

# Prapti

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1. **Trends, Opportunity and Possibility of Libraries for the Period of Pandemic ----- 1-5**  
*Ms.Nivetha.P*
2. **A Study on Landmark Judgements and Impact of Covid 19 on Insolvency and Bankruptcy Code, 2016 ----- 6-12**  
*Ms.RajKalaiselvi.M*
3. **A Study on Consumer Awareness and Preferences Towards Organic Products ---- 13-18**  
*Ms. Archana kumar , Ms.Menaka*
4. **Bill Smart ----- 19-22**  
*Anbumathi C V*
5. **The Importance of Employability Skills for the Engineering Graduates ----- 23-28**  
*Malaravan.M , Dr.P.Poongodi*
6. **Big Data Analytics Review Paper ----- 29-31**  
*Manonmani .P, Dhanya R.*
7. **Cram on Competent Quality Extraction and Edge Detection Methods for Segmentation of Images ----- 32-37**  
*Ms. M. Kavitha*

# Trends, Opportunity and Possibility of Libraries for the Period of Pandemic

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## Abstract

The entire world is polluted with COVID-19 pandemic, and every organisation, property right, and every business has been affected. Much of the related research on the subject areas may be conducted at libraries. Thanks to supplying researchers with the potential to study and improving their capacity to combat illness, the library and information infrastructure were vital to the medical and science community. This text illustrated the latest technical advances and precautionary steps implemented in order to preserve marketable information for library specialists.

**Keywords:** Library services, Information technology, COVID-19 Pandemic, Preventive measures,

## INTRODUCTION

In nearly every corner of the globe, libraries are working to keep their collections and resources open. libraries have taken advantage of the corona virus outbreak by offering automated resources

However, the most ideally position drug testing and the physical resources together inside scientific institutions where research on drugs and pharmaceuticals are conducted, so they can be obtained by the patient. The ability of libraries to support their users even during a time of lockdown can be very high, particularly if they have an extensive selection of electronic resources. Several libraries have produced interactive exhibits that showcase multimedia content on their websites, and the Let's Read Together online initiative. There have also been significant measures taken to improve library services online by adding more e-books/e-webs/DVDs/ etc. to reduce the danger of transmission of viruses.

- To find out pioneering ways to reach out documentation user
- To explore opportunity to plot a course through this challenge
- To develop knowledge and skilled skills
- To be equipped for New regular Life

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## POSSIBILITY OF THE LIBRARIES

Smart libraries have evolved as a part of the adoption of modern technologies. Libraries today have a wide array of innovative services to sell. so widespread that it is a crisis There has been a paradigm shift. At the turn of the 21st century, libraries play a vital role. Libraries are important to the city. details and

technical skills are narrowly spread. With this in mind, the library's resources and collection will both increase. In addition to traditional archives, newer library ideas include digital/virtual collections. They also provide remote user control. They are being used in several different ways, both formally and informally. The Internet, and particularly the World Wide Web have become more and more significant in our everyday lives in recent years. altered the habits of library users

### CURRENT TRENDS OF LIBRARY SERVICES

CoVeDiGence Plus Formal paratroopini: In order to completely to ensure utmost safety, be sure to use the recommended dose of lubricant, since it is enough to use more lubricant than the label recommends. The eradication of the pandemic does not seem to be complete. Librarians are focused on potential armed forces and volunteer military interface creation. It is important to have the new announcements and transportation in order to attain these long-term target libraries.

More rapidly increasing application of Information and Communication Technologies (ITs) reach several markets, as never before, such as has never been seen before (Nwaneri & Nwaneri, 2013). Opera libraries are believed to be efficient and dependable, but we have no reason to trust and agree that any of all of them are this.

### VIRTUAL LIBRARY SERVICES

1. Virtual library is a set of resources stored on one or more computers where a single point of access is given. More about current D-Library problems: The role of digital libraries in the present era:

2. It is not only a location for electronic content (materials, directories, newspapers, and catalogues), but also a virtual library facilities (assistance, advice, etc.) improve study skills by engaging in: E-library and distance learning
3. the whole body of a digital library is made available on the internet different resources, third-party providers (e.g., German Virtual Libraries) can provide the content Analyzing Digital Library Research: Dead end or a Good Path?
4. reference resources (e.g., indexes, articles, and web sources) are accessible over the Internet. The words electronic library and digital library are used interchangeably. Learn more about the issues, policies and procedures concerning virtual universities.
5. Tools (like indexes, newspapers, or subscription utilities, for example) are available over the internet. The term "digital library" is sometimes used as a substitute for "electronic library." We believe that continued education has a vital role in adult literacy and lifelong education.
6. An agency that resides exclusively in cyberspace and only for finding electronic documents Learn more information in: Expanding the digital library

### COVID-19 VIRUS AND ITS SPREAD

The coronavirus, which was recently identified, is an infectious disease. approximately 80% of people infected with the COVID-19 virus would develop normal to severe symptoms and require no care Older adults and people, as well as those with

chronic disease, including asthma, chronic lung disease, and cancer, are most likely to become sick.

The most successful way to monitor and avoid the spread of the COVID-19 is to know about it. Wash your hands or add an alcohol-based sanitizer regularly to both of keep bacteria at bay.

Owing to the primary mode of transmission being droplets of saliva or discharge from the nose, it is essential that you observe proper respiratory etiquette when coughing or sneezing.

### MANAGING OF STUDY MATERIALS IN THE LIBRARIES

Since, there is a significant risk of objectory virus contamination, research efforts must also continue to use library services. Librarians have to have had and day's service expanded to a safer mode according to the government quality requirements. For the purposes of the above, certain libraries have placed a time of problem (a period of quarantine) The Library of Congress and the Australian Library Council on Archives have used their own ways to manage library materials, such as using alcohol to disinfect plastic covers. According to the Italian Library Association, users may additionally be asked to ensure that materials are clean before returning them.

### IMPORTANT/USEFUL LINKS FOR DIGITAL LIBRARY AND E-RESOURCES

For all those library users who have urbanized or rising online interpretation habits, there are quite a few digital libraries offering interpretation material free of charge, the limaritalks are given below:

**TABLE: 1**

S. No.	TITLE	DESCRIPTION	Web Address/ URL
1	NDLI	Educational materials available for all subject areas like Technology, Social Science, Literature, Law, Medical, etc.	<a href="https://ndl.iitkgp.ac.in/">https://ndl.iitkgp.ac.in/</a>
2	Internet Archive	Internet Archive: is a non-profit library of millions of free books, movies, software, music, websites, and more.	<a href="https://archive.org/">https://archive.org/</a>
3	Hathi Trust	HathiTrust is a partnership of academic and research institutions, offering a collection of millions of titles digitized from libraries around the world.	<a href="https://www.hathitrust.org/">https://www.hathitrust.org/</a>
4	World Digital Library	The World Digital Library provides free access to manuscripts, rare books, maps, photographs, and	<a href="https://www.wdl.org/en/">https://www.wdl.org/en/</a>

		other important cultural documents from all countries.	
5	Khan Academy	Khan Academy non-profit educational organization. It provides short lessons in the form of videos.	<a href="https://www.khanacademy.org/">https://www.khanacademy.org/</a>
6	Khan Academy	Open Library is an open source towards a web page for every book ever published.	<a href="https://openlibrary.org/">https://openlibrary.org/</a>
7	Project Gutenberg	Project Gutenberg is a volunteer effort to digitize and archive cultural works.	<a href="https://www.gutenberg.org/">https://www.gutenberg.org/</a>

### OPPORTUNITIES OF LEARNING WITH THE VIRTUAL PLATFORM/WEBINAR IN THE LIBRARIES

This is the time for library employees to use resources and abilities in simulated environments. When a lecture is held online, it is known as a webinar. This day there are many applications to use or carry out a virtual conference, including video conferencing, online conferencing, or webinars. One can use a web-based (virtual) platform to host virtual meetings, seminars, lectures, and conferences. The webinar website facilitates online visual contact with the speakers and participants. Innovative webinar features provide real-time multi-site/multi-client capabilities,

surveys, question-and-answer communications, screen sharing, and video streaming. This technology can be used in a variety of ways in the online world, seminars, instruction, and learning applications. attempting to download or bind. Many of the links on this page provide a free module or trial version with only an easy method to install. This services can be used for exchanging information within the staff/researchers/users can be helpful. Following are among the most commonly used webinar hosting solutions:

**Table: 2**

S. No	Application/Software	Downloading Connecting Links
1	Google Meet	<a href="https://meet.google.com/">https://meet.google.com/</a>
2	Go to Meeting	<a href="https://www.gotomeeting.com/en-in">https://www.gotomeeting.com/en-in</a>
3	Business Hangouts	<a href="https://business-hangouts.com/">https://business-hangouts.com/</a>
4	Join Me	<a href="https://www.join.me/">https://www.join.me/</a>
5	Microsoft team	<a href="https://www.microsoft.com/en-in/microsoft-365/microsoft-teams/group-chat-software">https://www.microsoft.com/en-in/microsoft-365/microsoft-teams/group-chat-software</a>
6	My Own Conference	<a href="https://myownconference.com/">https://myownconference.com/</a>
7	Skype for Business	<a href="https://www.skype.com/en/get-skype/">https://www.skype.com/en/get-skype/</a>

### CONCLUSION

We live in an age of technological transition and revolution, where advances in technology have affected library systems tremendously. Libraries have become more professional and secure with respect to the management of information on the site. Knowledge societies are searching for information in digital format, which means libraries rely on experienced experts who possess digital skill sets.

Informal paraph: library plays a central role in data collection, preservation, study, interpretation, and distribution by library users. Due to the latest developments in information technology, the potential for increased use of library facilities and services in worldwide lockdowns and plagues has come to light. This report would offer an overview of mitigation and emerging developments in libraries.

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# A Study on Landmark Judgements and Impact of Covid 19 on Insolvency and Bankruptcy Code, 2016

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## **Abstract:**

This study is done to throw light on insolvency cases in India. This research shows the cases of insolvency and solutions given by the Insolvency and Bankruptcy Code, 2016. Due to the COVID-19 pandemic and restrictions on the country's economic activity, the Government of India announced the suspension of the bankruptcy solution against corporate debtors under Insolvency and Bankruptcy Code, 2016. This research gives importance to landmark judgements and cases in IBC. The IBC has solved many bankruptcy cases and promoted the firm to operate at the normal rate of efficiency.

**Keywords:** debtors, recovery, settlement, resolution

## **INTRODUCTION:**

IBC 2016: The Insolvency and Bankruptcy Code can be defined as an act to consolidate and amend the laws relating to corporate insolvency. IBC works in companies, partnerships with individuals. It provides a timely process to resolve debt default. In the event of an automatic payment, lenders gain control of the creditors' assets and must make decisions to resolve the insolvency. Under IBC debt and the lender both can begin the process of 'recovery' against each other.

IBBI: The Insolvency and Bankruptcy Board of India was established on 1st October, 2016 under the Insolvency and Bankruptcy Code, 2016 (Code). It is responsible for implementation of the Code that consolidates and amends the laws relating to organizational and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of the value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders.

## **Theoretical Framework of Insolvency Law:**

The initiative of solving the process is taken by either debtor or creditor. The specialist provides the financial information from the debtor's information to the debtor and manages the assets of the debtor. This process takes 180 days and any legal action will be taken against the debtor when found guilty.

## **Insolvency Cases in India:**

The Insolvency Act was introduced Five years before and the lead dispute resolution agency has stated the need to focus on efficiency to ensure timely settlement as there were 440 days to resolve. Between the Financial Year 17 and Financial Year 19, the average return was only 43-50 percent but the deadline was extended beyond the expected 180 days and 90 days. The average turnaround time was 440 days. If a debtor enters the time taken in the acceptance phase and after

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the approval of the decision process, it takes 12-36 months to close the resolution process.

Till July 2020, approximately 19,844 cases were pending including 12,438 under the IBC.

## **Landmark Judgements in Insolvency and Bankruptcy Code(IBC), 2016:**

### **I. Lokhandwala Kataria Construction (P) Ltd. (Company Debt) Vs. Nisus LLP Finance and Investment Manager. - Supreme Court:**

The Court held that as a result of Act 8 of the Expenditure and Expenditure Rules (Application for Judgment of Government Decision), 2016, NCLAT was unable to exercise the powers of the objects recognized by Act 11 of the NCLAT Act, 2016.

### **II. Innoventive Industries Ltd. (Company Debt) Vs. ICICI Bank & Anr. - Supreme Court:**

When a debtor has been appointed to manage the company, former directors are no longer able to keep a complaint on behalf of the company. The Court held that when a professional debtor is appointed to manage a company, former directors may not be able to file a complaint on behalf of the company - Insolvency and Bankruptcy Code, 2016 is a law that consolidates and amends laws relating to debt restructuring and debt management.

### **III. Macquarie Bank Ltd. Vs. Shilpi Cable Technologies Ltd.- High Court:**

Sections 8, 9 and 238 of the Insolvency and Bankruptcy Code, 2016 are read in Rule 5 of the Insolvency and Bankruptcy (Application to Adjudicating Authority) Rules, 2016 read by Section 30 of the Advocates Act - Correct Establishment of Section 9 (3) (c) ), with the

requirements of the Code, may lead to the conclusion that it cannot be construed as a limitation or a preceding condition - a non-obstruction clause in Section 238 of the code shall not violate the Advocates Act as there is no inconsistency between Section 9, readings of the Judicial Authority and Lawyer. There is no clear difference between the two Parliamentary provisions in this case that cannot now be resolved by a parallel interpretation. Therefore, a joint reading of Section 30 of the Attorneys Act and sections 8 and 9 of this Code and the Judiciary Rules and Forms below will result in the notice that the notice to be served on behalf of the active borrower will be in order.

### **IV. Mobilox Innovations (P) Ltd. Vs. Kirusa Software (P) Ltd. - Supreme Court:**

When the application processed by debtor and which is complete the judicial officer must refuse the application below Section 9 (5) (2) (d) if notice of dispute has been received by the active creditor or there is a record of disputes between the consumer of the information - As long as the dispute is real and not false, speculative or false, the adjudicating officer must refuse the request - provided that there is a literal dispute over the payment between the parties that may enter into an all-encompassing definition contained in section 5 (6).

### **V. Surendra Trading Company Vs. Juggilal Kamlapat Jute Mills Company Ltd. and others - High Court:**

Time limit at IBC, 2016 for accepting or rejecting an application or initiation of CIRP under subsection (2). (5) of Sec. 9, directory. The question before the NCLAT was whether the fourteen-day period under



section 9 (5) was given to the judging authority to confirm that something was wrong and to grant or refuse the application compulsory or direct. NCLAT holds that the authority of subsection (5) of section 7 or subsection (5) of section 9

The Court held that there may be instances where a Section 34 application challenging the Arbitral Award may be explicitly and implicitly restricted, by showing the Court that the 90-day period and the 30-day optional period are clear. has expired, after which no application has been filed under Section 34 filed or an application filed under section 34 filed. Only in extreme cases can debt repayment work. There may be other cases where an application of Rule 34 may be made in the wrong court, as a result of which the requester may seek an application in Section 14 of the Limitations Act to exceed the limit set out in Section 34 (3) of the Mediation Act. In such cases as well, it is clear that the default procedure cannot be carried out without a functional judgment under Section 14 of the Legal Limit.

#### **VI. Brilliant Alloys Private Limited Vs. Mr. S. Rajagopal & Ors.**

The Supreme Court in this case ruled that the Act should be read with the basic provisions Section 12A which does not have that definition.

#### **VII. Jaipur Metals & Electricals Employees Organization Vs. Metals of Jaipur & Electricals Ltd.**

The Supreme Court held that the NCLT process would now continue from where they were suspended. Clearly, a company application pending before the Supreme Court will no longer proceed with consideration to Section 238 of the Code. Written

petitions pending before the Supreme Court should also be rejected because the continuation of the Code must apply throughout the course. Therefore, we accept the appeal and set aside the decision of the High Court.

#### **VIII. Transmission Corporation of Andhra Pradesh Limited Vs. Equipment and cable operators Limited**

IBC is not intended to replace the rescue platform and whenever there is a real conflict, IBC provisions cannot be applied. The only argument filed by the defendant's educated attorney before this Court is that the Punjab and Haryana High Courts while setting aside the debt order issued by the Extraordinary Regional Judge did not say Invoice Nos. 1-57 is a restricted period. Therefore, the defendant had a valid claim under those invoices. This argument cannot be counted. As of today, there is no Arbitral Council award in respect of Sl. Numbers 1-57. There is no order in any other court like these invoices. In fact, the Arbitral Tribunal has specifically dismissed the plaintiff's claim as time is running out. It is fair to say that the respondent had referred the application to the Arbitral Tribunal to determine the amount to be paid by the applicant. However, the application was rejected by the Arbitral Council as unsustainable.

#### **IX. JK Jute Mill Mazdoor Morcha Vs. Juggilal Kamlatpat Jute Mills Company Ltd. Through the Director and Ors.**

That the trade union can be said to owe it to the IBC for its purpose, the NCLAT High Court, by virtue of the decision in question, is not entitled to refuse to

enter into a union's definition of a "personal" definition under Section 3 (23) of the Code. Similarly, NCLAT is incorrect in stating that the union will not be a debtor as there are no services provided by the union to corporate creditors. What is clear is that the union represents its members who are workers, who can be held accountable by the employer, who are heavily indebted to each other, represented by the union collectively. Equally, stating that each employee will have a different reason for taking the action, a different claim, and a different date for failure to do so would negate the fact that a joint application can be filed under Act 6 read by Form 5 of Insolvency and Bankruptcy (Application to Adjudicating Authority) Rules, 2016, with the authority from several employees to one of them to make such an application on behalf of all. For all these reasons, we acknowledge the appeal and set aside the decision of the NCLAT. The matter has now been referred to NCLAT which will decide on the appeal as soon as possible as the matter has been pending.

#### **X. Mr. Anand Rao Korada Resolution Professional Vs. M/ s. Varsha Fabrics (P) Ltd. and Ors.**

The Supreme Court should not have continued with the sale of the Company's Borrower's assets, once the process of proceedings under the IBC began, and the Order announcing the suspension was approved by the NCLT. The Supreme Court set aside the Exempted Interim Orders dated 14.08.2019 and 05.09.2019 passed by the Odisha High Court and held that due to IBC regulations, the High Court should not proceed with the sale of assets of the Company Debt, once the process of sub-proceedings had begun. IBC, and the Order announcing the suspension was adopted by the NCLT. The High Court approved the opposing Interim

Orders dated 14.08.2019 and 05.09.2019 after the CIRP started in this case. The suspension was announced by the NCLT on 06.2019, the High Court was not exempt from transferring the orders on 14.08.2019 and 05.09.2019 by auctioning the Corporate Debtor assets before the NCLT. If the Company's assets (Company Credit) are divided during the IBC's continuous proceedings, it will jeopardize the interests of all stakeholders.

#### **Impact Of COVID-19 On The Insolvency And Bankruptcy Code, 2016:**

##### **I. Increase in Payment Default Threshold**

Pursuant to a notification<sup>3</sup> dated March 24, 2020, the amount of payment default constituting the threshold for initiating insolvency resolution proceedings under the Insolvency Code was increased from INR 1 lakh to INR 1 crore. This move is expected to benefit micro, small and medium enterprises ("MSMEs") and is also otherwise welcome by corporate debtors given that the earlier threshold of INR 1 lakh was relatively low. Unlike the suspension of insolvency proceedings described below, there is no end-date for this measure, i.e., the notification does not restrict the applicability of the increased threshold to the period of the pandemic or any other time period.

##### **II. Exclusion of Lockdown Period from Timelines**

In March-April 2020, regulations under the Insolvency Code were amended to provide that the period of lockdown would not be counted for any activity/task in the Corporate Insolvency Resolution Process ("CIRP") or liquidation process, as applicable, that could not be completed due to such lockdown. While this amendment did not extend the statutory timeline of 180 days (which may be extended to up to 270 days) for completion of the CIRP specified under Section 12

of the Insolvency Code, the National Company Law Appellate Tribunal (“NCLAT”) issued an order<sup>4</sup> dated 30 March 2020, pursuant to which the period of lockdown was required to be excluded from such statutory period in respect of cases where the CIRP was pending.

### III. Suspension of Insolvency Proceedings

On June 5, 2020, the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2020<sup>5</sup> (the “Insolvency Ordinance”) became effective. The Insolvency Ordinance inserted a new Section 10A (Suspension of Initiation of Corporate Insolvency Resolution Process) in the Insolvency Code and modified Section 66 (Fraudulent Trading or Wrongful Trading) of the Insolvency Code.<sup>6</sup>

Section 10A of the Insolvency Code prohibits the filing of applications under Sections 7, 9 and 10 of the Insolvency Code (i.e., by financial creditors, operational creditors and corporate debtors themselves) for the initiation of CIRP of a corporate debtor in respect of defaults arising during the six (6) month period from and including March 25, 2020 (the date of commencement of the national lockdown) which may be extended up to one (1) year (“Restricted Period”). Section 10A of the Insolvency Code also prohibits in perpetuity the filing of applications for the initiation of CIRP of a corporate debtor in respect of any such default.

However, Section 10A of the Insolvency Code will not be applicable in respect of defaults committed by the corporate debtor prior to March 25, 2020.

### IV. Suspension of Liability for Wrongful Trading

Under Section 66(2) of the Insolvency Code, during the CIRP of a corporate debtor and upon an application filed by the resolution professional with the relevant National Company Law Tribunal (“NCLT”), the directors or partners (in case of a limited liability partnership) of the corporate debtor can be ordered to personally contribute to the corporate debtor's assets if the director or partner knew or ought to have known that there was no reasonable prospect of avoiding CIRP and did not exercise due diligence to minimize potential losses to creditors. The Insolvency Ordinance now inserts sub-section (3) to Section 66 of the Insolvency Code, which prohibits making any applications under Section 66(2) in respect of any default for which initiation of CIRP has been suspended under Section 10A.

### V. Special Insolvency Framework for MSMEs

On May 17, 2020, the Indian Government announced<sup>7</sup> the introduction of a special insolvency framework for MSMEs – this is still awaited. There is no doubt that the recent changes to the Insolvency Code, taken together with the moratorium and other measures announced by the Reserve Bank of India (“RBI”), will provide some relief to stressed businesses. However, the Insolvency Ordinance also extends to voluntary initiation of insolvency under Section 10 of the Insolvency Code. Section 10 provides that where a corporate entity has committed a default, it may (emphasis supplied) file an application for initiating insolvency subject to certain conditions. While Section 10 is written as a right, it is more akin to an obligation in certain cases considering Section 66(2) of the Insolvency Code, which provides for

wrongful trading. Given that the operation of Section 66(2) has been suspended, Section 10 should have been permitted to continue to remain in force, particularly given that it requires a shareholders' resolution by 75% vote, the CIRP invites a scrutiny of the company's past dealings, including with related parties, and the CIRP could result in a change in ownership and management. It would then continue to remain open for a corporate entity to make an informed assessment that it is unable to continue as a going concern, and to initiate insolvency proceedings under Section 10 on that basis, without an obligation under Section 66(2) to do so. Preserving this ability for a corporate entity to voluntarily elect to initiate insolvency proceedings even during any temporary period would be important for an efficient market.

Further, the above measures are focused primarily on new insolvency proceedings, however, the pandemic has also had a significant impact on ongoing insolvency proceedings. For example, the NCLT and the NCLAT have been hearing urgent matters through video-conferencing, however, this has caused delays in pending insolvency proceedings; and the assumptions and valuations in resolution plans submitted prior to the pandemic may not be appropriate in the current circumstances.

Lenders, debt investors and borrowers will now need to consider alternative out-of-court enforcement/restructuring options, such as under the Reserve Bank of India (Prudential Framework for Resolution of Stressed Assets) Directions 2019<sup>8</sup> ("RBI Directions") and securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002,<sup>9</sup> ("SARFAESI Act") or

in-court restructuring through schemes under Sections 230–232 of the Companies Act, 2013. On August 6, 2020, the RBI announced<sup>10</sup> that a window would be provided under the RBI Directions to enable lenders to implement a resolution plan in respect of eligible corporate exposures, without a change in ownership, as well as personal loans, while classifying such exposures as standard assets, subject to specified conditions. It remains to be seen whether stakeholders will use these mechanisms effectively without diminishing value or if courts will be inundated with insolvency resolution proceedings in respect of prior defaults and defaults occurring after the expiry of the 'Restricted Period'.

In these circumstances, a greater focus is required on enhancing the efficacy of existing out-of-court and in-court restructuring mechanisms and introducing new mechanisms to preserve value, such as the pre-packaged insolvency resolution process, which would provide statutory approval to a mutually agreed resolution plan in a cost-effective manner.

## CONCLUSION

The Insolvency and Bankruptcy Code has rescued 308 corporate debtors through resolution plans and they have rescued Rs 4.99 lakh crore to creditors. The recovery for financial creditors as compared to their claims, was found to be more than 43 per cent for all the years since the introduction of the IBC.

From the date of enactment of the IBC in 2016, out of the 18,892 applications, as many as 14,884 cases involving defaults of Rs 5.15 lakh crore were withdrawn by September 2020. On the whole 7 percent of the corporate debtors have undergone either resolution or liquidation. The Code has brought behavioral changes among the creditors and debtors

thereby redefining debtor-creditor relationship. The inevitable consequence of a resolution process deters the management and promoter of the firm from operating below the optimum level of efficiency.

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# A Study on Consumer Awareness and Preferences Towards Organic Products

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## Abstract

In India, most of the people are living in village and depends on agriculture. The production of organic product is also part of the agriculture. Now days the peoples are worried about their health and depend on the products that are conventional product like chemical, fertilizer; stored etc. Due to these issues the most of the consumer depends towards organic products. Data has been analysed with the help of a questionnaire. The findings of the study revealed that the perception towards the organic product was for quality and health of the consumer. A sampling of 50 respondents was taken for the study. A stratified random sampling technique is adopted for the study.

**KEYWORDS: Organic product, Conventional product, quality and health of the consumer.**

## INTRODUCTION:

Now a day's major part of the population prefer organic products. Organic products are grown without the use of chemicals, fertilizers and pesticides with an environmentally and social responsibility. The market for organic product has been highly growing over a last

few years. The middle class people have health concessions so they mostly prefer the organic products. Due to this, major city has been taken as the key factor contributing to increase in the market. Whereas conventional product which have chemicals, fertilizers, pesticides which result in unhealthier to the people. In organic product which have the natural substance result in healthier to the people. An organic product includes fruits, vegetable, dairy products, processed foods, pulses and food grains and also beverages etc. For the growth of the organic product market we need to improve the various standards and implement them.

## OBJECTIVES OF THE STUDY:

- To know the awareness of a consumer towards an organic product.
- To examine the customers preferences of an organic product.
- To know the suggestion of the consumer towards an organic product.

## REVIEW OF LITERATURE:

Ayswarya R (2018) in her study "Consumer behaviour towards Organic Product in Tiruchirappali corporation". The objectives of the study were studying the level of awareness and preference towards organic product, motivating factors influencing towards purchase of organic product, level of satisfaction, impact of organic product. The study is descriptive in nature. Simple random sampling techniques is used. The statistical tools used for the study were Percentage analysis, Chi-Square analysis, One-way Anova, Factor analysis, Discriminate analysis, Multi-dimensional scaling techniques. The data collected through questionnaire model. The sample size of the study was 599. The findings of the study were most

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of the respondents purchase organic on monthly basis. The study concluded that government should encourage the organic farmer by providing necessary financial support, new schemes, regulation and policies.

Pavithra.P(2016) in her study “A study on consumer perception and satisfaction towards organic farm product with special reference to Tirupur district. The objectives of the study were consumer preference towards organic products, consumer perception, consumer satisfaction, influencing factors of consumer perception. The study was empirical and descriptive in nature. The statistical tools are simple percentage, Ranking technique, ANOVA, Chi-square test, Correlation analysis, Regression analysis, Factor analysis. The findings of the study where satisfaction of the organic farm product consumers have mostly positive and negative relationship with all variable. The suggestion of the study was maintaining their service by the reasonable price and correct quality. The study concluded that the organic farms are gratifying their consumer requirements by their quality product.

### RESEARCH METHODOLOGY:

This study is based on the primary and secondary data. The primary data has been collected through questionnaire. The secondary data has been collected through the website. The study is conducted to know about the opinion, preference and perception of the organic products. For this purpose, a stratified random sampling technique is adopted. Coimbatore district have been selected for the study.

Sampling: Sample size are 50 respondent.

### LIMITATION OF THE STUDY:

This study has been constrained to organic stores in Coimbatore and organic products. The conclusion drawn purely on the responses obtained from the respondent in the study area.

### RESULT OF THE STUDY:

Table No: 01

S. No	Age	No. of. Respondents	Percentage
1	Below 25	14	28
2	26-30	16	32
3	Above 30	20	40
<b>Total</b>		<b>50</b>	<b>100</b>

Table showing distribution of respondents on the basis of age

Source: Primary data

### Interpretation

The above table reveals that 40% of the respondents belong to the age group of above 30, followed by 32% of the respondents belong to the age group of 26-30 and 28% of the respondents belong to the age group of below 25

Table No: 02

Table showing distribution of respondents on the basis of Gender

S. No.	Gender	No. of. Respondents	Percentage
1	Male	20	40
2	Female	30	60
<b>Total</b>		<b>50</b>	<b>100</b>

Source: Primary data

### Interpretation

The above table states that 60% of the respondents were female members and 40% of the respondents were male members

Table No: 03-Table showing distribution of respondents on the basis of Marital status

S.No.	Marital status	No. of. Respondents	Percentage
1	Married	35	70
2	Unmarried	15	30
<b>Total</b>		<b>50</b>	<b>100</b>

Source: Primary data



**Interpretation**

The above table describe that 70% of the respondents were married person and 30% of the respondents were unmarried person.

**Table No: 04**

**Table showing distribution of respondents on the basis of Educational qualification**

S. No.	Educational qualification	No. of. Respondents	Percentage
1	Higher secondary	12	24
2	Under graduate	25	50
3	Post graduate	13	26
<b>Total</b>		<b>50</b>	<b>100</b>

Source: Primary data

**Interpretation**

The above table states that 50% of the respondents were under graduate, followed by 26% of the respondents were post graduate and 24% of the respondent's educational qualification were higher secondary level.

**Table No: 05**

**Table showing distribution of respondents on the basis of Occupation**

S. No.	Occupation	No. of. Respondents	Percentage
1	Private employee	8	16
2	Business man	7	14
3	Government employee	10	20
4	Home maker	25	50
<b>Total</b>		<b>50</b>	<b>100</b>

Source: Primary data

**Interpretation**

The above table describes that 50% of the respondent's occupation were home maker, followed by 20% of the respondents were government employees, 16% of the respondents were private employees, 14% of the respondents were business man.

**Table No: 06**

**Table showing distribution of respondents on the basis of Monthly Income**

S.No.	Monthly Income	No. of. Respondents	Percentage
1	Below 15,000	26	52
2	15001-20,000	14	28
3	Above 20,000	10	20
<b>Total</b>		<b>50</b>	<b>100</b>

Source: Primary data

**Interpretation**

From the above table it examines that 52% of the respondents had monthly income below 15,000, followed by 28% of the respondents had a monthly income of 15,001 – 20,000 and 20% of the respondents had a monthly income of above 20,000.

**Table No: 07**

S.No.	Family type	No. of. Respondents	Percentage
1	Nuclear	35	70
2	Joint	15	30
<b>Total</b>		<b>50</b>	<b>100</b>



**Table showing distribution of respondents on the basis of type of the family**

**Source: Primary data**

#### **Interpretation**

The above table states that 70% of the respondent's family type is nuclear and 30% of the respondent's family type is joint.

**Table No: 08**

**Table showing distribution of respondents on the basis of Residential area**

S.No.	Residential area	No. of Respondents	Percentage
1	Urban	40	80
2	Rural	7	14
3	Semi-urban	3	6
<b>Total</b>		<b>50</b>	<b>100</b>

**Source: Primary data**

#### **Interpretation**

The above table states that 80% of the urban belong to the residential area of urban, followed by 14% of the respondents belong to rural and only 6% of the respondents belong to semi-urban.

**Table No: 09**

**Table showing distribution of respondents on the basis of years of purchasing organic product**

S.No.	Years of purchasing organic product	No. of Respondents	Percentage
1	Below 1 Year	25	50

2	1-2 years	10	20
3	Above 2 years	15	30
<b>Total</b>		<b>50</b>	<b>100</b>

**Source: Primary data**

#### **Interpretation**

The above table describes that 50% of the respondents purchase the organic product below 1 year, followed by 30% of the respondents purchase the organic product between 1-2 years and 30% of the respondents purchase the organic product above 2 years.

**Table No: 10**

**Table showing distribution of respondents on the basis of amount spend on purchase of organic products**

S.No.	Amount spend on purchase of organic products	No. of Respondents	Percentage
1	Less than 500	45	90
2	501 – 1000	5	10
3	Above 1000	0	0
<b>Total</b>		<b>50</b>	<b>100</b>

**Source: Primary data**

#### **Interpretation**

The above table describe that 90% of the respondents spend amount less than 500 for purchase of organic product, 10% of the respondents spend between 501 – 1000 amounts on purchase of organic product

**Table No: 11**

**Table showing distribution of respondents on the basis of place in which the organic product purchased**

S.No.	Place of purchase	No. of Respondents	Percentage
1	Organic store	25	50
2	Departmental store	15	30
3	Super market	10	20
<b>Total</b>		<b>50</b>	<b>100</b>

**Source: Primary data**

### Interpretation

The above table indicates that 50% of the respondents purchase organic product in organic store, followed by 30% of the respondents purchase organic product in departmental stores and only 20% of the respondents purchase organic product in super market.

**Table No: 12**

**Table showing distribution of respondents on the basis of preference about organic product**

S.No.	Preference	No. of Respondents	Percentage
1	Advertisement	35	70
2	Friends and relatives	03	6
3	Doctor advice	12	24
<b>Total</b>		<b>50</b>	<b>100</b>

**Source: Primary data**

### Interpretation

The above table states that 70% of the respondents said that they purchase organic product by viewing the advertisement, followed by 24% of the respondents purchase the organic product through doctor advice and only 6% of the respondents purchase the organic product through friends and relatives recommendation.

### Ranking

S.No.	Factors	Rank
1	Health	8
2	Reasonable price	7
3	Quality of product	20
4.	Decrease in weight and disease	10
5.	Preferred by family members	5

### Interpretation

The above table indicates that 20 of the respondents prefer organic product due to quality, 10 of the respondents prefer organic product due to decrease in weight and disease, 8 of the respondents prefer organic product due to health, 7 of the respondents prefer organic product due to reasonable price and only 5 of the respondents prefer organic product due to preferred by family members.

### FINDINGS

1. Majority of the respondents belongs to the age group of above 30 (40%)
2. Majority of the respondents are female members (60%)
3. Majority of the respondents were married person (70%)
4. Majority of the respondent's educational qualification were under graduate (50%)
5. Majority of the respondents were home maker (50%)

6. Majority of the respondent's monthly income were below 15,000 (52%)
7. Majority of the respondents belong to Nuclear family (70%)
8. Majority of the respondent's residential area were urban (80%)
9. Majority of the respondents purchase organic product below one year (50%)
10. Majority of the respondents spend less 500 amounts for the purchase of organic product (90%)
11. Majority of the respondents purchase organic product at organic store itself (50%)
12. Majority of the respondents purchase organic product through advertisement (70%)
13. Majority of the respondents said that they prefer organic product for the purpose of quality (20%)

#### **SUGGESTIONS:**

The following are the suggestions made based on the results of the study.

- There is a need to open organic products available in prominent market places and also gradually, in all the shops.
- The creation of awareness towards the benefits they derive through organic products is necessary among consumers.
- The government or marketers can conduct programmes on environment through workshops or demonstrate the organic product which creates consumers more environmentally conscious.
- Sustained improvement in product features would lead to an increase in consumption of organic products.

#### **CONCLUSION:**

Organic products are more expensive in comparison to non-organic products. So, people with a low level of income cannot afford the expenses on these products. So, that the organic consumers are not purchasing more quantity of products. The varieties of organic products which are available in the market are limited. There is a lack of awareness about organic products to consumers. So, on the basis of the study it can be concluded that people living in rural areas also want to use organic products but due to less knowledge and low level of income they cannot buy these products. If companies or manufacturers want to earn more profit they should move in the rural area of India because around 60% of the consumers are living in rural areas.

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# Bill Smart

*Anbumathi C V*

## ABSTRACT :

This is an innovative technology which is useful for both the supermarkets and customers. In this system, we depict reasonable and cost-effective Smart Shopping Cart utilizing IoT (Internet of Things) technology. Rather than influencing the clients to sit tight in a long line for looking at their shopped things, this helps in mechanizing the easy and comfortable billing process. These will be also very beneficial for the retail stores.

KEYWORDS : Billing, Barcode Scanner, Trolley

## INTRODUCTION :

It is a smart technology used for both the supermarkets and the customers. Every customer can use this trolley for their purchasing. This system is easily adaptable by all the supermarkets as they do not require any special training. The Bill Smart is equipped with a barcode scanner for product identification and an LCD display that informs customers about the product prices and the total amount. Once the customers are done with the shopping, they can just press the "BILL" button and the details are sent to the billing counter, hence the customer has to pay only the bill amount and leave. Along with these abilities, this system design is also capable of detecting the unscanned items taken by the customer. The Bill Smart has the potential to make shopping more pleasurable and efficient for the shopper as well as the supermarkets can achieve the customers satisfaction. Stocks of the supermarkets are updated daily by the admin. Subsequently, customers do not have to hold up in long lines for their work done. Bill smart requires Local Area Network (LAN) connection.

A local area network (LAN) is a computer network that interconnects computers within a limited area. Wi-Fi is the most common technology in use for the bill smart. In a wireless LAN, users have unrestricted movement within the coverage area. LAN enables you to store data in any central computer from where it can be shared.

## LITERATURE REVIEW :

In a supermarket people purchases different items and put them into the trolley. After completion of purchasing, one needs to go to the billing counter for payments. At the billing counter the cashier prepares the bill using bar code reader which is very time consuming process and results in a long queue at the billing counter. As this process is very time consuming, it becomes worst on holidays, special offers or weekends. Thus the retail stores will face a problem of customer dissatisfaction due to long waiting time during the billing process. A major drawback is that the customer has to wait even though a single item is being purchased.

## MAJOR DRAWBACKS :

- Customers have to wait in a long queue for the billing process.
- Every single item has to be perused physically.
- It does not reveal any automatic way of indicating to the customer how the total bill is.
- Involvement of lot of man power in the billing counter.
- More time consuming process

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**MATERIALS AND METHODS :****PYTHON DJANGO :**

Django is a web application framework written in Python programming language. It is based on MVT (Model View Template) design pattern. The Django is very demanding due to its rapid development feature. It takes less time to build application after collecting client requirement. By using Django, we can build web applications in very less time. Django is designed in such a manner that it handles much of configure things automatically, so we can focus on application development only. Django was design and developed by Lawrence journal world in 2003 and publicly released under BSD license in July 2005. Currently, DSF (Django Software Foundation) maintains its development and release cycle.

**FEATURES OF DJANGO :**

- Rapid Development
- Secure
- Scalable
- Versatile
- Open Source
- Vast and Supported Community

**MODULES :**

- Admin
- Database stock loading
- Adding product into cart
- Product removal
- Billing process

**ADMIN**

First to enter this system the user has to login to this system. Basically there are two types of users in this system.

**ADMIN USERS**

- They will have full access to all the modules of this system.
- They will grant privileges to other users.
- They can add, view, update and even delete the products from the database.

**OTHER USERS**

Has restricted access that is, Normal users will have access to only some of the modules. Once the privileges are granted the user can add, view and update the products. They cannot delete the products from the database.

**DATABASE STOCK LOADING**

In this module, we are performing the database stock loading process. The products are added into the database with its name, price, quantity and expiry date. Here the barcode value is also stored in the database. Once the stocks are insufficient in the database, both the admin and the user can add or update the products into the database.

**ADDING PRODUCT INTO THE CART**

This process is carried out by the customers while purchasing. The customer entering the supermarket will take a trolley for their purchasing. When they press “start button” in the system the barcode reader gets ready to read the products.

Every product has a barcode which contains an unique id. The information of the product is extracted from the database and details are displayed in the LCD screen. This system would ultimately facilitate the customer to shop a large number of products within a short time span.

**PRODUCT REMOVAL**

This system involves an option provided to delete some of the products from the trolley. If the customer wants to remove some of the products, then those products has to scanned again using the barcode scanner. Thus the scan id will be decoded and removed from the trolley. Thus the bill will be updated accordingly.

If the product is taken without reading by the barcode scanner, then the Buzzer sound will be intimated to the customer. This goes by the customers choice to remove the unenrolled product or to add again into the trolley.

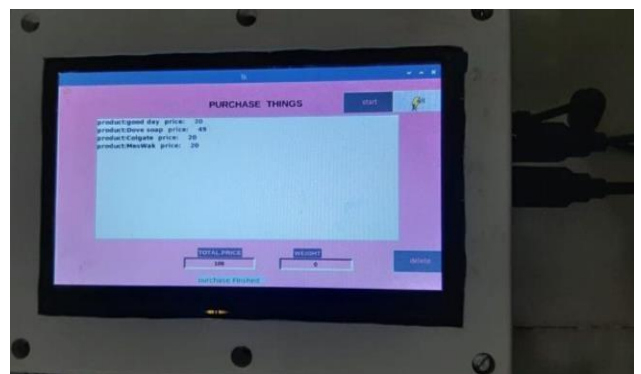
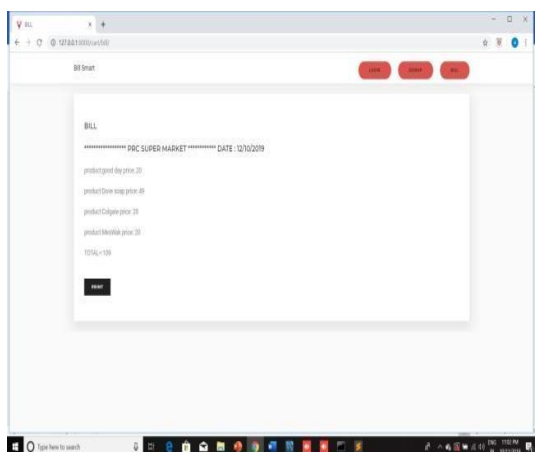
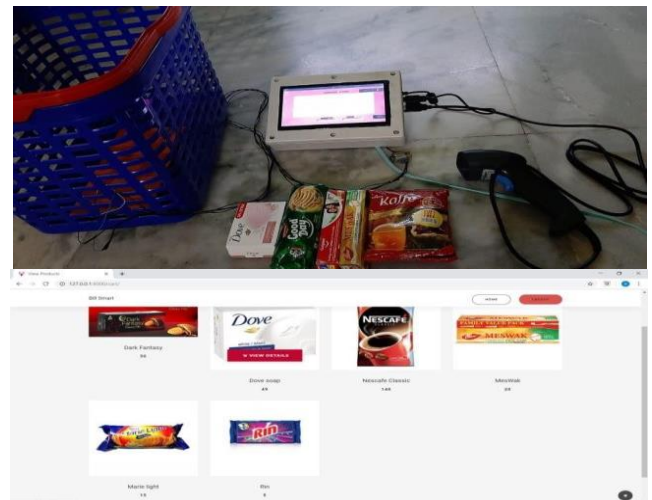
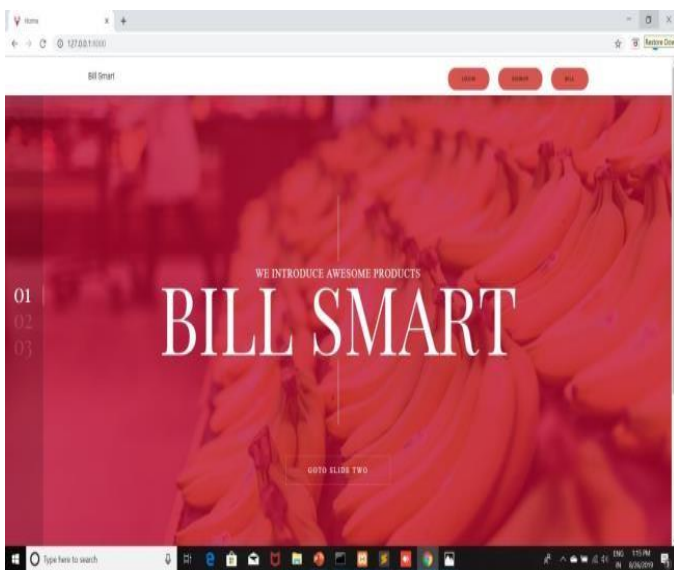
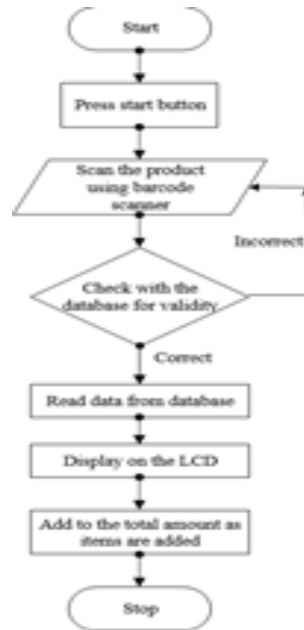
**BILLING PROCESS**

At the end of the shopping, the customer will press the “bill button” in the LCD screen. Thus those details will be stored

in the database and retrieved from the billing counter side. The customer can straight away move to the billing counter to just make their payments and leave. This system is easy to use and does not need any special training.

The database which contains the information of all the products that are present in the store, resides in the stores server. MySQL database has been used for the implementation, which consists of the following fields :

- Scan ID (Barcode ID).
- Name of the product.
- Price.



**CONCLUSION :**

The intended objectives were successfully achieved in the prototype model developed. The developed product is easy to use, low-cost and does not need any special training. Overall architecture of the system used in the supermarkets for intelligent and easy shopping is to save time, and energy of the consumers. It improves customers shopping experience in stores while reducing the man-power requirements of the stores. Along with these abilities, this system design is also capable of detecting the unscanned items taken by the customer. This smart shopping is implemented in such a way that it allows the customer to scan the item that he/she wants to purchase and automatically updates the bill thus preventing long queues at the billing counter. The project titled Bill Smart is tested with a real-time data and found to be working well. This system is flexible, user friendly and satisfies both the customers and retail shops requirements specified.

**FURTHER ENHANCEMENTS:**

It is not possible to develop a system that makes all the requirements of the user. User requirements keep changing as the system is being used. Some of the future enhancements that can be done to this system are :

Possible to upgrade the system and can be adaptable to desired environment.

System can be enhanced by making the card payment in the trolley itself.

This system is easily adaptable to any further changes.

- Tracking of the desired product module can be added.
- Cart-to-Cart communication can also be enhanced that allows the customers to share their shopping list with their partner thereby enabling them to shop in parallel without duplicating their purchases.

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# The Importance of Employability Skills for the Engineering Graduates

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## Abstract

This paper investigates the importance of employability skills for the engineering graduates. Employability skills refers to set of skills and knowledge required by the graduates in the workplace to satisfy their needs and corporate expectations. Employability is a set of skills, knowledge and personal attributes that make an individual more employable. It has been emphasized that soft skills play a crucial role in increasing the chances of the candidates to get an employment. Employability skills are important because the labour market is intensely competitive, and employers are looking for people who are flexible, take the initiative and have the ability to undertake a variety of tasks in different environments. Engineering education demands numerous challenges in the present context due to the difficulties posed by the placement scenario. Demand for competent engineering professionals has made the selection process highly challenging giving rise to a need for comprehensive education pedagogy not just confined to inculcating hard core technical attributes but also human skills. Hence there is an urgent need to

continuously upgrade the curriculum design of engineering courses so as to better equip the technical graduates with employability skills. The employability skills are the set of svkhghybhgbgvyhgv skills essentially required and expected by the Employers from the graduates for better outcome.

Keywords: Employability Skills, Graduates, Environments, Education, Engineering.

## 1. INTRODUCTION

There has been a recent increased recognition of the necessity to reinforce students' employability. And better education institutions are getting increasingly aware of students and Employers' needs. Identifying the status of graduates after leaving the tutorial institution may be a primary task of the every education institution to work out the strengths and weaknesses of particular curricular offerings. Employers search for a variety of skills in graduate applicants, many of which are common to variety of various career areas. Those most often mentioned are communication, team working, leadership, initiative, problem-solving, flexibility and enthusiasm. Employability skills are defined as: "A set of attributes, skills and knowledge that each one labour market participants should possess to make sure they need the potential of being effective within the workplace – to the advantage of themselves, their employer and therefore the wider economy."

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The factors that help to form people employable include:

- Knowledge and skills concerning a specific job
- The ability to spot suitable job opportunities
- Self-presentation (on applications and at interviews)
- External factors like the work market and private circumstances

It is commonly perceived that employers feel there's a graduate skills gap, suggesting that universities don't necessarily provide enough opportunities for college kids to develop skills critical for the labour market. Hence, comprehensive education curriculum should be the main target of the tutorial Institutes within the present scenario. There are organizations whose sole criteria for hiring the professionals is predicated more on skill sets relevant to a specific profession evaluating a private on parameters like attitude, leadership, motivation, team work, persuasive strategies to affect people, communication skills, emotional intelligence, interpersonal skills, conflict management, etc.

## LITERATURE REVIEW

Hard core skills are the skill sets relevant to a particular discipline but soft skills are a set of traits required for imparting a wholesome education to a professional wherein he is not only a computer engineer or a mechanical engineer but a technical graduate with a perfect hold on his dealings with the professional world and hence can be a good leader, a motivator and a person having all the necessary attributes which enable him to deliver his best in the job scenario. "The All India Council for Technical Education (AICTE) statistics show that the enrolment

of youth for technical courses in India is lower than the available capacity and less than 40% of the graduating students get jobs in industry. This clearly shows a mismatch between the industry requirements and academic skill development" (Büth 2017). Wen & Ngok, (2011), in his study on Higher Education and Employability Skills, explored the areas which are critical for employability of our students coming out of higher educational institutions. The paper considered what skill sets are lacking in our students and how this can be provided through soft skill training and Personality Development programs. Samson Packianathan and Rajagopal Narayanan (2014) in their research article on Employability Skills a Conceptual Framework, attempts to provide a conceptual framework on employability skills of business graduates based on in-depth reviews. A study by Archer and Davison (2008), considering the perspectives of employers on graduate employability, provides a contrast between what some universities are promoting and what is required by industry.

## EMPLOYABILITY SKILLS:

Employability skills are the set of skills essentially required for the educated people to become employable. In this competitive world every individual must acquire employability skills in order to get his dream job and also for his survival. Having a professional degree with excellent academic credentials alone are not adequate for a graduate as the employers today seek for competencies or capabilities in generic skill or soft skills. Generic skills are also known as "Core," "key," "transferable," "general," "non-technical", "soft" skills, and "employability skills" which is needed most in today's workforce (Bailey, 1990). Employability skills may differ according to the type of job an individual chooses and also it may vary from time to time based on industry

requirements. Most of the people change their job or career 5 to 7 times in their live. Skills developed in one job can be used in different lines of work or industries.

### List of Employability Skills

- Communication Skills
- Technical Skills
- Interpersonal Skills
- Analytical Skills
- Problem Solving and Decision Making Skills
- Leadership and Management Skills
- Team Working Skills
- Planning and Organizing Skills
- Negotiation Skills
- Innovative and Creative Skills

### Communication Skills

Communication skills play a vital role in the selection process because the selected candidate must interact with clients who are in other states or countries and importantly English is the common business language to communicate with the clients. Communication is the ability to communicate with others, whether it is verbal, written or electronic. In an employment setting communication skills are the key to building relationships. The ability to communicate effectively and change your style accordingly is important throughout your working relations. It is important that you get along with colleagues, listen and understand instructions.

### Technical Skills

Technical skills are the knowledge and abilities needed to accomplish mathematical, engineering, scientific or computer-related tasks as well as other specific tasks relating to technology. Those with technical skills are often referred to as technicians, such as electronics technicians or engineering

technicians. Technology based companies will surely expect technical knowledge from the candidates and students must have a solid command over at least one of the programming languages like C, C++ and JAVA etc. The below mentioned are the top 5 technical skills in an IT industry in recent days:

- Big Data Analysis
- Coding and Programming
- Project Management
- Social Media Experience
- Technical Writing

### Interpersonal Skills

Interpersonal skills are the skills we use every day when we communicate and interact with other people, both individually and in groups. People with strong interpersonal skills are often more successful in both their professional and personal lives. Good interpersonal skills allow an individual to participate effectively as a member of a team, negotiate, make decisions, take responsibility and work effectively with other employees.

### Analytical Skills

Analytical skill is the skill of performing an analysis. Such skills include the ability to apply logical thinking in order to break complex problems into their component parts. Analytical skills refer to the ability to collect and analyze information, problem-solve, and make decisions. These strengths can help solve a company's problems and improve upon its overall productivity and success. Often, analyzing requires a creative eye to spot trends in the data that others may not find. Creativity is also important when it comes to problem-solving. Employees with strong analytical skills will think outside of the box to come up with effective solutions to big problems. Critical thinking is necessary for having strong analytical skills. Critical

thinking refers to evaluating information and then making a decision based on your findings. Critical thinking is what helps an employee make decisions that help solve problems for the company.

### **Leadership and Management Skills**

Leadership skills are the tools, behaviors and capabilities that a person needs in order to be successful at motivating and directing others. Leadership is lifting a person's performance to a higher standard, the building of a personality beyond his normal limitations.

#### **The qualities of a good leader:**

- Honesty and Integrity
- Confidence
- Inspiring Others
- Commitment and Passion
- Good Communicator
- Creativity and Innovation

Management skills are the practice of understanding, developing and deploying people and their skills. Management skills are required to manage the business and include overseeing workplace issues, employees, teamwork and team development and communication.

#### **The qualities of a good manager:**

- Skilled and Knowledgeable
- Disciplined and Focused
- Orientation towards results
- Positive Attitude

### **Team working Skills**

Team working is that the ability to figure with others in groups and teams, both formal and informal. Not most are required to figure during a close-knit team, despite the language utilized in many organizations but the power to function well during a group may be

a vital skill in most jobs. Team working skills contains interrelated abilities that permit you're employed effectively in an organized group. it's vital to employers, as teams are a basic organizational unit within many companies. Teamwork happens when people cooperate and use their individual skills to realize common goals.

### **Planning and Organizing Skills**

Planning and organizing skills assist you manage time, tools and resources to succeed in a goal. They assist you're employed out what you would like to try to realize your aims. Planning is significant within the least levels in the workplace. Planning and organisation skills are essential if you would like to realize your goals – they assist keep you focused on doing the proper tasks, assist you set your priorities and provides you the arrogance that you simply are following your own personal roadmap to your target destination. And organisation skills also are essential for surviving this thing called life – and particularly in today's hectic world with numerous time pressures. Good planning skills can greatly help reduce the strain related to today's society, because you to feel more on top of things of your life and assist you manage some time better.

### **Negotiation Skills**

Negotiation skills are qualities that allow two or more parties to succeed in a compromise. These are often soft skills and include abilities like communication, persuasion, planning, strategizing and cooperating. Understanding these skills is that the initiative to becoming a stronger negotiator. Here is a couple of key negotiation skills that apply to several situations:

- **Communication:** Essential communication skills include identifying nonverbal cues and expressing yourself during a way that's engaging. It's important to know the natural flow of conversation and always invite feedback. Active listening skills also are crucial for understanding the opposite party. By establishing clear communication, you'll avoid misunderstandings that would prevent you from reaching a compromise.

- **Persuasion:** the power to influence others is a crucial skill for negotiation. It can assist you define why your proposed solution is useful to all or any parties and encourage others to support your point-of-view.

- **Planning:** so as to succeed in an agreement that benefits both parties, it's crucial you think about how the results will impact everyone within the long-term. Planning skills are necessary not just for the negotiation process but also for deciding how the terms are going to be administered.

- **Strategizing:** the simplest negotiators enter a discussion with a minimum of one backup plan, but often more. Consider all possible outcomes, and be prepared for every of those scenarios.

## INNOVATIVE AND ARTISTIC SKILLS

Creativity is a lively process necessarily involved in innovation. it's a learning habit that needs skill also as specific understanding of the contexts during which creativity is being applied. The creative process is at the guts of innovation and sometimes the words are used interchangeably. Innovations are often broadly thought of as new ideas, new ways of watching things, new methods or products that have value. Innovation contains the thought of output, of truly producing or doing something differently, making something happen or implementing something new. Innovation nearly always involves hard work; persistence and

perseverance are necessary as many good ideas never get followed through and developed. Creativity is a lively process necessarily involved in innovation. It's a learning habit that needs skill also as specific understanding of the contexts during which creativity is being applied. The creative process is at the guts of innovation and sometimes the words are used interchangeably.

## Importance of Employability Skills

According to Greatbach and Lewis (2007) generic employability skills are important because the labour market is extremely competitive and employers privately , public and therefore the third sector are trying to find people that are flexible, who can take the initiative and have the power to undertake a spread of tasks in several environments. Employability skills aren't as narrowly prescribed and defined as within the past and usually they're more 'service oriented', making information and social skills increasingly important. Therefore, for example:

- The wide world trend towards a rise in commission sector jobs (e.g. in business, finance and retail sectors) requires people to possess interpersonal skills – staff who are ready to explain things and solve problems in response to client needs.

- Those working in manufacturing industry increasingly add teams or cells and this sort of working demands more internal communication and a capability to influence, negotiate and influence.

- Craft workers often work with more complex processes which demand greater thinking, reasoning and problem-solving skills so as to work machinery or affect faults.

- Decentralized supply chain management and systems integration require greater communication, team leadership, business and commercial awareness from all the staff.

- The use of standardization of computer based packages in many insurance, banking and call centers highlights the importance of communication skills and attitudes like confidence, judgment and private organization.

### CONCLUSION

These days, employers search for skills beyond the ‘academic qualifications’ of candidates. Many of them believe that academic qualifications and knowledge are something which will easily be found but the proper combination of characteristics that help a corporation make money or economize, are hard to seek out. However, there are certain differences in terms of the fluency in expression and therefore the language because there are certain students who aren't at par with the mainstream engineering students thanks to their educational background and hence their performance isn't nearly as good as the engineering students. Practice based components and therefore the interactive methodology enables the scholars to find out better and supply them a chance to not only learn through doing but also gets an exposure in understanding the indispensability of the talents which is taken into account to be quite insignificant during their college years and may be learned later.

However, with the changing classroom, teaching scenario, which should be more of practice oriented instead of merely confined to delivering lectures there's a requirement to continuously update the teaching pedagogy to be more and more interactive and task based.

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# Big Data Analytics Review Paper

*Manonmani .P<sup>1</sup>, Dhanya R.D<sup>2</sup>*

## Abstract:

Big data is refers to the datasets that are not only big, but also high in variety and velocity, which makes the customers difficult to handle and for using traditional tools and techniques. The decision makers need to be able to gain valuable insights from such varied and rapidly changing data, ranging from daily transactions to customer interactions and social network data. Such as value can be provided by using big data analytics, which is the application of advanced analytics techniques on big data.

## INTRODUCTION

Big Data Analytics “Big Data” has been applied to datasets ranging from the fundamentals statistics is using numbers to quantify the info. Data processing is using statistics and programming languages to seek out patterns hidden within the data. Machine learning uses data processing to create models to predict future outcomes.

## CHARACTERISTICS OF MASSIVE DATA

In this Characteristics of massive Data, there are three main features characterize big data: volume, variety, and velocity, or the three V’s. The quantity of the info is its size, and the way enormous it’s. Velocity refers to the speed with which data is changing, or how often it’s created. Finally, variety includes the various

formats and kinds of knowledge, also because the different sorts of uses and ways of analyzing the info. Big Data Analytics is that the process of examining large and varied data sets i.e., to uncover hidden patterns, unknown correlation, market trends, unknown trends, customer preference and other useful information that help organization to form

## BIG DATA STORAGE AND MANAGEMENT

The traditional methods of structured, unstructured and semi-structured data storage and retrieval include relational databases, data marts, and data warehouses. the info is uploaded to the storage from operational data stores using Extract, Transform, Load (ETL), or Extract, Load, Transform (ELT), tools which extract the info from outside sources, transform the info to suit operational needs, and eventually load the info into the database or data warehouse.

## BIG DATA ANALYTIC PROCESSING

Consistent with this, there are four critical requirements for the big processing. The primary requirement is fast data loading. The network traffic interferes with the query executions during data loading, it is necessary to scale back the info loading time. The foremost important trait is that not only online firms, but virtually any sort of firm in any industry, can participate within the data-driven economy. Multiple data types: Organizations are combining large and little volumes of knowledge, internal and external sources, and structured and unstructured formats to yield new decisions.

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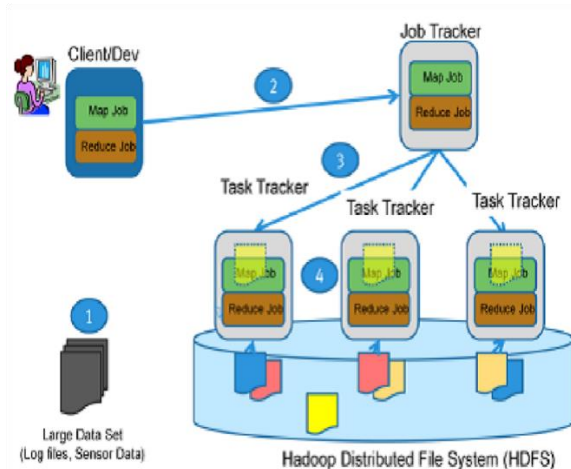


## BIG DATA ANALYTICS AND DECIDING

Big data is becoming an increasingly important asset for decision makers. Services that provide analysis of huge or complex data sets, using the cloud hosted services. Similar sorts of services include software as a service (SaaS) or infrastructure as a service (IaaS), where specific big data as a service options are wont to help businesses handle what the IT world calls big data, or sophisticated aggregated data sets that provide tons useful for today's companies.

## CUSTOMER INTELLIGENCE

Big data analytics holds the much potential for the customer intelligence, and it can highly benefit industries like retail, banking, and telecommunications. This will allow them to form more informed marketing decisions, and market to make the various segments supported their preferences alongside the popularity of sales and marketing opportunities.



## QUALITY MANAGEMENT AND IMPROVEMENT

The manufacturing, energy and utilities, and telecommunications industries, within the big data are

often used for quality management, so as to extend profitability and reduce costs by improving the standard of products and services provided.

- Decision analysis.
- Fast forward to technology provides scale and
- Flexibility to data storage Predictive analysis Cost escalates too fast.
- Less privacy
- Needs right cost and solve the proper problem.

## RISK MANAGEMENT AND FRAUD DETECTION

In Risk Management and Fraud Detection the evaluation and bearing of risk may be a critical aspect for the financial services sector, big data analytics can help in selecting investments by analyzing the likelihood of gains against the likelihood of losses.

Additionally, internal and external big data are often analyzed for the complete and dynamic appraisal of risk exposures.

## CONCLUSION

In this research, we have examined the innovative topic of massive data in business intelligence, which has recently gained many interest in thanks to its perceived unprecedented opportunities and benefits. So within the information we are currently living in, the voluminous sorts of high velocity data are being produced daily, and intrinsic details and patterns of hidden knowledge which should be extracted and then utilized. Big data analytics is that the process of examine large and varied data sets i.e. to uncover hidden patterns , unknown correlation , market trends , help organization to form better business

decisions .Future of big data analysis vital in changing environment as use altogether field like banking , insurance firm , education, predictive analysis , data management , predictive.

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# Cram on Competent Quality Extraction and Edge Detection Methods for Segmentation of Images

*Ms. M. Kavitha*

## ABSTRACT :

Segmentation is taken under consideration together of the foremost steps in image processing. It divides a digital image into multiple regions so on research them. It's also used to distinguish different objects within the image. Image segmentation may be a crucial problem in several fields of image processing and computer vision. Image segmentation is that the process of dividing images consistent with its characteristic e.g., color and objects present within the images. Different methods are presented for image segmentation. the main target of this study is to match the performance of varied segmentation algorithms. The study concludes that segmentation entirely relay on the image features and contrast. Image contrast could also be degraded during image acquisition. The usage of algorithms like Graph cut algorithm can generate over segmentation or under segmentation on badly contrast images in comparison to other methodologies.

**Keywords:** Edge Detection, Graphic Cuts, Noise Estimation, Segmentation.

## 1.INTRODUCTION:

Famous techniques of image segmentation which are still getting employed by the researchers are Edge Detection, Threshold, Histogram; Region based methods, and Watershed Transformation. Since images are divided into two types on the thought of their color, i.e. gray scale and color images. Therefore image segmentation for color images is totally

different from gray scale images, e.g., content based image retrieval. Also which algorithm is robust and works well is depends on the type of image. The property of a pixel during a picture and knowledge of pixels almost that pixel are two basic parameters for any image segmentation algorithm. It can also be representing as similarity of pixels in any region and discontinuity of edges in image. Edge based segmentation is used to divide image on the thought of their edges. Region based methods used the sting so on separate the background from an image , whereas neural network based techniques used the training algorithm to teach the image segmentation process. The result taken from image segmentation process is that the most parameter for further image processing research; this result also will determine the quality of further image processing process. Image segmentation is additionally used to differentiate different objects within the image, since our image is split into foreground and background, whereas

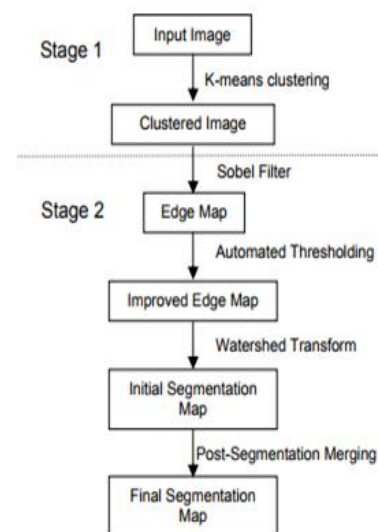


Fig 1. Process flow for segmentation

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foreground of image is claimed to the region of interest, and background is that the rest of the image. Hence, image segmentation will separate these two parts from one another.

**2. LITERATURE REVIEW:**

**[1]. Nida M.zaitoun :(2015)**

Thanks to the arrival of technology image-processing techniques became increasingly important during an enormous sort of applications. Image segmentation could also be a classic subject within the sector of image processing and is additionally a hotspot and focus of image processing techniques. Several general-purpose algorithms and techniques are developed for image segmentation. Since there is no general solution to the image segmentation problem, these techniques often got to be combined with domain knowledge so on effectively solve an image segmentation problem for a haul domain.

**[2]. Waseem Khan: (2013)**

Image segmentation could also be a mechanism used to divide an image into multiple segments. It'll make image smooth and easy to measure. Segmentation process also helps to hunt out region of interest during a specific image. the foremost goal is to make image more simple and meaningful. Existing segmentation techniques can't satisfy all kind of images. This survey addressed various image segmentation techniques, evaluates them and presents the issues related to those techniques.

**3.PROBLEM STATEMENT:**

Photographs have served as reliable primary sources of evidence, but that's quickly changing. Photo manipulation tools became widespread and it's easy to control images. Photo manipulations tools like Adobe Photoshop afford greater artistic expression, and enable users to make manipulations that challenge the bounds of our natural perception. The difference between authentic and manipulated photos has

become harder to differentiate, and may only be detected by digital forensic experts.

**4.METHODOLOGIES:**

**A . Edge Based Image Segmentation:**

Edge-based segmentation represents an outsized group of methods supported information about edges within the image. Edge-based segmentations believe edges found during a picture by edge detecting operators -- these edges mark image locations of discontinuities in gray level, color, texture, etc. image resulting from edge detection cannot be used as a segmentation result. Supplementary processing steps must follow to combine edges into edge chains that correspond better with borders within the image.

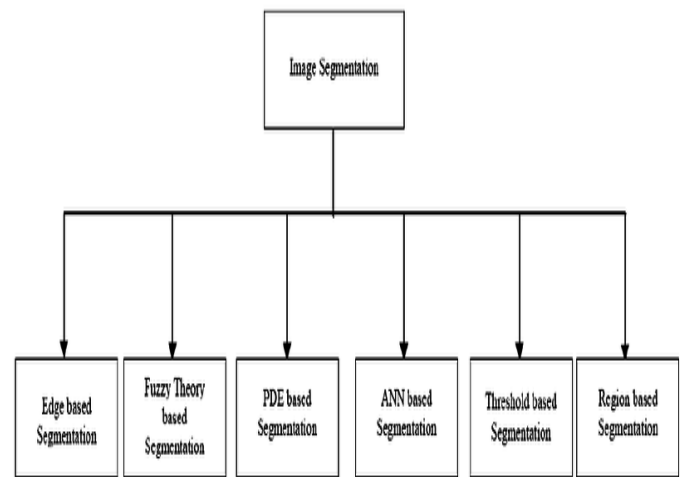


Fig 2 .Various image segmentation techniques

The more prior information that is available to the segmentation process, the better the segmentation results that can be obtained. The most common problems of edge-based segmentation are

An edge presence in locations where there is no border, and

No edge presence where a real border exists.

**1. Image preprocessing:**

Conversion of a color image into a grayscale image inclusive of salient features could also be a sophisticated process. The converted grayscale image may lose contrasts, sharpness, shadow, and structure of the color image. To preserve contrasts, sharpness, shadow, and structure of the color image a replacement algorithm has proposed. To convert the color image into grayscale image the new algorithm performs RGB approximation, reduction, and addition of chrominance and luminance.



A. Original image

B. Lightness



C. Average

D. Luminosity

If the gray scale has 256 brightness the ideal image has constant brightness values 128. Gray scale transformation do not depend on the position of the pixel in the image.

**2. Edge Classifications:**

The purpose of detecting sharp changes in image brightness is to capture important events and changes in properties of the planet. It is often shown that under rather

general assumptions for a picture formation model, discontinuities in image brightness are likely to correspond to:

- Discontinuities thorough,
  - Discontinuities in surface orientation,
  - Changes in material properties and
  - Variations in scene illumination.
- In the ideal case, the results of applying a foothold detector to a picture may cause a group of connected curves that indicate the boundaries of objects.



a. Original Image

b. Edge Detection Image

**3. Edge thinning:**

Edge thinning may be a technique wont to remove the unwanted spurious points on the sides in a picture. this system is used after the image has been filtered for noise (using median, Gaussian filter etc.), the sting operator has been applied (like those described above) to detect the sides and after the sides are smoothed using an appropriate threshold value.

**B. Image Segmentation:**

Image segmentation is the process of dividing an image into multiple parts. This is typically used to identify objects or other relevant information in digital images. There are many different ways to perform image segmentation, including:

- Thresholding methods such as Otsu’s method

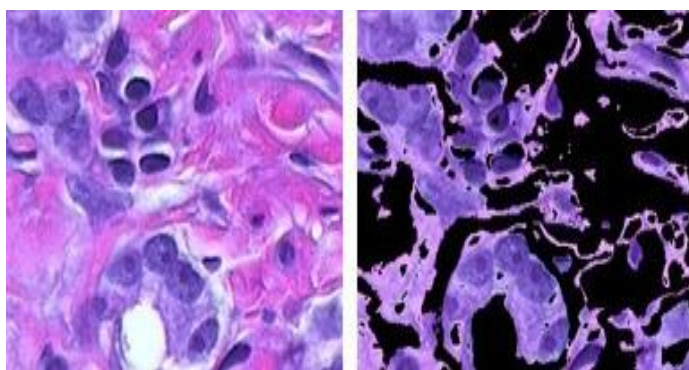


a. Original Image

b. Threshold Image

The algorithm assumes that the image contains two classes of pixels following bi-modal histogram (foreground pixels and background pixels), it then calculates the optimum threshold separating the two classes so that their combined spread (intra-class variance) is minimal, or equivalently (because the sum of pairwise squared distances is constant),

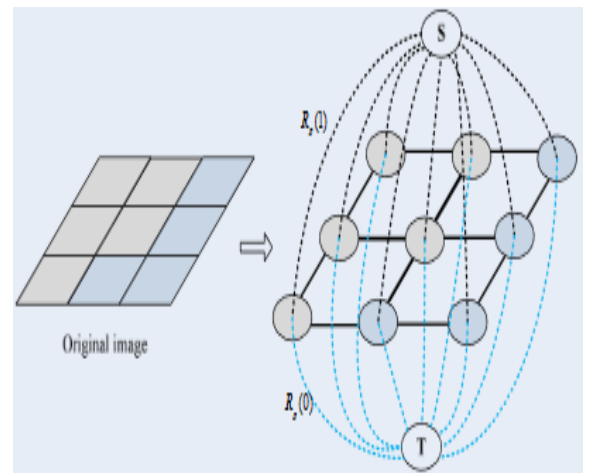
- Color-based Segmentation such as **K-means clustering**



**k-means clustering** is a method of vector quantization, originally from signal processing, that is popular for cluster analysis in data mining. *k*-means clustering aims to partition *n* observations into *k* clusters in which each observation belongs to the cluster with the nearest mean, serving as a prototype of the cluster.

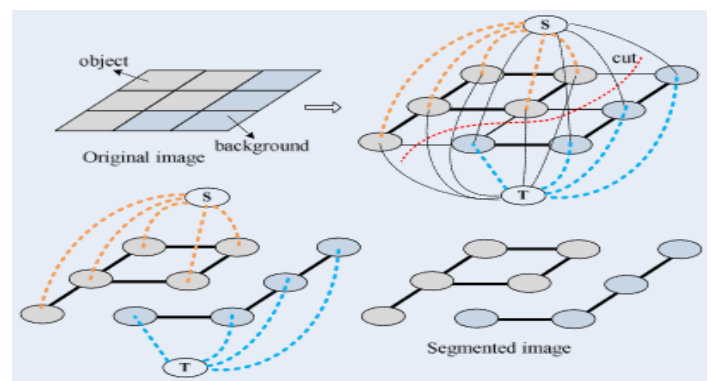
**C. Graph-Cut Segmentation:**

Image segmentation problem can be interpreted as partitioning the image elements (pixels/voxels) into different categories. A cut of a graph is a partition of the vertices in the graph into two disjoint subsets. Constructing a graph with an image, we can solve the segmentation problem using techniques for graph cuts in graph theory.



a. Original image

The image pixels correspond to the neighbor nodes in the graph(except s and t nodes). The solid lines in the graph are n-links and the dotted lines are t-links.



b. n-link and t-link Image



**Interactive-based graph cut:**

To most of the images, it is difficult for the application of pure automatic segmentation. Especially for the natural images and images which the accuracy requirements of target segmentation are very high, interactive segmentation is inevitable. Interactive based graph cut varies from easily choosing the interest object region or simple seed points to iteratively seed point selection.

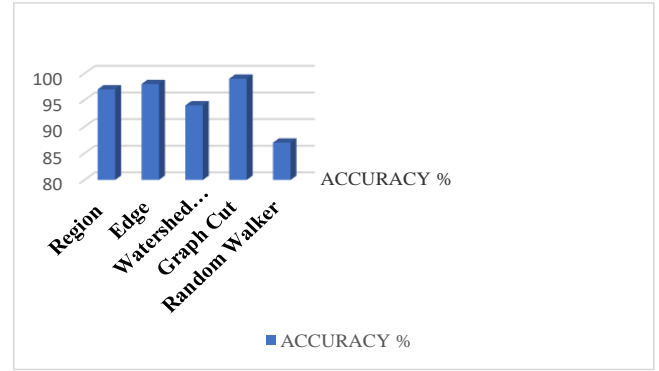


TABLE I. WEIGHT OF EDGES

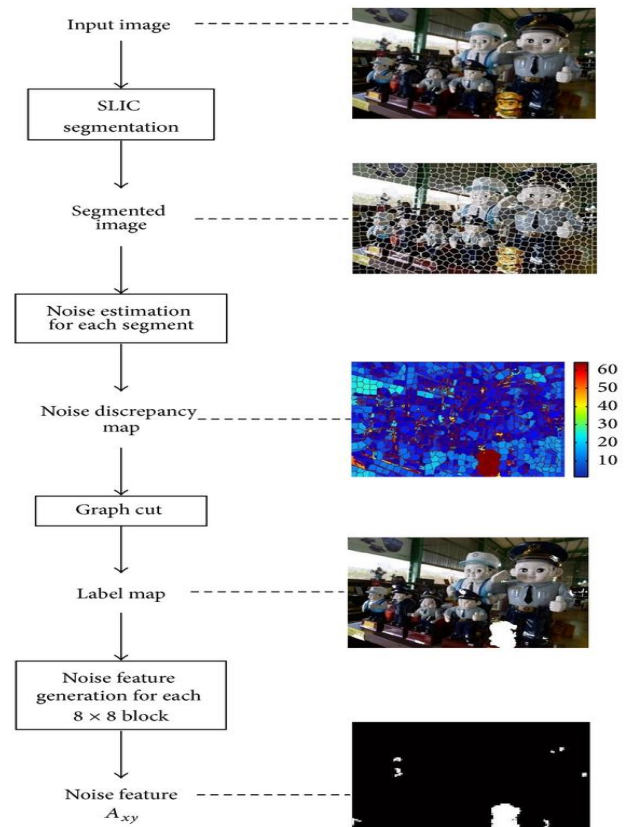
edge	weight	condition
$\langle p, q \rangle$	$B_{\langle p, q \rangle}$	$\{p, q\} \in N$
$\{p, S\}$	$\alpha \cdot R_p(0)$	$p \in P$ (unknown)
	K	$p \in \text{object}$
	0	$p \in \text{background}$
$\{p, T\}$	$\alpha \cdot R_p(1)$	$p \in P$ (unknown)
	0	$p \in \text{object}$
	K	$p \in \text{background}$

In the above table,  $\alpha \in [0, 1]$  is a parameter that controls the weight of the edges between the nodes  $p$  and  $S$  or  $T$ . Thus, when one point is classified as object, the weight between this point and  $S$  node in the established graph will be high while that will be 0 with  $T$  node. Similarly, when the point is selected as background, the weight between this node and  $T$  terminal will be high and the weight will be 0 for the edge between this node and  $S$  terminal.

**D. Noise Feature Extraction:**

The cast area spliced from other picture contains some features which may be inconsistent with the rest a neighborhood of image. The noise pattern and level of each segment is then estimated by using various filters. The noise features constructed during this step are utilized in energy-

based graph move expose forged area within the ultimate step. Experimental results show that our method provides good illustration of regions with noise inconsistency in various scenarios. Index Terms — Forgery detection, graphic cuts, noise estimation, SLIC, splicing forgery. Accuracy Chart The above chart and table represent the comparative results of varied segmentation techniques and their accuracy values. The Graph-cut algorithms has highest accuracy values then the remainder of the algorithms.



## 5. RESULT AND DISCUSSION:

S.NO	METHODOLOGY	ACCURACY %
1	Region Based Methodology	97%
2	Edge Based Methodology	98%
4	Watershed Transformation Based Methodology	94%
5	Graph Cut Based Methodology	99%
6	Random Walker Based Methodology	87%

**Tab1: Comparison Table**

### Accuracy Chart

The above chart and table represent the comparative results of various segmentation techniques and their accuracy values.

The Graph-cut algorithms has highest accuracy values then the rest of the algorithms.

## 6. CONCLUSION:

The goal of image segmentation process is to spot the segments of the image consistent with the image characteristic e.g., image color, objects shape etc. The simplified working of the image segmentation system is stated here. the foremost

important step is that the image acquisition. Any deficiency during the image acquisition can cause many problems within the result. The image utilized in this process is taken from image library. The input images are of low contrast. This segmentation process deals with the matter caused by these low contrast images by applying a preprocessing step using stochastic process. After preprocessing step the gradient of the image is finding by converting the input image to grey scale. And this gradient of image is employed because the input the image. The results show the performance of graph-cut algorithm within the segmentation is efficient than other algorithms.

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