IT STANDARDIZATION AND APPROACHES

In 21th century technology became a key concept to most industries where information management, documentation management getting more and more accessible thanks to databases, governmental online applications such as «ДІЯ», «Резерв+». Technology is accessible through cheap common hardware and opensource software or Cloud services such as AWS, Microsoft Azure, Google Cloud Platform, Huawei Cloud. Such variety of options need standardization and approaches for management and implementation.

ITIL (IT Infrastructure Library) was founded in 1980 by United Kingdom's Central Computer and Telecommunications Agency (CCTA) due to inconsistencies increase in diverse IT solutions architecture. First version was released at 1988 year under name Government Information Technology Infrastructure Management (GITIM), but was renamed as ITIL due to negative influence on private-sector due to word "government" [1]. Second version was released in 2000 year to make it more accessible for masses. Microsoft have adopted ITIL V2 for their own standard development known as Microsoft Operations Framework (MOF). Third ITIL version was released at 2007 year to refresh original version and centered on the concept of service lifestyle structure. Later on in 2011, AXELOS released new revision that resolved inconsistencies in original V3 version and since 2013 ITIL is managed by AXELOS Ltd. Current version known as ITIL 4 released in 2019 and focuses on collaborative environments and aligns with DevOps, Agile, and Lean work methods [2]. ITIL certification have big influence on market. According to survey [3], from 117 respondents 76,5% replied, that ITIL certification made them more marketable on job market, 58,8% replied that certification have improved compete ability, 70,6% of respondents that specific knowledge and expertise was developed. From organization point of view 47% indicated, that their employers noticed improved efficiency of time and cost, 55% reported improvement in overall effectiveness.

Framework of ITIL version 4 contain next service value system (SVS) like guiding principles, practices, service value chain, Continual Improvement and governance. This version can also be described by 4 dimensions Information and Technology, Value Streams and Processes, Organizations and People. ITIL certification is described by 4 levels – Foundation (basic understanding of ITIL framework), Managing Professional, Strategic Leader and Master [1,5].

Usually ITIL is followed by ITSM (IT service management). ITSM include all processes and activities for design, creation, delivery and support of IT services. In other words, ITIL is a set of guidelines to assist ITSM activities and processes [4].

Except ITIL, there are other guidelines for ITSM like ISO/IEC 20000, Control Objectives for Information and Related Technologies (COBIT), FitSM, The Business Process Framework (eTOM), Microsoft Operations Framework (MOF) and The Open Group Architecture Framework (TOGAF). **ISO/IEC 20000** was released in 2005 by International Organization for Standardization and was planned to reflect ITIL practices. **COBIT** was published in 1996 as a set of control objectives to simplify of IT financial audit of organization and contains forty governance and management objectives to establish a solid framework, navigate risk management, security and information, align business goals with IT goals. **FitSM** is developed by EU and published under Creative Commons licenses and open for access for everyone. FitSM can be described as simplified version of ITIL with simplified policies and procedures. **eTOM** is mainly used in telecommunications industry and can be applied to the whole business and allows to be combined with other guidelines. eTOM groups processes in three categories like "Strategy, Infrastructure and Product", "Operations", "Enterprise Management". **MOF** was developed in early 2008 and defines "Plan", "Deliver", "Operate" phases for IT service lifecycle. MOF operational procedures are divided in four quadrants like Changing, Operating, Supporting and Optimizing. **TOGAF** is used to improve efficiency and as a structure to implement new technologies. This guidance is based on The Architecture Development Method and defines 4 domains for different architecture specializations like business, application, data and technical [1,5].

References

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