

Development of the Future Internet Lessons Learned from Global Pioneers and Proposed Solutions for Iran

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Along with the technological changes and the growing number of users of communication and information networks, there has been a surge in the diversity of available services and their demands in these networks. This growth has resulted in current networks encountering various technical, security, and operational challenges. Hence, acknowledging the necessity of transitioning towards the future Internet, research endeavors in this domain have been launched globally. The objective of this research is to examine and analyze the programs and actions of leading countries in the development of the future Internet and to address the perspectives of the United States, China, South Korea, as well as the European Union on the future Internet by examining its potential in addressing current challenges. Furthermore, based on conducted studies, recommendations for the development of the future Internet in Iran have also been provided. The findings of this research suggest that the constraints related to Internet architecture, security, and scalability have impacted the effectiveness and quality of service provision. Consequently, countries have developed visions, policies, and measures aimed at prioritizing public interests and addressing the needs of users in this regard. Therefore, it can be concluded that to establish a suitable infrastructure for the digitalization process, greater attention should be devoted to the topic of the future Internet and its various dimensions.

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