

# Information Technology Governance in Public Sector & Government Institution: A Systematic Literature Review

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## Abstract

Information Technology (IT) Governance has always been an interesting topic even though it has been introduced for quite some time, especially since 2002, when the United States government enacted the Sarbanes-Oxley Act (Sarbanes-Oxley Act of 2002, Public Company Accounting Reform, and Investor Protection Act of 2002) as a response to several accounting scandals involving large companies such as Enron, Tyco International, Adelphia, Peregrine Systems, and WorldCom. Currently, almost all government institutions and the public sector in all countries in the world have used IT as a tool to carry out their operational activities. IT governance in government institutions and the public sector is a strategic point for a country. The Industrial Revolution 4.0 which is currently running makes the use of IT wider not only in organizations outside the government and companies but also in many countries that are always responsive and adopt the latest findings in the IT field to be utilized by government institutions and the public sector so that all operations can be carried out effectively, efficiently and of high quality. This article aims to be able to see how government institutions and the public sector carry out IT governance in terms of the Systematic Literature Review based on articles that have been published in journals and SCOPUS database proceedings in the last 10 years.

## Keywords

Information Technology Governance, Government Institution, Public Sector, Industry 4.0, Systematic Literature Review

## Biographies

**Prasetya Cahya S** is a Faculty Member at BINUS University, Jakarta, Indonesia as well as a practitioner and technopreneur in the field of information systems. He is an alumnus of the University of Indonesia Master of Information Technology program and has more than 25 years of experience both as a lecturer at several universities and a consultant for several IT projects such as the State Gas Company, the Indonesia Stock Exchange, Bank Indonesia and also the World Bank.

**Dr. Ir. Ford Lumban Gaol, S.Si. M.Kom, SMIEEE** (Senior Member, IEEE) received the B.Sc. degree in mathematics, the master's degree in computer science, and the Ph.D. degree in computer science from the University of Indonesia in 1997, 2001, and 2009, respectively. He is currently an Associate Professor in informatics engineering and information system with Bina Nusantara University, where he is also the Vice Chair of the Bina Nusantara University Doctorate Program with the Computer Science and Research Interest Group Leader for advance system in computational intelligence and knowledge engineering. He is the President of the IEEE Indonesia Section Computer Society and the Director of the IAIAI Southeast Asia Region. He was the Vice Chair of the IEEE Indonesia Section and the former Chair of the ACM Indonesia. He has 199 Scopus documents, with 208 citations and H index = 6.

**Prof. Dr. Ir. Suhono Harso Supangkat, M.Eng** was born in Yogyakarta Indonesia, 3 December 1962. He received the B.S from Department of Electrical Eng. Bandung Institute of Technology (ITB) Indonesia in 1986 and holds Dr. of Engineering from Graduate School of Information System the University of Electro-Communication Tokyo Japan in 1998. From 1998-2002, he was secretary of Electrical Engineering Department Bandung Institute of Technology. During 2002-2006, he was coordinator program on Graduate School of Information Technology in ITB. 2003-2009 Prof Suhono was assigned as a Chairman of Business Incubator Center at ITB. Since 2010, the center was extended become Institute for Innovation and Entrepreneurships Development and Suhono was a Chairman. Since 2000 he has been assisting some Government activities and industries, especially on Regulations and IT Governance.

**Dr. Ir. Benny Ranti, MSc** Lecturer at the Faculty of Computer Science, University of Indonesia and Doctoral Computer Science at BINUS University. Experienced practitioner in IT industry for more than 30 years. He was an expert staff of the Army Chief of Staff in IT and CIO in a BUMN and was also experienced in handling various IT projects on a large scale.

