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IDENTITY CRISIS IN MANJU KAPUR'S NOVELS.

Ms. Shraddha Narayan Raut

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ABSTRACT

This paper light on the issue of gender discrimination and identity crisis of Indian women INR in society's patriarchal system. Manju Kapur authored novels like Difficult Daughters, Home, The Immigrant, A Married Woman etc. Manju Kapur in her novels portrays plight of women who is always trying to settle between various duties. Women has to suffer in her life. Major themes in novels are all the women need to get married and be submissive to their husbands. Marriage is the ultimate goal of every woman and prime duty is to fulfil her responsibilities towards home and society. When we go to the novels of Manju Kapur, we can find that Manju Kapur is inspiring women to go beyond the horizons set by the society. This paper attempts to role of women in society the feminist perspective.

Keywords: Identity crisis, feminist perspective, patriarchy, male chauvinism.

Introduction:

Indian writing in English is now developing to certain phases. Manju Kapur is the novelist who dealt with present problems in the society. Women always taken for granted for certain things and Manju Kapur in her novels strongly opposes that. Her novels highlight the important issues like existence of women, survival of women and quest for identity. Women in the novels of Manju Kapur are depicted as new woman who have been sharing the burden of inhibition since ages and now want to be free in present age. She is suffering because she is having burden of being a woman. Manju Kapur succeeds to depict true picture of woman. Novels of Manju Kapur depicts women are superior to men. They hold all Trump cards in their lives picture in Manju Kapur novels. She is having clever strategy to manipulate roles of women to look beyond male comprehension of female world. Women portrayed by her is new women who can defeated betrayed by a male dominated society but she can overcome herself from the longings and outplay male counterparts. Women characters in her novel are symbols of modern world.

Depiction of female characters in Manju Kapur's novels:

Manju Kapur portrays various female characters in her novels. She throws light on the different aspects of women's life. Plots in her novels deals with exploitation and humiliation of the women in Indian society. She focuses on the marginalization of women in Indian society. It is reality that women feel satisfied with their roles as daughters, wives, mother's, sisters etc. But very few women can understand subordination of them in patriarchal system of society.

Manju Kapur as a feminist writer.

Manju Kapur in her novels present thought of liberating women from all kinds of bondages. In her novel "Difficult Daughters" she portrays character of Virmati. She wants to be independent. Virmati is in lead role in this novel who tries to exhibit courage and strong determination while engaging battle for her freedom. Virmati is a young Punjabi girl from a very conservative family in Amritsar. Sheep falls in love with a married professor. We can consider this relationship as illicit and socially, morally and legally incorrect. She is good in studies and always give importance to education. She is of view that a woman should give priority to widen horizons of life. But as a woman she has to face several social and family

family issues. And finally, there are certain things even beyond the horizons that still remain unconquered for her to win battle of her life.

In life of Virmati, she went through various pleasant and unpleasant experiences. She is in the quest for establishing own identity and get freedom. She wants to set her own rules and regulations to lead a life but in the patriarchal system she loses important part of her self and realises the insignificance of evil things in the society. Virmati as the eldest child in her family becomes second mother to her ten other siblings who you are dependent on Virmati for every little thing. All the responsibilities were imposed on her in a small age.

Virmati is private child who has not got love and care from her parents. At very early age of her life, she lost her track of life due to domestic responsibilities laid on her. She has no pleasant memories of her childhood and no close friend circle. Her parents ignore her and even her education and she has been taught that there are several important things in life than education. The things like marriage, rearing, having children, harmonious married life establishment of moral values important things for every woman.

Virmati is stuck in her life very badly. Since her childhood everyone is talking about her marriage and she also begins to weave dream house filled with marital bliss. She was very far from the thought that a woman should establish her own identity true education and successful career.

Manju Kapur about idea of independence which is aspired to and obtained by constitution of India. Shall we say that she is interested to portray lives of women. The novel difficult daughters Seems to base on Manju Kapur's life. She also faced challenges and frustrations encountered by protagonist Virmati.

The novel is set against the scene of partition in Amritsar and nearby regions. Manju Kapur portrays a sensitive picture of society in which dignity is more important than grief faced by Virmati. Virmati's determination to complete her education in Lahore. She wants to find solution to the problem and failed to get solution she tries to commit suicide. She thought that death could bring a solution to all your worries but she saved.

Virmati falls in love with professor Harish. Professor Harish also is love on Virmati. He is married he wants to have Virmati too. Virmati is young and beautiful so he gets attracted to her. Professor Harish knows that Virmati is mad in his love and can do anything for him. He also wants to live with his domestic and devoted wife for the social reputation. And he doesn't want to leave Virmati. He Just want to use Virmati for his physical needs. Manju Kapur gives here idea that a man cannot be faithful and loyal to both sides. He has to choose one and she e criticise attitude of professor Harish in the novel.

In the novel "A Married Woman" sorry revolve around character Astha. She wants to spend time with Hemant, her husband. Every woman is having some dreams about her marriage life and she expects several things from her husband. Astha also expects those things from her husband Hemant. When he comes to home always complaining about his boss and expressing his dissatisfaction with everything. He always comes late and never thinks about desires of his wife Astha. She wants to come out of the boredom so she decides to join a school Ajay teacher. Her life changed due to you have job. Her job as a teacher gives her opportunity to communicate with the outer world. Her position as a teacher gives her satisfaction. She comes to know about all the boundaries and limitations around her. Astha is young

married woman and had a strong desire for physical satisfaction and sexual relationship. But her husband is not aware of this. He is having the view that it is man who initiate a first move for having sex. Her in-laws are very to have daughter – in – law like her who is enduring and sacrificing for the family.

Astha is having two children. As a true mother Astha take care of her both kids. But her husband is busy with his business work and very ambitious to become successful businessman. Her husband Hemant never accepts his responsibilities as a father and lay all burden on Astha's shoulders. Astha always appears tired from work and separated by road family responsibilities. Her husband used to travel abroad and Astha has to manage single handed with her problems, children, job and family issues.

Astha feels lonely because her husband ignores her feelings. She expects warmth of love from her husband and also expects it support. Astha has developed hobby of writing poetry. She thought that writing a poetry is best way to express anguish and alienation. Her husband Hemant thought that writing poetry it's total waste of time so she quotes writing poetry and begins painting. Her paintings too reflect her inner psyche. She was busy in so many things and want to have her own time and her own space which is being denied to her.

Patriarchal system portrayed in novels of Manju Kapur.

Manju Kapur one of the most prominent female writers of India. Situation of women has never been changed even after so many years of Indian independence. Manju Kapur's novels revolve around the theme of women's subordination and humiliation in Indian society.

Patriarchal system of India does not allow women to create their own spaces. Men in this country how right to do anything they want but women have to take permission of her male counterpart. Manju Kapur in her novels beautifully pictures plight a woman and the patriarchal system of India. Manju Kapur's novels are fine attend to protest against the way of measuring women's experiences through all novels.

Conclusion:

Manju Kapur deals with portraying new women in her novels. Manju Kapur gives importance to female psyche while presenting female characters. Thus, Manju Kapoor's projection of true Indian society.

Works cited:

- [1] Ashok, Kumar. "Social web and Cry of the Self: A Critical Analysis of Manju Kapur's „A Married Woman". Prasad, Amar Nath
- [2] Ashok, Kumar. Social Web and Cry of the Self: A Critical Analysis of Manju Kapur's „A Married Women. [3] Berhane T, Ephrem R., and Gaikar V., (2021) „Leadership Styles and School Performance: A Study Within an Eritrean Context of Eastern Africa, „International Journal of Management (IJM)". Volume:12, Issue:4, Pp.:56-73.
- [4] Cherian, Jacob; Jacob, Jolly; Qureshi, Rubina; Gaikar, Vilas. 2020. "Relationship between Entry Grades and Attrition Trends in the Context of Higher Education: Implication for Open Innovation of Education Policy" MDPI, Switzerland, Journal of Open Innovation Technology, Market and Complexity, Vol- 6, Issue- 4: 199

-
- [5] Feministic Voices in Manju Kapur's „A Married Woman By. Dr.Ram Sharma,
[6] Gaikar Vilas B. (2013), “The role of ICT in education” Interactions, Vol. II, Issue-I
[7] Kapur, Manju. „Difficult Daughters.Penguin Books. New Delhi.1998 and 1999 [8] Manju Kapur: A Married Women New Delhi: India ink, 2002.

ATTITUDE OF THE CONSUMERS TOWARDS ONLINE SHOPPING- A STUDY WITH DINDIGUL DISTRICT

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INTRODUCTION

Civilization brought lot of changes in the life of human beings. It abolished the barter system and gave place to monetary practice. People bought goods and services for exchange of money. At that time, they bought goods and services within the limited boundaries. Gradually, due to the advancement of transport and communication system, they began to trade goods within a wide geographical area. Further, the trade and commerce develops with the modern inventions of technology.

The latest invention of commerce is one that is done over the internet. E-Commerce has emerged as the boundary-less trade medium in the era of globalization. The internet is a global network of networks.

ONLINE SHOPPING

Online shopping is a recent phenomenon. The declining cost of PCs, the development of search engines, and the consumers' growing interest in the internet has enabled online shopping to garner significant attention in recent years. Online shopping is becoming a well-accepted way to purchase a wide range of products and services. It offers a new environment distinguished from the traditional ways of doing business. It allows shopping for required products without going to the store physically. Online shopping is great because people are able to shop 24 hours a day without having to leave their home or work place.

Features of Online Shopping

Online shopping is just like a retail store shopping that we do by going to the market, but it is done through the internet. Online shopping has made shopping painless and added more fun. Online stores offer product description, pictures, comparisons, price and much more. Online shopping makes use of digital technology for managing the flow of information, products and payment between consumer, site owners and suppliers. Shopping cart is one of the important facility provided in online shopping, this lets customer to browse different goods and services and once they select an item to purchase they can place the item in shopping cart and continue browsing till the final selection. Customers can even remove the items from shopping cart that were selected earlier before they place the final order.

STATEMENT OF THE PROBLEM

Due to the rapid development of the technologies surrounding the internet, a company that is interested in selling products will constantly have to search for an edge in the fierce competition. Online shopping has made shopping painless and added more fun. Online stores offer product description, pictures, comparisons, price and much more. Online shopping makes use of digital technology for managing the

flow of information, products and payment between consumer, site owners and suppliers. Shopping cart is one of the important facilities provided in online shopping. In the beginning stage of online shopping, electronic and electronic goods are introduced in websites. After those home appliances, consumer goods, books and industrial goods are also added in the display list. The present study mainly focuses on online shopping.

SCOPE OF THE STUDY

The present study is confined to online shopping. It is consumer centric. Consumer is a core point of any trading and service activity. Now-a-days, consumers enjoyed the facilities of online shopping to a large extent. Purchasing and selling products and services over the internet without the need of going physically to the market.

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To know about the prospects and challenges of online shopping
2. To study the socio-economic profile of the respondents
3. To know about the reasons for buying goods in online shopping.
4. To give suggestions on the basis of findings of the study

RESEARCH METHODOLOGY

Research methodology includes type of research, types of data used in the study, data collection, sampling framework, data processing, tools of data collection, data analysis and area of the study.

As the study involves both primary and secondary data, descriptive research is applied in this research. The study is based on both primary and secondary data. The primary data has been gathered from 120 respondents residing at Dindigul. For collecting the surveys, the Social media network have been used and the questionnaire is prepared with the help of Google forms and sent to the mail id and whats app of the respondents. The secondary data has been gathered from books, journals and websites. The universe of the population includes the respondents who are buying goods in online shopping and also residing at Dindigul. The sample (i.e. sample size 120) were selected among the customers who are buying goods in online shopping. The samples were chosen from the population, by using Convenience sampling technique. The collected primary data has been coded, edited and tabulated for analysis. Percentage analysis, simple ranking technique and weighted ranking technique have been used to analyse the primary data. The area of the study is Dindigul.

SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS

In this section, gender, age, education, occupation, marital status, family size, type of the family and monthly income are studied.

Gender wise classification of the respondents

Table 1 shows the gender wise classification of the respondents.

Table 1

Gender wise classification of the respondents

S.No.	Gender	No. of Respondents	Percentage
1.	Male	77	64.17
2.	Female	43	35.83
	Total	120	100.00

Source: Primary data

It is clear from Table 1 that out of 120 respondents, 77 (64.17%) are male and the remaining 43 (35.83%) are female.

Age wise classification of the respondents

Table 2 shows the age wise classification of the respondents.

Table 2

Age wise classification of the respondents

S.No.	Age (in years)	No. of Respondents	Percentage
1.	Below 20	35	29.17
2.	20-40	49	40.83
3.	40-60	27	22.50
4.	60 and above	9	7.50
	Total	120	100

Source: Primary data

Out of 120 respondents, 49 (40.83%) are in the age group of 20-40 years, 35 (29.17%) come under the below 20 years, 27 (22.5%) belong to the age group of 40-60 years and 9 (7.5%) are in the age group of above 60 years.

Educational Qualification wise classification of the respondents

Table 3 shows the educational qualification wise classification of the respondents.

Table 3

Educational Qualification wise classification of the respondents

S.No.	Educational Qualification	No. of Respondents	Percentage
1.	SSLC	7	5.83
2.	High school	10	8.33
3.	Diploma level	19	15.83
4.	Graduates	40	33.33
5.	Post graduates	35	29.17
6.	Others	9	7.50
	Total	120	100.00

Source: Primary data

Out of 120 respondents, 40 (33.33%) are graduates, 35 (29.17%) are post graduates, 19 (15.83%) are diploma holders, 10 (8.33%) have finished their education upto high school, 9 (7.5%) belong to others category (Certificate holders/illiterates) and 7 (5.83%) have completed their education upto SSLC level.

Occupation wise classification of the respondents

Table 4 shows the educational qualification wise classification of the respondents.

Table 4

Occupation Qualification wise classification of the respondents

S.No.	Occupation	No. of Respondents	Percentage
1.	Salaried	42	35.00
2.	Professional	37	30.83
3.	Business	29	24.17
4.	Others	12	10.00
	Total	120	100.00

Source: Primary data

Out of 120 respondents, 42 (35%) are salaried people, 37 (30.83%) are professionals, 29 (24.17%) are businessmen and 12 (10%) belong to others category. (Wage earners/pensioners).

Marital Status wise classification of the respondents

Table 5 shows the marital status wise classification of the respondents.

Table 5**Marital Status wise classification of the respondents**

S.No.	Marital Status	No. of Respondents	Percentage
1.	Married	83	69.17
2.	Unmarried	37	30.83
	Total	120	100.00

Source: Primary data

It is noted from Table 5 that out of 120 respondents, 83 (69.17%) are married and the remaining 37 (30.83%) are unmarried.

Nature of the family wise classification of the respondents

Table 6 shows the marital status wise classification of the respondents.

Table 6**Nature of the family wise classification of the respondents**

S.No.	Nature of the family	No. of Respondents	Percentage
1.	Joint	36	30.00
2.	Nuclear	84	70.00
	Total	120	100.00

Source: Primary data

It is understood from Table 6 that out of 120 respondents, 84 (70%) come under nuclear family and the remaining 36 (30%) belong to joint family.

Family size wise classification of the respondents

Table 7 shows the family size wise classification of the respondents.

Table 7**Family size wise classification of the respondents**

S.No.	Family size	No. of Respondents	Percentage
1.	Below 4	31	25.83
2.	4-6	81	67.50
3.	Above 6	8	6.67
	Total	120	100

Source: Primary data

Out of 120 respondents, 81 (67.5%) have 4-6 members in their family, 31 (25.83%) have below 4 members in their family and 8 (6.67%) have above 6 members in their family.

Monthly Income wise classification of the respondents

Table 8 shows the monthly income wise classification of the respondents.

Table 8
Monthly Income wise classification of the respondents

S.No.	Monthly Income	No. of Respondents	Percentage
1.	Less than 15,000	25	20.83
2.	15,000-20,000	67	55.83
3.	20,000-25,000	16	13.33
4.	More than 25,000	12	10.00
	Total	120	100.00

Source: Primary data

Out of 120 respondents, 67 (55.83%) have earned a monthly income of Rs.15,000-Rs. 20,000, 25 (20.83%) have earned a monthly income of below Rs. 15,000, 16 (13.33%) have earned a monthly income of Rs. 20,000 – Rs. 25,000 and 12 (10%) have earned a monthly income of above Rs.25,000.

Reasons for Online Shopping

Table 9 exhibits the ranks given by the respondents regarding reasons for online shopping.

Table 9
Reasons for Online Shopping

Reasons	Ranks						Total
	I	II	III	IV	V	VI	
Saves time	47	22	12	32	2	5	120
Saves money	19	24	45	21	7	4	120
More offers and discounts	10	11	3	18	32	46	120
Home delivery	14	26	19	17	32	12	120
Quick shopping	13	5	14	13	30	45	120
Convenient	17	32	27	19	17	8	120
Total	120	120	120	120	120	120	

Source: Primary data

Simple ranking technique has been used to analyse the reasons for online shopping. Table 10 indicates the simple ranking technique results.

Table 10
Reasons for Online Shopping – Simple Ranking Technique

Reasons	Ranks						Total score	Mean score	Rank
	I	II	III	IV	V	VI			
Saves time	282	110	48	96	4	5	545	4.54	I
Saves money	114	120	180	63	14	4	495	4.13	II
More offers and discounts	60	55	12	54	64	46	291	2.43	VI
Home delivery	84	130	76	51	64	12	417	3.48	IV
Quick shopping	78	25	56	39	60	45	303	2.53	V
Convenient	102	160	108	57	34	8	469	3.91	III

Source: Primary data

Most of the respondents gave I rank to „Saves time“ with the mean score of 4.54 followed by „Saves money“ (4.13). III rank goes to „Convenient“ (3.91). „Home delivery“ (3.48), „Quick shopping“ (2.53) and „More offers and discounts“ (2.43) got IV, V and VI ranks respectively.

Source of information about online sites

Table 11 highlights the source of information about online sites.

Table 11
Source of information about online sites

S.No.	Source	No. of Respondents	Percentage
1.	Advertisements	22	18.33
2.	Relatives	55	45.83
3.	Friends	31	25.83
4.	Neighbours	12	10.00
	Total	120	100.00

Source: Primary data

Out of 80 respondents, 55 (45.83%) have gathered information from relatives, 31 (25.83%) have obtained information from friends, 22 (18.33%) have acquired details from advertisements and 12 (10%) have gathered information from neighbours.

For whom the respondents purchase goods in Online Shopping

Table 12 indicates the for whom the respondents purchase goods in online shopping.

Table 12**For whom the respondents purchase goods**

S.No.	For whom the respondents purchase goods	No. of Respondents	Percentage
1.	Own	35	29.17
2.	Spouse	33	27.50
3.	Parents	18	15.00
4.	Children	24	20.00
5.	Others	10	8.33
	Total	120	100.00

Source: Primary data

Out of 120 respondents, 35 (29.17%) have purchased goods for themselves, 33 (27.5%) have bought goods for spouse, 24 (20%) have purchased goods for children, 18 (15%) have bought goods for parents and 10 (8.33%) have purchased goods for others.

Amount spent for buying goods in online shopping

Table 13 points out the amount spent by the respondents for buying goods in online shopping.

Table 13**Amount spent for buying goods in online shopping**

S.No.	Amount spent (in Rs.)	No. of Respondents	Percentage
1.	Below 1,000	33	27.50
2.	1,000-3,000	65	54.17
3.	3,000 and above	22	18.33
	Total	120	100.00

Source: Primary data

It is clear from Table 3.13 that 65 (54.17%) have spent Rs. 1,000 – Rs. 3,000, 33 (27.5%) have spent below Rs. 1,000 and 22 (18.33%) have spent above Rs. 3,000 for online shopping.

SUGGESTIONS

Some suggestions are offered to the consumers while buying goods in online shopping.

The consumers are advised to check the originality of the shopping sites. Many fake shopping sites are available to divert the attention of the consumers. Hence, they have to verify it.

They do not disclose the pin number and secret codes of their account details. Many hackers try to hack the account details of the customers. Hence, while making payment for goods, consumers have to be vigilant.

CONCLUSION

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store. At the end, it has been a win-win situation for both consumer and sellers.

References

- Coulter, S. (2017). *SHOP TILL YOU DROP: SHOPPING AND CONSUMPTION*. In *Everyday Economics: A user's guide to the modern economy* (pp. 145-170). Retrieved from <http://www.jstor.org.ezlibproxy1.ntu.edu.sg/stable/j.ctv5cg7rp.10>
- Davis, S. (2001). *Shopping*. In Maxwell R. (Ed.), *Culture Works: The Political Economy of Culture* (pp. 163 - 196). University of Minnesota Press. Retrieved from <http://www.jstor.org.ezlibproxy1.ntu.edu.sg/stable/10.5749/j.cttts95w.9>
- D.Paul Dhinakaran, "Passengers Satisfaction towards Tamil Nadu State Transport Corporation Bus Services *International Journal Marketing and Management Research*, (ISSN (online) 2229- 6883, Volume 3, Issue 6-9, June-September, 2012.
- Gurak, L. (2001). *Shopping at the E-Mall*. In *Cyberliteracy: Navigating the Internet with Awareness* (pp. 128-144). New Haven; London: Yale University Press. Retrieved from <http://www.jstor.org.ezlibproxy1.ntu.edu.sg/stable/j.ctt1nq4x0.11>
- Hoyer, W.D., McInnis, D.J. Pieters, R. (2013). *Consumer Behavior*, 6th edition, SouthWestern Cengage Learning. ISBN 10: 11334435211 ISBN 13: 978-11334435211
- Karunanithi.G. (2013). *Internet Banking - An Overview, Financial Services- Issues and Challenges*, Aug 13-13, p. 6. PKR College for Women, Gobi.
- Dr. D.Paul Dhinakaran, "Community Relations Of Tamilnadu State Transport Corporation Ltd" *International Journal Of Research And Analytical Reviews* (E ISSN 2348-1269, print ISSN 2349-5138) Special Issue March 2019.

Empowering Learners Through English Teaching Models

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ABSTRACT

Teachers can make the classroom an environment of joy and celebration (Enright & McCloskey, 1988), worth and respect, appreciation and acceptance, safety and success, curiosity and challenge.... in which all of them can flourish in their wholeness. One can recognize and use everything and every event as an opportunity for learning. One can let fun be part of our experience as well as one's students'. An "integrated language teaching model" fits well with this additive approach because it integrates and adds all the elements of learning that make for wholeness and empowerment.

Keywords: Empowerment, English Language Teaching, Integrated Learning, Educational Models

Introduction

Empowerment has become the challenge everywhere. Women are battling for empowerment. Enhancing empowerment through English is the new goal set for English lecturers presently. The concept of empowerment has grown widely over the years in its impact on education spurring teachers to find ways of teaching, which promote the capabilities, resourcefulness, self-awareness, self-direction, and inner strengths of the learner. For many, however, the concept may have elusive, confusing, even threatening meaning.

Perhaps this is because they feel empowerment is wielding power, but the true meaning of becoming empowered means to change...to let go of limitations, to activate our full possibilities. And, to empower students imply that Teachers might have to find new ways to teach...ways that more effectively allow students to reach their "maximum potential". However, Teacher's aren't always clear about how this is accomplished. When we do get training in current "empowering" classroom strategies that are interactive, holistic, cooperative, student-centered, and experiential, one may not find within their self their own inner strength, readiness, wholeness, and power to implement those strategies, making it difficult to give what they do not have.

Those Teachers in ESL and bilingual education share something with linguistic and cultural minority students. Teachers are considered aliens, in the school and in the teaching profession. They often are not understood or valued or adequately prepared for all that they must do. When they talk with their colleagues and administrators about their students' need, their teaching strategies, their assessments, and insights, it often seems like they are speaking a foreign language. Miscommunication confusion, discomfort, blank looks, even fear and resistance are responses teacher may get to their efforts, and as a consequence can easily end up feeling powerless and drained.

As one strives to empower students, one may not know how to empower themselves and each other. It seems to be that one must first develop an awareness of our one's personal empowerment, and then clarify the direction and readiness for engaging that power. one need to regain their vision, regenerate and redirect energies, reframe the seeming limitations that thwart, rekindle the inner flame and vision for teaching, release teaching from the bondage one may feel caught in, and return to themselves... to nurture, support, observe, listen, and discover what they have within them to give.

Basic Strategies:

One would do well to apply to self the same basic strategies of empowerment that one is being encouraged to use with students: trusting and tapping one's own strengths and identities; connecting to others to form a community that nourishes and supports them in ways one can't on their own; freeing intuition and risk-taking skills; focusing on process as well as product; and integrating all skills and experience.

One of the sources for understanding of empowerment has come from an article Jim Cummins wrote for the Harvard Educational Review, called "Empowering Minority Students: A Framework for Intervention" (Cummins, 1986). Before showing how this framework can apply to teachers, in a nutshell he summarizes applied the framework to linguistic minority students. Cummins' framework is made up of four structural elements, which he says; first element is to "contribute to the extent to which minority students are empowered or disabled" (Cummins, p. 24). The second element is to their students' repertoire are likely to empower students more than those who see their role as replacing or subtracting students' primary language and culture" (Cummins, p. 25).

The third element consists of a "Reciprocal," interaction-oriented pedagogy, rather than the traditional "transmission-oriented" classroom practices. "Pedagogical approaches that empower students encourage them to assume greater control over setting their own learning goals and to collaborate actively with each other in achieving these goals" (Cummins, p. 28). The fourth and final element of the framework is an "Advocacy-oriented" approach to the assessment of minority students, rather than assessment that "legitimizes the disabling of minority students through testing children to locate the 'problem! Or 'disability. "The advocacy-oriented alternative requires that educators scrutinize "critically the societal and educational context within which the child has developed" (Cummins p. 30). A Framework: In using this four-part framework over the past few years as a tool for training teachers in student empowerment, It is found that it parallels the elements that seem most crucial to one's own empowerment... and that of the teachers with whom the process is explored. With the adaptations and expansions made to each of the four elements, a framework is created which are doubly useful, providing structure and guidance and strategies for the process of empowering oneself as they empower their students.

1. Additive Approach: one need to incorporate one's own cultural, linguistic, experiential identities and authentic full selves-head, heart, and spirit-into one's teaching experience. One becomes more empowered as one teaches from ones inner strengths, talents, and vulnerabilities, not from a "role of authority or expert, following externally and arbitrarily devised "rules." This should not imply that abandon ones power of critical thinking and ones responsibility to stay informed and updated. However, since teachers already tend to be active at cognitive levels, they may need to give more attention to their own intuitive and experiential the diverse resources. As they discover and up into all the within us, we rel wisdom, playfulness, spontaneity, and creative power. Teachers can make the classroom an environment of joy and celebration (Enright & McCloskey, 1988), worth and respect, appreciation and acceptance, safety and success, curiosity and challenge.... in which all of them can flourish in their wholeness. One can recognize and use every- thing and every event as an opportunity for learning. One can let fun be part of our experience as well as ones students'. An "integrated language teaching model" fits well with this additive approach because it integrates and adds all the elements of learning that make for wholeness and empowerment.

2. Collaborative Involvement: Teachers not only need to bring parents and minority communities into an active and collaborative engagement in the education of their children, Teachers also need to find other sources of collaboration and support for the task. This means linking, rather than fragmenting, instruction and student support services, developing collaboration between all who have the students needs at heart and who are seeking to enhance and empower the learning experience in positive ways. Teachers also need to connect with other teachers for mutual assistance, peer support, encouragement, teaming, coaching, sharing, and dialogue. In addition' they need to work in collaboration with our students in the process of congealing a shared classroom community that validates and multiplies the learning possibilities for all involved. Teachers can expand their sense of community to include not only parents, colleagues, and students, but also local community, human and organizational resources and "sister classes" near and far (Sayers, 1988).

What is important to one's own empowerment here is to avoid the autonomy-so typical of teaching-that breeds isolation, territoriality, stagnation and often a sense of victimization. Teachers can become just as "fossilized:" or stuck in their teaching methods, strategies and views as students can in their language learning. When teachers create community and collaboration, they can let go of their own fearfulness and competitiveness. They can create a more fertile growth environment for their own development when they mix and feed the soil, water and nurture the seedlings of new approaches. They can share their ideas and wishes and growing edges as teachers in order to hold a clearer view of the bigger picture, the broader perspective or vision that too often is lost.

3. Reciprocal, Interactive Pedagogy: In this category, everything Teachers do to let go the traditional, behavioral, transmission model of teaching and adopt an interactive, learner/learning centered approach to teaching, not only empowers students but empowers teachers as well. Here, when they focus on themselves, they need to have interaction between spontaneous and conscious selves, between natural inclinations and formal training, between the affective and cognitive parts of personalities, between left and right brains, and between the old and the new within one self. Teachers need to allow themselves to be observers, listeners, and learners of all that the students bring to the experience, as well as sharers of what they know and of what they are still in the Process of learning. This means that they can no longer operate on the assumption that they must know everything and that they must direct all the learning. In fact, teachers can get out of the spotlight, away from the front of the room, and out of the way of the learning process. They themselves from outdated, inappropriate and imposed practices. They can allow their methods and styles of teaching to be congruent with what they now believe about education, not just with ways they have always been taught. This may require some mental and literal cleaning of "closets"...ridding of what no longer fits empowered view. Finally, they can create and integrate learning adventures that are real, challenging, experimental, holistic and exciting for us as well as for the students.

4. Advocacy-oriented Assessment: There is no reason why one should operate under the limiting beliefs and modes of operation that one may feel constrained to follow and by which one tend to evaluate them. One often serves as one's own adversaries rather than as advocates, judging selves by unrealistic expectations and standards were never consciously chose. In this category we have a great deal more power than one believe. One can let go of the "problem-identifying" and "disability-labeling" that leads to the feeling of helplessness and inadequacy. It helps to assess progress and abilities (both teachers and students) with sensitivity and compassion and an understanding of the multiple factors that confront and confound teaching daily. Learning to Empower: If thought creates reality, then one need to change negative, problem-oriented thinking to positive affirmations of what one want to see manifested in

oneself and in their students. Although one may need practice at it, one can affirm strengths and goals, turn down the inner critic, embrace fears and inadequacies, replenish depleted energies, and dissolve the barriers created to block our progress. We can learn to be patient. The deeper and more profound the process of learning, the slower the apparent progress. Surface learning may be faster, more efficiently managed, and more easily assessed, but it is rarely assessed as empowerment. Learning to empowerment is possible in every experience, every imperfect lesson, every student, every moment, every awkward try at transformation and liberation. These are choices. The biggest question remains: how ready are Teacher's to make the changes that will activate personal and professional power?

References

- Cummins, Jim (1987). Empowering minority students: A framework for intervention. Harvard Educational Review, 56, 18-36.*
- Enright, D. Scott & McCloskey, Mary Lou (1988). Integrating English: Developing English Language and literacy in the multilingual classroom. Reading, Massachusetts: Addison- Wesley.*
- Sayer, Dennis (1988). Bilingual Sister Classes in Computer Writing Networks. In D. Johnson and D. Roen (Eds), Richness in Writing: Empowering ESL Writers, New York.*
- Longman. Reprinted from Teacher Development. Newsletter, No. 10, 1989, Adrian Underhill and Susan Barduhn, ads International House, White Rock, Hastings, East Sussex, TN34 1JY, UK.*

SMART TRAFFIC MANAGEMENT SYSTEM

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ABSTRACT

In the current context of smart city, specifically in the industrial and market zones, the traffic scenario is very congested most of the time particularly at the peak time of business hours. Due to increasing growth of population and vehicles in smart and metropolitan cities people face lot of problem at the major traffic points of the business towns. Not only it causes travelling delays, it also contributes to environmental pollution as well as health hazards due to pollution caused by vehicle fuels. To keep away from such severe issues many radiant urban communities implementing smart are right traffic now control frameworks that work on the standards of traffic automation with prevention of the previously mentioned issues. The fundamental concept lies in collection of traffic congestion information quickly and passing the alternate strategy to vehicles as well as passengers with on-line traffic information system and effectively applying it to specific traffic stream. In this context, an enhanced traffic control and monitoring framework has been proposed in the present article that performs quick information transmission and their corresponding action. In the projected approach, under a Vehicular Ad-hoc Network (VANET) scenario, the mobile agent based controller executes a congestion control algorithm to uniformly organize the traffic flow by avoiding the congestion at the smart traffic zone. It exhibits other unique features such as prevention of accidents, crime, driver flexibility and security of the passengers. Simulation carried out using Ns2 simulator shows encouraging results in terms of better performance to control the delay and prevent any accident due to profound congestion up to a greater extent.

KEYWORDS: VANET, Smart City, Traffic Management, Video Monitoring, Signal System,

INTRODUCTION

Fundamental features of designing an enhanced traffic control system consist of linking traffic signals and traffic control centres with GIS enabled digital road map of the town using intelligent computational power of data analytics [9] as a key module. In this context, the basic challenge lies in usage of real time analytics on online traffic information and correctly applying it to some basic traffic flow [13] & [14]. Data analytics tools [18] & [19] takes data from the Traffic Management System [9] and using GIS mapping under real time support they provide useful information to the drivers in the vehicles and help reducing the traffic congestion. Additionally, basic tourist information such as visiting places, parking area and distance are also projected in real time basis on large digital screens installed at city centres [20] entrance points to guide the drivers towards their destination. This helps to save fuel and finally to save a lot of time spent in searching various visiting places[11]. The smart living style in metro cities [20] is also fulfilled as the environment becomes pollution free and more hygienic[10]. The projected transport system has been planned in a Vehicular Ad-hoc Networks (VANETs) scenario as these networks are becoming more trendy technology in smart road traffic management and control systems. The problem faced by smart cities in terms of traffic congestion issues can be solved better by the use of VANETs as there is a network connectivity between the vehicle and the network infrastructure. Therefore, predictable information regarding road condition ahead and route information can be directed to the smart vehicles in transit and intelligent decisions can be taken sufficient time before any problem occurs. In other ways VANET in smart cities helps to reduce the problems of congestion, accidents, crime, parking problems and population overhead. Due to the overall development of the wireless technology, their applications are immense on vehicles and vehicles have been converted to smart vehicles to be

accessed under smart traffic applications. The traditional driving systems and drivers have also converted to smart drivers with more technical knowledge of receiving smart signals from traffic controllers, understanding them and act accordingly. VANETs support flexible communication between vehicles and traffic controlling systems in both infrastructure based and in wireless medium without fixed infrastructure. The proposed traffic congestion solution in smart city uses an improved technical explanation to the problem with powerful data analytics made by mobile agent dynamically under VANET scenario in a smart city. Mobile agents are flexible software programs supporting platform independence and good compatibility among computer workstations, client and servers and between controllers and peripheral devices. They are autonomous and re-configurable during run time so that they have the ease of being used as a support with any application program. Mobile agents are greatly used in database applications, digital signatures and ondemand network applications. Throughput of the mobile agent based applications are greatly affected as per the level of complex task handled by the agent. The challenge lies in carefully selecting the scripting language which can be smoothly implemented to communicate between platforms. In the proposed application, mobile agent has been used to implement the congestion control algorithm in an automated traffic control system in smart city context.

RELATED WORK

This section presents a complete literature survey on similar subject with relevance to the proposed approach. In [23] a real time distributed framework has been proposed to classify the urban road network congestion level using VANET. The article proposes models based on concept of spatial and temporal measures on synthetic data extracted from a specific case study. A low cost real time smart traffic management system has been presented in [8] using Internet of Things (IoT) and Big Data [25]. It provides improved service by implementing traffic indicators to update the traffic related information at every instance of events taking place in the network. In this approach low cost sensors with capacity of vehicle detecting system applications are embedded in the middle of the road at an interval of every 500 meters and 1000 meters. IoT devices [12] are used to acquire the traffic related on-line information quickly and further sent for processing at the Big data analytics [25] centers. Intelligence based analytical tools are used to scrutinize the traffic density and solution strategies are modeled. Congested traffic is managed by a mobile application based on the explored traffic density and alternate solution of this. An on-road air quality monitoring and controlling method has been proposed [24] with development of agent-based model that includes urban road network infrastructure and assesses real time and approximate air pollution index in different segments of the road and produces recommended strategies for road users. Such strategies include reducing number of vehicles usage in most polluted road segments, reducing the pollution levels with increasing vehicle flow on the roads. Data sets used for this purpose are collected from a location of quality monitoring system, road network information available and embedded lowcost e-participatory pollution sensors. Mobile Cloud Computing supports technical development in smart cities. An Improving Healthcare application using mobile cloud computing and big data analytics [25] has been proposed in [1] where a cloudlet-based mobile cloud-computing infrastructure has been developed. Comparative study and analysis has been done with a benchmark evaluation of Hama's graph package and Apache Giraph using PageRank algorithm[2]. Comparative studies and empirical evaluations have been performed in big data applications [10] in this article. For dynamic usage of electricity in smart city, a novel approach for clustering of electricity consumption behavior has been applied [3] and Markov model is applied to model the dynamic electricity consumption and a clustering technique has been developed by fast search and find of density

peaks (CFSFDP) which is primarily carried out to obtain the typical dynamics of consumption behavior. A scheduling algorithm, which is called multi clouds partial critical paths with pretreatment (MCPCPP), for big data workflows in multi clouds is presented [4]. This algorithm incorporates the concept of partial critical paths, and aims to minimize the execution cost of workflow while satisfying the defined deadline constraint. A hierarchical distributed Fog Computing architecture to support the integration of massive number of infrastructure components and services in future smart cities has been carried out [5] and a smart pipeline monitoring system based on fibre optic sensors and sequential learning algorithms to detect events threatening pipeline safety has been developed. An Ant Colony Optimization (ACO) based joint VM migration model for a heterogeneous, MCC based Smart Healthcare system in Smart City environment [6] has been proposed where the user's mobility and provisioned VM resources in the cloud address solves the VM migration problem. Smart transportation system is very much in smart city context. Therefore, to analyze how analytics [25] can be used to build a smart transportation system has been proposed in [7] and it imposes that Smart phones should be linked to smart traffic signals [10] & [11] to achieve the objective of smart transportation system. Performance of the communication protocol specifically traffic control systems in vehicular ad-hoc networks (VANET) is primarily influenced by the density of the traffic in terms of number of vehicles. In this direction the broadcasting performance of 802.11p for VANETs has been studied and analysed [22] and results focuses on accuracy of the improved mathematical models with features of inter-vehicular communication. Basically the analysis highlights correct applicability of the contributed methodology on proposed models and the performance of the VANET protocols on practical configured road networks.

OUR PROJECTED SYSTEM

An Intelligent Traffic Management Framework has been proposed. The planned framework deals with traffic control system STMS as the core module and it has the sub-modules such as video control system, Traffic Control System,, Supervisory computer control system and peripheral devices. The Traffic Control System manages and controls the heavy traffic during pre-defined rush period on the road. It uses the video monitoring system to identify excess traffic through video camera and when the amount of vehicles in particular path increases a precalculated threshold value, it informs the traffic control incharge of STMS with an alarm indicating "traffic limit reached" and prevents any further vehicle to enter in that path

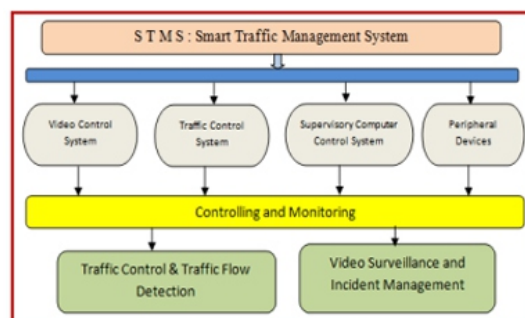


Fig.1. Block diagram of the proposed system

Fig.1 shows the basic block diagram of the proposed system with all the functional components and controlling system. So the next vehicles would be diverted towards another selected path, hence controlling the traffic. This traffic control system incorporates efficient transmission and uninterrupted communication by sending and receiving correct signal in proper time events. The smart peripheral devices handle the correct configuration of input sensors and output actuators to capture and detect the events and send the response and required information to control points. Similarly deployment of CCTV

Camera at noticeable traffic points which covers maximum range of scenario is also important activity of this module

CONCLUSION

With the advancement of emerging technology, industrial and educational development there are more opportunity of employment and better scope of education as well as research in developing cities. The life style of people in metro cities with large volume of population is equally affected by various application and service systems. Therefore currently most of the cities are in the process of transforming into smart cities by adopting automated systems in all possible sectors. With an objective of developing a new transport system for vehicles in a smart city, this article proposed a modern traffic control system using connected vehicle technology under VANET configuration with an integrated approach of solving general traffic related issues in a high volume traffic gateway. For the overall benefit of the traffic system, various modules like video monitoring, smart traffic control system, signal system and smart devices are included in the presented approach with detailed structure of their smart functionality. Simulation results show that it has an improved rate of congestion control in traffic points as it uses advanced technology of automating vehicles, mobile agent and big data analytic tools

REFERENCES

- [1] L. A. Tawalbeh, R. Mehmood, E. Benkhelifa and H. Song, "Mobile Cloud Computing Model and Big Data Analysis for Healthcare Applications," in *IEEE Access*, vol. 4, no. , pp. 6171-6180, 2016.
- [2] K. Siddique, Z. Akhtar, E. J. Yoon, Y. S. Jeong, D. Dasgupta and Y. Kim, "Apache Hama: An Emerging Bulk Synchronous Parallel Computing Framework for Big Data Applications," in *IEEE Access*, vol. 4, no. , pp. 8879- 8887, 2016.
- [3] Y. Wang, Q. Chen, C. Kang and Q. Xia, "Clustering of Electricity Consumption Behavior Dynamics Toward Big Data Applications," in *IEEE Transactions on Smart Grid*, vol. 7, no. 5, pp. 2437-2447, Sept. 2016.
- [4] B. Lin, W. Guo, N. Xiong, G. Chen, A. V. Vasilakos and H. Zhang, "A Pretreatment Workflow Scheduling Approach for Big Data Applications in Multicloud Environments," in *IEEE Transactions on Network and Service Management*, vol. 13, no. 3, pp. 581-594, Sept. 2016.
- [5] B. Tang; Z. Chen; G. Hefferman; S. Pei; W. Tao; H. He; Q. Yang, "Incorporating Intelligence in Fog Computing for Big Data Analysis in Smart Cities," in *IEEE Transactions on Industrial Informatics* , vol.PP, no.99, pp.1-1., 2017.
- [6] M. M. Islam; M. A. Razzaque; M. M. Hassan; W. Nagy; B. Song, "Mobile CloudBased Big Healthcare Data Processing in Smart Cities," in *IEEE Access* , vol.PP, no.99, pp.1-1., 2017.
- [7] S. Shukla, Balachandran K and Sumitha V S, "A framework for smart transportation using Big Data," 2016 International Conference on ICT in Business Industry & Government (ICTBIG), Indore, 2016, pp. 13.
- [8] P. Rizwan, K. Suresh and M. R. Babu, "Real-time smart traffic management system for smart cities by using Internet of Things and big data," 2016 International Conference on Emerging Technological Trends (ICETT), Kollam, 2016, pp. 1-7.
- [9] D. Singh, C. Vishnu and C. K. Mohan, "Visual Big Data Analytics for Traffic Monitoring in Smart City," 2016 15th IEEE International Conference on Machine Learning and Applications (ICMLA), Anaheim, CA, 2016, pp. 886-891.
- [10] R. A. Alshawish, S. A. M. Alfagih and M. S. Musbah, "Big data applications in smart cities," 2016

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-
- International Conference on Engineering & MIS (ICEMIS), Agadir, 2016, pp. 1-7.*
- [11] N. Ianuale, D. Schiavon and E. Capobianco, "Smart Cities, Big Data, and Communities: Reasoning From the Viewpoint of Attractors," in *IEEE Access*, vol. 4, no. , pp. 41-47, 2016.
- [12] Y. Sun, H. Song, A. J. Jara and R. Bie, "Internet of Things and Big Data Analytics for Smart and Connected Communities," in *IEEE Access*, vol. 4, no. , pp. 766-773, 2016.
- [13] W. Yuan et al., "A Smart Work Performance Measurement System for Police Officers," in *IEEE Access*, vol. 3, no. , pp. 1755-1764, 2015.
- [14] Z. Lv et al., "Managing Big City Information Based on WebVRGIS," in *IEEE Access*, vol. 4, no. , pp. 407-415, 2016.
- [15] P. O. Bhalerao, "Communication system design and simulation for future micro grids in Ns2," 2016 *International Conference on Automatic Control and Dynamic Optimization Techniques (ICACDOT)*, Pune, 2016, pp. 688-690

WI-FI BASED HOME AUTOMATION SYSTEM FOR FIRE ALERT AND GAS LEAKAGE DETECTION

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ABSTRACT

Internet of Things (IoT) is rapidly increasing technology. IoT is the network of physical objects or things embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data. In this paper, we are developing a system which will automatically monitor the industrial applications and generate Alerts/Alarms or take intelligent decisions using concept of IoT. IoT has given us a promising way to build powerful industrial systems and applications by using wireless devices, Android, and sensors. A main contribution of this review paper is that it summarizes uses of IoT in industries with Artificial Intelligence to monitor and control the Industry. index terms artificial Intelligence, IoT, Sensors, embedded electronics.

I. INTRODUCTION

In recent years a wide range of industrial IoT applications have been developed and deployed. Evolution of this starts from RFID technology, which allows microchips to transmit the identification information to a reader through wireless communication. By using RFID readers, people can identify, track, and monitor any objects attached with RFID tags automatically. Another technology is the wireless sensor networks (WSNs), which mainly use interconnected intelligent sensors to sense and monitoring. Its applications include environmental monitoring, industrial monitoring, traffic monitoring. Both RFID and WSN are used to develop IoT[1]. Then upcoming technology is IoT with Artificial Intelligent. In previous year, Industry was monitored manually, but this paper introduces Artificial Intelligent to monitor as well as control the Industry autonomously without human intervention.

II. GOALS AND OBJECTIVES

To develop a system which will automatically monitor the industrial applications and generate Alerts/Alarms or take intelligent Decision using concept of IoT. And also design the system to Take Intelligent Decision and Control Devices.

III. EXISTING SYSTEM

No ways to detect un-even condition in industry. Manual intervention required for monitoring. CCTV used which only monitor but no Alert generation. Alert and their appropriate actions not present manually. Time consuming approach to detect and generate Alert Manually

IV. NEED OF SYSTEM

Industry alert are based on manual intervention. Notification for any circumstances in Industry not provided. Appropriate action for this condition taking.

V. OVERVIEW OF SYSTEM

In this modern era of automation and advanced computing using IoT with Artificial Intelligence offer promising solutions towards the automation of Industry. In order to understand the development of IoT in industries, this paper reviews the current research of IoT, key enabling technologies, major IoT applications in industries, and identifies research trends and challenges. The Internet of Things allows objects to be sensed and controlled remotely across existing network infrastructure. This is implemented as in figure1.

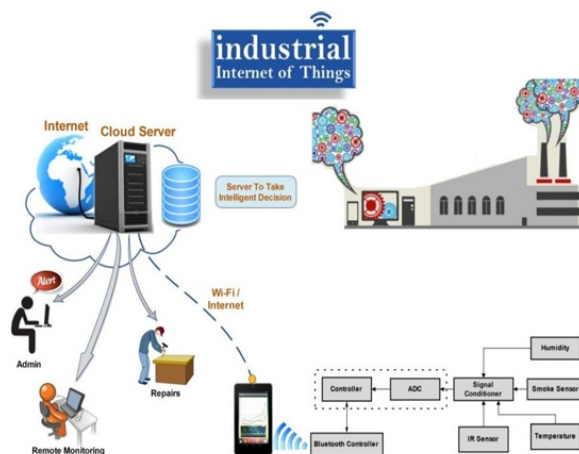


Fig: Block Diagram Of The System

VI.LITERATURE REVIEW:

In “E. A. Lee, “Computing Foundations and Practice for Cyber- Physical Systems:A Preliminary Report,” Tech. Rep., 2007. [Online]. Available: <http://www.eecs.berkeley.edu/Pubs/Tech Rpts/2007/EECS-2007-72.pdf>”

Cyber-Physical Systems (CPS) are integrations of computation and physical processes. Embedded computers and networks monitor and control the physical processes, usually with feedback loops where physical processes affect computations and vice versa. The economic and societal potential of such systems is vastly greater than what has been realized, and major investments are being made worldwide to develop the technology. There are considerable challenges, particularly physical components of such systems introduce safety and reliability requirements qualitatively different from those in general-purpose computing. This report examines the potential technical obstacles impeding progress, and in particular raises the question of whether today’s computing and networking technologies provide an adequate foundation for CPS. It concludes that it will not be sufficient to improve design processes, raise the level of abstraction, or verify (formally or otherwise) designs that are built on today’s abstractions. To realize the full potential of CPS, we will have to rebuild computing and networking abstractions. These abstractions will have to embrace physical dynamics and computation in a unified way. CyberPhysical Systems (CPS) are integrations of computation with physical processes. Embedded computers and networks monitor and control the physical processes, usually with feedback loops where physical processes affect computations and vice versa. In the physical world, the passage of time is inexorable and concurrency is intrinsic. Neither of these properties is present in today’s computing and networking abstractions. This report examines this mismatch of abstractions. Applications of CPS arguably have the potential to dwarf the 20-th century IT revolution. They include high confidence medical devices and systems, assisted living, traffic control and safety, advanced automotive systems, process control, energy conservation, environmental control, avionics, instrumentation,

control (electric power, water resources, and communications systems for example), distributed robotics (telepresence, telemedicine), systems, manufacturing, and defense smart structures. It is easy to envision new capabilities, such as distributed micro power generation coupled into the power grid, where timing precision and security issues loom large. Transportation systems could benefit considerably from better embedded intelligence in automobiles, which could improve safety and efficiency. Networked autonomous vehicles could dramatically enhance the effectiveness of our military and could offer substantially more effective disaster recovery techniques. Networked building control systems (such as HVAC and lighting) could significantly efficiency and improve energy demand variability, reducing our dependence on fossil fuels and our greenhouse gas emissions. In communications, cognitive radio could benefit enormously from distributed consensus about available bandwidth and from distributed control technologies. Financial networks could be dramatically changed by precision timing. Large scale services systems leveraging RFID and other technologies for tracking of goods and services could acquire the nature of distributed real-time control systems. Distributed real-time games that integrate sensors and actuators could change the (relatively passive) nature of on-line social interactions. Tight integration of physical devices and distributed computing could make “programmable matter” a reality. The positive economic impact of any one of these applications areas would be enormous. Today’s computing and networking technologies, however, may have properties that unnecessarily impede progress towards these applications. For example, the lack of temporal semantics and adequate concurrency models in computing, and today’s “best effort” networking technologies make predictable and reliable difficult, at real-time best. performance Many of these applications may not be achievable without substantial changes in the core abstractions.

If the US fails to lead the development of these applications, we would almost certainly find our economic and military leadership position compromised. To prevent that from happening, this report will identify the potential disruptive technologies and recommend research investments to ensure that if such technologies are successfully developed, that they are developed in the US.

IN “R. R. RAJKUMAR, I. LEE, L. SHA, AND J. STANKOVIC, “CYBERPHYSICAL SYSTEMS,” IN PROCEEDINGS OF THE 47TH DESIGN AUTOMATION CONFERENCE - DAC’10. NEW YORK, USA: ACM PRESS, 2010, P. 731. [ONLINE].AVAILABLE:HTTP://PORTAL.ACM.ORG/CITATION.CFM?DOID=1837274.1837461”

Cyber-physical systems (CPS) are physical and engineered systems whose operations are monitored, coordinated, controlled and integrated by a computing and communication core. Just as the internet transformed how humans interact with one another, cyber-physical systems will transform how we interact with the physical world around us. Many grand challenges await in the economically vital domains of transportation, health-care, manufacturing, agriculture, energy, defense, aerospace and buildings. The design, construction and verification of cyber-physical systems pose a multitude of technical challenges addressed by a that must be cross-disciplinary community of researchers and educators.

IN “THE INDUSTRIAL INTERNET OF THINGS (IIOT): AN ANALYSIS FRAMEWORK”

Historically, Industrial Automation and Control Systems (IACS) were largely isolated from conventional digital networks such as enterprise ICT environments. Where connectivity was required, a zoned architecture was adopted, with firewalls and/or demilitarized zones used to protect the core

control system components. The adoption and deployment of „Internet of Things“ (IoT) technologies is leading to architectural changes to IACS, including greater connectivity to industrial systems. This paper reviews what is meant by Industrial IoT (IIoT) and relationships to concepts such as cyber-physical systems and Industry 4.0. The paper develops a definition of IIoT and analyses related partial IoT taxonomies. It develops an analysis framework for IIoT that can be used to enumerate and characterise IIoT devices when studying system architectures and analysing security threats and vulnerabilities. The concept of Industrial Automation and Control Systems (IACS) is well established. These systems, often referred to as Operational Technology (OT), are employed in diverse industries including manufacturing, transportation and utilities, and are sometimes referred to as cyber-physical systems (CPS). Since the term Internet of Things (IoT) [1] was first used in 1999, it has been applied to connected devices in consumer, domestic, business and industrial settings [2]. Although there is a significant amount of literature attempting to define IoT, its uses, and its typical components, it is rarely made obvious how any of this applies in the industrial setting. Because current definitions of IoT invariably imply a similar approach to the high-level architecture of a system, the ubiquitous use of the term IoT to refer to the use of digital technologies in industry is unhelpful as it hinders the analysis of alternative system architectures, including the location and nature of the data or information processing, and associated performance and security issues. The aims of this paper are to improve on existing definitions of Industrial IoT (IIoT) and to propose a framework for IIoT components as a basis for analysing the use and deployment of IoT technologies in industrial settings. In undertaking this research our aim was to establish a framework that allows us to analyse the nature of IIoT devices and their uses, which is to be used as part of a vulnerability and threat analysis process for these devices. By being able to characterise the devices in a systematic manner, we anticipate being able to analyse cross-cutting threats and vulnerabilities and identify patterns that may be obscured when focusing on the technology employed or sector specific issues. Whilst researching IIoT we have reviewed a wide range of academic literature and found that when combining the search terms: (“Industrial Machines” OR “Industrial Systems”) AND “Internet” OR (“Industrial Internet”) “Machines”

The following terms were amongst those most regularly found: Cyber Physical Systems (CPS), Industrial Control Systems (ICS), Supervisory Control and Data Acquisition (SCADA), and Industrial Internet. Although not an exhaustive list, it does represent the most commonly used terms in both academic and relevant nonacademic literature, for white papers and corporate blogs. In the rest of this section we define Industry 4.0 and review the above terms before moving on to develop our definition of IIoT and the taxonomy.

INDUSTRY 4.0

The first three industrial revolutions are characterised as being driven by mechanical production relying on water and steam power, use of mass labour and electrical energy, and the use of electronic, automated production respectively [3]. Whilst the supposed fourth industrial revolution („Industry 4.0“) was first proposed in 2011 in the context of the goal of developing the German economy [4]. This revolution is characterised by its reliance on the use of CPS capable of communication with one another and of making autonomous, de-centralised decisions, with the aim of increasing industrial efficiency, productivity, safety, and transparency. There is a considerable overlap between the concept of Industry 4.0 developed in Germany and the Industrial Internet concept (see 2.6), which originated in the United States. The definition of the latter now encompasses change for both business and individuals: “...the industrial internet is an internet of things, machines, computers and people enabling intelligent industrial

operations using advanced data analytics for transformational business outcomes, and it is redefining the landscape for business and individuals alike” [5]. A definition of „Industrie 4.0’ a term which, in its English cognate, the authors treat as synonymous with IIoT, is: “...we define Industrie 4.0 as follows: Industrie 4.0 is a collective term for technologies and concepts of value chain organisation. Within the modular structured Smart Factories of Industrie 4.0, CPS monitor physical processes, create a virtual copy of the physical world and make decentralized decisions. Over the IoT, CPS communicate and cooperate with each other and humans in real time. Via the IoS [Internet of Services], both internal and cross- organizational services are offered and utilised by participants of the value chain.” [6]

CYBER-PHYSICAL SYSTEMS (CPS)

Whilst there are a number of definitions of CPS [7], [8], [9], [10], [11], this paper uses: “A system comprising a set of interacting physical and digital components, which may be centralised or distributed, that provides a combination of sensing, control, networking computation functions, to and influence outcomes in the real world through physical processes.” [12] What sets CPS apart from more conventional information and communications systems (IT or ICT) is the real-time character of their interactions with the physical world. Whilst both CPS and ICT systems process data and/or information, the focus of CPS is on the control of physical processes. CPS use sensors to receive information about, including measurements of, physical parameters, and actuators to engage in control over physical processes. CPS often involve a large degree of autonomy. For example, CPS often have the capacity to determine whether to change the state of an actuator or to draw a human operator’s attention to some feature of the environment being sensed.

INDUSTRIAL AUTOMATION & CONTROL SYSTEMS (IACS)

IACS or ICS is a collective term typically used to describe different types of control systems and associated instrumentation, which include the devices, systems, networks, and controls used to operate and/or automate industrial processes. Descriptions of ICS from authoritative American and European organisations are respectively: “Initially, ICS had little resemblance to traditional information technology (IT) systems in that ICS were isolated systems running proprietary control protocols using specialized hardware and software. Many ICS components were in physically secured areas and the components were not connected to IT networks or systems. Widely available, low-cost Internet Protocol (IP) devices are now replacing proprietary solutions” [13]; and “Today ICS products are mostly based on standard embedded systems platforms, applied in various devices, such as routers or cable modems, and they often use commercial off-the shelf software” and “command and control networks and systems designed to support industrial processes. The largest subgroup of ICS is SCADA” [14].

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)

SCADA has been described as: A system that allows an operator, in a location central to a widely distributed process, such as an oil or gas field, pipeline system, or hydroelectric generating complex, to make set point changes on distant process controllers, to open or close valves or switches, to monitor alarms, and to gather measurement information [15]; Similar to a Distributed Control System with the exception of sub-control systems being geographically dispersed over large areas and accessed using Remote Terminal Servers [16]. Where a Distributed Control System (DCS) is a supervisory control system typically controls and monitors set points to sub-controllers distributed geographically

throughout a factory [17]; and SCADA applications are made up of two elements: the process/system/machinery you want to monitor and control, which can take the form of a power plant, a water system, a network or a system of traffic lights; and a network of intelligent devices that interface with the first system through sensors and control outputs. This network, which is the platform system, provides the capability to measure and control specific elements of the first system [18]. The nature of SCADA has led to conflicting views as to whether it forms part of the IIoT ecosystem. For example, discussion of SCADA system forensic analysis within IIoT [19] contrasts with a view that SCADA is simply the predecessor to IIoT especially as SCADA systems have evolved to connect to the internet but do not have the analytics and level of connectivity that is found in IIoT [20].

INDUSTRIAL INTERNET

The concept of an Industrial Internet was first articulated by General Electric (GE) [21], and described as: “The definition of the Industrial Internet includes two key components: The connection of industrial machine sensors and actuators to local processing and to the Internet; The onward connection to other important industrial networks that can independently generate value. The main difference between the consumer/social Internets and the Industrial Internet is in how and how much value is created. For consumer/social Internets, the majority of value is created from advertisements” [22]. This description clearly separates the Internet and the Industrial Internet, although in both cases the function of the Internet is to provide the wide area networking. More recently the Industrial Internet has been defined as:

“... a source of both operational efficiency and innovation that is the outcome of a compelling recipe of technology developments [sic]. The resulting sum of those parts gives you the Industrial Internet—the tight integration of the physical and digital worlds. The Industrial Internet enables companies to use sensors, software, machine-to-machine learning and other technologies to gather and analyse data from physical objects or other large data streams—and then use those analyses to manage operations and in some cases to offer new, value-added services” [23].

From this definition, it is apparent that the authors consider a key component of the Industrial Internet to be the ability to analyse data, which is corroborated by a statement later in their report, in which it is stated that “...Big Data analytics is the foundation of the Industrial Internet...”. This desire to collect and analyses data is a feature in common with Industry 4.0.

IN “INDUSTRIAL AUTOMATION USING IOT”:

Internet of things (IoT) is rapidly increasing technology. IoT is the network of physical objects or things embedded with electronic software, sensors, and network connectivity which enables these objects to collect and exchange data. In this paper, we are developing a system which will automatically monitor the industrial applications and generate Alerts/Alarms or take intelligent decisions using concept of IoT. Safety from leaking of raw gas and fire are the most important requirements of home and industries security system for people. A traditional security system gives the signals in terms of alarm. Automation is one of the increasing need with in industries as well as for domestic applications. Automation reduces the human efforts by replacing the human efforts by system which are self operated, The Internet is one way of the growing platform for automation, through which new advancement are made through which one can easily monitor as well control the system using internet. As we are making use of Internet the system becomes secured and live data monitoring is also possible using IoT system. Within industries the

the various hazardous gas are being processed, hence to provide security to those employ working within those industries, it becomes important issue to work on their security, If leakage of gas takes place then these system alerts by turning ON alarm which notifies the employers. This system also helps us take some crucial decision from any point of the world within internet network. Wifi shield is being used to act as service point between network and connecting network Industrial Automation Using Internet of Things (IOT) In this paper, they are developing a system which will automatically monitor the industrial applications and generate Alerts/Alarms or take intelligent decisions using concept of IoT.

[1]. RASPBERRY PI AND IOT BASED INDUSTRIAL AUTOMATION .

IOT is achieved by using local networking standards and remotely controlling and monitoring industrial device parameters by using Raspberry Pi and Embedded web server Technology. Raspberry Pi module consists of ARM11 processor and Real Time Operating system whereas embedded web server technology is the combination of embedded device and Internet technology .Using embedded web server along with raspberry pi it is possible to monitor and control industrial devices remotely by using local internet browser.

[2] A REVIEW ON INDUSTRIAL AUTOMATION USING IOT.

They have developed new technologies that have allowed us to move from the First generation of the Internet into the current transition into the Fourth generation. This generation has been propelled by the concept of the Internet of Things (IoT).

[3] IOT BASED AUTOMATED TEMPERATURE AND HUMIDITY MONITORING AND CONTROL

In this paper, a raspberry pi running with Linux OS coded with C++ program that retrieves the temperature as well as humidity readings and these values are sensed and sent to the internet.

[4] INDUSTRIAL TEMPERATURE MONITORING AND CONTROL SYSTEM THROUGH ETHERNET LAN

This paper presents a PC based temperature monitoring and control system using virtual instrumentation, LabVIEW. Data acquisition is an important role in industry in order to ensure the quality of service. Temperature sensor measures the temperature and produce corresponding analog signal which is further processed by the microcontroller. The simulator acquires data from the microcontroller through Ethernet port. The data will be displayed on the LCD in microcontroller and PC monitor. Automation and control can be done with the help of control circuitry

IN “L. HU, N. XIE, Z. KUANG, AND K. ZHAO, “REVIEW OF CYBERPHYSICAL SYSTEM ARCHITECTURE,” IN 2012 IEEE 15TH SYMPOSIUM INTERNATIONAL ON OBJECT/COMPONENT/SERVICE ORIENTED REAL-TIME DISTRIBUTED COMPUTING WORKSHOPS. IEEE, 2012, PP. 25–30. [ONLINE]. AVAILABLE: [HTTP://IEEEEXPLORE.IEEE.ORG/LPDOCS/EPIC03/WRAPPER.HTM?ARNUMBER=6196100](http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6196100)”

With the goal of accomplish the ubiquitous intelligence in social life, Cyber-Physical Systems (CPS) are getting growing attentions of researchers and engineers. However, the complexity of computing and physical dynamics bring a lot of challenges in the development of CPS, such as integration of heterogeneous physical devices, system verification, security assurance, and so on. A general or unified architecture plays an important part in the process of CPS design. In this paper, we review the current and previous works of CPS architecture, and introduce the main challenges and techniques of architecture development : real-time control, security assurance, integration mechanism. Then we propose a general CPS architecture based on ServiceOriented Architecture (SOA), the main advantage of this proposed architecture is the integration flexibility of services and components. At the end, we introduce the typical applications of CPS, and suggest the future research areas. There is no unified concept of Cyber-Physical Systems (CPS). Generally, CPS is defined as the fuse of cyber world and the dynamic physical world. CPS perceive the physical world, process the data by computers, and affect and change the physical world. He JiFeng presented the concepts of "3C":Computation, Communication, and Control. With "information" as the center,fusion the computation and communication and control, to achieve the real-time sensing, dynamic control and information service in large scale systems[1]. CPS have close relationships with embedded systems, sensors,and wireless network, but have their own characteristics, for example, the complexity and dynamics of environment, the big problem space and solution space are closely related with the environment, the requirement for high reliability of the system. In the early stage, CPS had a twotier structure inherently, the physical part and computing part. The physical part sense the physical environment, collect data, and execute the decision made by the computing part; the computing part analyze and process the data from the physical part, and then make decision. This is a kind of feedback control relation of the two parts. In [2], Hyun Jung La et al. proposed a 3-Tiers architecture of CPS : Environmental Tiers: consists of physical devices and a target environment which includes end-users using the devices and their associated physical environment. Service Tiers: a typical computing environment with services in SOA and CC (Cloud Computing).

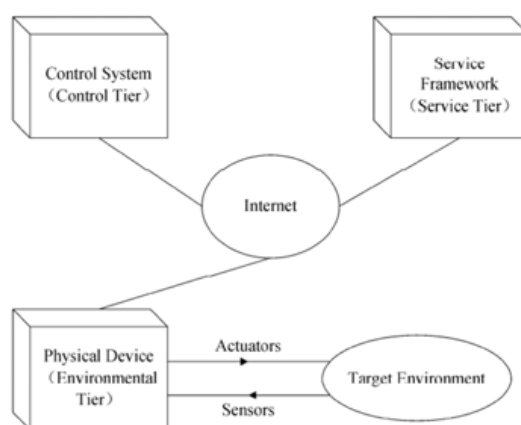


Fig: The three tiers of CPS architecture

Cyber world and physical world are different essentially, but they are connected and affect each other by information. One of the main features of physical world is dynamic, the same entity at different time showed different properties. Therefore, when modeling the physical world entities, the dynamic features should be considered in particular. In the cyber world, changes are represented by state transitions, thus, simulating the physical world may lead to state explosion. This is an important feature to be considered in the modeling and design process of CPS. As the base of CPS research, architecture is very important, but currently, there were no unified framework or general architecture can be used in most applications. In this paper, we review the developments of CPS from the architecture aspects. Based on this, in section

3, a general architecture is proposed based on SOA. This architecture extends the traditional concept of SOA, and introduce it in CPS architecture design. In the 4th section of this article, typical applications of CPS will be introduced. Finally, we discuss the current problems in CPS research, and give future research directions

IMPLEMENTATION:

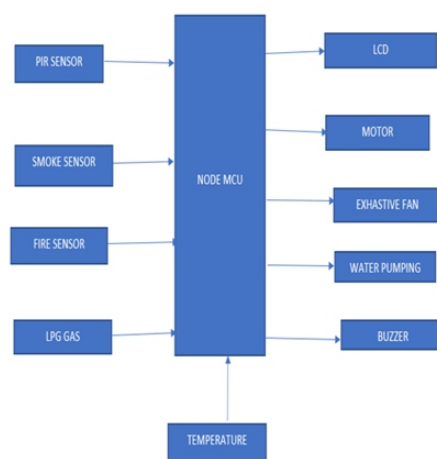


Fig: Block Diagram Of Smart Sensor SoC Architecture For The Industrial Internet Of Things

Sensors (Pir Sensor, Smoke Sensor, Fire Sensor, Lpg) are used to percept the environment and object conditions. Analog signal are provided to android device produced by sensors. Admin set threshold to every sensors placed in Industry. Android check this threshold against incoming analog signal. When it encounter an uneven condition devices (Buzzer, Alarm, motor, fan) are use to take accurate measures such as Alarm/Alert are generated, it send messages and email to Admin. Then with the help of Artificial Intelligent it takes

APPLICATIONS

Industry and office:-We can implement sensors in wide area over the machines and instruments. Control and Monitor circumstances by using concept of Artificial Intelligence and IoT.

Hospital and Labs: -We can plot sensors on patient's body and Doctor can check current status on his android phone and also take necessary actions and decisions.

Home:-We can implement sensors to household appliances and monitor and control with the help of Artificial Intelligence.

CHALLENGES TO OVERCOME

WiFi/Internet Connection is fluctuating which may create problems. SMS/Email Alerts has to send but may have range problem. Decision Making is very difficult as this is question of many life & industry. Wrong tool Selection for Development

CONCLUSION

Nowadays we need everything computerized. Earlier we can only monitor the situations with the help of cameras. In industries to reduce manual overhead we have implemented Internet of Things (IoT) in Industry to monitor as well as to inform the responsible person to take appropriate measures, but this will partially fulfill our requirement. As sometimes it will be late in this process and it will harm to property as well as life. For this purpose we are developing a system for Industrial Automation using IoT with the help of Artificial Intelligence to make system automated which will take intelligent decisions.

REFERENCES

- [1] Li Da Zu "Internet of Things in Industries: A Survey" *IEEE Transactions on Industrial Informatics*, vol. 10, no. 4, November 2014
- [2] Sadeque Reza Khan Professor Dr. M. S. Bhat "GUI Based Industrial Monitoring and Control System" *IEEE paper*, 2014
- [3] Ayman Sleman and Reinhard Moeller "Integration of Wireless Sensor Network Services into other Home and Industrial networks" *IEEE paper*
- [4] Rajeev Piyare and Seong Ro Lee "Smart Home-Control and Monitoring System Using Smart Phone" *ICCA 2013, ASTL Vol. 24, pp. 83 - 86, 2013 ©SERSC 2013*
- [5] Jinsoo Han, Chang-Sic Choi, Wan-Ki Park, Ilwoo Lee Green home energy management system through comparison of energy usage between the same kinds of home appliances 2011 *IEEE 15th International Symposium on Consumer Electronics*
- [6] S.d.t. Kelly, n.k. Suryadevara and S.C. Mukhopadhyay Towards the Implementation of IoT for Environmental Condition Monitoring in Homes, *IEEE Paper 2013*
- [7] Jinsung Byun, Insung Hong, Byoungjoo Lee, and Sehyun Park, Member Intelligent Household LED Lighting System Considering Energy Efficiency and User Satisfaction, *IEEE paper February 2013*
- [8] Gopinath Bhanuprasad Shanmuga Sundaram, Patibandala, Harish Santhanam Bluetooth Communication using a Touchscreen Interface with the Raspberry Pi 978-1-4/13/31.00 2013 *IEEE*

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