

An evaluation of Open Network for Digital Commerce (ONDC) implementation for MSMEs in India.

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ABSTRACT

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The Department for Promotion of Industry & Internal Trade of the Government of India founded the private, non-profit firm Open Network for Digital Commerce to create open networks for e-commerce. India's e-commerce environment is anticipated to change as a result of the government-imposed Open Network Digital Commerce (ONDC) platform. Customers and sellers will be able to interact and transact online independently of the app or platform they are using. This platform seeks to provide new opportunities, restrain digital monopolies, and assist single proprietors, micro, small, and medium-sized businesses, and other smaller businesses in joining online marketplaces. The purpose of this paper is to illustrate the benefits that ONDC provides to MSMEs—Micro, Small, and Medium-Sized Enterprise, while simultaneously posing a challenge to the major e-Commerce players yet an advantageous platform to all digital businesses.

Keywords: ONDC, MSMEs, e-Commerce players.

1. Introduction

Digital commerce is here to stay and is en route to taking over as the main method by which most people shop. By 2023, e-commerce is expected to account for 22% of all retail sales, up from 14.1% in 2019 and more than doubling the 10.4% figure from that year. Online shopping may be influenced by COVID-19, however the trend existed long before the pandemic. Digital commerce provides convenience and other benefits over traditional retail outlets, such as 24/7 access and the absence of traffic, parking, or crowds. These traditional retail outlets are mostly MSMEs which are assisted through ONDC to leverage their businesses creating huge impact in the market. The aim of ONDC is to create new opportunities, decrease digital monopolies, as well as enable micro, small, and medium-sized businesses and small traders by making them online. This way it became advantageous to MSMEs and increased competitiveness to the major e-Commerce players in the market. Besides, it creates an open, interoperable network for MSMEs where buyers and sellers can conduct transactions without being on the same platform. This network can contain a variety of different types of Network Participants, each managing specialized portions of the e-commerce value chain, due to disaggregating and interoperability, which make it simple for diverse

platforms to communicate with one another thereby making their businesses digital.

2. Literature Survey

The advantages and disadvantages of ONDC as a network-based platform were highlighted and a review of ONDC's digital warfare in India taking on the e-Commerce giants have been discussed in this section by Bibhu Dash et al. (2022) [1], An entire overview of ONDC as an emerging area in the area of e-Commerce technology was detailed in this paper P. R. Venugopal et al. (2022) [2]. A. Shaji George et al. (2022) [3] explains the ONDC concept of democratizing digital commerce and curbing digital monopolies in India.

Implementing ONDC

Having a structured methodology is helpful to ease up the process in terms of understanding and implementing the ONDC which is explained below. The implementation of ONDC is divided into 4 steps:

- Institutional setup
- Role of ONDC entity
- Governance
- Implementation strategy

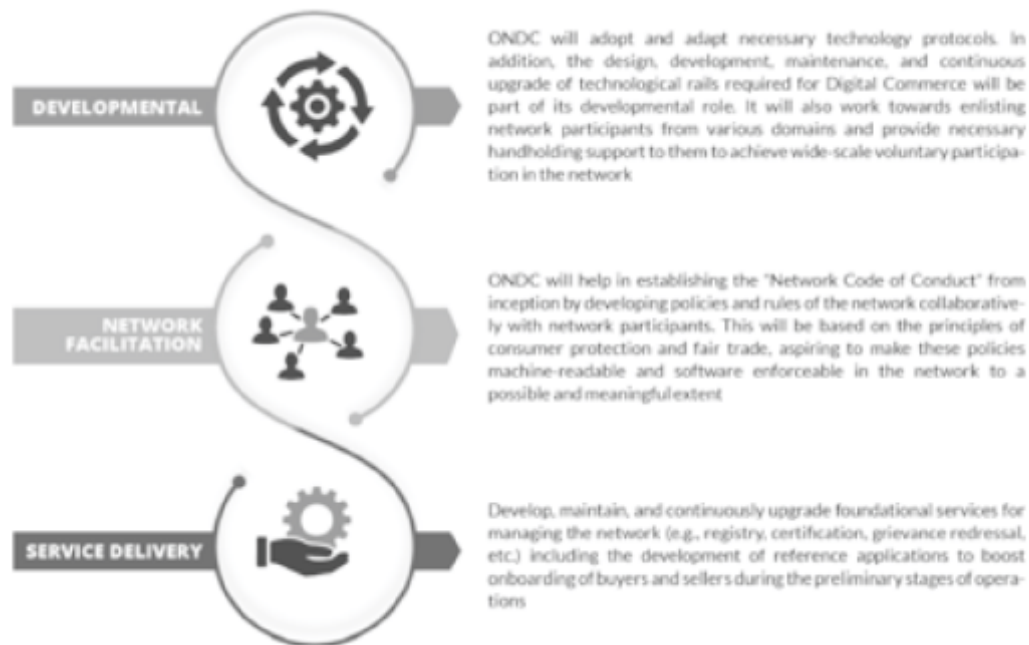
A. Institutional setup

The human capital and the independence of the

management to excel and transform the market. This is also subjected to sound corporate governance norms as in section 8 company thereby removing any incentive for the owners to drive for profit maximization and to retain its purity of intent of establishing a public good.

B. Role of ONDC Entity

Open Network for Digital Commerce entity will be responsible for three roles as shown in figure 1 below:



Source: ONDC Strategy Paper

Figure 1: Role of Open Network for Digital Commerce entity

C. Governance

The ONDC as an organization will operate under the regulatory supervision of the current framework given by the pertinent Ministries that have an impact on digital commerce. By jointly creating network policies and regulations based on the values of consumer protection and fair trade from the outset, ONDC, the network enabler, will assist in establishing the Network Code of Conduct. In order to do this, ONDC may create a council with representation from network users who would formally participate in the creation and implementation of network rules and guidelines.

All network members must comply with a basic framework of mutually approved rules and regulations provided by ONDC as the Network Facilitating organization. The ONDC will create a user council made up of members of the network participants, users, and subject matter experts in order to continuously improve network rules and

policies enabling speedy adoption of the network by a larger set of participants and users. Therefore, in the context of its function as a network orchestrator, ONDC might expand on the preceding concept of a self-regulatory organization.

D. Implementation Strategy

The need for implementing ONDC on a population scale to turn it into a public utility is a long-term strategy given the variety of use cases and participants in the ecosystem. The ONDC will confront difficulties in establishing confidence among small and large digital commerce enterprises, managing user expectations, and managing customer and seller fraud/issues given the revolutionary change it will bring to the way the industry currently functions. Therefore, the ONDC's initial phase needs to be implemented as soon as possible in order to obtain acceptance and identify relevant practical factors for implementing it on a broader scale. Technology, business, and institution building are the three main

focuses of the implementation plan for the ONDC execution. Further, it has been focused as a short-term and long-term strategy as explained in the strategy paper of ONDC.

3. Benefits to MSMEs

Although the Unified Payments Interface (UPI) is on track to surpass the \$100 trillion mark, the Open Network for Digital Commerce (ONDC) for hyperlocal transactions is a ministry of commerce programme that can spread the advantages of digitization to a much wider audience. The present focus is on empowering local sellers, who now have less influence over disputes on proprietary platforms. This will significantly alter how micro, small, and medium-sized firms (MSMEs) conduct business and contribute to GDP growth. Among the existing users of the network are Paytm, Dunzo, eSamudaay, and others. It will enable the hyper-localization of small businesses and micro, small, and medium-sized companies (MSMEs). The platform will enable the display of products from all participating e-commerce businesses in search results across all networked apps. As a result, MSMEs can advertise their goods on the platform at a lesser price without there being any distinction between large and small dealers.

Currently, ONDC has a large number of participants, including vendors like Bizom, Digiit, Enstore, eSamudaay, Growth Falcons, etc., buyers like Craftsvilla, Paytm, IDFC, Kotak, etc., and logistics operators like Delhivery, Dunzo, Grab, LoadShare, and Shiprocket. When a customer looks for a product on one of the buyers' applications, like Paytm, the ONDC platform connects the customer to listed sellers who display retailers from which the customer may make a purchase.

The government's action shows that it is providing an open network protocol that enables any network-enabled application to find and engage in location-aware local commerce across industries. Small business owners and MSMEs aiming to scale their operations through digital commerce will benefit the most from this. This will be a ground-breaking effort to level the playing field for digital trade on the size of a nation like India. Overall, it will support fair trade and provide small, independent business owners more control as they will once again be able to engage with their clients directly and won't be separated from them by an intermediary barrier.

With ONDC, trust portability is advantageous. Consider a decent taxi firm that provides excellent customer service but lacks brand recognition due to its dependence on aggregator apps like Uber or Ola. By enabling a taxi fleet company like this to be seen by many more potential clients, ONDC hopes to change this and raise the trustworthiness of small and independent brands and services.

This network in Bengaluru began its beta testing phase with small shops from 16 different pin codes. The ONDC, which is built on open specifications, would increase the e-commerce scale of small businesses and weaken the power of major firms like Amazon and Walmart-backed Flipkart. The Ministry of Commerce and Industry is behind the project. On the first day of the beta testing, three buyer apps—Paytm, Spice Money, and Mystore—were available on the platform. On the first day, the system was also integrated with as many as 11 vendor apps, which essentially act as aggregators of small shops and kirana stores.

ONDC & Major e-Commerce players

ONDC is in talks with 200 firms, including banks, corporates, and payment firms, to onboard them on the network and as ONDC accelerates e-Commerce adoption, existing players like Amazon, and Flipkart stand to benefit and additionally unicorns such as OYO, Swiggy, Zomato will be onboarded during the coming phase of the ONDC initiative. Clearly, ONDC is not here to challenge Flipkart, Amazon. It is essentially making ecommerce enablers helping the small retailers leverage the digitisation of commerce through our network. In order to create a homogeneous market, ONDC would, at its heart, be a system that enables a network to onboard millions of retailers, sellers, and potential customers via buyer-seller-facing applications. The objective is to increase the population-scale penetration of ecommerce from 4–5%. Nothing is intended to change the current 4–5% marketing shares. Majors in e-commerce have a business risk if they choose not to participate in ONDC but also stand to gain from it.

ONDC in shaping global e-Commerce

Due to the contribution of the government's ambitious ONDC project, which aims to democratize e-commerce for India and provide a level playing field for small and medium businesses, India is well-positioned to emerge as a global pioneer in reinventing the digital commerce landscape. India has advanced to the point where it is now pioneers not just

in this country but also on the entire planet when it comes to digital commerce. And for this reason, there is interest worldwide in how and when India will succeed through its businesses from small to large scale with the aid of ONDC specifically due to its immense focus in the areas of digital commerce in the market.

4. Conclusion

Over the past twenty years, the way individuals do business has swiftly changed from traditional brick-and-mortar establishments to online commerce. E-commerce platforms, which have played a key role in this evolution, have to consider carefully how to address the challenge of building confidence in a situation where the customer and vendor are never in person. The approach that has so far been successful calls for the central platform to take complete command of the value chain and develop into the main repository of trust. But this centralized strategy is not without its flaws. In summary, the ONDC is positioned to become the upcoming innovation in internet infrastructure. It will alter how individuals conduct business and give MSMEs better funding and negotiating choices. Enhanced seller visibility across the network will surely promote GDP growth and benefit sellers as well. Additionally, in order to support the national push, ONDC claimed that it has created an incentive programme for three groups of people: first, seller network participants to encourage seller onboarding; second, sellers themselves to encourage transactions, including but not limited to converting offline customers to online sales; and third, buyer network participants to encourage demand generation on the network.

The king is the consumer. The seller-friendliness of the platform is irrelevant to them. They only consider convenience and enjoyment. ONDC would be well to keep this in mind. Hence, the ONDC is not against major e-Commerce players to pull down its businesses in the market upon competition and posing challenges; however, this network provides an equal opportunity to all the firms in the field of digital commerce.

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Employee Engagement Through Employee Empowerment with Special Reference to Employee Working in Manufacturing Industry Situated at North Karnataka Region

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ABSTRACT

Every organization should involve in identifying the Engagement levels of employees in their work. Engaged employees are uncopied competitive advantage for the organizations. Employees can be engaged by empowering them with well designated roles and by providing sufficient amount of autonomy while delivering their roles and responsibilities. The objective of present study is to analyze the relation between employee engagement and employee empowerment and also to find out, to what extent employee empowerment influence the engagement levels of employee at his/her workplace working in manufacturing industry. Factor analysis and regression analysis has been conducted to observe the total variance explained about the two phenomenon of the study and to analyze the effect of empowerment on engagement levels of employee.

Keywords : Employee engagement, Structural empowerment, Psychological empowerment, Manufacturing industry situated at North Karnataka .

1. Introduction

Manufacturing Industry plays a commendable role in Economic growth of every nation. It has greater contribution towards Socio-Economic transformation and creates direct and indirect employment in its related services. Manufacturing Industry builds competitiveness of the various companies/Industries by building knowledge, technology and Innovations and strengthens the Business environments. It is a key feature for modern Economic growth and prosperity and holds major share in GDP of every nation. From the history it can be observed that Manufacturing Industry is genesis for new technology, Innovations, R&D activities so this Industry is considered as backbone for Developed as well as developing nations. In Manufacturing Industry, Steel Production is vital part of Industrialization and steel is a topmost metal which is used in different types of machinery, construction, Automobiles, Infrastructure, manufacturing intermediary & finished products etc. According to the statistics of Department for Promotion of Industry and Internal Trade (DPIIT), between April 2000-March 2022, Indian

metallurgical industries attracted FDI inflows of US\$ 17.01 billion. The contribution of steel to Indian Economy is around 2%. The growth in steel sector is expected to improve the economic growth rate of India. On the basis of the reports provided by IBEF, steel Industry has huge scope of growth (IBEF,2022) and consequently it is major contributor toward economic growth of nation. So, organizations involving in this process should identify value addition elements that enhance organization's performance and sustainability.

2. Need of the Study

Factors those are necessary in every manufacturing industry are financial Assets, Processes, Place, Utilities and People and One of the major elements which govern the performance of the company is human Resource of the organization. There is a need for every organization to come out with the strategies which makes their human capital get engaged in the work. Engagement speaks about total immersion of the employee in his work physically, psychologically, emotionally and cognitively (Kahn, 1990). Employee involvement in his work leads to

organization's growth and involvement is possible when employee harness himself in his work (May et al, 2004). So there is a need to identify the ways through which employees find their identities in their work with his complete involvement physically, psychologically and cognitively to attain organization's goals and objectives. This is possible only when employees are self motivated, feel responsible and accountable whole heartedly towards their roles and responsibilities. Employees should be made self driven and self directed by providing sufficient amount of autonomy and empower them in process of decision making relating to their work.

The present study wants to fulfill the need of identifying the avenues through which organizations can able to make employees to deeply engaged in the job that precedes the job identities (May et al, 2004).

By considering the current need, the present study has been carried out to answer the Research question - '**To what extent Employee Empowerment influences the Engagement levels of the Employees'**

3. Objectives of the study

To answer the Research question, following objectives are formulated:

- To understand the concepts of Employee Empowerment and Employee Engagement.
- To observe the Empowerment levels among the employees working in the Manufacturing Industry.
- To analyze the relationship between Employee Empowerment and Employee Engagement levels.
- To analyze the influence of Employee Empowerment on Engagement levels of the Employees.

4. Literature Review

Workplace is an important part in every individual's life as he involves in developing various dimensions of life like social relationships, engaging in challenges, building up his identity (Kanungo, 1982). Organizations should continuously strive for creating positive work environments and there is substantial evidence which shows that positive environments are also productive environments (Cameron et al 2003) and in turn fostering work engagement (Bowen & Ostroff 2004, Wright et al 2001, 2005, Dunford & Snell 2001,) and employees are also more productive when compare to others (Csikszentmihalyi 1997,

Seligman 2002, Fredrickson 2003, Diener & Biswas 2008). Positive work environments can be created by providing sufficient resources, and autonomy so that employees can unleash their full potential and knowledge in appropriate decision making (Goldsmith et al, 1997). According to some major research organizations, employees who are committed towards their work and feel enthusiastic, connected emotionally with their work and workplace and perform psychological investment in their work and organization are said to be highly engaged employees (Gallup, Willis Tower Watson, Aon Hewitt, Quantum Workplace).

If employees feel engaged, they care for their organization success and sustainability. There are many positive outcomes if employee is engaged in his/her work. Employees' satisfaction will be enhances in turn leads to their retention in the organization (Purushothaman and Kaviya (2020), Schaufeli, Bakker, & Salanova, 2006). It is an equal important to retain existing talents along acquiring new talent. Enhanced Employee Relations by reducing communication gap, organizations can able to achieve high engagement behaviors among the Employees (Kaushik and Guleria (2020)). Organizations should give opportunities to employees to come out with their opinions and high degree of creativity (Kumar 2021). Organizations should have virtues like, Trust, Empathy, Justice, harmony that leads to create more Humane work environments in which employees feel nourished and valued that leads to employee Engagement (Kumar 2021). Research reveals that workplace environments have major effects on employees' productivity (Yadav et al 2020).

Work environments which promote team coordination will boost the employees' morale and makes them involve in the work more enthusiastically (Kaushik and Guleria (2020)). Organizations has to create a culture where employees should not feel misused, overused, underused and abused (Ketter 2008). Social support from colleagues and supervisors, autonomy, performance feedback, skill variety, learning opportunities are positively associated with Employee Engagement (Schaufeli et al 2009; Xanthopoulou et al 2009). In this context some more Empirical studies have been conducted and studied to find out the influencing factors of engagement levels. Engagement is Behaviourial, cognitive and emotional condition of the employee (.Farndale & Murrer, 2015; Shuck & Wollard, 2010).

So organizations should build work culture in which employee feel empowered to utilize their cognitions to be more creative and productive.

The pioneer for the concept, Khan (1990) explains Employee Engagement as harnessing employees' selves to their work roles. It is positive attachment, commitment, loyalty, (Xiao & Duan, 2014) and positive psychological attachment to work roles (Saks & Gruman, 2014). To get involve emotionally and psychologically at workplace, organization's culture and environment plays an important role. Openness, trust, Authenticity, proactiveness, Autonomy, collaboration are important elements of culture which allows employees to get more engaged in their job roles. employee engagement depends on many antecedents, such as management styles and practices, organizations can build and promote engagement.

Besides, positive work environment can enhance the level of employee engagement. Employees need to have a healthy working environment, which can have an impact on organizational behaviors, such as, organizational commitment and engagement. Rozman et al. (2019) proved that working conditions contribute to improving work engagement.

Work environment is a climate in which employees perform their duties (Hanaysha, 2016) and supportive work environments leads to employee commitment, performance and job satisfaction (Danish et al. (2013), Hanaysha, 2016, Dul et al. (2011). Organizations should provide conducive work environments in which employees feel empowered to take appropriate decisions. From literature it can be observe that Empowered employees are more committed with reduced turnover intensions (N Alkahtani & et al 2021, William C. Murray & et al 2021) and improved performance. Empowering employees is a persuasive practice through which performance and productivity can be enhanced by psychological investment and maximum contribution in appropriate decision making process.

We can observe in literature about mainly two types of Empowerment, and those are Structural Empowerment & Psychological Empowerment (Mathieu, Gilson & Ruddy, 2006). In Structural Empowerment, subordinates are given with power, control, authority and autonomy to carry out different functions and activities related to work. Subordinates

are motivated to grow and learn new skills and allowed to utilize those in their work process (Chen & Chen, 2008).

In order to implement the Empowerment, there should be a proper organized structure where administrators share authorities and responsibilities with the employees according to their profiles ((Demirbilek & Türkan, 2008). If organization fails in identifying the line of authority and control objectively, then it will fail to empower and in turn results in to negative consequences like employee Burnout and Exhaustion. So empowering through external factors require more scrutiny before its implementation.

Psychological Empowerment is an important element of Intrinsic motivation which includes four personal orientations as Competence, Meaning, Self Determination and impact and also demonstrates cognitive orientations about ob roles (Spreitzer, 1995). It is considered as an important resource that enhances employees' Engagement with their work (Ugwu et, al 2014) and also have strong predictive ability of Engagement levels (Bhatnagar , 2012). Psychological Empowerment is a critical antecedent for positive workout comes like job satisfaction(Dewettinck and van Ameijde, 2011; Amundsen and Martinsen, 2015; Nikpour, 2018) and work innovation (Seibert et al., 2011). From the literature it is observed that, Psychological Empowerment develops positive orientations towards the work and job roles and resultant as detrimental to burnout and Exhaustion (McVicar, 2003; Laschinger et al., 2006; Cavus and Demir, 2010; Gong et al., 2021). Physical and Psychological depletion leads to Employee Burnout (Shirom, 1989). If employees are empowered psychologically by providing resources though which they transform their abilities to cope up with their emotional Exhaustion to enhance their potential at work place (Boudrias et al., 2012; Tian et al., 2015; Ayala Calvo and García, 2018; Liu et al., 2019; Permarupan et al., 2020).

Psychological investment stimulates individual's enthusiasm towards work and improves their performance that results to organization's commitment. Research showed that there is a statistically significant relationship between psychological empowerment and Employee Engagement (Marius WS, Sebastian R., 2010). Empowering is considered as a key factor for positive

work outcomes (Irina M, Coralia S, Paul S, 2015) and is positively related to employees' task and innovative performance (Yi L, Feng W, Shenggang R, Yang D, 2015).

From the above discussion, it is clear that Employee Empowerment plays an important role in achieving positive work outcomes and also creates positive intentions towards the job among the employees. A work environment which leads to the development of positive outcomes can have engaged employee in turn can achieve organization success.

5. Conceptual Framework

Literature has provided sufficient evidences on the importance of two constructs of the study. Poor engagement levels effects the organization performance and its success. So organizations should continuously strive in identifying the antecedents that maintains the engagement levels



Present study has conceptualized the theory around two main constructs in which Employee Engagement is conceptualized as Dependent variable and Employee Empowerment as Independent variable. In this section effort has been made to develop a theoretical construct which depicts that sufficient Empowerment leads to desired Engagement levels among the employees.

For this purpose, Structural and psychological Empowerments are considered to analyze the influence of empowerment on three variables of three variables of Engagement - 'Vigor, Dedication, Absorption'.

on the basis of above mentioned conceptualization, a set of hypotheses are formulated to achieve the established objectives of the present study.

H: Employee Empowerment is positively associated with Employee Engagement

H1: Structural Empowerment is positively associated with Vigor

H2: Structural Empowerment is positively associated with Dedication

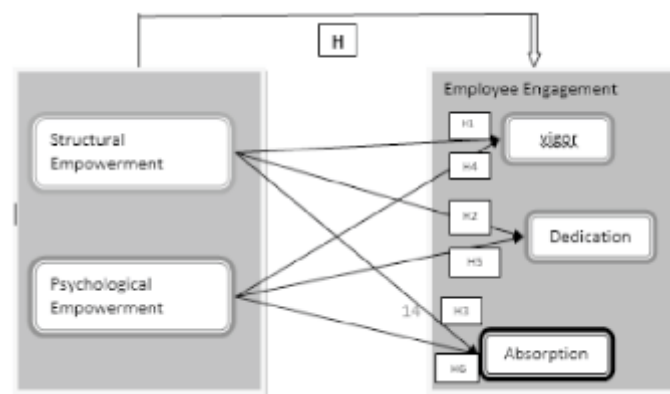
H3: Structural Empowerment is positively associated with Absorption

H4: Psychological Empowerment is positively associated with vigor

H5: Psychological Empowerment is positively associated with Dedication

H6: Psychological Empowerment is positively associated with Absorption

Fig:2 Pictorial representation of relationship among the variables of



Measures & Methods

Measuring dimensions of the construct

Employee Engagement and its dimensions

Schaufeli et al (2002) defined engagement as 'a positive fulfilling, work related state of mind that can be characterized by Vigor, Dedication, and Absorption'. So it is very important to pay attention to improve psychological strengths and positive experience at work.

The present study adopted UWES (Utrecht work engagement scale) to measure engagement levels among the employees. This scale has been developed by Schaufeli et al (2002) with three dimensions - 'Vigor, Dedication, and Absorption'. Again developed a refined form of questionnaire to measure work engagement based on the original version of Utrecht Work Engagement scale (UWES), (Schaufeli et al 2006).

Employee Empowerment

Structural empowerment was measured using scale developed by Laschinger et al. (2001) and it consists of sub factors like

1) Opportunities provided by Management to acquire new skills & knowledge and application of those knowledge and skills; opportunity in decision making;

2) Information & communication provided by the Management in the process of carrying out the functions

3) Support is provided by Management in sufficient amount to handle with critical situations in critical times

4) Resources provided by the Management to fulfill the responsibilities that demands in their respective roles handle with the situations.

Psychological empowerment was measured using the scale developed by Spreitzer, (1995) and it consist of four subscales –

1. Meaning which measures, to what extent employee is finding meaning in his/her work and how much that job is important to him and also to what extent he/she is confident to perform that particular job role.

2. Competence assesses the whether employee mastered the skills necessary for the job and self assured on the competencies that are required in the way of carrying out his/her work.

3. Self determination assesses whether he can determine what to do in his/her work and having autonomy of performing the work.

4. Impact assesses the Employee's control and significant impact over the activities that happens in the department.

6. Research Design

The present study adopted Descriptive research design which gives a detailed profile of the respondent population being studied by analyzing the characteristics of the group on which research is carried on. The present study involves analyzing the effect of variables that are considered of interest on the selected sample.

Cross sectional nature of research is adopted as it is relevant for that particular time period. (Deepak chawla, Neena sodhi 2014). The cross sectional studies are extremely useful to study current patterns of behaviors or opinions. This is a better technique as the results are more reliable and valued.

Quantitative methods are used to analyze the study. These include descriptive and inferential statistical methods. Both methods are used to analyze the collected data, to derive necessary conclusions and interpretations from the analysis.

Sampling Design

The present study has adopted probability sampling in which simple Random technique is used. Sample size of the study is 150 which consists of employees working in different Iron & steel manufacturing, Ferroalloy manufacturing companies situated at north Karnataka region.

Data collection

Descriptive research studies require two types of data – secondary data and primary data.

Secondary data is collected to gain sufficient knowledge on the topic of investigation, analyze the established relationships among the variables and Primary data is collected exclusively for the purpose of the current investigation that research is conducting (Churchill & Iacobucci 2005).

Instrumentation

Questionnaire is the main data collection tool used to conduct present study. Questionnaire has developed in two sections. First section of the questionnaire collects the data pertaining to the

demographic characteristics of the respondents. It includes age, qualification, work experience, marital status. second section consists of measurement statements pertaining to the variables of the study - Employee Empowerment & Employee Engagement. Total number of Measurement items included in the Questionnaire is 25 in which Employee Engagement contains 17 items and Employee Empowerment consists of 8 items.

Data is collected through 7 Point rating scale in which agreement levels are collected towards statements

7. Statistical Analysis

Data collected from questionnaire is analyzed through Descriptive and inferential statistical tools using SPSS ver.20. There is no incomplete filled questionnaire so total 150 responses are considered for the analysis.

Reliability & Validity of the Instrument

Internal consistency of the variables of the study is measured by using Cronbach alpha (α). The α value for Employee Empowerment is $\alpha = 0.831$ and Employee Engagement $\alpha = 0.719$. Total consistency among all items of the study is 0.8 which implies good reliability.

It is important to conduct validity test on the measurement instrument as reliability is not

sufficient. Validity refers to the meaningfulness of the research component. When behaviors are measured, then it should be checked that measurement instrument is measuring what it is intended to measure. This can be attained through validity test. To fulfill the purpose, construct validity have been adopted. Construct validity of the instrument is performed. Construct validity measures to what extent items in the questionnaire are related with constructed theory and it is quantitative in nature. It refers to whether scale measures with a theorized psychological construct.

Factor analysis is used to assess the construct validity of the research instrument. It is commonly used statistical measure in which items are clustered in the form of factors to be measured. High loading of items are grouped to makes one factor and low loading items are discarded as these doesn't contribute for the factors. The method of extraction is principle component analysis with varimax rotation. KMO measure of sampling adequacy is >0.5 which indicates the appropriateness of using factor analysis and Bartlett's sphericity test gives a measure that indicates the level of significance for of the correlation matrix of the variables.

Following table provides KMO & Bartlett's sphericity test results of the two constructs of the study. All these values justify the use of factor analysis.

Table:1

Scale	No. of items	KMO MEASURES	Df	Bartlett's sphericity test	
				Approx chi-square	p-value
EMPLOYEE EMPOWERMENT	8	0.837	28	773.338	0.000**
EMPLOYEE ENGAGEMENT	17	0.746	136	1634.168	0.000**

**P-value <0.01% confidence level

Total variance explained is accounted almost 67.890%, 60% of the variability in the original values of Employee Empowerment and Employee Engagement respectively which indicates how much of the variability in the data has been modeled by the factors. Acceptance level of variance explained by the model can be 60% - 70% (Robin Beaumont 2012). Total variance explained by two scales falls in this range only.

Factor loadings with respect to each item of both

scales are observed above 0.4 ranges from 0.4 to 0.9 . According to Kothari (2005), factor loadings of 0.3 can be considered absolute values to be interpreted. The general rule of the thumb for acceptable factor loading is 0.4 or above (David et al 2010). In the present study, 9th item and 16th item of Employee Engagement and 2nd item of Employee Empowerment are below the adopted threshold value of 0.3 and negative. After removing these items from the scale, the cronbach's alpha of Employee Empowerment & Employee Engagement 0.85, 0.754 respectively. As the consistency values of the scale are not changed or improvised, the items with lower loadings are considered for further analysis. With this analysis, it can be concluded that Measurement scale of the present study has attained validity and can be considered for the further analysis. Both Descriptive and Inferential statistical tools are used to analyze the collected data

Table: 2 Demographic characteristics of the Respondents

Table:2

Demographic Variables	No. of Respondents	In (%)
Gender		
Male	110	73%
Female	40	27%
Age		
25-35	55	37%
35-45	50	33%
45-55	45	30%
Qualification		
Diploma	50	33%
UG Degree	60	40%
PG Degree	40	27%
Designation		
Technicians	60	40%
Asst Managers (Grade II)	40	27%
Managers (Grade I)	20	13%
Clerical Grade	30	20%
Years Of Experience		
Below 10	40	27%
10 - 20	80	53%
Above 20	30	20%
Total	150	100

Descriptive statistics

Descriptive statistics of the responses is analyzed through % Mean responses. Following table provides

mean responses towards the Measurement statements for Structural Empowerment and Psychological Empowerment.

Table:3

S.No	STATEMENTS	Response (%)								In (%)
		C A	A	SW A	N	D A	S W D A	C D A	Mean Respo nse	
1	I have the chance to gain new skills and knowledge on the job	4.3	3.3	8	4.7				6	85.7
2	I have information about the goals of the organization	7	19.7	22	7.7				5.41	77.2
3	I receive helpful hints or problem solving advice	4	29.3	13.3	3.3				5.68	81
4	I have time available to do necessary paperwork	6	25.7	16	2.3				5.6	80
5	The work I do is meaningful to me.	2.7	27	16.7	3.7				5.57	79.5
6	I have mastered the skills necessary for my job.	4	26.3	18.3	1.3				5.46	78
7	I can decide on my own how to go about doing my own work.	4.3	24	16	4.7	2			5.5	78.5
8	I have a great deal of control over what happens in my department.	4	29.7	12	4.3				5.66	80.8

CA=completely agree; A=Agree; SWA=somewhat agree; N=neutral; SWDA=somewhat disagree; DA=disagree; CDA=completely disagree

Inferential Statistics

Inferential statistical tools are used to analyze the association between the Independent (Employee

Empowerment) and dependent variables (Employee Engagement) of the study. Correlation and Regression analysis are conducted to analyze the Hypotheses formulated.

Following table provides the values of the analysis

Table:4

	Hypotheses	T-static	F-static	β values	Adjusted Rsquare	p-value	Decision
H	Employee Empowerment is positively associated with Employee Engagement	6.224	38.74	0.445	21%	0.000**	Supported
H 1	Structural Empowerment is positively associated with Vigor	5.149	26.5	0.39	15%	0.000**	Supported
+9 87	Structural Empowerment is positively associated with Dedication	3.509	12.31 4	0.279	7%	0.01	Supported
H 3	Structural Empowerment is positively associated with Absorption	4.16	17.34 3	0.324	10%	0.000**	Significant
H 4	Psychological Empowerment is positively associated with vigor	.339	69.53	0.565	32%	0.000**	Supported
H 5	Psychological Empowerment is positively associated with Dedication	2.91	8.479	0.233	5%	0.004	Not significant
H 6	Psychological Empowerment is positively associated with Absorption	3.532	12.47 5	0.279	8%	0.01	Supported

**P-value <0.01% confidence level

8. Results and Discussions

The first objective is attained by conducting extensive literature survey on the concepts of the study. The second objective is attained by analyzing the responses given by the sample of 150 respondents in form of their agreement levels towards the 8 statements of Employee Empowerment Measurement scale. All responses are positive, ranges from 77% to 86%. All the statements have received positive agreements which conclude that maximum respondents have average of 85% of empowerment levels.

The third and fourth objectives are attained by

analyzing level of association exists between the main variables and sub variables of the study. The first hypothesis is constructed between main variables Employee Engagement and Empowerment and analyzed. Results showed that there exist a positive association between main variables of the study with positive correlation value $r=0.455$, which can be interpreted as moderate relationship. Regression analysis reveals the results that Employee Empowerment (independent variable) can influence 21% of variability on Employee Engagement (dependent variable). F-test and T-test are conducted to observe statistical significance of regression effect

and predictive ability of independent variable on dependent variable with positive regression coefficients $\beta=0.44$. On the basis of above results, it can be stated that, main hypothesis H is proved and supported. Remaining hypotheses H1 to H6 are constructed among the sub variables of both the construct. H1 & H4 are formulated between Structural and Psychological empowerment stating that they are positively associated with 'Vigor' variable of Employee Engagement. with correlation of 0.39 & 0.56 respectively and with positive regression coefficient, showing positive influence of Psychological and structural empowerment on 'Vigor' variable. Results proved that Structural and Psychological empowerments can influence the variability of 15% & 32% in the vigor of Employee Engagement. So, H1 & H4 are proved and supported.

H2 & H5 are the hypotheses formulated between Structural and Psychological Empowerment as Independent variable and 'Dedication' of Employee Engagement as dependent variable. From the analysis it is proved that there is a positive association between these variables but weak relation. Regression analysis showed that an influence of 7% and 5% variability can be observed due to Independent variables in the dependent variable of 'dedication'.

H3 & H6 are the hypotheses formulated between Structural and Psychological Empowerment and 'Absorption' of Employee Engagement. From the analysis it is observed a positive and weak association between the variables. Regression analysis shows that structural & Psychological Empowerment influences the 10% and 8% of variability on Absorption levels employees. There is a positive but weak association.

From the table it is clear that all hypotheses of the study are positive and significant except H5 which states weak association between Psychological empowerment and Absorption variable.

9. Conclusion

The complete results of the study show positive relation and influence of Employee Empowerment on Employee Engagement level. If we observe in detail, employees are not psychologically empowered which means they may not be finding meaningfulness in their job and may feel less autonomy in process of execution of their job roles and have poor control over their department activities. These reasons can directly

affect the engagement levels of the employee. Employee can able to immerse himself in his/her work only when he/she is psychologically involved. So organizations should promote the organizational culture which transcends the work environments as 'best places to work' by integrating inner self of employee with sense of fulfillment along with healthy social interactions at workplace.

Organization will be successful if it work culture can create a sense of fulfillment through meaningful work in which organization communicates its values with supportive work environments, so that employees get absorbed and work vigorously with improved dedication levels.

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