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Number of research papers in the Journals notified on UGC CARE list in the year 2020-2021

Sl.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Is it listed in UGC Care list
1	A study on Consumer satisfaction towards Online Purchasing in Flipkart with special reference to Kurichi in Tirunelveli City	Mrs.C.Jeya Gowri	Commerce	International Journal of Engineering and Applied Sciences and Technology	UGC Care Listed
2	Triangular mean labelling of union of F-Tree Graphs	Mrs.R.Pappathi	Mathematics	Mukt Shabd Journal	UGC Care Listed
3	Analysis of Vehicle Detection using Region-based Convolutional Neural Networks(RCNN)	K.M.N.Syed Ali Fathima	Computer Science	Journal of Xi'an University of Architecture & Technology	UGC Care Listed
4	Perception on Digital Payment with Special reference to E-Wallets – A Study	Mrs.C.Jeya Gowri	Commerce	Wesleyan Journal of Research An International Research Journal	UGC Care Listed
5	Users perception towards digital payment with special reference to Melapalayam, Tirunelveli city	Mrs.C.Jeya Gowri	Commerce	International Journal of Research in Computer Application & Management	UGC Care Listed
6	Patthupattil ogara eereluth oru mozhi	Dr.S.Uma	Tamil	Modern Tamizh Research	UGC Care Listed
7	Application of Graph Theory to Find Optimal Paths for the Transportation Problem using Triangular Number.	Dr. S. Ananthalakshmi	Mathematics	Science, Technology and Development	UGC Care Listed
8	Net Work-Path using Graph Theory Algorithm	Dr. S. Ananthalakshmi	Mathematics	Compliance Engineering Journal	UGC Care Listed
9	A Modern Approach for finding minimization cost in transportation problem	Dr. S. Ananthalakshmi	Mathematics	Turkish Journal of Computer and Mathematics Education	UGC Care Listed

SL. No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Is it listed in UGC Care list
10	A study on Awareness about insolvency and Bankruptcy code 2016 among Entrepreneurs in Palayamkottai	Mrs. P .Parvathy	Commerce	Research and Reflections on Education	UGC Care Listed
11	SVM with Hog Based on Classification Using Vehicle's Different Viewpoints	K.M.N.Syed Ali Fathima	Computer Science	International Journal of Engineering Research and Technology	UGC Care Listed
12	P- Order Prime Graph	R. M. Muthulakshmi	Mathematics	Journal of Xi'an Shiyou University	Scopus

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A STUDY ON CONSUMER SATISFACTION TOWARDS ONLINE PURCHASING IN FLIPKART WITH SPECIAL REFERENCE TO KURICHI IN TIRUNELVELI CITY

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ABSTRACT - "Consumer behaviors may be defined at the behavior that consumer display in searching for purchasing, evaluating and disposing of products, evaluating and disposing of produces, service and ideas which they expect to satisfy their needs". Thus, the study of consumer behavior is the study of how an individual makes decision to spend their available resources-money, time and effort on consumption related items. However, it may be noted that consumer behavior research today goes far beyond "what, why, how, when, where, and how often" fact of consumer behavior and also consider the use of goods they buy and evaluations after use there may be many repercussions after the consumer make a purchase.
In Tirunelveli all so there are such studies regarding various aspects. In such that way, flipkart.com in Tirunelveli city were found to be providing quality product and services to the consumer satisfaction. This prompted the researcher to select the study regarding the various factors influencing the satisfaction level of the consumer retention and their problems. The study has covered the general profile and the shopping habits of the respondents, along with an enumeration of their opinion on the various dimensions of satisfaction to the service provided.

Keyword: Consumer, Consumption, Satisfaction, Shopping.

I. INTRODUCTION

Now days, Flipkart become the latest and more trending the online shopping sites. But most of the people don't know about the details of Flipkart. Flipkart is an E-Commerce company found in 2007 by **Sachi Bansal** and **Binny Bansal.** It is registered in Singapore and it operates in India where it **Head Quartered** in **Bangalore, Karnataka**. Flipkart is launched its own product range under the name "DigiFlip" with products including tablets USB and laptop bags. In May 2014, Flipkart received $10 million from DST global and in July at raised $1 million led existing investor's tiger Global and South Africa's media group Naspers. Flipkart last fund-raising round in December had checked its valuation at $12 billion "Consumer behaviors may be defined at the behavior that consumer display in searching for purchasing, evaluating and disposing of products, evaluating and disposing of produces, service and ideas which they expect to satisfy their needs". Thus the study of consumer behavior is the study of how an individual makes decision to spend their available resources-money, time and effort on consumption related items. However, it may be noted that consumer behavior research today goes far beyond "what, why, how, when, where, and how often" fact of consumer behavior and also consider the use of goods they buy and evaluations after use there may be many repercussions after the consumer make a purchase.

II. STATEMENT OF PROBLEM

In this modern era almost every one of us are using internet and smart phones but many are using the internet. To enhance and attract online customer it is very important to know about their behavior and understand what they require and need. Since online shopping is the new medium of shopping with new demands of consumers. All customers have their own desires and demands for products so that it is very crucial for all online retailers to identify and know about their online consumers in flipkart. According to this short period, Flipkart.com attract more customer from Tirunelveli and satisfy them in various way. Company strategy should be high. So it is very much required for any marketer to access the consumer preference so the present study will contribute in this regarding and focuses to know the consumer preference and satisfaction level regarding the Flipkart.com product in Tirunelveli city.

III. OBJECTIVES OF THE STUDY

- To assess the demographic profile of customer.
- To analysis the satisfaction levels of the customers of the selected online products.

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- To scrutiny the problems faced by the customer in the online shopping.

IV. RESEARCH DESIGN

The researcher has been selected on convenience sampling technique and the total number of sample was 60 out of which 50 were selected. The structured interview schedule was used to collect the relevant data.

Apart from the necessary tables, chart and like suitable statistical tools are applied for analysis and interpretation.

* Percentage Analysis * Garrett Ranking

ANALYSIS AND INTERPRETATION

GENDER WISE CLASSIFICATION

Serial No`	Sexual category	Respondents	%
1	Male	28	56
2	Female	22	44
	Total	**50**	**100**

AGE WISE CLASSIFICATION

Serial No`	Age	Respondents	%
1	21-30	17	34
2	31-40	08	18
3	41-50	11	22
4	More than 50	13	26
	Total	**50**	**100**

EDUCATIONAL CRITERION

Serial No`	Qualification	Respondents	%
1	HSC	15	30
2	Degree	19	38
3	Diploma	10	20
4	Others	6	12
	Total	**50**	**100**

MARTIAL STATUS WISE CLASSIFICATION

Serial No`	Marital Status	Respondents	%
1	Unmarried	26	52
2	Married	24	48
	Total	**50**	**100**

SIZE OF FAMILY UNIT OF RESPONDENTS

Serial No	Family Size	Respondents	%
1	Nuclear family	33	66
2	Joint family	17	34
	Total	50	100

OCCUPATION WISE CLASSIFICATION

Serial No	Occupation	Respondents	%
1	Student	12	24
2	Private	19	38
3	Government	13	26
4	Business	6	12
	Total	**50**	**100**

TIME SPEND ON INTERNET

Serial No	Particulars	Respondents	%
1	Below 1 hour	07	14
2	1 hour	24	48
3	2-3 hours	11	22
4	3-6 hours	08	16
	Total	**50**	**100**

KNOWLEDGE OF FLIPKART

Serial No	Particulars	Respondents	%
1	Well knowledge	32	64
2	Some what	18	36
	Total	**50**	**100**

PERIOD OF ACCESS FLIPKART.COM

Serial No	Particulars	Respondents	%
1	Less than 1 year	9	18
2	2 to 3 years	13	26
3	3 to 4 years	11	22
4	4 to 5 years	5	10
5	Above 5 years	12	24
	Total	**50**	**100**

THE PRICE OF THE PRODUCT OFFERED

Serial No	Particulars	Respondents	%
1	Reasonable	23	26
2	High Price	13	46
3	At a discount	14	28
	Total	**50**	**100**

OPINION ABOUT DISPLAY OF PRICE RANGE FOR THE PRODUCT

Serial No	Particulars	Respondents	%
1	Greatly Satisfy	22	44
2	Satisfy	11	22
3	Unbiased	06	12

- Only educated people are more aware of online shopping so focus should made on people who are not aware of online purchasing.
- To provided better security against malpractices.
- To reduce delivery charges and implement more offer to attract new customer.
- Flipkart should try to reduce the cost and introduce many cheap plans to make it affordable to those who cannot afford, which will in turn help them to increase their customer.
- They can provide more information about the product and services availability which will improve the knowledge of the customers help them shop easily.
- Convenience of shopping can be developed by bringing in user friendly methods of making online purchasing easily.

V. CONCLUSION

In the basis of the present study conclude that the online consumer satisfaction. This research explicitly indicates that flipkart online marketer should give were importance on price factor and after sale factor in this competitive world, online marketer should have to offer new scheme day to day attract that the new customers. Online shopping becoming more popular day to day with the increase in the stage of world wide web known as www.understanding customer's need for online selling has become challenge for marketer. In conclusion having access to online shopping has truly revolutionized and influenced our society as a hole. This use of technology has open new doors and opportunities that enable for a more convenient life style today. Variety, Quick service and reduced price were three significant ways a which online shopping led to the possibilities of fraud and privacy conflict. Through privacy and security policies, website designer doing. By doing so, society a will continue to depend upon online shopping, which will allow it to remind a tremendous success in future.

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TRIANGULAR MEAN LABELING OF UNION OF F- TREE GRAPHS

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ABSTRACT

Let G be a graph with p vertices and q edges. A triangular mean labeling is an injective function $f\ from\ V(G)$ to the set $\{0, 1, 2, \dots, T_q\}$, where T_q is the q^{th} triangular number that induces for each edge uv, the label $f^*(uv) = \left\lceil \frac{f(u)+f(v)}{2} \right\rceil$ such that the set of edge labels is $\{T_1, T_2, \dots, T_q\}$. A graph which admits such labeling is called a triangular mean graph. In this paper, we define the triangular mean labeling of union of F-tree graphs.
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KEYWORDS: Triangular numbers, Triangular mean labeling, Triangular mean graph.

1. INTRODUCTION

The graph considered in this paper are finite, undirected and without loops or multiple edges. Let $G = (V, E)$ be a graph with p vertices and q edges. Terms not defined here are used in the sense of Harary [4]. For number theoretic terminology [1] is followed. A graph labeling is an assignment of integers to the vertices (edges/both) subject to certain conditions. If the domain of the mapping is a set of vertices (edges/both) then the labeling is called a vertex (edge/total) labeling. A dynamic survey of graph labeling is regularly updated by Gallian [2] and it is published by Electronic Journal of Combinatorics. The concept of mean labeling of graphs was introduced by S.Somasundaram and R.Ponraj [6]. M.Seenivasan, A.Lourdusamy and M.Ravi Ramasubramanian [5] introduced triangular mean labeling of graphs. The following definitions are necessary for present study.

2. PRELIMINARIES

Definition 2.1: A path P_n is obtained by joining u_i to the consecutive vertices u_{i+1} for $1 \leq i \leq n-1$.

Definition 2.2: A cycle in a graph is a sequence of distinct vertices $u_0, u_1, u_2, \dots, u_{(n-1)}, u_0$ where u_i and u_{i+1} are adjacent for all $i = 0,1,2, \cdots, (n-2)$ and u_{n-1} and u_0 are adjacent. A cycle with n vertices is denoted by C_n.

Definition 2.3: Let $G_1 = (V_1, E_1)$ and $G_2 = (V_2, E_2)$ be two vertex disjoint graphs. Then their union $G = G_1 \cup G_2$ is a graph whose vertex set is $V = V_1 \cup V_2$ and its edge set is $E = E_1 \cup E_2$.

Definition 2.4: The Star graph $K_{1,n}$ of order $n + 1$ is a tree on n edges with one vertex having degree n and other vertices having degree 1.

Definition 2.5: The corona of two graphs G_1 and G_2 is the graph $G = G_1 \Theta G_2$ formed by one copy of G_1 and $|V(G_1)|$ copies of G_2 where the i^{th} vertex of G_1 adjacent to every vertex in the i^{th} copy of G_2.

Definition 2.6: The graph obtained by joining a single pendent edge to each vertex of a path is called a comb. It is denoted by $P_n \Theta K_1$ (or) P_n^+.

Definition 2.7: A connected, acyclic graph is called a tree.

Definition 2.8: Bistar is the graph obtained by joining the apex vertices of two copies of star $K_{1,n}$.

Definition 2.9: A F- tree $F(P_n)$ is a graph obtained from path on $n \geq 3$ vertices by appending two pendent edges one to an end vertex and other to vertex adjacent to an end vertex.

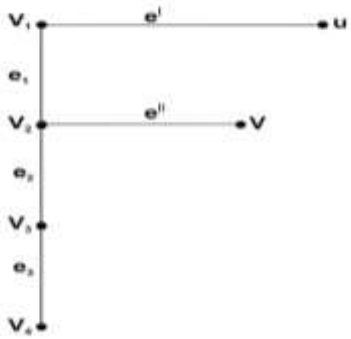

Figure 1 F – tree $F(P_4)$

Definition 2.10: A graph G with p vertices and q edges is called a mean graph if it is possible to label the vertices $x \in V$ with distinct elements $f(x)$ from 0,1,2,...,q in such a way that when each edge $e = uv$ is labeled with $(f(u) + f(v)) / 2$ if $f(u) + f(v)$ is even and $(f(u) + f(v) + 1) / 2$ if $f(u) + f(v)$ is odd, then the resulting edge labels are distinct. f is called a mean labeling of G. If G is a mean graph, then the edges get labels 1, 2, $\cdots, q$.

$f^*(w_{j+1}\, w_{j+2}) = \frac{(2m+2n+j)^2-(2m+2n+j)}{2}, \quad 1 \le j \le l-2$

$f^*(xw_1) = \frac{(m+n+3)^2-(m+n+3)}{2}, \quad f^*(zw_2) = \frac{(m+n+5)^2-(m+n+5)}{2}$

Hence the edge labels are $T_1, T_2, \cdots, T_{l+7}$.

Thus $G = B(3,2) \cup F(P_l)$ where l is even is a $triangular\ mean\ graph.$

Example 3.14: The Triangular mean labeling of B(3,2) ∪ $F(P_4)$ is shown in figure 8.

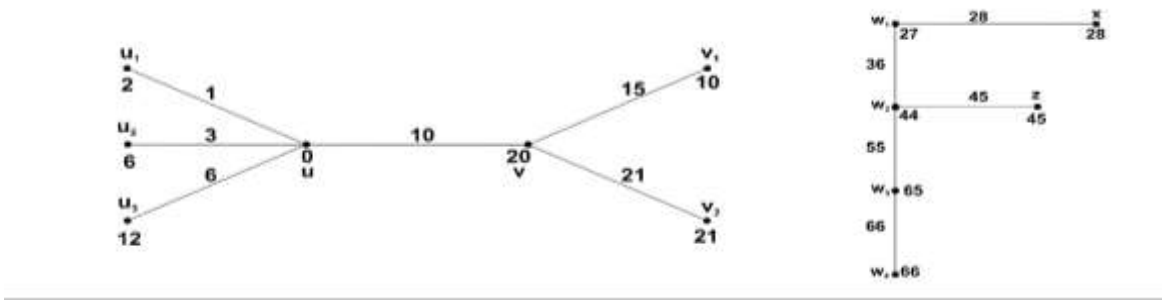

Figure –8

4. CONCLUSION

In this paper, we have studied the triangular mean labeling of union of F-Tree graphs. This work contributes several new results to the theory of graph labeling.

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Analysis of Vehicle Detection using Region-based Convolutional Neural Networks (RCNN)

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Abstract-Vehicle detection and its tracking can help us to avoid accidents to a greater extent. Vehicle detection will locate the presence of objects in the frame along with its position and also with the classification of the located vehicles. Researchers have shown that region-based works will give good performance for object detection. In this paper, we propose a region-based deep learning network to detect the vehicles. Region-based learning is implemented by combining Faster RCNN and Grid RCNN. **The proposed work can detect multiple vehicles in an image. The evaluation of the proposed work gives better results in terms of mAp, Ap, precision and recall when it is applied for CBCL dataset.**

Keywords: Faster RCNN, Grid RCNN, Vehicle detection

1. INTRODUCTION

Computer visualization inconvenience is an entomb remedial methodical field that manages with how computers can be finished to improve significant level perceiving from futuristic images. Computer visualization undertakings consist of schemes for gathering, progressing, evaluating, developing and deciding digital images, and extraction of high-dimensional data from the real world to produce numerical or symbolic information. Vehicle detection is a challenging and important research area of image processing. It is broadly used in computer vision.

The complete understanding of an image should not simply contemplate on categorizing dissimilar images, but also on specifical approximation the positions of substances enclosed in every representation. Object detection, one of the essential computer visualization troubles, is capable to make available important in sequence in linguistic discerning of images.

Many kinds of research were done to detect the objects. Deep learning-based object detection gives good results in detecting vehicles on real road images. But, the vehicle detection in real-time images fails in larger variations of luminosity, intense occlusion, and bulky disparity of object levels. This paper proposes a region-based deep learning technique because instead of working on the entire image, working in the region will yield a better result.

Section 2 discusses the related works done in vehicle detection. Section 3 explains the proposed work which helps to detect the vehicles. The evaluation details are analyzed in Section 4. Section 5 gives the conclusion.

2. RELATED WORK

Detection of a vehicle is one of the important problems in computer vision research. Recent advances in object detection are driven by region-based methods. Basri and Jacobs [1] have exhibited the benefit of separating nearby locale limits for detection. Edelman et al. conjectured that these perplexing neurons could take into account coordinating and detection of 3D objects from a scope of perspectives.

Ke and Sukthankar[6] applied PCA on the gradient image. The PCA-SIFT used in this work yields a 36-dimensional descriptor which is fast for matching. Reducing false-positive rates by more than an order of magnitude relative to the best Haar wavelet-based detector from [2]. Lowe et al. [4] proposed a scale-invariant feature transform (SIFT) to detect and describe local features in digital images. It locates certain key points and then furnishes them with quantitative information is called descriptors. Gaussian $g(x) = \frac{1}{\sqrt{2\pi\sigma}} e^{-x^2/2\sigma^2}$ was estimated with adequate precision using a 1D essential part. Here,$\sigma = \sqrt{2}$. Convolution with the information picture can be capably enlisted by applying two goes of the Gaussian function in the parallel and erect directions. HOG [13] is used as a feature descriptor along with linear SVM classifier as a regional image descriptor. The HOG descriptor

technique counts occurrences of gradient orientation in localized portions of an image - detection window, each entity pixel surrounding the pixel shade transforms in both x-axis and y-axis, the gradient of a continuous multi-variable function,$\nabla q(x,y) = \begin{bmatrix} r_x \\ r_y \end{bmatrix} = \begin{bmatrix} \frac{\sigma q}{\sigma x} \\ \frac{\sigma q}{\sigma y} \end{bmatrix} = \begin{bmatrix} \mathrm{q(x+1,y)-q(x-1),y} \\ \mathrm{q(x,y+1)-q(x,y-1)} \end{bmatrix}$, which gives the vector of limited derived of everyone the inconsistent. Assume q(x, y) traces the redden of the pixel at position (x, y), the slope vector of the pixel (x, y) is identified, $\frac{\frac{\sigma q}{\sigma x}}{\frac{\sigma q}{\sigma y}}$ -the term is the partial derivative on the x-path, which is calculated as the color variation connecting the closest pixels.

SURF descriptor [10]for image matching and object recognition, uses a numeral estimate of the determinant of Hessian blob detector, which can be calculated with 3 integer procedures using a precomputed integral image, feature descriptor is based on the sum of the Haar wavelet response around the point of interest, also be computed with the integral image. $\mathscr{H}(x,\sigma) = \begin{bmatrix} \mathscr{S}_{xx(x,\sigma)} \mathscr{S}_{xy(x,\sigma)} \\ \mathscr{S}_{xy(x,\sigma)} \mathscr{S}_{yy(x,\sigma)} \end{bmatrix} \ldots\ldots\ldots \mathscr{S}_{xx(x,\sigma)} = \frac{\sigma^2}{\sigma x^2 g(\sigma)} uses\ \mathscr{L}$-scale-space representation, then detecting scale-space maxima of this operator $\mathscr{H}(x,\sigma)$ and obtains differential blob detector with automatic scale selection. Ross et al. [19] used region-based convolutional neural networks to generate create locale proposition from a system whose last FC layer at the same time predicts different (e.g., 800) boxes, which are utilized for R-CNN, object recognition, For regression, embrace the definitions of the 4 directions, with $\mathrm{u_x} = \frac{\mathrm{x-x_a}}{\mathrm{w_a}}, u_y = \frac{y-y_a}{h_a}, t_w = \log(w/w_a), u_h = \log(h/h_a)$ and $\mathrm{u_x^*} = \frac{\mathrm{x^*-x_a}}{\mathrm{w_a}}, \mathrm{t_y^*} = \frac{\mathrm{y^*-y_a}}{\mathrm{w_a}}, \mathrm{t_w^*} = \log(w/w_a), \mathrm{t_h^*} = \log(h^*/h_a)$, where x, y, w, and h denote the two coordinates of the box centre, width, and height. Variables x,$\mathrm{x_a}$, and $\mathrm{x^*}$ are for the calculated box, anchor box, and ground-truth box respectively, as bounding-box regression from an anchor box to a nearby ground-truth box. Fast R-CNN expands on productively order object proposition utilizing profound convolutional networks, to improve preparing and testing speed while likewise expanding identification precision.

Girshick et al.[22], a fast R-CNN network was proposed which accepts a whole picture as information. The system first procedures the entire picture with a few convolutional (conv) and max-pooling layers to deliver a conv highlight map. At that point, for each article proposition, a locale of intrigue (RoI) pooling layer removes a fixed-length highlight vector from the component map. Each element vector is taken care of into a grouping of completely associated (Fc) layers that at long last branch into two kin yield layers: one that produces softmax likelihood evaluates over K object classes in addition to a catch-all "foundation" class and another layer that yields four genuine esteemed numbers for each of the K object classes. Every set of 4 qualities encodes refined jumping box position for one of the K classes. He et al. [23proposed a technique for object identification called Faster R-CNN which joins Region Proposal Network (RPN) as a Region of Interest (RoI) applicant extractor. Faster R-CNN [23] is progressively vigorous to deal with the huge variety of vehicle different scales.

Grid R-CNN [38] is object detection and identification framework structure, where the customary relapse definition is supplanted by a lattice point guided confinement instrument and the unequivocal spatial portrayals are productively used for excellent limitation. Grid R-CNN isolates the item jumping enclose locale to matrices and utilizes a fully convolutional network.

GoogleNet[28] is a deep learning structure which applied distinctive scale convolution portions (1X1; 3X3 and 5X 5) a similar component map in a given layer. This strategy is caught by utilizing multi-scale includes and summed up these highlights together as a yield highlight map.

VGG Net [27] is collected from five groups of convolutional layers and three FC layers. There are two convolutional layers in the first two groups and three convolutional layers in the next three groups. Between each group, a Max Pooling layer is applied to lessen spatial element. ResNet [29] which condensed optimization difficulty by introducing shortcut relations extract attribute embed of the complete reflection and concatenate it with area characteristic to progress recognition. DenseNet [30] which is retain the deep layer features and better in sequence flow by succession the input with the remaining output, oppressed features from thin layers were reproduction and acquired.

He et al. [31] proposed Mask R-CNN, which anticipated bouncing boxes and division covers in corresponding to create and afterwards RoIPool or RoIAlign are consumed to extort features for these proposals. The extort features are then used for supplementary proposal degeneration and classification, ROI Align layer which tended to the quantization issue by bilinear introduction at partially inspected positions inside every grid, He et al. [31] and Dai et al.[32] be trained integrated occurrence segmentation framework and optimize the detector with pixel-level supervision. Cascade R-CNN [50] prepares multi-stage R-CNNs with growing IOU threshold phase-by-phase and thus the multi-stage R-CNNs are consecutively more prevailing for exact localization.

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Research Article : Commerce

PERCEPTION ON DIGITAL PAYMENT WITH SPECIAL REFERENCE TO E-WALLETS -A STUDY

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ABSTRACT:

In the past few decades digital payment systems in India has grown rapidly. The development of technology e-wallet apps is the digital version of online bank account with all types of banking services. This study the researcher investigated the perception on digital payment with special reference to e-wallets. The investigator used convenient sampling technique and the sample size was 90. Percentage analysis, Garrett ranking, Correlation Analysis are the tools used for analysis and interpretation.

Keywords: Amazon Pay, MConnect+, IndOASIS, Yono, PayTM, PhonePe

INTRODUCTION:

In India digital payment channels are continuing to grow robustly. E-wallet has mainly two components, software and information. The software component stores personal information and provides security and encryption of the data. The information component is a database of details provided by the user which includes their name, shipping address, payment method, amount to be paid, credit or debit card details, etc. NPCI is an umbrella organization for operating retail payment systems in India RBI has authorized various Payment System Operators (PSOs) such as NPCI, CCIL, ATM networks, TReDS platform providers, to name a few, to operate payment systems in India. The role of NPCI is to provide infrastructure to the banking system in India for physical and electronic payment systems.

STATEMENT OF THE PROBLEM:

In future, Biometric authentication, Tap- and-go payment, Invisible payments, A voice payment and Face recognition apps are dominate in digital payment world. So, this study required to know the perception on digital payment with special reference to E-Wallets of the persons who resides in the city of Tirunelveli.

OBJECTIVES OF THE STUDY:

- To know the demographic profile of the respondents.
- To analyse the perception on digital payment with special reference to E-Wallets.
- To analyse the difficulities to work with e-wallet.
- To know the benefits of e-wallet.
- To analyse the relationship between monthly income and amount spend through e-wallets.

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USERS PERCEPTION TOWARDS DIGITAL PAYMENT WITH SPECIAL REFERENCE TO MELAPALAYAM, TIRUNELVELI CITY

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ABSTRACT

India is moving forward along the path of the most significant digital revolution, and in the coming years, the digital payment system will be an important milestone in a cashless economy. A digital payment system is an electronic environment that allows consumers to make electronic commerce transactions for their purchases, financial transactions, making bill payments like mobile bill, land line service etc. The present study is restricted to know the users thought that make them to use digital payment and the experience of the users who are living in Melapalayam, Tirunelveli city. The researcher has selected convenience sampling technique and the total number of sample was 47. The structured interview schedule was used to collect the relevant data. The suitable statistical tools are Percentage Analysis, Garrett Ranking and Chi Square Test applied for analysis and interpretation.

KEYWORDS

UPI, AEPS, USSD, E-WALLET, digital payment, perception, mobile banking.

JEL CODES

M15, O32.

INTRODUCTION

A digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method. In digital payments, payer and payee both use digital modes to send and receive money. The development of digital payments in India is expected to depend on digital payment service providers, an effective banking regulatory mechanism and consumer experience, as well as on factors driving the growth of digital payments in India. The digital payment system is gaining momentum, especially after demonetization in India. The Government of India has taken various steps to effectively use digital payment platforms to eliminate corruption and black money in the Indian economic system.

STATEMENT OF THE PROBLEM

Digital payment is used in various sector due to hard cash in supply. With the technology advancement and adoption in each sector digital payment gave a different approach to the currency handling. In the modern world smart phones are functioning as leather wallets. There is no need to carry hard cash while using digital payment. Since digital payment is used a lot now a days it is required to know the users perceptions so the present study will contribute in this regard and focuses to know the users preference, awareness, experience, benefits and risks faced by the users regarding the digital payment of Melapalayam, Tirunelveli city.

OBJECTIVES OF THE STUDY

1. To know about user's awareness towards digital payment.
2. To study the user's perception on adoption of digital mode of payment.
3. To know the users, purpose of using digital payment.
4. To know the impact of demographic factors on adoption of digital mode of payment.
5. To know the problems faced by users in using digital payment.

METHODOLOGY

This section describes the methodology which includes research design, collection of data, constructions of questionnaire and framework of analysis.

DATA PROCESSING AND STATISTICAL TOOLS USED

In this study Descriptive research and analytical design was implemented where the data source is primary and secondary. Self- administered questionnaire was implemented. The size of the sample used for this research was 50 out of which only 47 questionnaires were found fit to be used constituting 94 percent response rate. Moreover, convenience sampling method was utilized to collect the relevant data. The tabular analysis was done both manually and also with the 'Statistical Package for Social Science (SPSS). In analysing data, simple statistical techniques such as percentage, chi square test, garrett ranking technique were used to deduce the association among variables, in order to reach conclusions.

COLLECTION OF DATA

The study is based on both primary and secondary data. Primary data has been collected from the entrepreneurs through a structured questionnaire. After proper classification and tabulation of the collected data, suitable statistical tools and techniques have been applied for analysis and interpretation. The secondary data

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பத்துப்பாட்டில் ஒகர ஈரெழுத்தொரு மொழி

சு.செங்குகுமார்
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தமிழ்த்துறை , அன்னை ஹாஜிரா பெண்கள் கல்லூரி. மேலப்பாளையம்
இணைப்பு: மனோன்மணியம் சுந்தரனார் பல்கலைக் கழகம்
திருநெல்லேலி - 627 012

முன்னுரை

ஒரு மொழியின் முதன்மையான எழுத்துக்களை உயிரெழுத்துக்கள் என்கிறோம்.

இவை தடைபடாமல் குரல் வளையிலிருந்து வரும் ஒலி என்பதால் இப்பயெர் பெற்றது.[1] இக்கட்டுரை உயிரெழுத்துக்கள் பன்னிரெண்டனுள் குறில் எழுத்தான ஒகரம் பத்துப்பாட்டில் இடம் பெற்றமையைப் பகுத்து, வகுத்துத் தொகுத்து விளக்குகிறது.

குறில் எழுத்து

உயிரெழுத்துக்களில் குறுகிய ஓசையுடைய எழுத்துக்கள் குறில் அல்லது குற்றெழுத்து என்று வழங்கப்படுகிறது.இவை ஒரு மாத்திரையளவு ஒலிக்கும்.

இதனைத் தொல்காப்பியர்

அ இ உ

எ ஒ என்றும் அப்பால் ஐந்தும்

ஓரளபு இசைக்கும் குற்றெழுத்தென்ப[2]

என்கிறார்

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Application of Graph Theory to find optimal paths for the transportation problem using Triangular Number.

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Abstract:

In Mathematics, Operational Research is the important field. Graph theory provides many useful applications in Operation Research. Graphs are used to define the flow computation. Graphs theory is used to find shortest path in road or a network. In Google Maps, various locations are represented as vertices or nodes and roads are represented as edges and graph theory is used to find the shortest path between two nodes. In this paper is designed the solution for a practical problem to find a minimum spanning tree by using triangular number. We have find minimum spanning tree by using Kruskal Algorithm and graph search Dijkstra's Algorithm to find the shortest path between two points. Also for this case was developed a network model of the transportation problem which is analyzed in detail to minimize shipment costs.

Keywords:

Graph, Transport, Algorithm, Minimum spanning tree, Node, Arcs.

1. Introduction to Graph theory

Graph theory provides many useful applications in operations research. A graph is defined as a finite number of points (known as nodes or vertices) connected by lines (known as edges or arcs). In this paper for a given graph find a minimum cost to find the shortest path between two points.

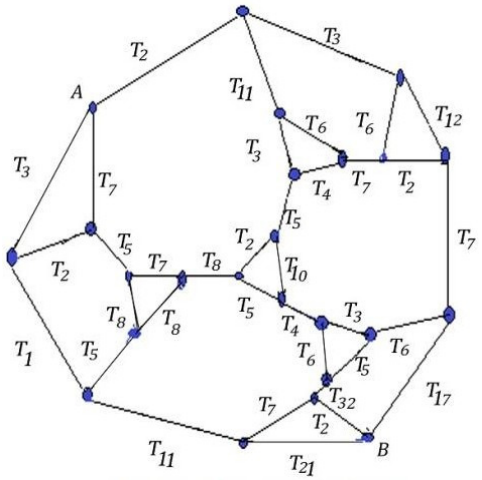

Figure 1 Connected Graph

There are different path options to reach from node A to node B but our aim is to find the shortest path with a minimum transportation costs, this requires a lot efforts.

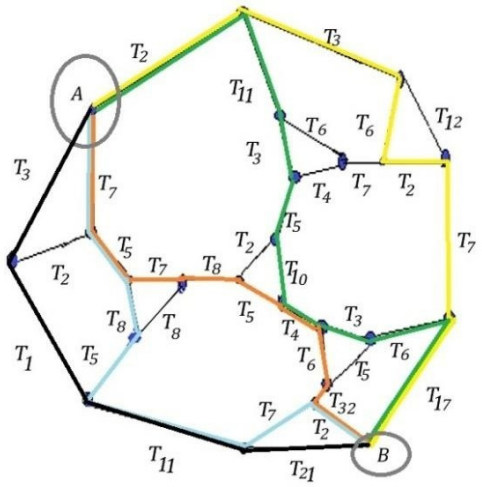

Figure 2 Some of the path options.

2. Minimum spanning tree by using kruskal algorithm

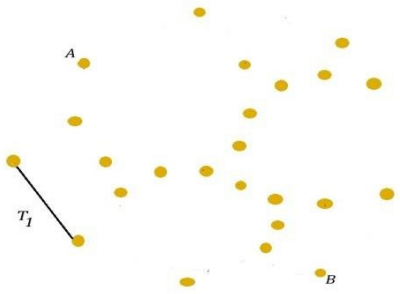

Figure 3

NET WORK-PATH USING GRAPHTHEORY ALGORITHM

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Abstract

In the modern world, for business and industrial field, planning efficient routes is very much essential and need for everyone in this world, along with the applications which are varied as product distribution. Networks are used in everywhere to move people for various purposes, such as transportation of goods, communicate information and to control the flow of matter and energy. There are many Networks in this world. They are all around us. We can choose the best for our best. Roads, railways, airways, water (ship, boat etc.,), cables, pipelines are phenomena that frequently need to be represented and analyzed as a network. The complexity of network, cost and time are the basic requirement for networking.

second variant has the same growth rate as Dijkstra's algorithm with Kirby-Potts graphs, though in our implantations its run times do seem to be marginally higher.

In contrast, our second variant EXTENDED-DIJKSTRA-V2 has the same growth rate as Dijkstra's algorithm with Kirby–Potts graphs, though in our implementations its run times do seem to be marginally higher.

This approach has helped by reducing the number of edges in a network graph and as well as nodes in the graph by combining similar nodes based on the MSC algorithm.

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Research Article

A Modern Approach For Finding Minimization Cost In Transportation Problem

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Abstract: In this paper, the proposed technique is new and simple for obtaining an initial basic feasible solution (IBFS) of a transportation problem (TP). The objective of this paper is to find how to minimize the transportation cost (TC) by using a new approach. The method is illustrated with some numerical examples using algorithm.

Keywords: TP, IBFS, TC, Optimum Solution

Introduction

Transportation problem deals with the determination of a minimum-cost schedule for transporting a single commodity from a number of sources (warehouses) to a number of destinations (markets). This class of problem is basically a linear programming problem. In the transportation problem, the availability can be equal to the demand (balanced problem), the availability may be superior to the demand and the availability may be less than the demand. One of the first and important applications of the linear programming techniques, was the formulation and the solution of the transportation problem. The basic transportation problem was originally stated by Hitchcock [1].

The linear programming formulation and the associated systematic method for solution were first given in Dantzig [2]. To find optimal solutions to TP different methods are discussed in many papers [3, 4, 7] and so far.

There are three well-known methods namely, North West Corner Method[5], Least Cost Method[5], Vogel's Approximation Method[5] to find the initial basic feasible solution of a transportation problem. In the last years, several researchers have developed alternative methods for finding initial basic feasible solution. This problem has been studied since long and is well known by S.M.Abul Kalam Azad, Md. Bellel Hossain, Md. Mizanur Rahman. [6], Md.Mizanur Rahman, Dr.Md.Bellel Hossain and Dr.Md. Mosharraf Hossain,[8], Mollah Mesbahuddin Ahmed, Aminur Rahman Khan, Md.Sharif Uddin, Faruque Ahmed [9], Aminur Rahman Khan, Adorian Vilcu, Nahid Sultana and Syed Sabbir Ahmed [10]. Z.A.M.S. Juman and N.G.S.A. Nawarathne [11]

In this paper, it has been focused in order to obtain a better initial basic feasible solution for the transportation problems with the numerical examples by using algorithm.

Mathematical Formulation for Transportation Problem:

In this section we further discuss about the mathematical formulation of the transportation problem (TP). The following notations are used in formulating the TP.

Notations

Supply quantity (S_i) in units from i^{th} supply node
The demand (d_j) in units per unit time
C_{ij} Unit transportation cost from i^{th} supply node to j^{th} demand node
X_{ij} Number of units transported from i^{th} supply node to j^{th} demand node
m Total number of supply nodes (suppliers)

8	15 3	35 0
20 0	20 9	10
3	60 2	1

Total Cost obtained by new method is as follows,
Total Minimum cost = (15*4) + (35*1) + (20*3) + (20*8) + (60*4) =555

CONCLUSION:

The main aim of this paper is to achieve the optimal transportation cost by using the new method and it is very easy to understand. Based on the optimal solution it allows us to take a decision effectively. The decision maker goes through all the steps of algorithm which makes our approach very useful to solve real problems.

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CONTENT

A STUDY ON AWARENESS ABOUT INSOLVENCY AND BANKRUPTCY CODE 2016 AMONG ENTREPRENEURS IN PALAYAMKOTTAI

UGC CARE APPROVED

ABSTRACT

The Insolvency & Bankruptcy Code (IBC) - 2016, passed by the Parliament on 28th May 2016, and implemented from 1st December 2016, was aimed at revamping the then prevailing legal framework of insolvency and bankruptcy resolution in the country, which was very fragmented. Insolvency is a state in which financial difficulties of a company are such it is unable to run its business at its current pace. Bankruptcy is the status of a person who is legally declared as incapable of paying their dues and obligations. The Code aims to smoothen the process and to make it clear and certain. The IBC involves standard steps which is viable and understandable. So, everyone, be it creditors, debtors, companies, or shareholders etc. shall have standard perform for any matters relating insolvency

Keywords : *Bankruptcy, Entrepreneurs, Finance*

Introduction

Insolvency refers to the situation in which a firm or individual is unable to meet financial obligations. An insolvent firm may decide to file for bankruptcy protection, which is a court order that oversees the liquidation of the company's assets. Insolvency is a state of financial distress, whereas bankruptcy is a legal proceeding. Insolvency And Bankruptcy Code 2016 is the bankruptcy law of India which seeks to consolidate existing framework by creating single law for insolvency and bankruptcy. The aim of this code also includes safeguarding the interest of small scale and sick units. The success of implementation of this IBC 2016 depends on knowledge and usage among stakeholders in business. This research paper aims to trace out the awareness level regarding the provisions and procedures of IBC 2016 among small, micro and medium level entrepreneurs in Palayamkottai.

Objectives of the study

The following are the objectives of the study.

1. To analyze whether the sample entrepreneurs have awareness about Insolvency and Bankruptcy Code 2016.
2. To trace out the source of awareness among them.
3. To offer suggestions for improvement in future.

Area & Scope of the Study

The area selected for this study is Palayamkottai. The study facilitates to evaluate the outlook and awareness regarding Insolvency and Bankruptcy Code 2016 among Micro, Small and Medium level entrepreneurs in Palayamkottai.

Research methodology

Research type

The present study is descriptive in nature.

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SVM with Hog Based on Classification Using Vehicle's Different Viewpoints

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Abstract

In this field of vehicle classification the key task of ITS. A vehicle-different viewpoints classification based on SVM with HOG is proposed in this paper. The scrutiny system is used for many purposes. For the finding purpose, the scheme can be helpful to the policemen protect the vehicle from criminals how to identify the vehicle, physically classify the vehicle in recorded video conferring to its exteriors. Though the accurateness of SVM is good, it is time duration has been too long and motivated by responsibilities for the human exhaustion for an extended period of videos/images for the execution phase. Furthermore, hiring an organisation is costly. Here be present time, some learning approaches that can be applied to categorize the vehicles viewpoints, e.g. SVM, Decision Tree, Random Forest, etc., unique methods used by CNN is a category of DL which is in the group of the neural network. The technique is appropriate in the vehicle viewpoint classification field in the present-day because of improving its performance. In the proposed vehicle classification used by the vehicle, different viewpoints, i.e. front, rear and side, are used by the vehicle. CNN is utilized to categorize vehicle images. The evaluation of outcomes illustrates that SVM with HOG can reach great performance in real-world transportation and autonomous driving assistance system uses.

Keywords-Intelligent Transportation System, viewpoint, SVM, HOG, deep learning convolutional neural network.

1. INTRODUCTION

Currently, reconnaissance capturing images are connected nearly ubiquitously popular cities. The main goals of connecting scrutiny structures be situated simultaneous observing then actions are penetrating. This paper emphases only on actions recognized by different viewpoints. For the viewpoint scope, the analysis and intelligent transportation scheme (ITS) can be used by probing analyzer. Designed for model, to examine for a precise vehicle's viewpoint classification. In common, the searching analyzer needs the data of the vehicle's classification as well as a vehicle's viewpoint for vehicle's detection. The detector/analyser frequently applies an allocation of period observing verified videos/images by themselves. Furthermore, the analyser/detector creates some faults with their inertia after a time of searching the vehicles.

With the aim of resolving such difficulties, means of transportation organisation can be applied on the way to contribute to the view of the vehicle such as front, rear and side. Several approaches are applied in vehicle classification at present.

R. Feris et al. [2, 11] created a structure that could examine for vehicles in identifying videos. K. Ying. [12] suggested a DT, for instance, used by an identifier. In their experimentation, feature groupings be located to decrease remembrance then computing period. Though, the groupings of 4 otherwise additional features mightn't type classification precision raises, proposed SVM classifier with HOG. The classifying a vehicle was a finder built on SGDM optimization [5-14]. The key task of SVM with HOG was classifying 12 dissimilar vehicles from a viewpoint. By way of outcome, they could reach a 79% recurrence of accuracy.

Carlos guindel [17, 22, 14, and 21] used the deep CNN that categorised the vehicle's viewpoint such as front, rear and side, placed on the car's view positions. Their outcomes achieved a more than 87% rate of accuracy. Wang et al. [15, 25, and 35] associated the execution of grouping among many identifiers, i.e. DT, random forest also SVM. Popular experimentation, entire approaches provided outcomes that were equivalent. Though, the RF was selected for 2 explanations, i.e. smaller learning period associated to further approaches and essential not any control. The CBCL Dataset proposed the car's viewpoint classification. Structure utilized a surveillance audio-visual/image as idea and allowable user toward see the vehicle viewpoint to find for exact vehicles, based on vehicle view classification to classify the vehicle's view from an image. Experimentation, operated well when joined by the classification.

In current periods, is alternative technique called DL [18, 27, 31, and 34] which is used in the classification. Deep CNN by other than two hidden layers. Subsequent are around of the

cropped by the system. The experimentation's outcomes show that SVM with HOG beats other methods in classification of vehicles. Even though, CNN recovers a precise viewpoint classification. Used for the upcoming work, improving the accurateness of viewpoint classification will be the main goal. Besides, several features should be discovered and tested, e.g. dissimilar input image size also, deep CNN model such as Googlenet, which various studies useful and different parameters has been included. Our method achieves precision by exchanging the flexibility characteristics with a SVM with HOG, both during training and during testing, resolve and benefit from improvement in this field. SVM with HOG features to extract the features of vehicle images.

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p-Order Prime Graph

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Abstract

Let G be a group with identity e. Let p be a prime number. The p-Order Prime graph graph $\Gamma_{pop}(G)$ of G is a graph with $V(\Gamma_{pop}(G)) = G - e$ and two distinct vertices x and y are adjacent in $\Gamma_{pop}(G)$ if and only if $GCD(O(x), O(y)) = p$. In this paper, we want to explore how the group theoretical properties of G can effect on the graph theoretical properties of $\Gamma_{pop}(G)$. Some characterizations for fundamental properties of $\Gamma_{pop}(G)$ have also been obtained.

Key words: p-Order Prime graph, finite group, self inverse element.

1 Introduction

The study of algebraic structures, using the properties of graphs, becomes an exciting research topic in the last twenty years, leading to many fascinating results and questions. There are many papers on assigning a graph to a ring or group and thereby investigating algebraic properties of the ring or group using the associated graph, for instance, see [1, 2, 3, 7, 8, 9, 10, 11, 12]. In the present article, to any group G, we assign a graph and investigate algebraic properties of the group using the graph theoretical concepts. Before starting, let us introduce some necessary notation

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