**LITERATURE REVIEW ESSAY**

**Topic:** **Critical success factors for the IT strategy and governance**

1. **Introduction**

The Information Technology (IT) resources, demands and investments are a major concern for the executive and board management due to the opportunities, issues and challenges in its effective governance and management in the enterprises in the global world today. Therefore, there is a need to address the critical success factors for the IT strategy and governance being a contemporary concern for the enterprises due to the rapid dependence of organisations on the IT for managing and growing the business in a competitive world. Thus, IT has become an integral part of the organisations in today’s world and its critical success factors are even more important that decide the success or failure of the IT systems being implemented in the organisations. In various activities, IT governance has now become an imperative need for corporate organizations. The key process is characterized by modernisation, and its form of thinking and the ability to address the problems posed by the market world define intellectual leadership. Effective ITG produces real business advantages such as improved reputation, trust, time-to-market, product leadership and lower costs, all of that increase the value of stakeholders.

Many legislations covering the protection of protected information, financial transparency, data management and disaster recovery among many others are subject to organisations today. Shareholders, stakeholders and consumers also push them. Many organisations implement a formal IT governance programme, which provides a framework of best practises and controls, to ensure it meets internal and external specifications. Both private and public sector organisations need to have a plan to maintain that business targets and objectives are achieved by their IT works. Any company in any sector that must comply with legislation related to financial and technical transparency must be on the radar with a structured IT governance programme. However, it consumes a lot of effort to incorporate a robust IT governance programme. Where really small entities can only practise essential methods of IT governance, a complete IT governance programme should be the objective of larger and more regulated organisations. Therefore, IT strategy and governance have significant benefits including the production of measurable results for the achievement of goals and strategies via the following formal framework. It can be stated that the integral part of the enterprise governance overall is the IT governance. It also helps in the compatibility of the strategic organisational goals and the intentions for the aid of corporation for realising a stage of satisfactory risk.

1. **Main body**

This part of the literature review essay constitutes the annotated bibliography of five identified sources for analysing the literature regarding the selected topic that is “Critical success factors for the IT strategy and governance” under the area of IT strategy and governance/management.

**Title:** Critical success factors (CSFs) for information technology governance (ITG)

**Reference:** Alreemy, Z., Chang, V., Walters, R., & Wills, G. (2016). Critical success factors (CSFs) for information technology governance (ITG). *International Journal of Information Management*, *36*(6), 907-916.

**Annotation:** The authors defined critical success factors as the key areas that need to go right in order to flourish a business. If the critical success factors are not performed and tackled well then it is very unlikely that goals, missions and objectives of any project or business would be achieved. So, critical success factors are not the practical detailed steps for implementing a system instead they are the assistant and supporting factors for the assistance of effective system’s implementation. The authors have also used the term of challenges or enablers for these critical success factors and categorised them as stakeholders involvement, management support, financial support, organisational effects (internal), strategic alignment between business and IT, staffing management of IT, IT structure, environmental effect (external), implementation management, and preparation.

**Title:** The Effect of Critical Factors on the Level of IT Governance in Enterprises in Slovakia.

**Reference:** Romanová, A., Bolek, V., & Zelina, M. (2018). The Effect of Critical Factors on the Level of IT Governance in Enterprises in Slovakia.

**Annotation:** The authors stated that the previous literature that is available focuses majorly on the structures, processes and forms of the IT governance and there has been less focus on the inhibitors or the factors that are actually critical for the development and implementation of the IT governance system. The characteristics of IT investments are considered highly important by the authors of this research since the investments in IT are processed at various levels with having differing functional scope and different requirements for boundary spanning. Therefore, they will be needing various actors of organisation for governing the processes regarding decisions of IT investments. Hence, the inhibitors of IT governance identified by the authors are lack of interest and motivation in increasing the performance of the organisation, lack of effective methodology regarding IT management and governance, absence of clear individual unit responsibility, bas cooperation of user units and IT units, reluctance of the units of IT/IS, poor quality of SLAs and contracts at commercial levels, absence of the IT/IS metrics systems, services of IT/IS suppliers having low quality and working capacity of the IT unit being insufficient. Moreover, the users preparation qualification being insufficient, application services that are provided being of low quality, low quality of the operated applications, lack of the interest of managers in the IT/IS application innovation and applications developed unsystematically with the relation to the performance of enterprise are some other inhibitors identified by the authors that need to be tackled in order to have a successful implementation of the IT strategy and governance.

**Title:** IT Governance—An Integrated Framework and Roadmap: How to Plan, Deploy and Sustain for Competitive Advantage

**Reference:** Selig, G. J. (2018, August). IT Governance—An Integrated Framework and Roadmap: How to Plan, Deploy and Sustain for Competitive Advantage. In *2018 Portland International Conference on Management of Engineering and Technology (PICMET)* (pp. 1-15). IEEE.

**Annotation:** Selig supported the stance that IT governance is the integrated framework for achieving the sustainable competitive advantage. One of the easiest ways for starting with any IT governance framework is to use the one that is already designed by the experts in the industry and being used by most of the organisations. Selig also provided the frameworks that are commonly used by lots of organisations including COBIT, ITIL, COSO, CMMI, and FAIR. COBIT is a framework that is comprehensive consisting of the models, analytical tools and the practices that are globally accepted and it is designed in order to help in the management and governance of the enterprise IT. The scope of COBIT has been expanded with the passage of time for completely supporting the IT governance, despite being rooted in the IT auditing. The latest version that is most commonly used in organisations is COBIT 5 that focuses on risk mitigation and risk management. ITIL is known as Information Technology Infrastructure Library that focuses on the management of IT services and aims for ensuring that the services of IT are supported by the business core processes. It consists of the five best practices of management that include design, service strategy, operation, continual service improvement and transition (i.e. change management). COSO is a model that is used for the evaluation of internal controls. This is designed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). It focuses on less IT specific things as compared to rest of the frameworks and concentrates more the aspects of the business i.e. fraud deterrence and Enterprise Risk Management (ERM). CMMI is an acronym for Capability Maturity Model Integration which is a method developed by Software Engineering Institute and it is considered an approach for the improvement of the performance. It also uses a 1 to 5 scale for gauging the quality, performance and profitability maturity level of an organisation. FAIR is an acronym for Factor Analysis of Information Risk that is a relatively recent model that is used for the quantification of risk in organisations. Its main focus is on the operational risk and the cyber security by the goal of designing decisions that are well-informed.

**Title:** Unexpected Problems Associated with the Federated IT Governance Structure in Robotic Process Automation (RPA) Deployment.

**Reference:** Asatiani, A., Kämäräinen, T., & Penttinen, E. (2019). Unexpected Problems Associated with the Federated IT Governance Structure in Robotic Process Automation (RPA) Deployment.

**Annotation:** One of the main emerging technologies known as Robotic Process Automation (RPA) provides authentication for having low investments and consequently getting high returns. This technology is designed for imitating the human worker via the information system interactions by using already existed graphical user interfaces. Hence, there are lots of concerns regarding the prospective challenges for the adoption of RPA in different businesses. Theoretically, RPA is considered to be developed and implemented autonomously in various business units by completely crossing the IT departments of the companies. But in the real market world, this governance structure that is decentralised may lead towards lack in the coherent and accurate coordination in various business units for which there is fragmented development of RPA. Whereas, if this process is made centralised as a solution then it would again pose further challenges including cases of escalation issues in which due to some reasons the procedure breaks and RPA becomes unable to follow particular rules. These types of problems are not able to be handled by the IT specialists, rather they require to be handled from the local unit business experts. Therefore, federated governance structure must be employed in order to minimise the issues regarding the successful development and implementation of RPA.

**Title:** A consensus-based multicriteria group decision model for information technology management committees

**Reference:** Lima, A. S., de Souza, J. N., Moura, J. A. B., & da Silva, I. P. (2018). A consensus-based multicriteria group decision model for information technology management committees. *IEEE Transactions on Engineering Management*, *65*(2), 276-292.

**Annotation:** The authors emphasised that there is not a single criterion that fits into all the IT strategy and governance frameworks, rather the decisions are based on multicriteria which is also consensus based. Therefore, the management committees play a significant role in the implementation of IT governance. However, the risk management committees are crucial as they help in ensuring positive results and smooth implementation of IT management. The formation of risk management committee by the help of business representation and sponsorships of top levels are recommended by the authors for ensuring the success of IT governance. The program for being an effective one must require to be supported by the broad set for line of the business leaders. The sharing of results with the audit or the board committee helps in developing the real attention when the remaining items are beginning to be ignored. The lines of communication between different parties must be opened with all the significant projects (e.g IT strategy and governance programs) for the measuring and monitoring of the implementation progress and seeking the outside help. It is also recommended by the authors that various risk management programs can also be implemented. For instance, COBIT focuses on the IT enterprise management and the governance management especially for the management of the risks and COSO focuses on the deterrence of frauds and ERM that is Enterprise Risk Management. But the issue here that is ignored majorly is that the consideration must be given on the culture of the corporate for choosing any of these frameworks to be implemented in an organisation.

1. **Conclusion**

In achieving an organisation's goals, IT governance plays a significant role that has spurred many researchers and practitioners to make a contribution to this field. Compatible IT Governance (ITG) has now become crucial to the survival of an enterprise with the rapid advancement of information technology (IT) applications and practises around the enterprise. A holistic, high-level structure is required in each organisation to mitigate the risks associated and maximise value, as IT is correlated with risk and value possibilities. The sources addressed numerous success factors, considerations, obstacles and challenges.

Some of the critical factors identified are stakeholders involvement, management support, financial support, organisational effects (internal), strategic alignment between business and IT, staffing management of IT, IT structure, environmental effect (external), implementation management, and preparation. Some of the other critical success factors identified by the authors are lack of interest and motivation in increasing the performance of the organisation, lack of effective methodology regarding IT management and governance, absence of clear individual unit responsibility, bas cooperation of user units and IT units, reluctance of the units of IT/IS, poor quality of SLAs and contracts at commercial levels, absence of the IT/IS metrics systems, services of IT/IS suppliers having low quality and working capacity of the IT unit being insufficient. Moreover, the users preparation qualification being insufficient, application services that are provided being of low quality, low quality of the operated applications, lack of the interest of managers in the IT/IS application innovation and applications developed unsystematically with the relation to the performance of enterprise are some other inhibitors identified by the authors that need to be tackled in order to have a successful implementation.