Chapter 5

Development of Employees Time-Tracking App

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Background

Through the creation of a mobile-based employee time-tracking application, the SMART TIME app initiative seeks to enhance time management in businesses. The research team thoroughly examined current time-tracking programmes and modified them to satisfy the requirements of a fictional business. By reducing administrative work and avoiding fraudulent clock-ins, they sought to develop an intuitive mobile application that improves payroll processing, expedites time tracking, and increases productivity.

Statement of the Problem

Despite their robustness, many time-tracking apps on the market lack the adaptability necessary to meet the demands of organisations. The suggested SMART TIME app seeks to close these gaps by providing a flexible and safe time-tracking system that lowers administrative costs and increases worker productivity and engagement.

Limitations and Scope

Designing a mobile-based employee time-tracking application that incorporates necessary functions, including work-hour monitoring, geo-fencing as alerting systems, and payroll processing, is part of the research scope. By making time management easier, eliminating fraud, and guaranteeing accurate payroll processing, the software seeks to increase productivity.

Limitations include the research focus on important elements for employee time monitoring, avoidance of more specialised services such as advanced analytics or integration with complicated corporate systems. Instead of being implemented in a real-world business setting, testing and validation are based on a hypothetical firm scenario. Customisation capabilities may be limited by technical constraints, such as the availability of resources for executing complicated operations such as real-time geo-fencing.

Theoretical Framework

1. Information Technology Compliance: This model explains how users accept and use a technology. In this context, carrying out these concepts is helpful in informing the design in such a way that it would be user friendly and useful for both parties.
2. Use of Technology: This helps in identifying some of the factors that increase employee interest in using time-tracking applications effectively, such as IT support and staff training.
3. Behavioural Management Theory: This theory addresses the behaviours of employees and their motivations in the workplace. The design of an application can be based on positive factors, such as rewarding an employee for clocking in on time, which increases productivity.
4. Time Management: This is the framework that basically discusses how one can manage time to achieve goals effectively. The application is intended to provide insights into the usage of time to understand trends and ways to improve work hours spent by employees and management.

Conceptual Framework

Traditional time-tracking methods, which rely on employees manually clocking in and out, are prone to inaccuracies due to human error or intentional manipulation, such as where one employee clocks in for another. These inaccuracies undermine accountability and can lead to payroll inefficiencies and increased labour costs. Geo-fencing technology, which creates virtual boundaries around workplaces, has the potential to automate the process of clocking employees in and out based on their physical location, significantly reducing these inaccuracies.

However, the introduction of location tracking through geo-fencing has raised concerns regarding employee trust and privacy. Employees may feel uncomfortable with the perception of being continuously monitored. Geo-fencing solutions can be designed to track only employee locations within defined work areas and during working hours.

Goals and Objectives

The objective of our study is to benefit organisations by offering an application that will help both management and staff maintain accurate accounting of time and, more importantly, achieve effective on-the-job productivity. We designed the app to gain (and provide) insights into how time can be more effectively used and, just as importantly, how the app can assist in maximising and enhancing productivity in the workplace. The app also features an important inclusivity aspect; it will serve by helping and, in part, "talking to" those employees with vision impairments. The app exists, first and foremost, to help organisations maintain a healthy workplace.

To achieve successful outcomes, as part of our research, we needed to address certain queries. We wanted to understand what kind of time-tracking app would, not only in the present but also in the foreseeable future, best serve organisations.

- What capabilities and attributes should this perfect app possess?

- Is integrating the tool with other systems, such as HR and payroll, worth the effort, or would it add only unnecessary complexities?
- Would the employees, at the forefront of the organisation, be open to using the application, or would they push back against it instead?
- If we implement a digital time-tracking system, would it be better or worse for our staff to log their work hours with a smartphone app than with a manual system?
- Last, would utilising the application bring any quantifiable advantages to the organisation?

These were just some of the few questions that we address in our study.

Significance of the Research

As we now live in a much more automated world that is powered by the 4th Industrial Revolution, we wanted to develop a solution for companies, large or small, to transition to evolving technologies in their entities to increase efficiency. We saw a gap within entities that are behind by struggling to evolve into a more digitalised environment as they are still using manual systems such as physical clock-in systems. This study focuses not only on the development of a time-tracking app but also on the development of an app that will ensure ethical behaviours within the workplace. Manual data/time tracking can easily be manipulated and accessed without proper authorisation; therefore, this study will address how this app will have appropriate controls and measures to counteract and avoid such breaches.

References

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