

Business Ethics Engagement through Engineering Management in Small Business Firms

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ABSTRACT

The objective of this paper is to explore the importance and possibilities of engaging ethical standards in small businesses by using engineering techniques. Ethics are the principles and values an individual uses to govern his activities and decisions. There are many ethical issues that can arise in the course of operating a small business. Many ethical issues arise as a result of human resource management. There are clear unethical issues such as indiscipline in keeping up the time, absenteeism without prior intimation, stealing things at work, misusing facilities is due to illiteracy, no zeal towards the work, unrealistic government facilities etc. As the study has been done,, around 20 business enterprises, which are lagging behind in terms of business ethics and engineering technology, result in under-development and losses to the business. The intention behind this paper is to investigate the technology which can be implemented and managed in small business enterprises and how technology is helpful in raising the standards of ethical issues by inculcating it in Human Resource Management.

Purpose: The paper has motive of application of engineering technologies to overcome ethical issues and which can implemented in any small business organizations.

Methodology: The study involves descriptive methodology and survey of owners of small business enterprises and to apply it in business Ethics engagement through engineering management in Small Business Firms.

Key Words: *Ethics engagement, Issues, Engineering management, Technology*

1. INTRODUCTION

A business is also known as an enterprise, agency or a firm. It is an entity involved in the provisions of goods and services to customers. Businesses are prevalent in capitalist economies, where most of them are privately owned and provide goods and services to customers in exchange for the other goods, services or money. A business owned by multiple individuals may be formed as an incorporated company or jointly organized as a partnership. Countries have different laws that may ascribe different rights to various business entities.

Forms of ownership:

- **Sole proprietorship:** It is also known as sole trader, is owned by one person and operates for their benefits. The owner may operate the business alone or with other people. A sole proprietor has unlimited liability for all obligations incurred by the business, whether from operating costs or judgements against the business. All assets of the business belong to a sole proprietor. For example: Computer infrastructure, any inventory, manufacturing equipments and retail fixtures.

- **Partnership:** A partnership is a business owned by two or more people. In most forms of partnership, each partner has unlimited liability for the debts incurred by the business. The three most prevalent types of profit partnerships are: General partnerships, Limited partnerships and Limited liability partnerships.
- **Corporation:** The owners of a corporation have limited liability and the business has a separate legal personality from its owners. Corporations can be either government owned or privately owned they can recognise either for profit or as not for profit organisations.
- **Cooperative:** Cooperative is often referred to as a “co-op”, a cooperative is a limited liability business that can organise for profit or not for profit. A cooperative differs from cooperation in that it has members, not shareholders, and they share decision making authority. Cooperatives are typically classified as either consumer cooperatives or worker cooperatives.

Small Business:

Small businesses are normally privately owned corporations, partnerships, or sole proprietorships. What businesses are defined as "small" in terms of government support and tax policy varies depending on the country and industry.

Small businesses are common in many countries, depending on the economic system in operation. Typical examples include: convenience, other small shops (such as a bakery or delicatessen), hairdressers, tradesmen, lawyers, accountants, restaurants, guest houses, photographers, small-scale manufacturing, and online businesses, such as web design and programming.

1.1 Business Ethics: It is a branch of philosophy, concerned with analyzing what is right or wrong in people's behavior or conduct. Ethics and morality are terms that are often used interchangeably in discussions of good and evil. Ethics comes from the Greek word, ethos meaning “character”. The term ethics is usually applied to persons. According to Boddy, (2011) Ethics is often defined as an underlying principle that would produce an action to prevent a substantial harm to others, when an individual or group has an opportunity to do so for their own benefit. Churchill, (1982) the concept of an individual's moral standard is based on our perception it that can injure or severely benefit another.

Engineering technologies are very useful that would help the entrepreneurs to overcome time keep up by using Work alarms, text messages in their business\ . These technologies will make the workers to be aware about their time and work.

By using CCTVs, they would overcome the unethical issues like stealing things at work and to be aware.

1.2 Engineering management:

Engineering Management is a specialized form of management that is concerned with the application of engineering principles to business practice. Engineering management is a career that brings together the technological problem-solving of engineering and the organizational, administrative, and planning abilities of management in order to oversee complex enterprises from conception to completion. A Master of Science in Engineering Management (MSEM, or MS in Engineering Management) is sometimes compared to a Master of Business Administration (MBA) for professionals seeking a graduate degree as a qualifying credential for a career in engineering management.

Engineering management is considered to be a sub discipline of industrial engineering/systems engineering. Successful engineering managers typically require training and experience in business and engineering. Technically inept managers tend to be deprived of support by their technical team, and non-commercial managers tend to lack commercial acumen to deliver in a market economy. Largely, engineering managers manage engineers who are driven by non-entrepreneurial thinking, and thus require the necessary people skills to coach, mentor and motivate technical professionals. Engineering professionals joining manufacturing companies sometimes become engineering managers by default after a period of time. They are required to learn how to manage once they are on the job, though this is usually an ineffective way to develop managerial abilities

1.3 Overview

In our research work, we have considered 65% of the respondents having grocery shops, 25% of the respondents having super markets, and 10% of the respondents having whole sale shops. Engineering technologies are the most vital section that can improve and develop the ethical behavior of the workers in the businesses. Yet this sector is faced with ethical dilemmas which have caused a lot of ethical and moral issues. The worker's unethical issues faced by the entrepreneurs of small businesses are: being indiscipline in their work, absenteeism without prior intimation, stealing things at work etc. The main reason for unethical issues is the unrealistic government facilities have been providing such as subsidies, rice, sugar etc. Not only these reasons for but other unethical issues are: there is no training regarding time keep up and other unethical behaviors, less learning attitude, illiteracy, and no zeal towards the work. Though the businesses expect the ethical behavior from the workers, but they often fail to follow ethics in their work because small businesses do not adopt engineering technologies, so to overcome these ethical issues business should adopt technologies like work alarms, text messages, mobile banking, CCTVs etc.

2.1. Objectives of the study:

1. To study the different factors, resulting in ethical issues among the workers.
2. To find out the reasons for ethical issues.
3. To identify the technology that can be useful to enhance ethics among the workers.

2.2. Scope:

The scope of this study has covered the related ethical issues and behavior in small business firms of Bagalkot and is limited to entrepreneurs of in and around the Bagalkot. The study will further help small businesses to overcome the unethical issues by implementing engineering technologies that will lead to success of the business and to prosper.

2.3 Methodology:

As far as the methodology is concerned, the study employed both primary and secondary data for meeting the stated objectives.

Survey is carried through:

- Structured questionnaire for the business entrepreneurs
- Direct interaction with the entrepreneurs

3. LITERATURE REVIEW

Feldman 2002 Ethics emerged in both personal and professional sphere to analyze the importance of personnel values, norms, and custom. Ethic takes on vital role in reduction of major dilemmas particularly at the work place. (**Advance Ethical Practices in Human Resource Management**)

Pattanayak 2010 The outcome of pay dissatisfaction may include lower job performance, increase grievance, incessant absenteeism or as well as labor turnover. On the other hand, excessive compensation costs can reduce organizations competitiveness and its ability to provide jobs. (**Promoting Ethical Human Resource Management Practices in Work Organizations**)

Wooten 2001 providing employees with training and developmental opportunities encourages good performance, strengthens job-related skills and competencies, and helps employees keep up with changes in the workplace, such as the introduction of new technology. (**Ethical Considerations in Human Resource Management**)

“Ethics is essential to capitalism, as there are not enough laws” (Venezia 2011). Falkenberg (2004) agrees with the statement above, nevertheless, many researchers argue that ethics cannot be included in business profit maximization

and capitalism. There is no room for ethics since it discourages profit maximization. **(Ethics in Family Businesses and Venture Capital Firms)**

In order to investigate the impact of business ethics in organizations, it is necessary to firstly define the term ethics. “Ethics concerns itself with what is good or right in human interaction”, (Rossouw, 2002). In Rossouw’s opinion ethics is centered on three basic concepts, namely the good, the self and the other. (Rossouw, 2002). **(Institutionalizing ethics in organizations: the role of mentoring)**

Victor & Cullen, 1988 Studies that have explored the link between ethical theories and ethical decision making usually focus on the ethical reasoning or justification that individuals use to explain their decisions and actions in morally challenging situations. These reasons are assumed to be derived from various ethical theories that differ in the basic criteria used for moral reasoning. **(The role of ethical theories in ethical reasoning and behavior within organizations)**

Plinio, Young, and Lavery 2010 Found that one of the most serious problem facing organizations today is impoverished ethical behavior and nonexistent ethical leadership. Consequently, the authors note that trust in leadership is waning and the situation is worsened by a weak economy. The authors also noted an alarming increase in misconduct by employees at all levels. **(A Review of the Literature Concerning Ethical Leadership in Organizations)**

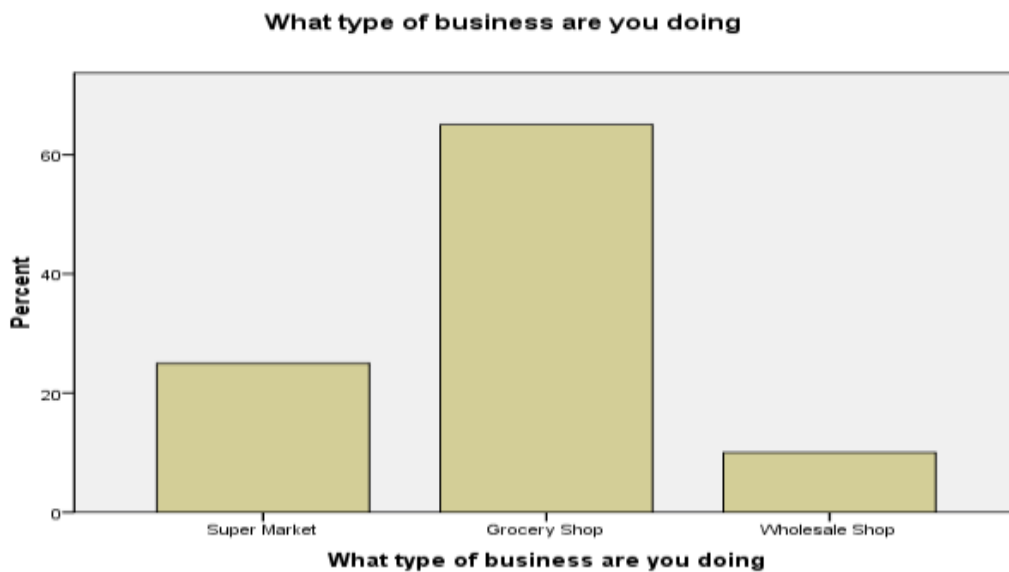
Johnson 1981 argues that “most business decisions involve choices between two or more goods or two undesirable options”. A related challenge to ethical decision making is that sometimes good and sometimes evil seem to be joint products. **(Business ethics: a literature review with a focusing on marketing ethics)**

Plinio 2009 Executives admit that following the law and obeying regulations are not what makes ethics complicated. They even disclose that influencing others to do the right thing is not the problematical part of ethical leadership. Rather, the complexity of ethical leadership exists in the gray areas of who is responsible when problems arise. **(A Review of the Literature Concerning Ethical Leadership in Organizations)**

4. Data Analysis and Interpretation:

What type of business are you doing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Super Market	5	25.0	25.0	25.0
Grocery Shop	13	65.0	65.0	90.0
Wholesale Shop	2	10.0	10.0	100.0
Total	20	100.0	100.0	



Analysis:

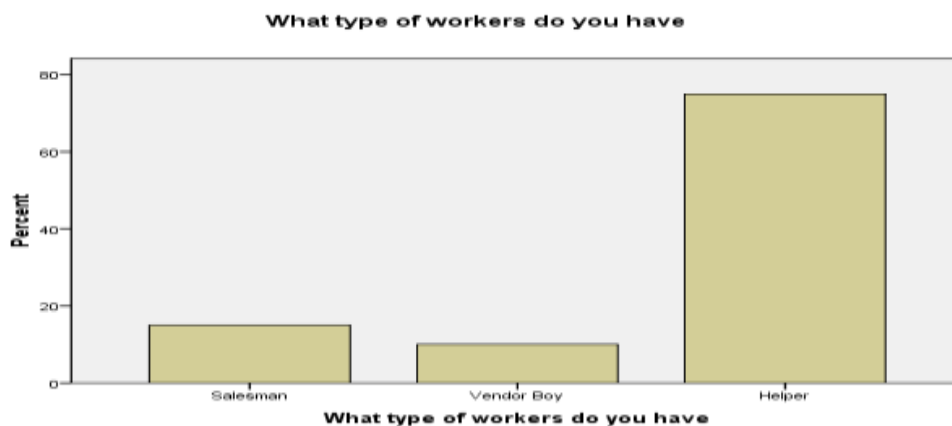
According to the survey 65% of the respondents have grocery shop, 25% of the respondents have super market and 10% of the respondents have wholesale shop.

Interpretation:

From the above analysis it can be interpreted that grocery shops are more when it is compared to super markets and wholesale shop with respect to the survey.

What type of workers do you have

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Salesman	3	15.0	15.0	15.0
Vendor Boy	2	10.0	10.0	25.0
Helper	15	75.0	75.0	100.0
Total	20	100.0	100.0	



Analysis:

According to our survey, 75% of the workers are helpers, 15% of the workers are salesmen and 10% of the workers are working as vendor boy.

Interpretation:

From the above analysis it can be interpreted that there are more number of grocery shops so the helpers are more when compared to salesmen and vendor boys.

Are the workers keeping up the time at work

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	8	40.0	40.0	40.0
No	12	60.0	60.0	100.0
Total	20	100.0	100.0	

Are the workers keeping up the time at work



Analysis:

According to the survey 60% of the owners say that workers do not keep up the time at work and 40% of the owners say that do keep up the time at work.

Interpretation:

From the above analysis it can be interpreted that most of the workers do not keep up their time due to laziness and disinterest in their work

Do the workers remain absent without any prior intimation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	13	65.0	65.0	65.0
No	7	35.0	35.0	100.0
Total	20	100.0	100.0	



Analysis:

From the above graph it is found that 65% of the workers remain absent without any prior intimation and 35% of the workers will inform before remaining absent

Interpretation:

From the above analysis it can interpreted that most of the workers remain absent because they feel that their work is not important and hence they remain absent.

Did the workers lie to you at any time

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	13	65.0	65.0	65.0
No	7	35.0	35.0	100.0
Total	20	100.0	100.0	



Analysis:

From the above graph it is found that 65% of the owners say that workers lie to them and 35% of the owners say that workers do not lie to them at any point of time.

Interpretation:

From the above analysis it can interpreted that most of the workers lie to their owners because they think that their opinions and wishes will not be fulfilled and hence they lie at times.

Do the workers steal things at your organization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	2	10.0	10.0	10.0
No	18	90.0	90.0	100.0
Total	20	100.0	100.0	



Analysis:

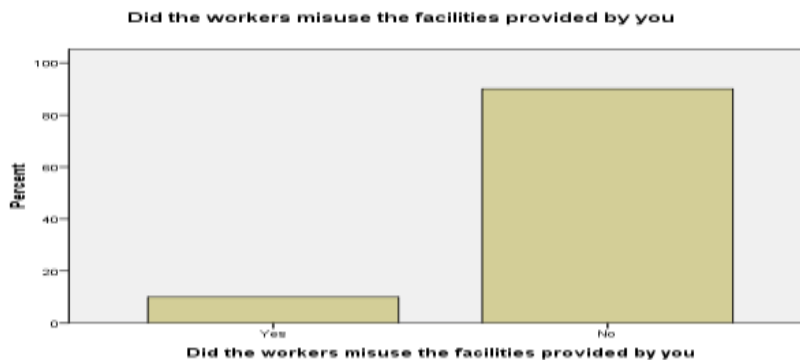
From the above graph it is found that 90% of the workers do not steal things at work whereas 10% of the workers do steal at work place.

Interpretation:

From the above analysis it can be interpreted that most of the workers do not steal at their organization because they are satisfied with the facilities provided by the owners and they also want to retain in the organization.

Did the workers misuse the facilities provided by you

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	2	10.0	10.0	10.0
No	18	90.0	90.0	100.0
Total	20	100.0	100.0	



Analysis:

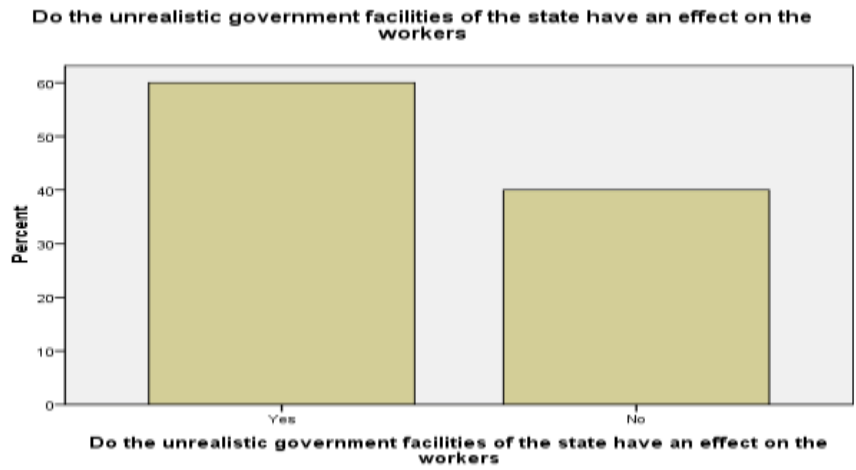
From the above graph it is found that 90% of the owners say that workers do not misuse the facilities and 10% of the owners say that workers misuse the facilities provided by them.

Interpretation:

From the above analysis it can be interpreted that most of the workers do not misuse the facilities because they have value of facilities provided by the owner and they are satisfied.

Do the unrealistic government facilities of the state have an effect on the workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	12	60.0	60.0	60.0
No	8	40.0	40.0	100.0
Total	20	100.0	100.0	



Analysis:

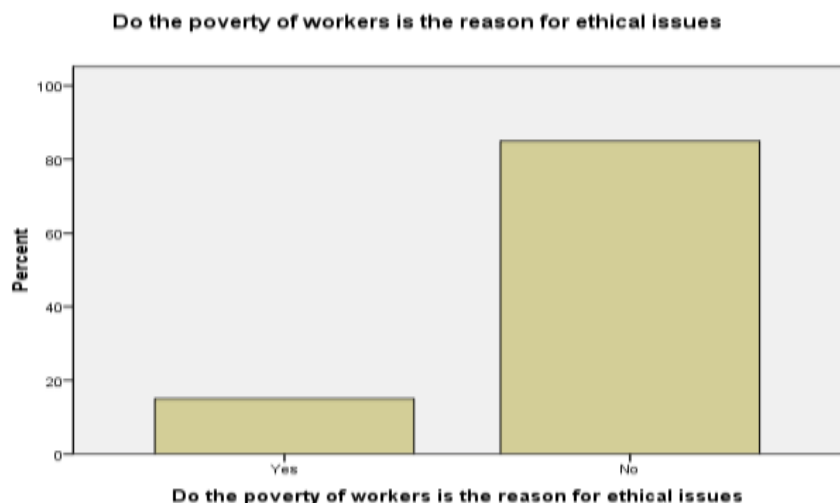
From the above graph it is found that 60% of the owners say that unrealistic government facilities such as subsidies, rice, sugar etc will have an effect on the workers and 40% of the owners say that government facilities of the state will not have an effect on the workers.

Interpretation:

From the above analysis it can be interpreted that unrealistic government facilities of the state have an effect on the workers because the government is providing so many facilities which fulfill their basic needs and hence that will have an effect on the work of workers.

Poverty of workers is the reason for causing ethical issues? Yes or No

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	3	15.0	15.0	15.0
No	17	85.0	85.0	100.0
Total	20	100.0	100.0	



Analysis:

From the above graph it is found that 85% of the owners say that poverty is not the reason for unethical issues and 15% of the owners say that unethical behavior is due to poverty.

Interpretation:

From the above analysis it can be interpreted that most of the poor workers is the reason for ethical issues because they know their job is important to run their family and fulfill their needs.

Bad habits like smoking, consumption of alcohol etc will have impact on the work of the workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	4	20.0	20.0	20.0
No	16	80.0	80.0	100.0
Total	20	100.0	100.0	



Analysis:

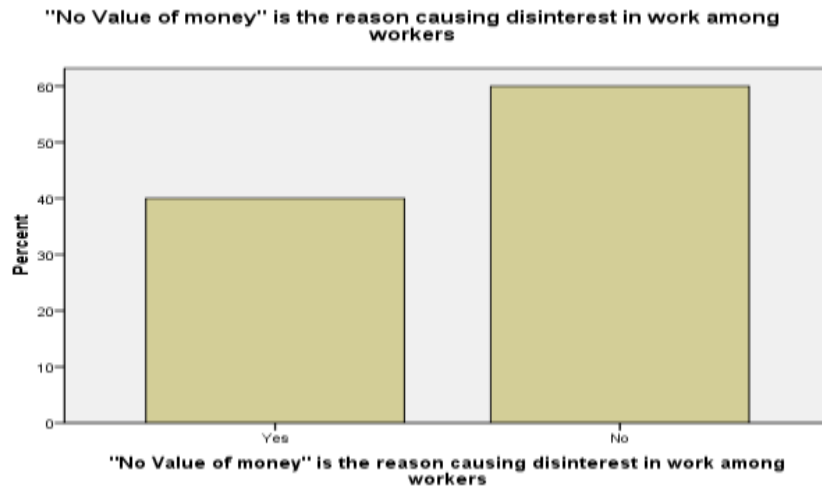
From the above graph it is found that 80% of the owners say that bad habits like smoking, consumption of alcohol etc will not have impact on the work style of the workers and 20% of the owners say that bad habits will impact on the worker style.

Interpretation:

From the above analysis it can interpreted that most of the workers do not consume alcohol and smoke because they are aware of the results which is caused by bad habits and hence they try to avoid during their work.

"No Value of money" is the reason causing disinterest in work among workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	8	40.0	40.0	40.0
No	12	60.0	60.0	100.0
Total	20	100.0	100.0	



Analysis:

From the above graph it is found that for 60% of the owners say that value of money is not the reason for causing disinterest in their work and 40% of the owners say that worker’s disinterest is due to there is no value of money.

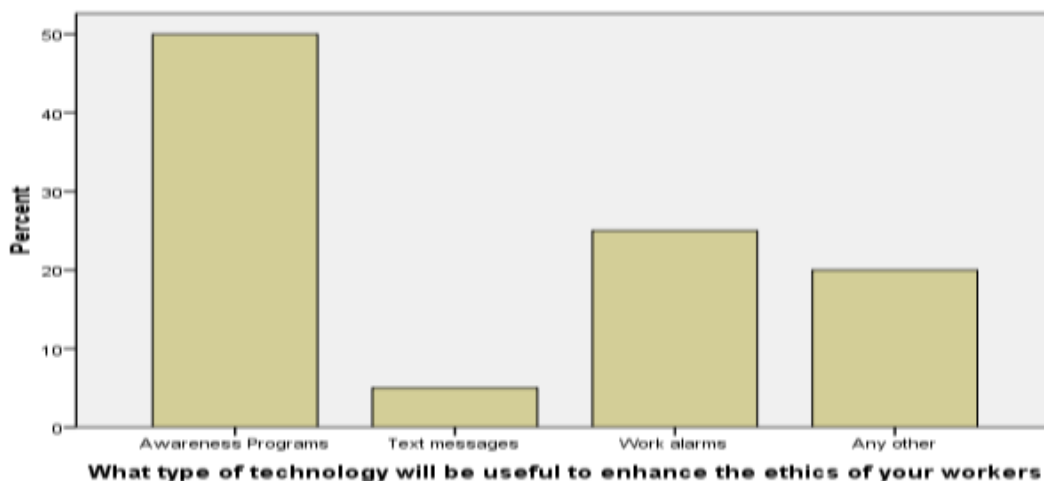
Interpretation:

From the above analysis it can be interpreted that most of the workers are poor and hence they know the value of money and responsibilities like managing the family and satisfying their needs.

What type of technology will be useful to enhance the ethics of your workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Awareness Programs	10	50.0	50.0	50.0
Text messages	1	5.0	5.0	55.0
Work alarms	5	25.0	25.0	80.0
Any other	4	20.0	20.0	100.0
Total	20	100.0	100.0	

What type of technology will be useful to enhance the ethics of your workers



Analysis:

From the above graph it is found that 50% of the owners say that awareness programs will be useful to enhance the ethics of their business, 25% of the owners say that work alarms will be useful to enhance the time keeping and ethics of their workers, 20% of the owners say that modern technology like CCTVs will be useful and 5% of the owners say that text messages will be useful to enhance the ethics of their workers.

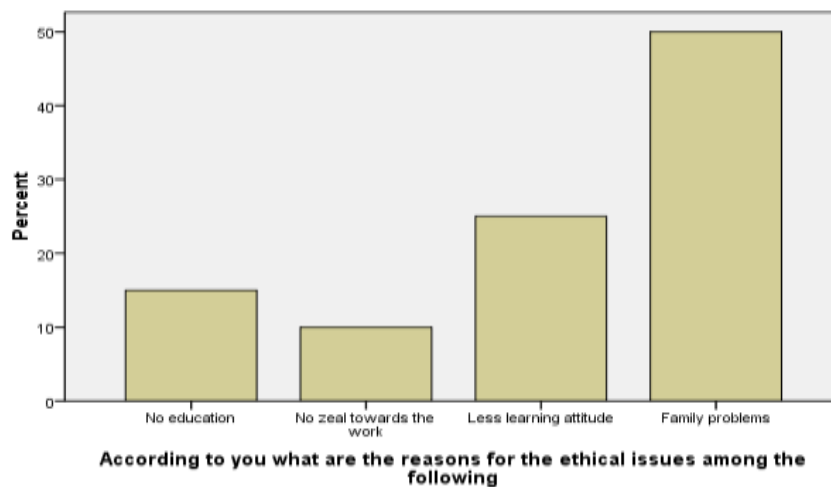
Interpretation:

From the above analysis it can be interpreted that awareness programs will be useful to enhance the ethics of their workers when compared to mobile banking, ad films, text messages, work alarms etc because they are not aware about the importance of technologies and their effect.

According to you what are the reasons for the ethical issues among the following

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No education	3	15.0	15.0	15.0
No zeal towards the work	2	10.0	10.0	25.0
Less learning attitude	5	25.0	25.0	50.0
Family problems	10	50.0	50.0	100.0
Total	20	100.0	100.0	

According to you what are the reasons for the ethical issues among the following



Analysis:

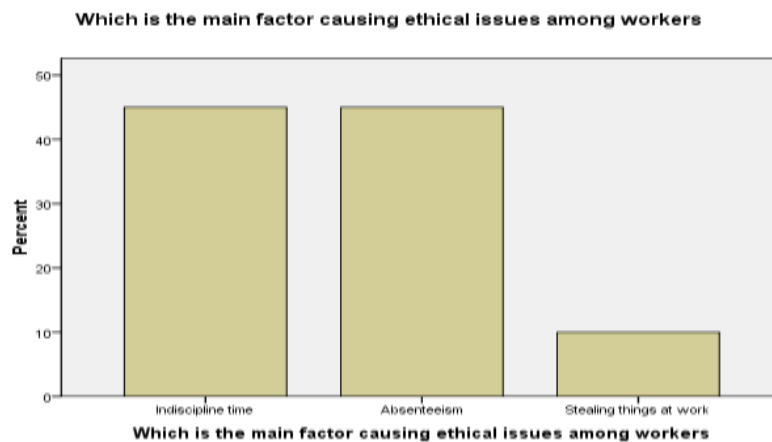
From the above graph it is found that 50% owners say that family problems is one of the reason for the unethical issues, 25% of the owners say that less learning attitude, 15% of the owners say that illiteracy is the reason for unethical issues and 10% of the owners say that not having zeal towards the work is one of the reason for unethical issues.

Interpretation:

From the above analysis it can be interpreted that family problems is one of the main reason for the ethical issues when compared to education, no zeal towards work and less learning attitude because when expectations of the family increases, automatically problems arises and hence it will have an effect on the work of the workers.

Which is the main factor causing ethical issues among workers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Indiscipline time	9	45.0	45.0	45.0
Absenteeism	9	45.0	45.0	90.0
Stealing things at work	2	10.0	10.0	100.0
Total	20	100.0	100.0	



Analysis:

From the above graph it is found that 45% of the owners say that indiscipline in work shows their unethical behavior, 45% of the owners say that absenteeism is the factor, and 10% of the owners say that stealing things at work is main factor causing ethical issues among workers.

Interpretation:

From the above analysis it can be interpreted that both indiscipline and absenteeism is the main factor that cause ethical issues among workers when compared to stealing things at work and misusing the facilities because of their laziness and disinterest in the work.

5. Findings:

Note: In our research work, 65% of the respondents have grocery shop, 25% of the respondents have super market and 10% of the respondents have wholesale shop. 75% of the workers are helpers, 15% of the workers are salesmen and 10% of the workers are working as vendor boy.

- 60% of the owners say that workers do not keep up the time at work and 40% of the owners say that do keep up the time at work.
- 65% of the workers remain absent without any prior intimation and 35% of the workers will inform before remaining absent
- 65% of the owners say that workers lie to them and 35% of the owners say that workers do not lie to them at any point of time.
- 90% of the workers do not steal things at work whereas 10% of the workers do steal at work place.
- 50% of the owners say that awareness programs will be useful to enhance the ethics of their business
- 25% of the owners say that work alarms will be useful to enhance the time keeping and ethics of their workers

- 20% of the owners say that modern technology like CCTVs will be useful
- 5% of the owners say that text messages will be useful to enhance the ethics of their workers.
- 90% of the owners say that workers do not misuse the facilities and 10% of the owners say that workers misuse the facilities provided by them.
- 60% of the owners say that unrealistic government facilities such as subsidies, rice, sugar etc will have an effect on the workers and 40% of the owners say that government facilities of the state will not have an effect on the workers.
- 85% of the owners say that poverty is not the reason for doing unethical issues and 15% of the owners say that workers unethical behaviour is due to poverty.
- 80% of the owners say that bad habits like smoking, consumption of alcohol etc will not have impact on the work style and 20% of the owners say that bad habits will impact on the worker style.
- 60% of the owners say that value of money is not the reason for causing disinterest in their work and 40% of the owners say that worker's disinterest is due to there is no value of money.
- 50% of the owners say that awareness programs will be useful to enhance the ethics of their business, 25% of the owners say that work alarms will be useful to enhance the time keeping and ethics of their workers, 20% of the owners say that modern technology like CCTVs will be useful and 5% of the owners say that text messages will be useful to enhance the ethics of their workers.
- 45% of the owners say that indiscipline in work shows their unethical behaviour,
- 45% of the owners say that absenteeism is the factor, and 10% of the owners say that stealing things at work is main factor causing ethical issues among workers.

6. SUGGESTIONS:

Businesses should become aware of the severe implications of the unethical behavior of workers. In response to this, businesses should begin to train their workers to make ethical decisions. Employees must be capable of making ethical decisions to protect the business from legal liability and to maximize long term profits.

- Small businesses should train their workers about ethical behaviour, to reduce the issues of keeping up the time and absenteeism.
- The business should motivate their workers in such a way that they should develop their interest in the work.
- Preaching's from great personalities will help the workers behave ethical and to overcome the issues like stealing things at work, misusing the facilities etc.
- Businesses should educate their workers about the latest technologies and their operations.
- Small businesses should implement technologies such as work alarms, text messages, mobile banking etc, which help them to overcome ethical issues at work.
- Workers make mistake and mistakes are most powerful learning tool. Support your stumbling workers and give them the opportunity to prove to themselves that the next time they are presented with ethical decisions; they will make a wiser choice.

Conclusion:

As we have done our research study on business ethics in small businesses, we intended to improve the quality of Human Resource Management, to enhance their ethical behavior by providing useful solutions. As we are in the 21st century we can make use of technology to manage business ethics. In our study, we found engineering management will help to improve the business ethics, so that the owners can develop the employee productivity. This survey makes us sure that there is close relation with ethics and engineering management. Thus the conclusion of the paper points out enhancement of ethical behavior by using engineering techniques. As there is a famous saying by Robert Noyce that "If ethics are poor in organization from the top, that behavior is copied down through the organization.", hence the ethics is the foundation for the long run productivity for any organization

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