**Literature Survey**

**Team No : 32**

**Team ID** :PNT2022TMID30032

**College Name :** Er. Perumal Manimekalai College Of Engineering

**Department**  :Electronics and Communication Engineering

**Team Leader** :Nandhish.G

**Team Member** :Nirosh kumar.J

**Team Member** :Prasan kumar.M

**Team Member** :Saravanan.R

|  |  |  |
| --- | --- | --- |
| S  No | **TITTLE** | **PROGRAM** |
| **1** | **Popular**  **languages** | Build your application in Node-   * Java, * Ruby, * C#, * Go, * Python, * PHP. |  |
| **2** | **Fully**  **managed** | A fully managed environment lets you focus  on code while App Engine manages  infrastructure concerns. | |
| **3** | **Powerful**  **Application**  **diagnostics** | Use Cloud Monitoring and Cloud Logging  to monitor the health and performance  of your app and Cloud Debugger and Error Reporting  to diagnose and fix bugs quickly. | |
| **4** | | **Application**  **versioning** | * Easily host different versions of your app, * easily create development, * test, * staging, * production environments. | |
| **5** | | **Application**  **security** | Help safeguard your application  by defining access rules with App Engine firewall  and leverage managed SSL/TLS certificates by  default on your custom domain at no additional cost. | |
| 6 | | **Services**  **ecosystem** | Tap a growing ecosystem of Google Cloud services  from your app including an excellent  suite of cloud developer tools. | |

|  |
| --- |
|  |

* **Theoretical Research Avenues**

Articles utilizing the grounded classification and general concepts are dominant, whereas few already-existing theories were utilized to study the adoption of cloud computing. Yet, there is a need for applying more theories (e.g., institutional theory [90, 91])that fit studying the adoption of IT innovation, to gain more insights regarding cloud computing adoption. Institutional theory captures the notion of irrationality in decision making, as enterprises may or may not adopt the cloud under internal (i.e., cultural resistance and internal readiness) or external pressure (i.e., competitors and business partners) and not because of efficiency and cost reduction. Moreover, institutional theory is helpful in understanding how enterprises respond to external and internal pressures and why [92, 93]. Consequently, this review brings interesting questions to IS researchers’ empirical investigation briefcase: what factors (i.e., internal and external) affect the adoption of cloud computing, and how do enterprises form  
strategies to cope with these factors?

* **Methodological Research Avenues**

The majority of reviewed articles study cloud adoption factors and processes in a rather broad perspective. Therefore, there is a need for interpretive case studies to investigate each of cloud computing factors and processes found from this review (i.e., willingness, organizational culture, regulations, cloud providers trust worthiness, evaluation of cloud services, adoption decision, or implementation and integration processes) [94]. These in-depth studies are preferred owing to their implications for both practice and academia.

**Empirical Research Avenues**

According to the review, although cloud computing adoption factors have been in vestigated slightly more than the processes have, plenty of issues remain unclear. For instance, there is a conflict regarding the relationship between the firm’s size and the likelihood to adopt cloud computing, and further in-depth studies are needed to address this conflict. Further, cloud computing is recognized as a cost-reduction solution; however, this cost reduction may not be significant, particularly in the context of SMEs, as reported by a survey study conducted in India [86]. Likewise, when the enterprise maintains an on premise backup, this adds to the cost as well [69]. If cloud computing helps enterprises reduce IT-related costs, then how significant will be this cost reduction be? Thus, further studies with focus on evaluating costs and benefits of cloud computing solutions would be favorable

* **Conclusion**

This study sought to conduct a systematic review of the extant literature on cloud computing adoption by enterprises. This involved identifying the current contributions of IS research regarding the phenomenon and determining the under investigated issues and the contributions of IS research regarding the phenomenon.  
The classification of reviewed articles, findings, and implications for future IS research avenues are according to theories, research methods, and cloud computing adoption factors and processes that were identified by using GT approach. Yet, plentiful legal, ethical, technical, and managerial issues are waiting for IS researchers to explore. Thus, the paper suggested a future IS research agenda based on the discussed findings.

This article is not free of limitations; it sought to review only academic articles from seven literature databases, leaving out white papers, magazine articles, other  
 scholarly literature databases, and articles from a forward and backward search, the  
inclusion of which would help capture more issues about cloud computing adoption  
by enterprises. The search criterion was limited to article title only; however, including abstracts as a criterion would have revealed more insightful articles. The search  
phrases were limited; as some articles discuss cloud computing adoption using different words (i.e., utility computing or application service provision) that may not have  
been included in the search results of this review