

# Utilisation of Mobile Telephones by Micro and Small Enterprises in Ghana: Empirical Evidence

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# What is Science and Technology Policy Research Institute ?

- Part of the Council for Scientific and Industrial Research (CSIR)
- 13 Institutes out of which two are social - based sciences



# Our Mandate

- conduct STI policy studies to support the formulation and implementation of relevant policies;
- facilitate the transfer, diffusion and commercialization of technological innovations;
- promote the acculturation and popularization of STI in the society;
- support STI human resource development and management;
- provide advocacy for STI commitment on the part of all stakeholders.

# Activities

- Policy Studies on Emerging Technologies (Biotechnology, Nanotechnology, Material Sciences etc)
- Policy Studies on Environment
- Technology Assessment Studies
- Information and Communication Technologies Policy Studies
- Science and Technology Policy Management Studies
- Agriculture

# Activities Contd.

- **Through these programmes the Institute aims to:**

- (i) Enhancing the use of the emerging technologies as strategic tools for accelerated socio-economic development;
- (ii) Enhancing the utilisation of technology in the private sector through technology assessment, transfer and proper management; and
- (iii) Providing researched inputs and development indicators that are essential for policy formulation and implementation

# Introduction

- **Development literature is full of information on the catalytic roles micro and small enterprises (MSEs) play in the economies of developing countries.**
- **The MSEs are important because they significantly contribute to economic growth and employment.**
- **They offer opportunities for people who are excluded from paid employment in large businesses to enter into the productive market.**
- **They also have the capacity to introduce innovations into the market and support the economies of the areas in which they operate.**
- **However, the growth of the MSEs depends largely on access to inputs, knowledge of product qualities, market requirements and cost-effective support systems.**
  - **Access to technologies (within a sound business environment) could form part of the support systems which could engender innovativeness in their operations**

# Introduction

- Dominance of MSEs in industrial and business sector in Ghana
- about 70% of the Ghanaian enterprises are micro to small sized
- about 69% of the population is employed in the MSE

# Methodology

- Geographic classification of the country
- Study Areas – less urban and rural areas
- Sample size (600 with 200 MSEs from each zone)
- Combination of purposive and snowball sampling techniques were used
- Tools of data collection



# Methodology Contd

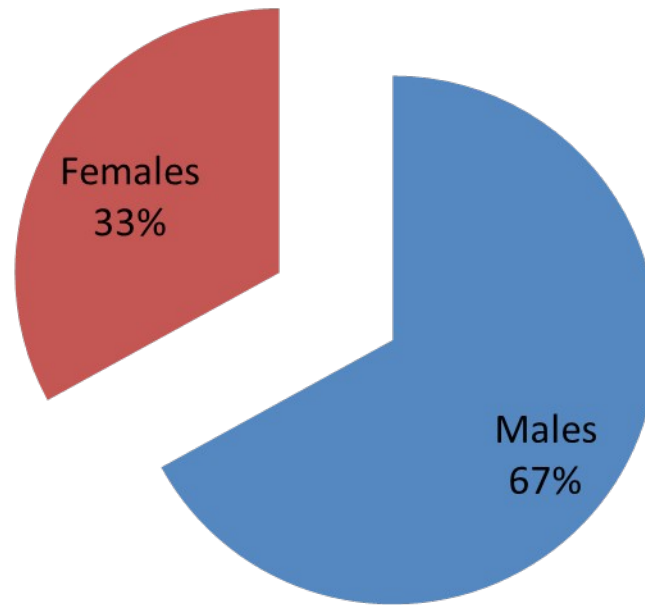
**Table 1: Classification of Businesses**

Sector	Total
D: Manufacturing	115
F: Construction	26
G: Wholesale & Retail, Repair works	218
H: Hotels & Restaurants	100
I: Transport, Storage & Communications	76
M&N&O: Education, Health, Social work, Social & Personal services	65
Total	600

# Analysis of Survey Results

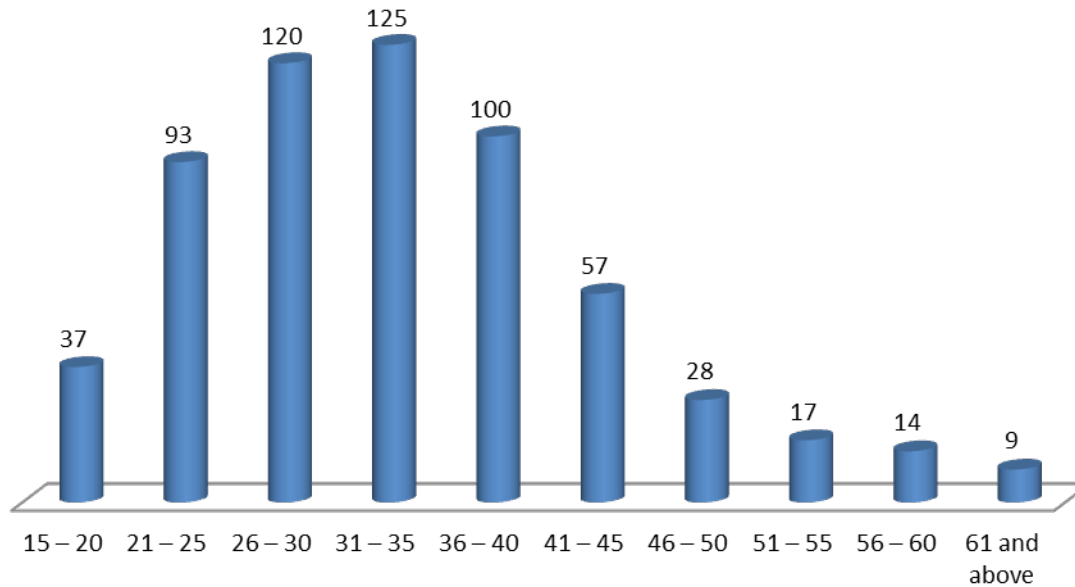
## Sample Characteristics

**Distribution of Respondents by Gender**



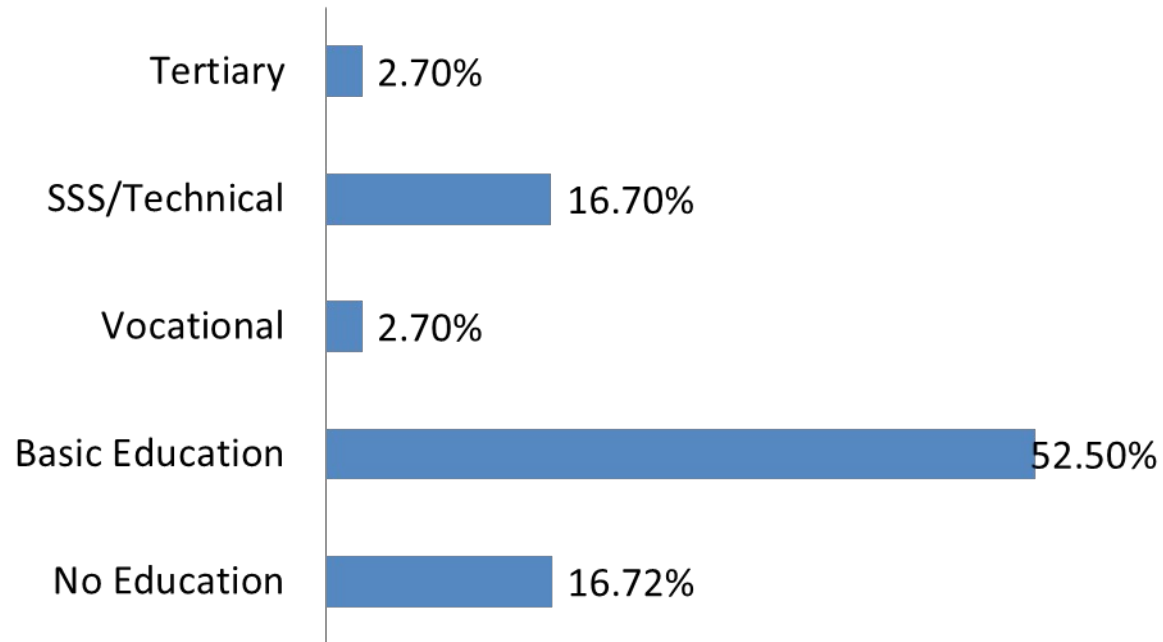
# Sample Characteristics Contd.

## Age Group of MSE Operators



# Sample Characteristics Contd.

## Educational Background



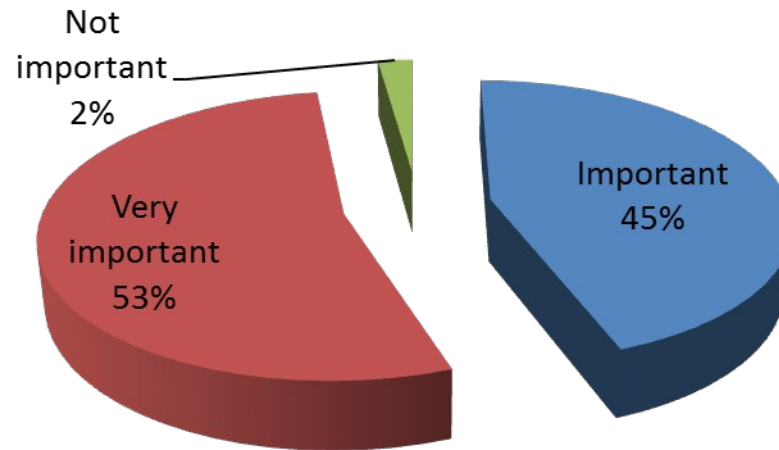
# Sample Characteristics Contd.

## Ownership of Telephones on Industrial Classification Basis

<b>Sub-sector</b>	<b>Mobile telephones</b>	<b>Fixed lines</b>	<b>Both</b>	<b>No response</b>	<b>Total</b>
Manufacturing	95	0	2	18	115
Construction	23	0	1	2	26
Wholesale & Retail, Repair works	169	0	15	34	218
Hotels & Restaurants	72	1	8	19	100
Transport, Storage & Communications	64	0	4	8	76
Education, Health, Social work, Social & Personal services	45	2	5	13	65
<b>Total</b>	<b>468</b>	<b>3</b>	<b>35</b>	<b>94</b>	<b>600</b>

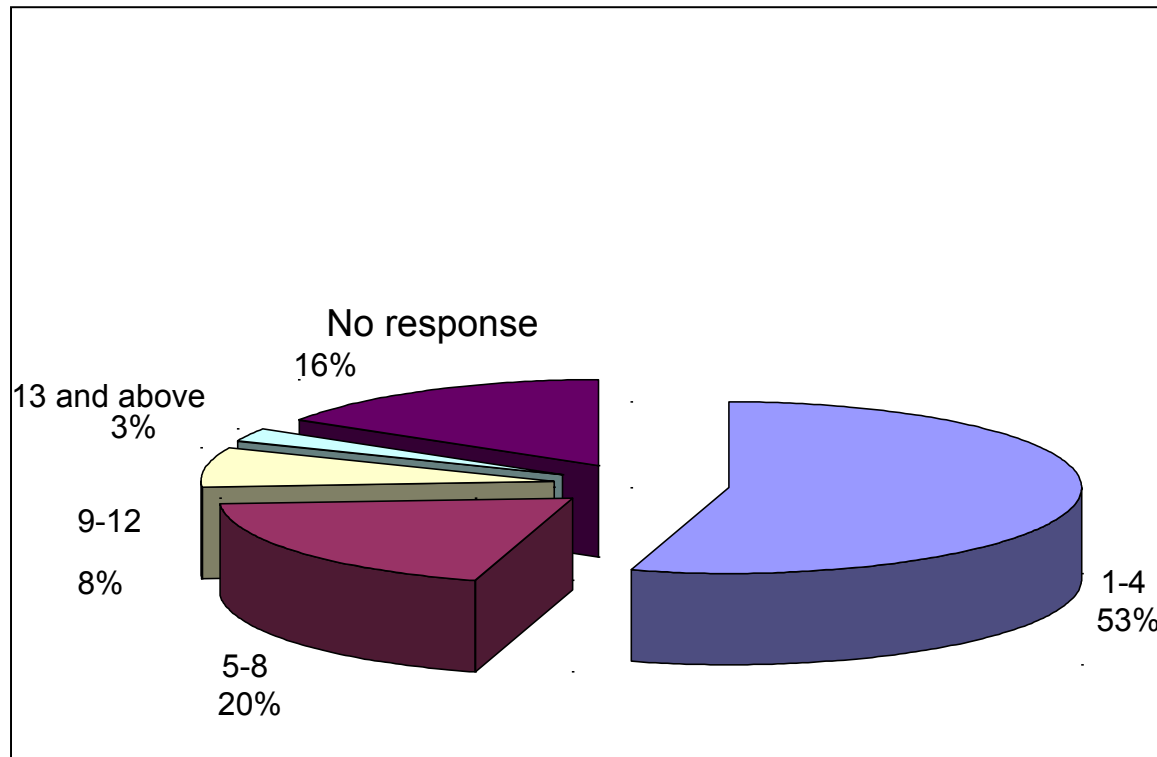
# Business Usage of Mobile Telephones

## Relevance of Mobile Telephones to Business



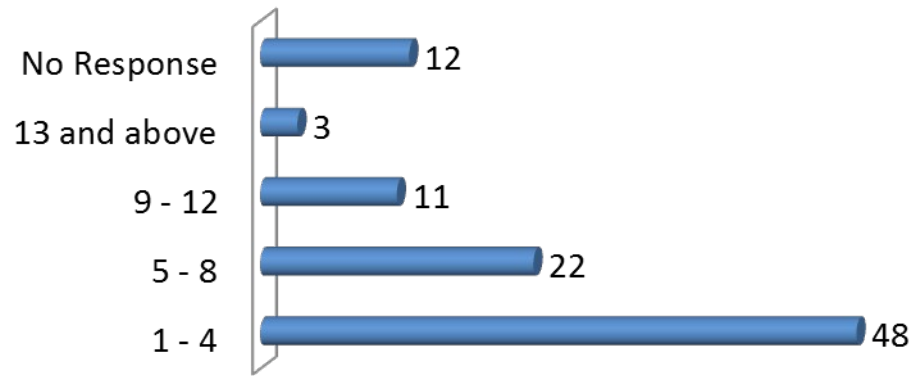
# Business Usage of Mobile Telephones Contd.

## Daily Business Related Calls Made



# Business Usage of Mobile Telephones Contd.

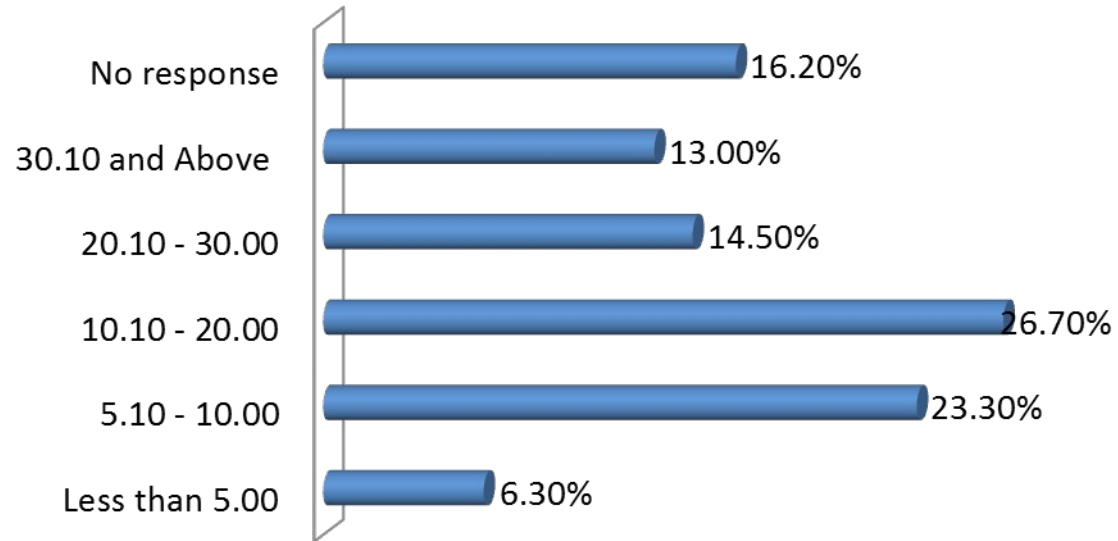
## Business-Related Calls Received in a Day





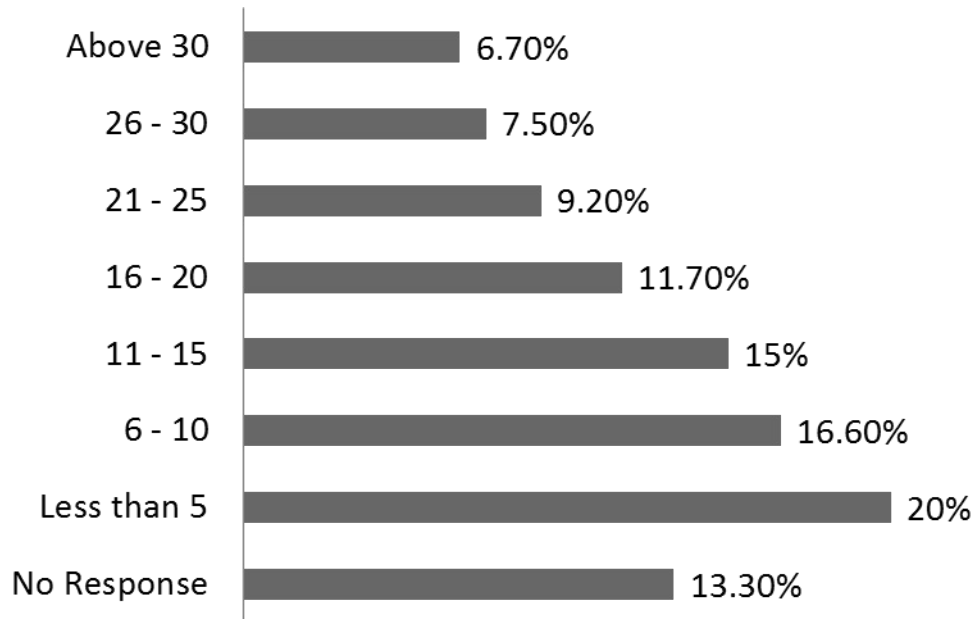
# Business Usage of Mobile Telephones Contd.

**Monthly Expenditure on Business-Related Calls (US\$)**



# Business Usage of Mobile Telephones Contd.

## Transactions made through Mobile Telephone in a Week



# Business Usage of Mobile Telephones Contd.

## Successful Weekly Transactions

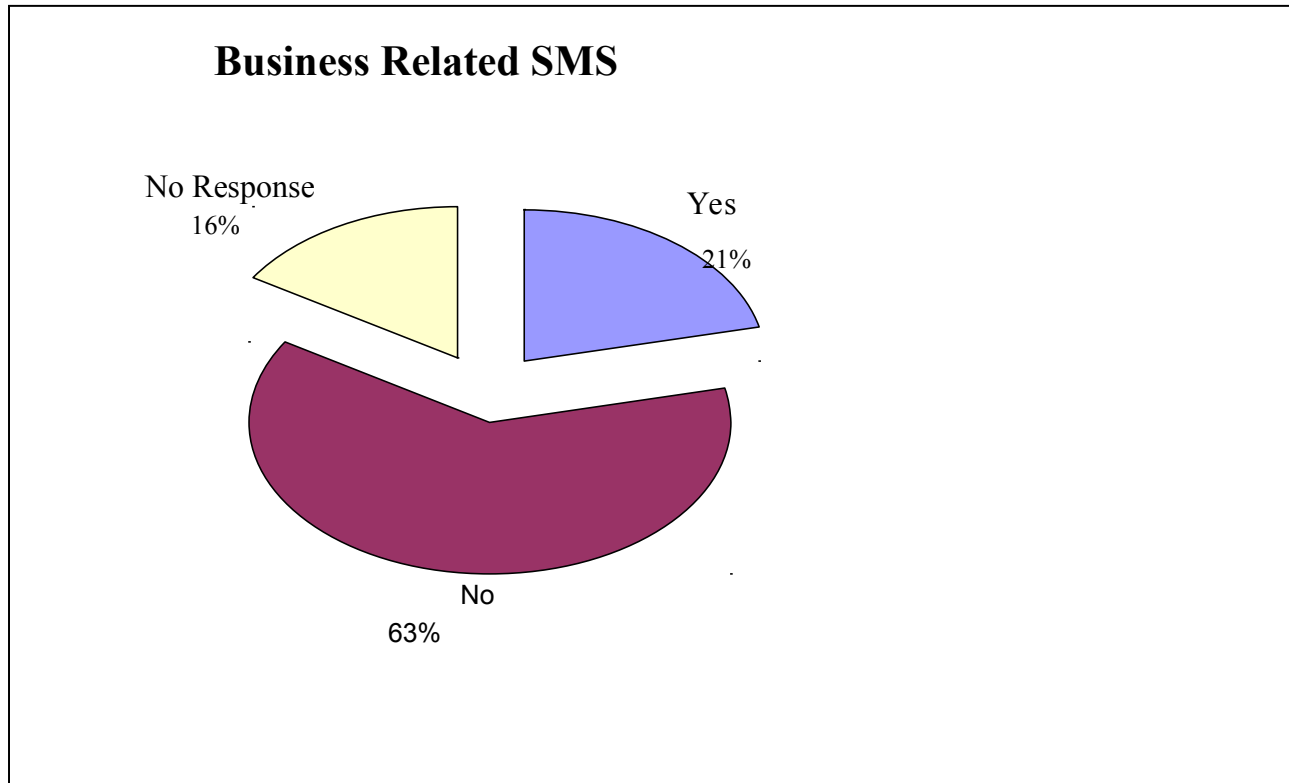
	<b>Frequency</b>	<b>%</b>
None	30	5.0
1- 3	209	34.8
4- 6	115	19.2
7- 9	46	7.7
10 and above	103	17.2
No response	97	16.2
Total	600	100.0

# Business Usage of Mobile Telephones Contd.

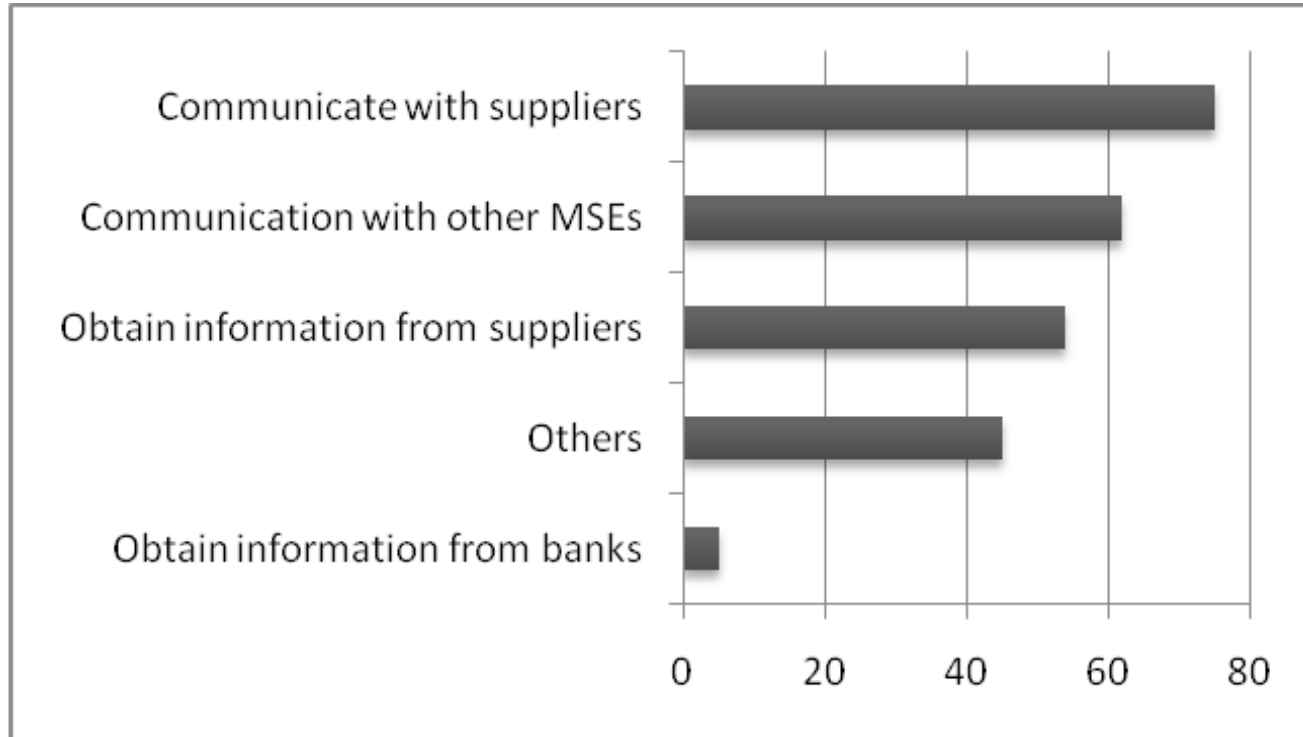
## **Business Activities for which Mobile Telephones were Used**

<b>Activity</b>	<b>Frequency</b>	<b>%</b>
Check prices	273	45.5
Order raw materials	280	46.7
Call service providers	138	23
Check on customers for orders	315	52.5
Collect debt from customers	248	41.3
Check for new products	101	16.8
Check market demand trends	66	11
Others	99	16.6

# Business Usage of Mobile Telephones Contd.



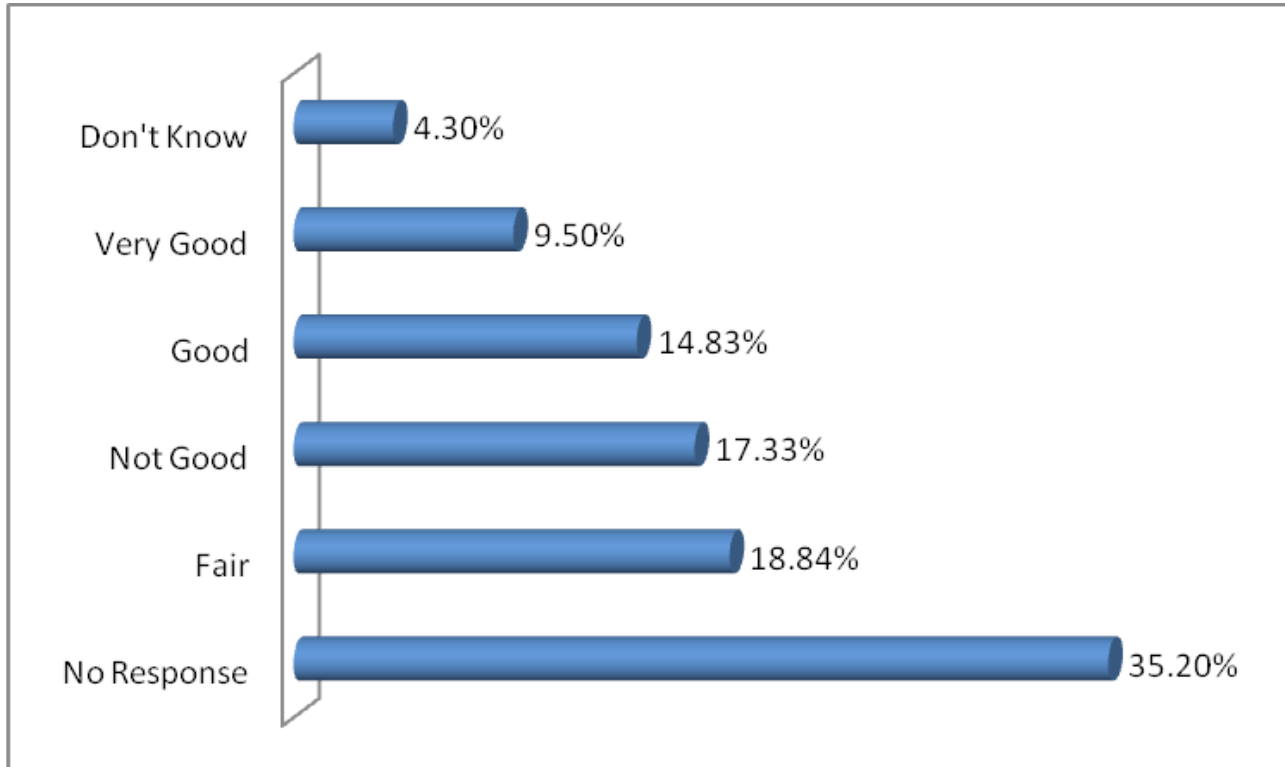
## Business Usage of SMS



## Flashing in Business

Number of flashes	Frequency	Percent
1-5	244	40.7
6-10	101	16.8
11-15	29	4.8
16-20	14	2.3
No response	211	35.3
Total	600	100

## Effectiveness of Flashing for Business Purposes

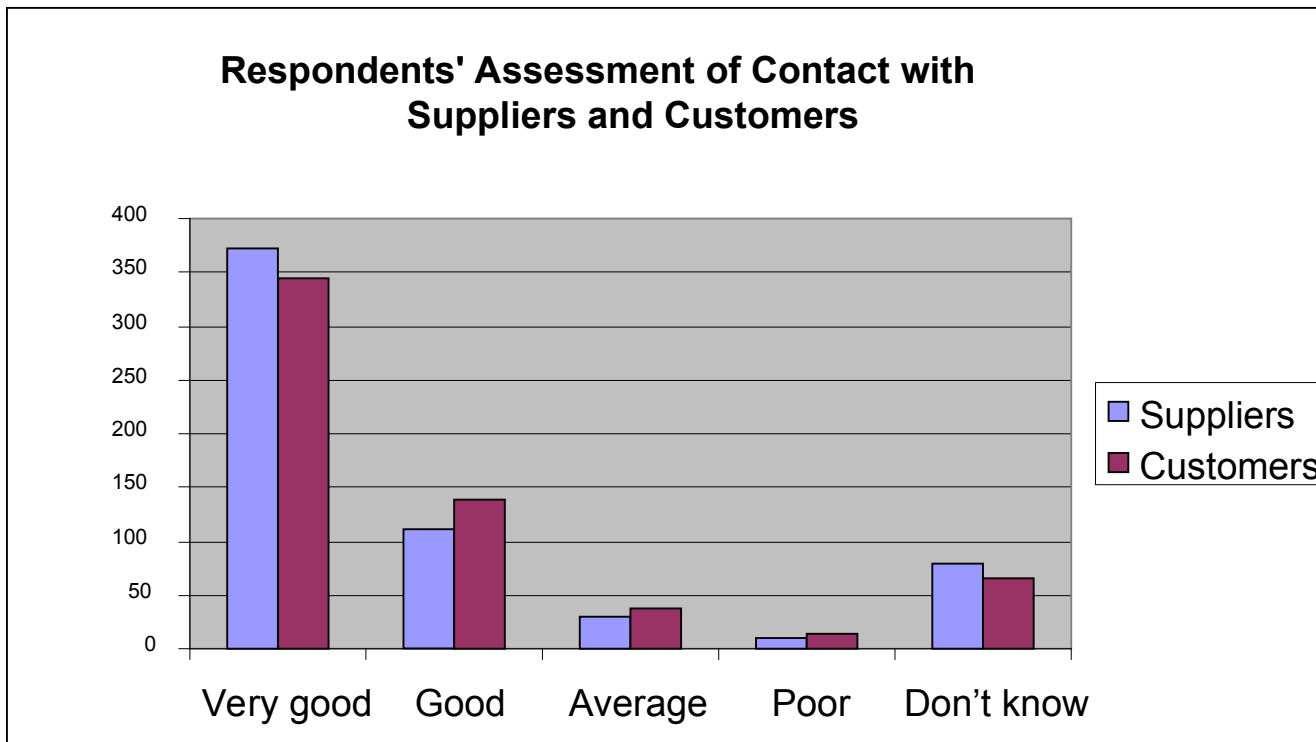




# Access to Facilities

- **Access to Banking Facilities**
  - only 30% of the MSEs had bank accounts
  - Only few MSEs (13%) were aware of cellphone banking
  - Of this number less than 1% had ever used cellphone banking
  - Confirms earlier work by Frempong (2007) where also less than 1% of 280 SMEs used cellphone banking

# Access to Market



# **Policy Implications**

- **Pricing of Services**
- **Strategic Business Tool**
- **Enhancing general policy environment for industry and trade**

# Conclusion

The indication is that there is increased application and use of mobile telephones for diverse activities. This should encourage the service providers to develop innovative ways of making the service available to the majority of Ghanaians