing unauthorized access to information. The prefix "crypt" means "hidden" and suffix graphy means "writing". In Cryptography the techniques which are used to protect information are obtained from mathematical concepts and a set of rule based calculations known as algorithms to convert messages in ways that make it hard to decode it. These algorithms are used for cryptographic key generation, digital signing, verification to protect data privacy, web browsing on internet and to protect confidential transactions such as credit card and debit card transactions.

Keywords: Steganography, Cryptography, suffix, prefix, cryptographic key, digital signing.

1. INTRODUCTION

In computer science, digital image processing is the use of a digital computer to process digital images through algorithms. As a subcategory or field of digital signal processing, digital image processing has many advantages over analog image

Dr. Hemant M. Bapat
Principal
Madamhikhe College of Engineering
Technology, Amravati

Pawar Sukhvinderkaur Sevasingh And Anirudha Kolpyakwar





MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE

Devika S.Gandhi¹, Prof.S.A.Murab², Prof.P.D.Thakare³
¹Department of Computer Engineering

²Head Of Department of Computer Engineering, ³Professor Of Department Of Computer Engineering
Jagdambha College Of Engineering And Technology Yavatmal, India

ABSTRACT:

Multiple clouds are used to store important data by using many advanced technology. Separated data over different cloud storage providers (CSPs) automatically provides a certain degree of data leakage control, so that no single point of attack can leak all the data. However, unplanned distribution of data chunks can lead to high data disclosure even while using multiple clouds. An important data leakage problem caused by unplanned data distribution in multicloud storage services. Then, we present StoreSim, an data leakage aware storage system in multicloud. StoreSim aims to store similar data on the same cloud, thus minimizing the user's data leakage across multiple clouds. We design an approximate algorithm to efficiently generate similarity preserving signatures for data chunks based on MinHash and Bloom filter, and also design a function to compute the data leakage based on these signatures. Next, an effective storage plan generation algorithm based on clustering for distributing data chunks with minimum data leakage across the multiple clouds. Finally, evaluate our scheme using two real datasets from Wikipedia and GitHub. We show that our scheme can reduce the data leakage by up to 60% compared to unplanned placement. Furthermore, our analysis on system attackability demonstrates that our scheme makes attacks on data more complex. Data security plays an important role in cloud in which lot of data is get shuffled and became unsecured while sharing to TPA or other users.

Keywords: Multicloud Storage, Data leakage, system attackability





AGRICULTURE PRODUCT SELLING SYSTEM FOR FARMERS

1.Nikhil P.Wagde, 2. Aarti A. Giri, 3.Prerana N. Bhagat, 4.Payal S. Deokate, 5.Prachi V. Kale

'Prof. A. M. Dhore'

Department Of Computer Engineering, Jagadamba Collage Of Engineering & Techonology, Yavatmal,
Maharashtra, India.

1.nikhilwagde@gmail.com, 2. aarti23396@gmail.com, 3.bhagatprerana34@gmail.com,
4.payaldeokate123@gmail.com, 5.Prachikaler123@gmail.com

Abstract:

Farming is the Prime Occupation in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Advanced techniques and the Automated machines which are leading the world to new heights, has been lagging when it is concerned to Farming, either the lack of awareness of the advanced facilities or the unavailability leads to poverty in Farming. Even after all the hard work and the production done by the farmers, in today's market the farmers are cheated by the Agents, leading to poverty. Agriculture Product selling will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website. The site will guide the farmers in all the aspects, the current market rate of different products, the total sale and the profit for the sold products, access to the new farming techniques through e-learning and centralize approach to view different government's agriculture schemes including the compensation schemes for farming.

Keyword: Website, Android, MySQL, SMS facility.

I. INTRODUCTION

Agriculture product selling system the farmer is web Application which will help the farmers to perform the Agro marketing leading to achieve success and increased In their standard of living; It can be good marketing facility for them. At initial stage farmer will register. After completing of registration, Farmer will have a unique ID for logging.

Nikhil P.Wagde, Aarti A. Giri, Prerana N. Bhagat, Payal S. Deokate, Prachi V. Kale And Prof. A. M. Dhore
Dr. Hemant M. Baradkar
Jagadamba College of Engineering & Technology, Arni Road, Kirti, Maharashtra



MINIMIZING INFORMATION LEAKAGE IN MULTICLOUD STORAGE SERVICE

Devika S.Gandhi¹, Prof.S.A.Murab², Prof.P.D.Thakare³

¹Department of Computer Engineering

²Head Of Department of Computer Engineering, ³Professor Of Department Of Computer Engineering
Jagdambha College Of Engineering And Technology Yavatmal, India.

ABSTRACT:

Multiple clouds are used to store important data by using many advanced technology. Separated data over different cloud storage providers (CSPs) automatically provides a certain degree of data leakage control, so that no single point of attack can leak all the data. However, unplanned distribution of data chunks can lead to high data disclosure even while using multiple clouds. An important data leakage problem caused by unplanned data distribution in multicloud storage services. Then, we present StoreSim, an data leakage aware storage system in multicloud. StoreSim aims to store similar data on the same cloud, thus minimizing the user's data leakage across multiple clouds. We design an approximate algorithm to efficiently generate similarity preserving signatures for data chunks based on MinHash and Bloom filter, and also design a function to compute the data leakage based on these signatures. Next, an effective storage plan generation algorithm based on clustering for distributing data chunks with minimum data leakage across the multiple clouds. Finally, evaluate our scheme using two real datasets from Wikipedia and GitHub. We show that our scheme can reduce the data leakage by up to 60% compared to unplanned placement. Furthermore, our analysis on system attackability demonstrates that our scheme makes attacks on data more complex. Data security plays an important role in cloud in which lot of data is get shuffled and became unsecured while sharing to TPA or other users.

Keywords: Multicloud Storage, Data leakage, system attackability





Design and Analysis of Chassis with Loading Condition and with Weight Optimization Solution

S. R. Harne¹, K. N. Kalaspurkar², A. M. Shende³

¹Student, M.E., ^{2,3}Assistant Professor, Department of Mechanical Engineering, Jagadamba College of Engineering & Technology, Yavatmal, Maharashtra, India

Abstract: The chassis frame is an important part in a Vehicle and it carries the whole load acting on the truck as well as different parts of the automobile. So it must be strong enough to resist the shock, twist, vibration and other stresses. Maximum stress and maximum deflection are important criteria for design of the chassis. There are several types of chassis frames available and they are much strength full. But the direct major or minor impacts on chassis frames in accidental cases may cause the dynamic unbalancing, chassis misalignment and other problems which affect the vehicle performance as well as the appearance. Due to large and sudden jerks during running conditions may create the vibrations inside the chassis which cause the prior failure in chassis members. The objective of this paper is to improve the design of chassis by using different cross sections and material. Also the weight of chassis is suggested to enhance the vehicle performance. For this purpose entire design work is carried out in CATIA V5R19 software. Both cross sections (C section and I sections are considered) with different materials are analysed for stresses and deformation in ANSYS 14.5 software. Based on the comparative study of obtained results the best chassis cross section and design will be suggested.

Keywords: Heavy duty chassis, FEA of Chassis, Structural behavior of Chassis, Design of Chassis, Chassis Analysis, Deformation analysis of Chassis, Design improvement in chassis, Weight Optimization, ANSYS 14.5

I. INTRODUCTION TO HEAVY DUTY CHASSIS

There are many industrial sectors using this Vehicle for their transportations such as the logistics, agricultures, factories and other industries. If any of the excitation frequencies coincides with the natural frequencies of the Vehicle chassis, then resonance phenomenon occurs. The chassis will undergo dangerously large oscillations, which may lead to excessive deflection and failure. The vibration of the chassis will also cause high stress concentrations at certain locations, fatigue of the structure, loosening of mechanical joints, creation of noise and vehicle discomfort. To solve these problems, study on the truck chassis dynamic characteristics is thus essential. The torsion stiffness and modal parameters were determined experimentally and then used to validate the finite element model and finally the chassis was optimized to increase the structural stiffness. It was noted that the torsion mode dominated the natural frequency. A chassis consists of an internal framework that supports a man-made object in its construction and use. It is analogous to an animal's skeleton. An example of a chassis is the under part of a motor vehicle, consisting of the frame (on which the body is mounted). If the running gear such as wheels and transmission, and sometimes even the driver's seat, are included then the assembly is described as a rolling chassis.

II. OBJECTIVES OF STUDY

- Virtual Design of C-section and I-section Chassis.
- Determination of Stress and deformation in chassis frame.
- Study of Finite Element Method and its applications.
- Study of CAD and FEA Package.
- Comparative study of chassis with different materials and cross sections.

III. OUTCOMES FROM LITERATURE SURVEY

- Vibrations due to sudden jerks are to be studied well. Focus needed on vibrations.
- FEA Analysis is best suitable method for chassis experimentation and testing.
- Stresses are induced in the rear members of chassis.
- Different chassis materials are studied rarely.
- Combination of structural, vibration and shape optimization analysis will provide deep study of chassis deformation and stresses.

Real Time Vehicle Number Plate Recognition by using Raspberry Pi3

Tanvi Kaipilyawar¹, Yashashree Ade², Shivani Utale³, Neha Wagh¹, R. S. Sawant¹

^{1,2,3,4}Student, Department of Computer Engineering, Jagadambha College of Engineering & Technology, Yavatmal, India

⁵Professor, Department of Computer Engineering, Jagadambha College of Engineering & Technology, Yavatmal, India

Abstract: The number plate Recognition system for vehicles plays very important role for authentication of specific vehicle. The system also has lot of commercial uses. As number plate having different formats and variety of fonts present over the vehicle. In this dissertation, a simple, smart, efficient and cost effective system can be implemented using OpenALPR Cloud, the system would be connected with this cloud. Thus the system works on real time inputs. The system make use of raspberry pi3, pi camera and PIR sensor as a hardware tools. Here we have use a Node-RED which is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the internet of things. The system uses a Passive infrared sensor which detects the number plate of vehicle then pi camera captures image and send it to an OpenALPR Cloud which further authenticates the vehicle.

Keywords: Authentication, Raspberry pi3, OpenALPR, Node-RED.

1. Introduction

The automatic Number plate recognition was invented in 1976 at the police scientific development branch in the United Kingdoms. The system is capable of determining if the vehicle is registered or not, and then informing the authority regarding the status of vehicle. As Number plate is a unique identification of a specific vehicle. Number plate recognition has been applied in enormous applications.

Thus the system with Automatic Number plate recognition is a combination of integrated hardware and software that will not need of humans to do it. The purpose of this paper is to develop and implement a smart system for optimum use of information and communication technology. The main goal of system is to recognize the number plate of vehicle and to allow the specific vehicle only in an organization.

2. Literature survey

This paper focuses on security of parking at any premises. The implementation of Vehicle number plate recognition was achieved using Raspberry pi [1]. The main objective of this project is to design and develop an Automatic registration number of the vehicles automatically without any human

intervention [2]. This paper is helpful for the identification and detection of vehicle number plate using raspberry pi2 [3].

3. Proposed System

The proposed system will be comprising of Raspberry Pi3 processor. It will be a kind of heart of the project. This onboard computer is able to effectively as well as efficiently communicate with the output and input modules being used. The Raspberry pi is a credit-card sized single board computer which was developed in UK by the Raspberry pi foundation. Here, the operating system for the detection of vehicle number plate using Raspberry pi3 is the Raspbian JC. For the recognition purpose, Raspberry pi modelB+ is used. Raspberry pi is a SOC (system on chip) device has inbuilt 1.2 GHz BCM 2837 Arm Cortex processor. The arm cortex processor is of 64 bits. Raspberry pi has 1GB Ram. The average power is ranging from 1.5 to 6.7 watt. Raspberry pi has 40 digital input output pins out of which 27 pins are GPIO (General Purpose Input Output). The operating system is installed in external SD card for booting and storage purposes.

As in many industries, they do not allow the unknown vehicles for the security issues. Their security is very important for industries thus a system is required to help for recognize of unknown vehicle on gate. Recognizing vehicle number plates is a difficult but much required system for today's world. This is very useful in the places like automating toll booths, automated signal breakers identification and identifying traffic rule breakers. Thus we propose a Raspberry Pi based vehicle number plate recognition system which automatically recognizes number plates of vehicles.

The system uses a camera circuit interfaced to a Raspberry pi. The system processes incoming camera footage to find or detect any trace of number plates. On placing a number plate in front of the camera, it further processes the camera input, extracts the number plate part from the provided image. Processes the extracted image using ALPR and extracts the number plate number from given input. Hence we put forward a vehicle number plate recognition system using Raspberry Pi3.

The camera plays important role in capturing images of


Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering &
Technology, Arni Road, Khami, Yavatmal



Design & Analysis of Synchronous Reference Frame Based Shunt Active Power Filter Using Matlab Simulink

Chetan Haribhau Kidile¹, Prof. Rajendra M. Bhombhe², Prof. Praful Kumbhare³

¹Post Graduate Student

Gurunanak Institute of Engineering & Technology,
Nagpur, Maharashtra, India

^{2,3}Assistant Professor

Gurunanak Institute of Engineering & Technology,
Nagpur, Maharashtra, India

Abstract – This paper presents the implementations of a new control algorithm for a three-phase shunt active power filter to regulate load terminal voltage, eliminate harmonics, and improve the power factor in systems with an uncontrolled rectifier and an AC controller as the non-linear loads. Different methods are used to control the active power filters. The reference current to be detected from the load current and processed by the active power filter controller is obtained from control algorithms, of Synchronous Reference Frame Theory (SRF Theory). The voltage source inverter (VSI) is the core of an active power filter. The system is modeled and simulated using MATLAB/Simulink simulation package with a shunt active power filter to compensate for the harmonics current injected by the loads.

Keywords- Shunt Active Power Filter, Voltage Source Inverter, Current controller, Non linear load, Synchronous Reference Frame, Total Harmonic Distortion.

INTRODUCTION

The increasing number of power electronics based equipment has gravely impacted the quality of electric power supply. Harmonics are caused by both industrial and domestic loads. At the same time, much of the equipment causing the disturbance is quite sensitive to the harmonics themselves. A shunt active power filter (SAPF) is a device that is connected in parallel to a

group of loads. The shunt active power filter cancels the reactive and harmonic currents drawn by the load so as to make the supply current sinusoidal. Thus, the resulting total current drawn from the ac main becomes sinusoidal. Shunt active power filters is the device which generates the same amount of harmonic as generated by the load but 180° phase shifted. The advantage of active filtering is that it automatically adapts to changes in the network and load fluctuations. They can compensate for several harmonic orders, and are not affected by major changes in network characteristics, eliminating the risk of resonance between the filter and network impedances. Another advantage is that they take up very little space compared to traditional passive compensators. One of the key issues for a proper implementation of an active filter is to use a good control algorithm. Control strategies are applied to active power filters for determining the reference compensation currents to maintain sinusoidal source currents supplied to nonlinear loads according to IEEE-519 standards. The design of an active power filter becomes a challenging task for meeting the strict requirements of critical loads. The use of computers in the 978-1-4799-3421-8/14/\$31.00 ©2014 IEEE design stage helps in the better understanding of the circuit behavior, selection of component ratings; design of closed loop controllers, and also to arrive at optimum solutions. Simulation is a powerful way to reduce development time and ensure the proper fulfillment of critical steps. This paper proposes a model of a three-phase three-wire shunt active power filter based on synchronous reference frame control strategy for the extraction of reference

Efficient Kinetic Energy Recovery System for Vehicle

Vineet Rajesh Shriwas¹ Prof. Pratik H. Rathod²

¹Student ²Assistant Professor

^{1,2}Department of Mechanical Engineering

^{1,2}Jagadambha College of Engineering and Technology Yavatmal, Maharashtra, India

Abstract – KERS is generally used to accelerate the running power of the four wheel drive in respective to the engine speed. This system is generally works on energy absorption principal when then vehicle taking a turn as we know there was a frictional contact was occurred in between the four wheel drive and road surface hence the there will be large lost of kinetic energy which is then dissipated as a heat to the atmosphere to utilize this lost of kinetic energy this system is used which covert this lost of kinetic energy into vehicle acceleration.

Keywords: Energy, Acceleration, Reservoir, Efficiency

power then same energy is used to accelerate the vehicle at an instantaneous point hence works on principle on acceleration with retarding speed. It serves and provide a path to utilize waste heat means it also work for utilizing the illegally dissipating energy this device recover kinetic energy presented in the waste heat created by the vehicle generally during braking process. UP to 88 BHM for 8.8 sec or 500 KJ of waste in power was stored. KERS builders, Flybrid systems demonstrated a working F1 device at the auto sport international show. But many F1 teams opposed it at it was quiet expensive so it was banned in 2010 season. At 2011 North American international auto show, Porsche 918 concept car which uses a flywheel based KERS. A motorcycle racing company KTM secretly tested this system in their vehicle but They were banned as that system was illegal and unstable for motorcycles.

I. INTRODUCTION

KERS is the inbuilt system that helps to utilize waste heat and kinetic energy during deceleration is first converted into

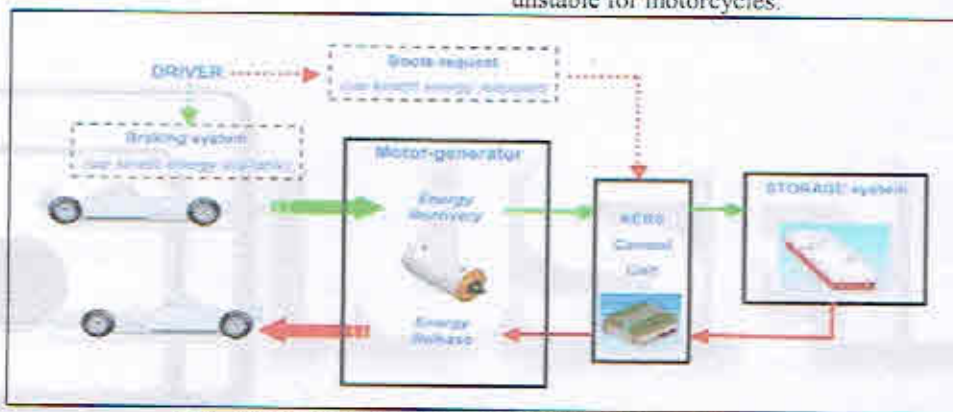


Fig. 1: Kinetic Energy Recovery System Block Diagram

II. WORKING PRINCIPLE

KERS is works on the principle that it stores the kinetic energy during deceleration of the vehicle and same lost of kinetic energy is then converted into power to accelerate the vehicle. Generally when the vehicle taking a turn a driver applies a break and kinetic energy is lost due to friction between the road surface and a wheel this lost of energy is used to boots vehicle speed. The standard KERS system

works on the basis of two basic cycle charge cycle and boots cycle during charge cycle when the speed of the vehicle is reduces as it takes a turns an actuator unit absorb the waste heat from the rear brakes this stored energy is then passed through the central possessing unit and into storage unit. This units are positioned centrally to maintained the position, balancing and ground clearance of the vehicle.

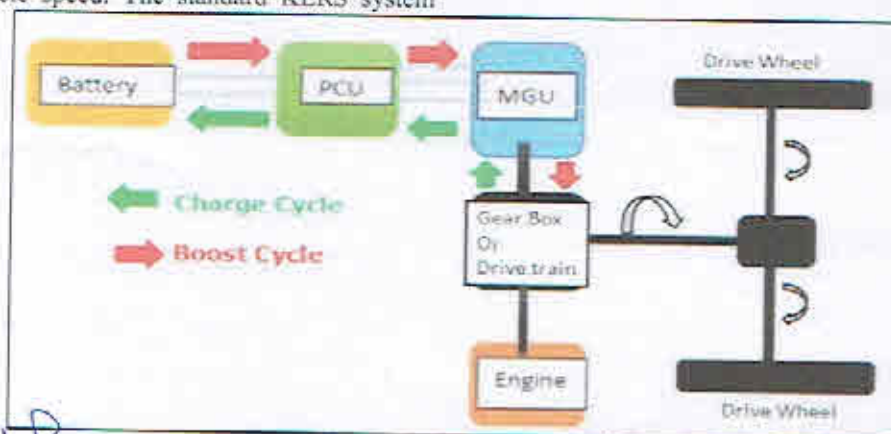


Fig. 2: working Principle

Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering & Technology, Arni Road, Yavatmal



Inventory Management System

Prof.R.S.Sawant¹, Prof. A.A. Kolpyakwar², Prof.S.A.Murab³, Prof.R.V.Deshmukh⁴, Prof. R. M. Raut⁵


^{1,2,3,4,5}Assistant Professor, Department Of Computer Engineering, Jagadambha College of Engineering and Technology Yavatmal.

Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

1. INTRODUCTION:

Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments

History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Body building, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering &
Technology, Arni Road, Kinkri, Yavatmal



Inventory Management System

Prof.R.S.Sawant¹, Prof. A.A. Kolpyakwar², Prof.S.A.Murab³, Prof.R.V.Deshmukh⁴, Prof. R. M. Raut⁵

^{1,2,3,4,5} Assistant Professor, Department Of Computer Engineering, Jagadambha College of Engineering and Technology Yavatmal.

Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

1. INTRODUCTION:

Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments

History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Body building, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering &
Technology, Amravati Road, Yavatmal



Inventory Management System

Prof.R.S.Sawant¹, Prof. A.A. Kolpyakwar², Prof.S.A.Murab³, Prof.R.V.Deshmukh⁴, Prof. R. M. Raut⁵

^{1,2,3,4,5} Assistant Professor, Department Of Computer Engineering, Jagadambha College of Engineering and Technology Yavatmal.

Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

1. INTRODUCTION:

Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments.

History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Bodybuilding, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering &
Technology, Arni Road, Kinli, Yavatmal



Inventory Management System

Prof.R.S.Sawant¹, Prof. A.A. Kolpyakwar², Prof.S.A.Murab³, Prof.R.V.Deshmukh⁴, Prof. R. M. Raut⁵

^{1,2,3,4,5} Assistant Professor, Department Of Computer Engineering, Jagadambha College of Engineering and Technology Yavatmal.

Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

1. INTRODUCTION:

Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments.

History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Body building, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


Dr. Hemant M. Saradkar
Principal
Jagadambha College of Engineering &
Technology, Arni Road, Kinhi, Yavatmal



Inventory Management System

Prof.R.S.Sawant¹, Prof. A.A. Kolpyakwar², Prof.S.A.Murab³, Prof.R.V.Deshmukh⁴, Prof. R. M. Raut⁵

^{1,2,3,4,5} Assistant Professor, Department Of Computer Engineering, Jagadambha College of Engineering and Technology Yavatmal.

Abstract: Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers.

1. INTRODUCTION:

Inventory management and supply chain management are the backbone of any business operations. With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In any business or organization, all functions are interlinked and connected to each other and are often overlapping. Some key aspects like supply chain management, logistics and inventory form the backbone of the business delivery function. Therefore, these functions are extremely important to marketing managers as well as finance controllers. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments.

History: MCIE Group commenced its commercial production at Nasik, Maharashtra, India in the year 1984 as Sheet Metal Automotive Component manufacturing unit. Over the years the Group has broadened its product range to sheet metal stampings and its assemblies like Load Body (Cargo), Door Assemblies, Floor Assemblies, Machined Components like Salisbury Tube Assemblies, Banjo Beam Assembly and also Bus Bodybuilding, Tipper manufacturing and Roll forming. Innovation has been on-going efforts at MCIE Group & as a result they have developed the competency to be a Product Development Group providing the "Art to Part" Solutions to their Customers. Effective Mapping of Customer requirement and adhering to the Voice of Customer thereby paving a way to Total Customer Satisfaction and Delight is the major focus of the entire organization. This undoubtedly makes them a proud supplier with a strong foothold on the market dynamics and thereby earning the goodwill of our customers to the hilt.


Dr. Hemant M. Baradkar
Principal
Jagadambha College of Engineering &
Technology, Arni Road, Kishi, Yavatmal



SMART FLOWER AND AGRICULTURAL SYSTEM

Prof. Ekeshwari A. Rangari¹

Mr. Akash S. Rathod²

Mr. Abhijeet D. Madheshwar³

Ku. Swati P. Unhale⁴

Ku. Swarangini S. Sapat⁵

Abstract

In the sunny days, when the ultra violet rays scattered on the solar panels, the energy is collected and stored in a battery. In this paper, we are going to introduce a solar photo voltaic cells for collecting rays from the sunlight and using this solar array transforming this mechanical energy to electric energy. In this system, the supply for the irrigation is given by electricity stored in the battery collected through sun rays in the rural areas where there is scarcity of electricity. In this solar kit, the Automatic solar tracker have been introduced which stimulates and increases the efficiency of the solar panels which moves according to the direction of the sun rays. By photovoltaic effect, a solar photovoltaic(PV) cell is an electric device which convert the light energy into the electric energy directly. A photoelectric cell is defined as a device whose electrical characteristics like current, voltage, resistance, vary when exposed to light. Solar cells are the basement for any photovoltaic modules panels. As a photo detector, the solar cells are used for detecting the light near the visible range or measuring the light intensity. Also interfacing the different sensors in farm and manipulating and control their data on monitor using IOT. This will make the agriculture very easy in the way and reduce the manpower.

Keywords:

Moisture sensor;
Ultrasonic sensor;
Humidity sensor;
Battery;
Solar panels;
LDR;
Pump.

Author correspondence:

¹Assistant Professor, Electrical Engineering Department, Jagadambha College of Engineering & Technology, Yavatmal, Maharashtra

^{2,3,4,5}Students, Electrical Engineering Department, Jagadambha College of Engineering & Technology, Yavatmal, Maharashtra

1. Introduction

A several decade before, agriculture had been playing an important role in human kind to surpass the growing and dynamic demands every day. Irrigation is a crucial component of crop production in several areas of the world. PA (precision agriculture) is an integrated system that was designed to increase long-term, field specific, and also farm production efficiencies, productivity, and profitability especially in the area of agriculture. The parameter that has to be properly monitored to enhance the yield is moisture. Moisture sensors will monitor and collect information about the field moisture. So according to the need pump can be start to water the field. This can be done from anywhere with the help of IOT. Internet of Things (IOT) is being used in several real time applications. Also we are aware of PA is very essential for the countries like India those agriculture completely depends upon the rains and climatic conditions only. Precision farming makes things to be quicker response times, better quality control for the yield with less labor effort. So these are several factors that leads for requirement of use in sensing technologies in the field of PA to monitor the crop parameters and control the utilization of resources towards the humankind benefits The project is designed to develop a Farmer Helper system which switches the pump motor ON/OFF By Mobile Phone also sensing the moisture content of the soil. In the field of agriculture, use of proper method of irrigation is important.



Dr. Hemant M. Baradkar
Principal