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Mobile Business Intelligence framework for Start-ups in India: Case study of Star Unisex Salon



Abstract: Mobile data is factually the spine of modern business communications today. Capitulating the current trend of wireless connectivity. Mobile business intelligence (MBI) is termed as a technology-enabled process of extracting meaningful insights from data and delivering them to end-users via mobile devices. Mobile BI users can conduct data analysis in real time using smartphones, tablets, and wearables to make quick data-driven decisions.

MBI has become a primary strategy for the growth of many small, medium and large corporations in India. However, mushrooming growth of startups in India lags in implementation and exploitation of MBI solutions. The Mobile Business Intelligence Market is expected to register a CAGR of 22.43% over the forecast period 2021 to 2026.

The adoption of mobile BI by large enterprises in the Banking, Financial services and Insurance sector (BFSI sector) can be attributed to numerous factors, such as the growing acceptance of data analytics, an increase in mobile data generation, proliferation of mobile devices and apps, and the improved efficiency of BI tools. To counter competition, startups must be able to monitor and effectively use all their resources, in particular information resources, to assist them in making vital strategic business decisions. Unisex salons have mushroomed in India with specific focus on cities and towns owing to open culture adopted by current generation. According to a recent report, the Indian salon industry was valued at approximately INR 90,000 crore in 2020 and is expected to reach INR 1.75 trillion by 2026, growing at a CAGR of 15% from 2021 to 2026. This paper highlights the challenges faced by Unisex Salon -startup in towns and villages such as lack of strategic planning, technical expertise and limited budget when implementing a Mobil BI solution within its operations in Miraj city. This paper highlights how these challenges can be overcome through applying various BI tools and strategies and their probable paybacks.

Keywords: *Mobile Business Intelligence (MBI), Business Intelligence (BI), Unisex Salon -startup.*

1. Introduction

A part of the Startup India campaign, an initiative of the Government of India, was announced by India's prime minister on 15 August 2015. Its goal was to catalyze India's startup culture and construct a strong and inclusive ecosystem for innovation and entrepreneurship. Startup India has implemented a few programs aimed at supporting entrepreneurs and turning India into a country of job creators instead of job seekers. Currently, Startups and the entire technology ecosystem being the engine of growth has an positive impact on the Indian innovation and entrepreneurship ecosystem as the total number of documented startups in India projected annual growth rate of 6.3% (as per IMF data) in 2023–24. The Union Finance Minister announced a corpus of ₹1 lakh crore for India's "tech-savvy youth" in her sixth Budget speech on Thursday.

During their development, these startups generated large quantities of internal and external data. It is essential for business decision-making that large, unrelated, volumes of data are efficiently managed, accessed and analyzed, otherwise, important business possibilities may be missed. India is positioned second in the world in terms smartphone usage of with over 647.53 Million over a population of 1.42 billion. The combined capital expenditure of Jio and Bharti Airtel in FY24 is expected to be around Rs 75,000 crore. With the penetration of 5G spectrum the total number of expected to reach 1.20 billion units in 2024, growing 2.8% year over every

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year is expected to reach 1.25 billion by 2027. This conducive climate has brought in tools, techniques to manage this unexplored data in startups business climate and conditions wherein Mobile Business Intelligence (MBI) could have a major stake in tackling businesses strategically. Lately to bring about a competitive advantage, Unisex-salons have to implement new ways to improve their businesses. One among the several strategies has been the adoption of Data Warehouse (DW) and Business Intelligence (BI) which has become an essential component of contemporary business decision support systems. Due to the advancement of BI tools and the readiness of Startups to adopt new strategies to stay ahead of their game Business Intelligence has grown significantly some of the technologies such as Decision Support Systems (DSS), Executive Information Systems (EIS), Data Warehouse (DW), Online Analytical Processing (OLAP) and Data Mining have had a significant impact on the increase in popularity of BI. Key benefits of implementing BI successfully within an enterprise, include: 1. Ability to transform raw data into usable information 2. Enable managers to make intelligent business decisions by identifying important trends and patterns in the business transaction 3. Drive business performance and revenue 4. Improve operational efficiency. 5. Improvement in business decision through predictive analysis. 6. Reporting in a smarter and faster way. However, amongst Chai-startups, there is a lack of technical expertise required to convert data into information to facilitate an informed business decision making process. Furthermore, the lack of understanding of the benefits of MBI and budget also make Uni Sex salon-startups unwilling to invest in adopting any BI solutions.

1.1 Mobile Business Intelligence Framework:

Mobile business intelligence (MBI) is defined as “the ability of the persons to access BI related data such as dashboards, key performance indicators, business metrics, and on mobile devices” Alexe et al. (2014). MBI solutions which are presented as “comprehensive support for analytics on smart phones and tablet devices so that today’s mobile workforce can access the information they need, wherever they are, with no compromise in functionality” Munteanu and Puican (2012). MBI applications are recognized as extension of the BI functionalities on mobile devices used by the decision makers in companies and classify this type of applications in three categories: “standalone applications (they run on mobile devices independently of external resources and connections), network applications (they use distributed components on mobile devices as well as on external systems) and web applications (they run only the interface of the mobile device, while the application uses external application servers)” Trif and Visoiu (2011). MBI applications that refer to dimensions such as: “security (data and device security, authentication), mobile technology (device independence, usability, accessibility, network connectivity, flexibility, consistency, reusability, functionality), system content and quality (support of interactive, customization, right-time report), organizational support (management support, skill and knowledge)” were critical success factors in using MBI applications Chan et al. (2013). From the standpoint of the interaction of mobile devices with the BI solution system of a company, Panian (2012) defines two types of MBI: “passive MBI” - developed as “push technique”, comprising sets of error-alerts and reports sent to the mobile devices of the MBI user, and “active MBI” - developed based on “push and pull technique” offering user interaction facilities through analysis and supplementary requests related to the system data.

1.2 Mobile Business Intelligence and Star Unisex Salon:

Star Unisex Salon initiated by young entrepreneur Ms. Ana Sharif in Miraj city with a seed funding of Rs. 10 lakhs. Born and brought up in a family specialized in dealing with Hair styling and hair treatments related issues. Ms. Ana having completed her Bachelors in Business Administration in 2020 from a prestigious Institute in Sangli happened to venture into her dream venture as Unisex salons begun to mushroom in Miraj city with brands viz. Scissors N Razors Unisex salon, Naturals family unisex salon, Stylo unisex salon etc. to name a few. According to market statistics the chai market turnover in Miraj alone is approximately over 25 Cr. with many unbranded players majority a male dominated profession, venturing into same with their own form of chai such as Gold Unisex salon, Excellent Unisex salon, Uniks Unisex salon etc. to name a few. The idea of **Star Unisex Salon** by Ms. Sharif came to light as the majority of the entrepreneurs dealt with their business in its traditional form. The Salons was made and served out of popular readymade brands of hair and hair treatment products available in the market. Further the business has a traditional form of manufacturing, marketing, Bookkeeping. None of the **Unisex Salon** businesses had incorporation of digitization into their business. Having learnt practical aspects of digital marketing in her under graduation program and having equipped with sound knowledge of GST (Goods, Services Tax) as added value addition during her three year BBA-program, Ms.

Sharif chanced upon the **Star Unisex Salon** business venture as majority of salon entrepreneurs have loyal customers but do not keep a track of their visits, treatment ,hair related issues, payment mode etc. Secondly, since the business involves a lot of mechanical work of men, material, markets significant investment was forayed down in skilled manpower, raw materials, location.

She initiated her dream venture with specific variants of **Star Unisex Salon** products viz. Star Shampoo hair (Normal, Dry, Oily), Star hair conditioner, Hair spray, Facial Kit as these are commonly used. Her idea of **Star Unisex Salon** gained momentum among the youth as she developed a mobile power business intelligence (BI) app through android platform which had a sturdy connect with her consumers as the app not only hinted on eliminating waiting time for both sexes but even highlighted them line of treatment, appointment date, and instructions to be followed before and after treatment. Due to her techno savvy connection with her customers, visits to **Star Unisex Salon** increased and it became difficult for maintaining data of customers as she was the sole person handling the app. Her employees though literate in this field had multiple reports generated, plus there was no single source of contact for keeping a track on the product line quality and quantity, line of treatment, visits planned. This is where she banked on mobile business intelligence systems through which her issues could be solved.

1.3 Success Mantra of Microsoft Power BI in Star Unisex Salon.

Ms. Sharif conducted a market research in Miraj city and based on her findings in the survey carried out framed a SWOC analysis of the current ‘Unisex-Salon-Market Scenario’.

<p>Strengths Salon products, services consumption is approx.82%. Loyal customers’ consumption is avg.2-times in a day. Salonpreneurs growth is 76% in the current market. Hair problems constitutes 78% consumption than other forms of salon services. 77% prefer Hair treatment quality services in terms of appointment-based treatment, Versatility and expertise, hygiene, quality products, personalized consultations etc.as mostly preferred</p>	<p>Weakness Unisex Salons are popular in urban areas with less or no scope in towns and villages. 92% Labour intensive business, 95% traditional form of book keeping, constant Owner vigilance required. 80% opined Availability, location in prime area preferred than quality treatment. 92% dependency is on offline mode of treatment and its base price. 85% High investment on prime location for franchise outlet approx. investment 15-20 lacs.</p>
<p>Opportunities Star Unisex Salon has higher growth prospects due to its Versatility and expertise and quality products. Customers can be served in result oriented manner with a customized salon management software. Maintaining a reliable daily operation and healthy team culture. Digital employee training and onboard checklists. Generate on-site or home treatments assigning specific beauticians through digital means.</p>	<p>Challenges Unisex Salon culture market is still in infancy stage. Rigid preferences of hair issues in rural areas. Stiff competition from established brands who might foray into similar markets due to its growth potential. Price war, Product duplication to be more rampant once having established. Bringing in automation in this primitive labour-intensive sector through Business Intelligence, Artificial intelligence, Machine learning.</p>

Based on market research and feedback generated from her Salon salesmen, clients she initiated the novel idea of installing Star Unisex Salon App (Star-Unisex-App) that aids in automatizing the entire internal and external salon business operation processes in a way easier to streamline and grow the salon business thereby connecting with present and potential customers. The advantages of Unisex S-App being time saving, easy to install, advertisement tool, payment option, less money. She also introduced herbal line of hair and skin treatment according to the hair and skin issues, preferences of customers commuting in those areas. Ms. Sharif could successfully operate in the male dominated Unisex Salon-market with the help of Microsoft Power BI as the advantage was manifold as she could Connect to data, transform and model the data, create charts and graphs, reports and dashboards that are collections of visuals, share reports with other salon mates using the Power BI

service for further improvements in simplified booking, digital services, visibility and popularity, employee retention and attraction etc.

1.6 Microsoft Power BI into Action:

1. **Excel Spread Sheets:** Ms. Sharif initially uploaded her vital data in terms of Men, Materials, Machines, Methods, Markets in 'Microsoft Excel Spreadsheets' in the format of Employee-Customer engagement, Herbal Hair, Skin Products, Machines, Line of Treatment (Pre, Post), Number of visits, OTC sales, Consumer Referrals, Market Analysis.
2. **Strategic Power BI:** The data uploaded was then transfigured into 'Strategic Power BI' data with area wise sales, key performing areas (KPA's), running Employee-Customer engagement, Line of treatment, Herbal-hair and skin products sales Return on Investment, Star Performers for the month, Consumer referrals, Customers feedback etc.
3. **Data Model:** This transformed strategic power BI data was further processed into 'Data model' to further analyze which Employee, Herbal-hair and skin products is non- performing and how to substitute them with a better choice. Further the sales of Herbal-hair and skin products 'Sex-wise' its market area, treatment pattern, Employee-Customer engagement choice, Avg. daily sales was also considered and sorted area wise.
4. **Infographics:** The data model was further replenished with a '**visual data presentation**' in accordance to '**Star Unisex Herbal Salon-Performance Report**' which highlighted the Key Performing Indicators (KPI's) in terms of Employee wise sales, Herbal-hair and skin products consumed, Line of treatment, Consumers preferences, tastes, buying behavior etc.
5. **Dashboards:** The Startup also created Dashboards highlighting metrics and measurement in the format of Employee wise Sales, Star Sales Performers of the month, Herbal Hair-Skin products OTC sales having steady return on investment, Consumer wise consumption, their payment mode and feedback.
6. **Reports:** The reports related to Customers visits, Line of Treatment, Herbal Hair-Skin products OTC sales, return on investment, Employee performance, Treatment pattern, customer preferences, was generated, tabulated and presented in dashboard format and was shared across for further analysis and improvement. Ms. Sharif worked on these available dashboards by interacting with her staff, customers through online App available and made sure that the customer, employees were competitive by arranging regular meets, contests online in which the star performers was rewarded instantly through online transfer of rewards, referrals discounts, Instant price savings on prompt payments etc. which was further highlighted to both customers and employees to keep them on track. Further, queries of employees, customers were segregated according to the intensity of the problem and discussed online through video conferencing after business hours. An artificial robot was designed to handle day-to-day basic queries which could deliver solutions on spot. While important queries were routed directly to the owner for further analysis and solutions. The Start-up also highlighted contests, rewards program, scratch card coupons for its loyal customers where in their tips, suggestions for improvement, queries if any were resolved.

2. Conclusion

The benefit of MBI is its ability for end users to access information in their mobile BI system at any time and from any location. This enables data and analytics in 'real time', which improves daily operations and react more quickly to a wider range of events. Secondly, one can integrate mobile BI functions into operational business processes thereby increasing the penetration of BI within organizations that often brings benefits in the form of additional information. These speeds up the decision-making process by extending information and reducing the time spent searching for relevant information. Ms. Sharif's conclusion is with this real-time access to data, operational efficiency is improved and organizational collaboration is enforced. Thereby in her opinion mobile BI brings about greater availability of information, faster reaction speed and more efficient working, as well as improving internal communication and shortening workflows. Even a layman can use access, view and retrieve messages, images, reports through simple software's, applications and respond in real time which can enhance the productivity of the business.

The advantages of MBI being manifold in terms of Simple access, Competitive Advantage, Simple decision making, increased productivity prompted Ms. Sharif to incorporate MBI into her Star Unisex Salon venture which readily increased her productivity, customers, line of treatments in the current market. Her acquaintance

with Microsoft Power BI Pro easy-to-use tool that can be readily used with basic understanding of Excel and other Microsoft tools enabled her employees and self to use Microsoft Power BI as a self-service tool. The usage of Microsoft Power BI being available in local language made it simpler and more efficient handling to the company employees and their customers.

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