# MOBILE REPAIRING/ ALLIED SERVICE

#### 1. INTRODUCTION:

With the advancement of technology, varieties of Mobile Phones with a lot of features are being introduced in the market every day and more and more Multi-national companies are entering this field. Mobile set are now a day's considered as integral part of human life cycle. The responsibility to provide after sale service lies with the supplier. However, adequate facilities are not available in many Urban or Remote areas for servicing of these electronic products. The mobile repair center is a profitable venture to cater to the need of the public. A Mobile or cellular phone is a long-range, portable electronic device for peer-to-peer telecommunications over long distances. Most current mobile phones connect to a cellular network of base stations, which is in turn interconnected to the public switched telephone network (PSIN). Cellular networks were first introduced in the early to mid-1980s. Prior mobile phones operating without a cellular network (the so-called OG generation) such as Mobile Telephone Service, Date Back to 1946. Until the mid to late 1980s, most mobile phones were sufficiently large that they were permanently installed in vehicles as car phones.

### 2. PRODUCT & ITS APPLICATION:

With the advance of miniaturization, currently the vast majority of mobile phones are hand held. In addition to the standard voice function of a telephone, a mobile phone can support many additional services such as SMS for text messaging, packet switching for access to the Internet and MMS for sending and receiving photos and video. Mobile Phone is an electronic device used for communication and messaging. Now days this has become very popular and essential need of the society. These are available in various make and brands in the market. Therefore repairing and servicing of mobile phones are also required to be done. This has got a prospective market.

### 3. DESIRED QUALIFICATIONS FOR PROMOTER:

Graduate in any discipline.

### 4. INDUSTRY LOOK OUT AND TRENDS

Repairing and Servicing of mobile phones have a good market prospect all over the country. This business can be started in a very less investment. Though branded companies have their own service center but the demand for repairing of mobile phones are very high therefore more service centers are required.

### 5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

Consumer electronic industries constitute the largest part of the electronic hard ware sector. Now that the consumer electronic technology has changed the society to such an extent that there is no house even in the remote area without an electronic product like mobile set. These products are prone to damage due to fluctuation in electricity, in proper handling and Failure of component etc. The service facility from the supplier is not adequate. Therefore, the venture has a good market potential to serve people. Repairing and Servicing of mobile Phones have a good market prospect all over the country. This business can be started in a very less investment. Though branded companies have their own service center but the demand for repairing of mobile phones are very high therefore more service centers are required. From the slow start in 1995, the Indian mobile phone industry has come a long way. Cellular services have registered a phenomenal growth of more than 100 percent annually and this is an increasing demand for better services and lower price. India has emerged as the second largest mobile hand set market, poised for explosive growth by 2007 and within first quarter of 2006, it become a global hub for mobile hand set manufacturers. There are over 40 million GSM subscribers in the country and an increase of 100 percent over the last year. In addition, there are over 20 million CDMA subscribers. Dominated largely by JIO, with a total market share of 45 percent followed by Samsung 20 percent and Motorola of 10 percent respectively. The India n mobile handset market catered to 62 million

as of June, 2015. The total number of mobile phone sold was around 28 million in 2014 which is estimated to be 55 million in 2018. As the mobile hand set market is growing similarly the demand of servicing of handsets is also growing. The branded companies like Reliance, Nokia and Samsung etc. have their own service centers in the metros and big cities but due to a gap in between demand and service provided, another servicing center with qualitative service at optimum price are required. This demand is more at town level since rarely available branded companies servicing centers while use of mobile hand set increasing day by day. So enough potential is available for setting up of mobile servicing units in the SSI sector.

# **6. RAW MATERIAL REQUIREMENTS:**

There are so many small parts and accessories are required for repairing shop. However few are listed below.

1. Tin Soldering Wire 2. De soldering Wire 3.JumperWire 4.PPD Paste 5.White Paste6.White Petrol 7. Min Cream 8. Lamination Sheet 9.Charging Jack 10.Ear Phone Jack 11.Speaker Universal 12.Ringer Universal 13. Integrated Circuit - IC 14. Display 16. Touch 17. Books/Magazine for Latest Technology. Other materials required are 1. SMD Components 2. C. Cont. 3. SMD Chips 4.Ant. Switch 5.P.A. 6.3310 on/off SW. 7. Buzzer 2 Memory IC (C.Cont.) 3 SMD Chips 4 Antenna switch 5 Power Amplifier 9 POD Paste 10 Soldering, de soldering wire 12 Battery connector.

### 7. MANUFACTURING PROCESS:

As there is not any defined procedure for servicing of mobile hand set available at present. The servicing of mobile hand set usually depends on the brand & model no. of handset due to different design concept used by companies in manufacture and fast technological changes in era of mobile technology. Minor fault may be rectified with little experiences however major fault repairing require knowledge and experience both. The repairing basically consists of hardware & Software repairing. Hardware faults may rectified either by replacing the PCB module in which fault occurred or by identify the section inside the PCB

module where the fault occurred and replace the faulty SMD components / Chips/ Microprocessor. The software fault may rectified by using standard software CD for particular brand and model no., cable & a complete computer with appropriate software package.

# 8. MANPOWER REQUIREMENT:

The enterprise requires 5 employees as detailed below:

Sr. No	Designation Of	Salary Per	Monthly	Number of employees required				d
	Employees	Person	Salary ₹					
				Year-1	Year-2	Year-3	Year-4	Year-5
1	Production Manager	18000	0	0	0	0	0	0
2	Operators	12000	24000	2	2	2	2	2
3	Helpers	10000	10000	1	1	1	1	1
2	Admin Manager	15000	15000	1	1	1	1	1
3	Accounts/Stores Assistant	12500	0	0	0	0	0	0
	Office Boy	9000	9000	1	1	1	1	1
	Total		58000	5	5	5	5	5

### 9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 2 months' time as detailed below:

Sr. No.	Activity	Time Required
1	Acquisition of premises	1.00
2	Construction (if applicable)	1.00
3	Procurement & installation of Plant & Machinery	2.00
4	Arrangement of Finance	2.00
5	Recruitment of required manpower	1.00
	Total time required (some activities shall run concurrently)	2.00

# **10.** COST OF PROJECT:

The project shall cost ₹ **6.53**lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land on rent	0.00
2	Building	0.00
3	Plant & Machinery	2.00
4	Furniture, Electrical Installations	1.00
5	Other Assets including Preliminary / Pre-operative expenses	0.20
6	Working Capital	3.33
	Total	6.53

# **11.** MEANS OF FINANCE:

Bank term loans are assumed @ 75 % of fixed assets.

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	1.63
2	Bank Finance	4.90
	Total	6.53

# 12. WORKING CAPITAL CALCULATION:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	<b>Bank Finance</b>
1	Inventories	1.67	0.25	0.42	1.25
2	Receivables	0.83	0.25	0.21	0.63
3	Overheads	0.83	100%	0.83	0.00
4	Creditors	-		0.00	0.00
	Total	3.33		1.46	1.88

# 13. LIST OF MACHINERY REQUIRED:

Sr No	Bastisula va	шом	<b></b>	Rate	Value	
Sr. No.	Particulars	UOM	Qtty	(₹)	(₹ in Lacs)	
	Plant &Machinery / Equipments					
a)	Main Machinery					
1	Computers	NO	1	0.50	0.50	
2	Software's	NO	1	0.50	0.50	
3	Tools	NO	1	0.20	0.20	
4	Miscellaneous	L.S.	1	0.30	0.30	
5	Testing Machine	NO	1	0.20	0.20	
6	Installation, Electrification, Taxes And	L.S.	1	0.30	0.30	
	Transportation.					
	Sub-Total Plant &Machinery				2.00	
	Furniture / Electrical Installations					
a)	Office Furniture	LS	1	50000	0.50	
b)	Stores CUPBOARDS	LS	1	0	0.00	
c)	Books And Others	L. S.	5	50000	0.50	
	Sub Total				1.00	
	Other Assets					
a)	Preliminary And Preoperative				0.20	
	Sub-Total Other Assets				0.20	
	Total				3.20	

All the Computers, its peripherals and other equipments are available from local manufacturers. The entrepreneur needs to ensure proper selection of product mix and proper type of equipments and accessories to have modern and flexible designs. Some of the suppliers of computers and accessories are as below:

## 1. Impressive Computers

Hasan Ali House No. 4/41-A,

Noor Baug, Umerkhadi,

Mumbai - 400009,

Maharashtra, India

### 2. Computer Planet

Shop No. 1, Shaniwar Peth-53,

Opposite AmruteshwarMandir,

Amruteshwar Co Operative Housing Society,

Near Shaniwar Wada,

Pune - 411030,

Maharashtra, India

## 3. Visicube Technologies Private limited

Door No. 1-8-315,

Begumpet, Opposite US Consulate,

Hyderabad - 500016,

Telangana, India

## 4. Micon Automation Systems Private Limited

A-814, Siddhi Vinayak Towers,

Behind DCP Office, Makarba,

Ahmedabad - 380051,

Gujarat, India

# 5. Adaptek Automation Technology

No. 13, F- 3, 2<sup>nd</sup> Floor,

Main Road, Adyar Nehru Nagar,

Near H.D.F.C. Bank A.T.M.,

Chennai - 600020,

Tamil Nadu, India

### 14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	12.00	14.00	16.00	18.00	20.00
3	Raw Materials & Other direct inputs	₹. In Lacs	6.47	7.55	8.62	9.70	10.78
4	Gross Margin	₹. In Lacs	5.53	6.45	7.38	8.30	9.22
5	Overheads except interest	₹. In Lacs	2.70	2.87	3.21	3.31	3.38
6	Interest	₹. In Lacs	0.49	0.49	0.33	0.25	0.20
7	Depreciation	₹. In Lacs	1.40	1.00	0.70	0.50	0.45
8	Net Profit before tax	₹. In Lacs	0.94	2.09	3.14	4.24	5.19

The basis of profitability calculation:

The growth of selling capacity will be increased 10% per year. (This is assumed by various analysis and study; it can be increased according to the selling strategy.)

Energy Costs are considered at Rs 7 per Kwh and fuel cost is considered at Rs. 65 per liter. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

### 15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 38.79%% of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value	
1	Sales at full capacity	₹. In Lacs	20.00	
2	Variable costs	₹. In Lacs	10.78	
3	Fixed costs incl. interest	₹. In Lacs	3.58	
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	38.79%	

## 16. STATUTORY / GOVERNMENT APPROVALS

Bureau of Indian Standards (BIS) is operating Compulsory Registration Scheme (CRS) for Electronics & IT Goods as per the provision of Chapter IVA of THE BUREAU OF INDIAN STANDARDS RULES, 1987 for the product categories notified by Meity. Visit official government website (Bureau of Indian Standards) for notice about products on: <a href="http://crsbis.in/BIS/">http://crsbis.in/BIS/</a> Entrepreneur may contact State Pollution Control Board where ever it is applicable.

#### 17. BACKWARD AND FORWARD INTEGRATIONS

It is assumed that the unit will be viable at 75% efficiency on single shift basis considering 5 working days or as per demand of area per week.

The rate of interest in the scheme is taken at 11.5 % for both fixed and working capital. Due to liberalization and competition among banks, lower rate of interest is possible in future.

The prices of machinery and equipment are approximate which are ruling locally at the time of preparation of the project. When a tailor-cut project is prepared the necessary changes are to be made at the local level.

The cost of staff and labour is approximate which is ruling locally at the time of preparation of the profile. When a tailor-cut project is prepared the necessary changes are to be made.

### 18. TRAINING CENTERS AND COURSES

There is no specific course in repairing and assembling services, but the most authorized center is government authorized "ITI" available in all the cities across the country.

India Training institute of computer technology conducts various technical courses in different cities to enable students to make a bright career. Most of our vocational programs are job-oriented with which students can start earning the day they finish their training or

can learn them as a hobby. Students can join for any of these in vacations as all these are short-term certificate courses.

Udyamimitra portal ( link : <a href="www.udyamimitra.in">www.udyamimitra.in</a> ) can also be accessed for hand-holding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

### **Disclaimer:**

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.