

BYOD AWARENESS, OPPORTUNITIES & FUTURE – A STUDY OF THE CORPORATE PROFESSIONALS IN JODHPUR CITY OF RAJASTHAN

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Abstract— Despite the security risks BYOD poses to an IT environment, the businesses embracing 'BYOD' in the workplace continues to accelerate. It seems as if BYOD is becoming a new standard in workplace rather than an exception. The research paper highlights the findings of the survey with respect to 'BYOD' awareness in Jodhpur area of Rajasthan. It also tends to suggest some effective measures to reduce 'BYOD' risks and improve 'BYOD' condition.

Index Terms— Bring Your Own Device, BYOD risk, BYOD future, BYOD adoption, BYOD awareness, BYOD Opportunities, BYOD Conditions

1 INTRODUCTION

With increased usage of digital technology, one thing is clear that 'BYOD' simply cannot be ignored & is here to stay. New companies are using 'BYOD' as the foundation for developing their network infrastructure. A large number of growing organizations are allowing employees to purchase & use their own devices at the workplace. Smartphones & Tablets have provided unprecedented level of flexibility – thus leading to IT consumerization. Therefore, when an employee purchase their own devices, the company can save a lot of their IT & hardware related costs.

'BYOD' means comfort for workers and increased productivity for the organizations that implement a well-defined 'BYOD' plan. A person sitting with their digital device may check their emails, Twitter account, update Outlook calendar and may even make a video call. 'BYOD' also provides a lots of benefits for businesses like: less time offline for workers would mean project work moves forward a a fast pace and important business decisions are no longer restricted to 9-to-5 timings. While the organizations and employees have a lot to work on 'BYOD' part, digital technology devices like – tablets, smartphones, laptops, PCs etc. that coworkers move & work around are here to stay.

The paper will help know findings of the survey, some of the effective measures to reduce 'BYOD' risks and improving 'BYOD' condition in Jodhpur city of Rajasthan.

This introduction section is followed by a literature review & research methodology. Finally, the discussion of findings will be followed by recommendations and a conclusion.

2 LITERATURE REVIEW

BYOD is a fast growing trend- where employees are bringing their own personal devices at the workplace & accessing company resources like emails, file servers, databases and also their own personal data & applications. **MobileIron (2011)** in their first series suggested about 8 components that will be helpful in adoption of a secure & scalable BYOD program. They are: Device choice, Sustainability, Trust Model, User experience & policy, Liability, Internal Marketing, Economics, and App Design & governance. 'BYOD' has been attractive mainly due to the increased usage of the tablets & smartphones – that have captured the majority of the consumer market. As per the reports of **Wipro (2011)**, the primal reason for rise in 'BYOD' is due to the proliferation of smartphones and IT consumerization. The enterprises are embracing BYOD due to the gainful benefits like improved user experience, increased productivity, and the anytime-anywhere availability of data & applications, and cost-reduction in hardware and management. Information security has always been a major concern when it comes to accessing corporate data & systems. Due to several emerging attacks and limitations on device resources, it is difficult to trust these devices with access to critical proprietary information. **Ghosh, A. et al (2013)** gave measures for mobile security like determining roles & responsibilities for managing & securing the device, registering mobile devices, testing applications to be installed on those devices, updating security settings & training employees regarding security issues. Therefore, with the increased usage of digital technologies, 'BYOD' awareness becomes important. Some organizations have adopted 'BYOD' but many organizations are still on the deciding mode or have not yet adopted. As per the survey conducted by **Schulze**

(2013), 60% of organizations have not yet adopted BYOD, but are considering it. Only 10% of non-adopters are ruling it out. 24% are actively working on policies, procedures & infrastructure for BYOD. The primal reason for the non-adopters of 'BYOD' is the security issue. With digital revolution, the future is all about understanding 'BYOD' and include it in the organization's policy making.

Cognizant Co. (2014) in their report stated that BYOD Adoption is a necessity for all organizations to survive in this dynamic world. They also faced various challenges like BYOD cost, their security, data protection & support system.

3 OBJECTIVES

The objectives for the research paper are:

1. To determine 'BYOD' awareness
2. Effective measure to improve 'BYOD' condition
3. Effective measures to reduce 'BYOD' risks.

4 RESEARCH METHODOLOGY

As a start, pilot study was conducted for approximately 10-12 organizations. Top management functionaries were contacted with a personal interview fulfilled by a short schedule. With the completion of pilot study, two sets of questionnaires were prepared - employees & employers.

Further, the questionnaires were uploaded on Google Forms for the respondents to fill. A 'Google Form' survey of approx.. 40 organizations was conducted. For every organization, a ratio of 1 employer: 10 employees was taken - making it to almost 40 employers & 400 employees.

5 FINDINGS

- ❖ 30% 'BYOD' unawareness has been recorded.
- ❖ Devices like: Tablets, USBs, Smartphones & Laptops are being allowed to employees at work - with Smartphones being rated as the most popular.
- ❖ Majority of the organizations provide free Wi-Fi connection at work.
- ❖ Approx. 75% have supported & feel it's a great idea to allow employees to use their own IT devices at work.
- ❖ Almost close to 60% of the organizations allow employees to work from home.
- ❖ Majority of the employees (Close to 90%) are currently using IT tools / devices for official purposes now.
- ❖ ios / Apple, Android / Google & Blackberry are some of the mobile platforms being supported by the organizations - with Android being rated as the most popular.

- ❖ Emails, Documents, Contacts & Cloud-Backups are the main applications supported by majority of the organizations for official purposes.
- ❖ Encouraging BYOD can help organizations achieve gainful benefits:
 - Reduce overlapping of work
 - Helps in speedier decision-making
 - Helps in securing data & its confidentiality
 - Improves employee availability for office work
 - Improve employee satisfaction at work
 - Improve employee connectivity at work
 - Improve employee productivity at work
 - Save cost / investment in IT devices
- ❖ In encouraging / not encouraging BYOD, there are security concerns with respect to:
 - Official data misused (copied / taken away)
 - Lack of control over employee work
 - Unlicensed software use
 - IPR violation in employee device
 - Lost or stolen devices
 - Support & maintenance
 - Malware infection

6 RECOMMENDATIONS

After analyzing the survey results, tightening up of security bolts and spreading 'BYOD' awareness are crucial. 'BYOD' awareness is important since past survey reports clearly indicate careless employees as the primal reason for cybercrimes. Some of the ways to reduce 'BYOD' risks are: adopt proper mobile policies, create effective passwords, educating the mobile users, putting up a Mobile Device Management solution, and restrict jailbroken devices.

Some of the effective measures to improve 'BYOD' condition in Jodhpur area of Rajasthan will be the following:

- Employee privacy: Employees must be aware of the level of visibility that a company will have on their devices.
- Financial liability: Employees must be aware as to who would be paying for the roaming charges, if specific phone is to be purchased or use a specific provider, cost-coverage in case of loss damage etc.
- Compliance & legal concerns: Employees must be aware as to what all stuff are allowed to be accessed from their devices, which job-related functions are allowed or restricted on their device etc.
- Appropriate device usage: Employees must be aware if their device could be used by a family member, if they can upgrade software on their devices, which applications are allowed or restricted on their devices etc.

7 CONCLUSION

'BYOD' has been around since 2009 - which is still not more than nine years. But with digital revolution, it is important to note the coming future is all about fram-

ing of proper 'BYOD' policies that must work in the interest of employer-employee and the organization itself. 'BYOD' cannot simply be ignored. Non-adopters of 'BYOD' will sooner or later have to include it in their policy making. Jodhpur is a city and district in the Indian state of Rajasthan. The economy of Jodhpur is mainly dependent on agriculture, handicrafts in tourism industry. Although still developing, Jodhpur has lately witnessed increasing number of educational institutions and the way in which they are imparting education through smart classrooms & use of digital technology. Jodhpur is soon becoming a major education hub for higher studies in India. Hence, 'BYOD' awareness & its inherent benefits becomes important to understand for long-term success. Small offices of IT organizations are also now increasing in numbers. This makes 'BYOD' education a must for the employees. As mentioned in the research paper, effective measures must be taken to reduce the risk to the minimal and improve 'BYOD' condition. Framing of 'BYOD' policies will be done as per the organizations suitability. This is something that need to be polished time & again as organization needs changes & vary.

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