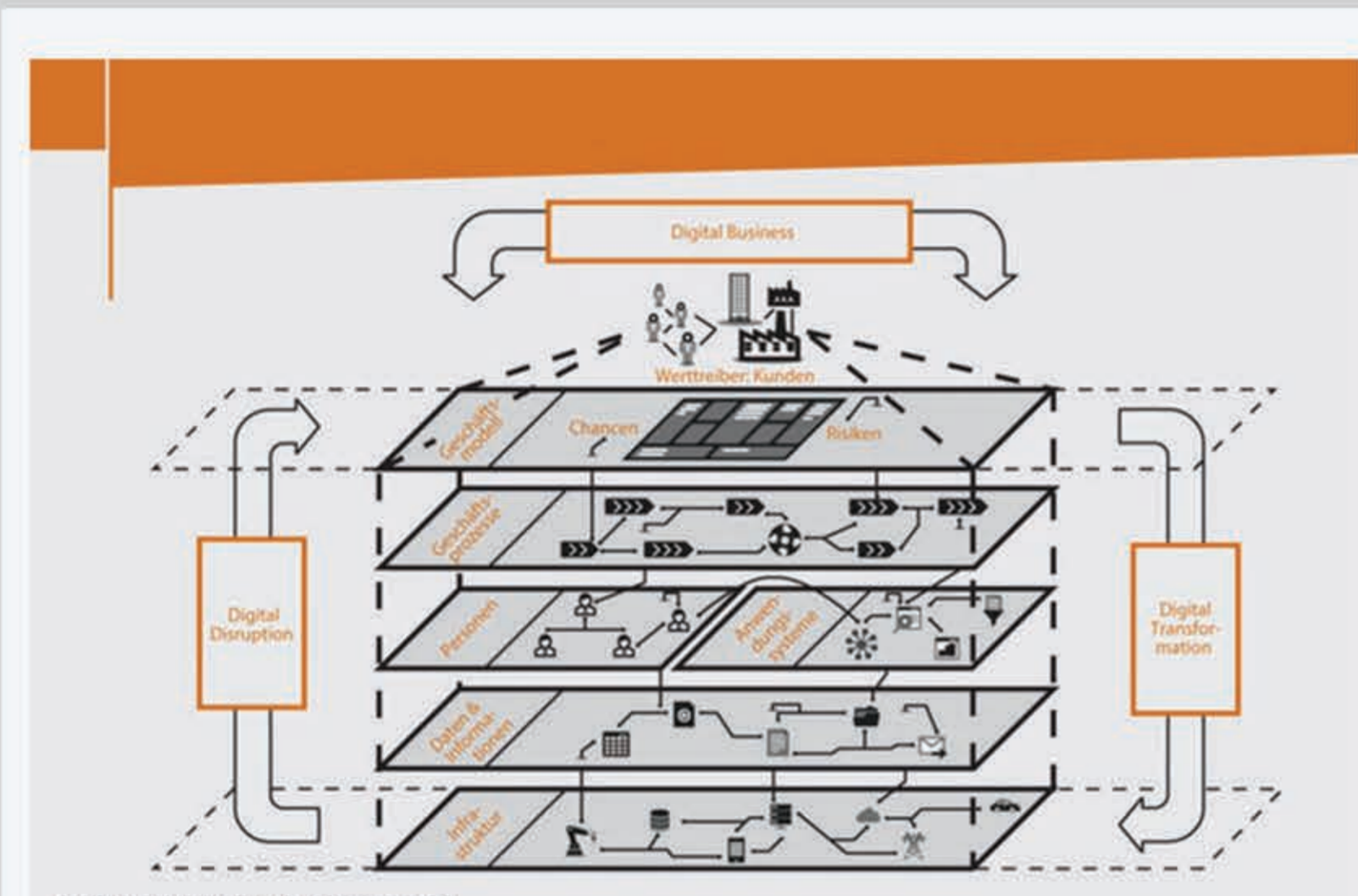


Research Group  
Library and Information Science

Research Area  
Public Communication and Information Science

# Models for Digital Maturity and Strategies for Digital Transformation of GLAM Institutions in Bulgaria



## METHODOLOGY

A systematic analysis of corresponding literature in the way to identifying scientific articles which dealing the phenomena "digital transformation" (DT) according to a specific cultural institution such as public libraries. The understanding of DT and the digital readiness of cultural organizations to reflect it in their specific activities, organizational structure, and services they offer to users, should be a way to increase the meaning and to put their activities in the public focus. The public libraries are also under the influence of the social and technological changes as one of the GLAM organizations. Digital maturity (DM) is the operationalization of digital transformation. DM is a gradual process in which the employers learns how to respond to the challenges posed by the environment resulting from new digital technologies. The research was conducted for a period of 10 years (2014-2023) as a bibliometric study on the Web of Science platform and its Core Collection and the SCOPUS database.

## RESULTS

Digital maturity models can be systematized based on their stages of maturity. Some models define three, four, or even five stages of digital maturity. Depending upon which Digital Transformation Maturity model you follow, the stages can include higher, medium, and lower, beginner, intermediate, advanced, and expert; or traditional, emerging, engaged, competitive, and maturing. Digital Maturity Assessment is a systematic evaluation process that gauges an organization's current level of digital maturity within the framework of a digital maturity model. This assessment involves analyzing various aspects of the organization's operations, culture, technology adoption, and strategic alignment. Maturity models are structured frameworks that help organizations assess their current capabilities, identify areas for improvement, and guide their progression towards higher levels of maturity in a particular domain. These models typically consist of a set of defined stages or levels that represent increasing levels of maturity, with each level building upon the capabilities of the previous one. Maturity models are commonly used in various fields to evaluate and chance organizational processes, practices, and performance.

Table 2. Compares different digital maturity models, outlining their specifics and differences

Model	Dimensions	Stages/Scoring	Focus
Deloitte's Digital Maturity Model	- Customer - Strategy - Technology - Operations - Organization	Categorizes digital maturity into stages such as early, developing, and mature.	Aligning business strategies with digital technologies.
McKinsey's Digital Quotient (DQ)	- Strategy - Culture - Organization - Capabilities - Operations - Technology	Organizations receive a DQ score based on their digital capabilities across dimensions.	Balanced development across all dimensions for sustainable digital growth.
BCG's Digital Acceleration Index (DAI)	- Digital Capabilities - Digital Intensity	Organizations receive a score based on their digital performance across two axes.	Increasing both digital intensity and digital capabilities.
MIT Sloan's Digital Business Transformation Framework	- Customer Experience - Operational Processes - Business Models	Organizations progress through stages of digital maturity as they develop capabilities in these areas.	Transformation of customer experience, operational processes, and business models.
Cappemini's Digital Maturity Model	- Customer Experience - Operations - Technology - Culture - People - Innovation - Governance	Organizations receive a maturity level score in each dimension.	Holistic view of digital transformation, considering different aspects of the organization.
PwC's Digital Fitness Assessment	- Digital Capabilities	Provides an overall digital fitness score and insights into different areas of digital maturity.	Emphasis on self-assessment and personalized recommendations for digital improvement.

### Other examples of maturity models:

- Business Capability Maturity Model (CMM):** this model focuses on business capability maturity
- Cybersecurity Maturity Model:** this model is tailored for cybersecurity practices
- Cascade Strategy Maturity Model:** this model helps organizations assess their strategy execution capabilities
- Business Process Maturity Model:** this model uses five levels to assess an organization's maturity. The levels are: Initial (characterizes inconsistent management practices or teams that react to crises rather than predict them) and Managed (defines teams and businesses that have a management foundation, but the individual teams within the business still work in silos with minimal collaboration or evidence of incorporating improvement strategies).

### Maturity models in different fields



Table 1. Comparison of different maturity models in various domains, outlining their specifics and differences:

Model	Domain	Description	Levels of Maturity	Focus
Capability Maturity Model Integration (CMMI)	Software and Systems Engineering	CMMI assesses and improves an organization's processes	Five levels, from initial (Level 1) to optimizing (Level 5)	Process maturity and capability
Information Technology Infrastructure Library (ITIL)	IT Service Management	ITIL includes a maturity model for assessing an organization's IT service management processes	Not explicitly specified in levels	IT service delivery and support capabilities
Project Management Maturity Model (PMMM)	Project Management	PMMM evaluates project management processes and capabilities	Not explicitly specified in levels	Improved project outcomes and performance
Capability Maturity Model for Software (CMM-SW)	Software Development	CMM-SW assesses and improves software development processes	Five levels, from initial to optimizing	Software development capabilities
Business Process Maturity Model (BPMM)	Business Processes	BPMM focuses on assessing and improving an organization's business processes	Five levels, from initial to optimizing	Operational excellence and strategic objectives
Knowledge Management Maturity Model (KMMM)	Knowledge Management	KMMM assesses an organization's knowledge management practices	Not explicitly specified in levels	Knowledge sharing, collaboration, and innovation capabilities

Author of the analysis and comparison of DMM was prepared by researcher Nikolina Bel

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## INTRODUCTION

Usually Digital transformation (DT) refers to "the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers".

The concept of DT has been defined by Berghaus and Back as the "technology-induced change on many levels in the organization that includes both the exploitation of digital technologies to improve existing processes, and the exploration of digital innovation, which can potentially transform the business model". In this sense different digital maturity models (DMMs) were designed to lead organizations through the challenges of DT.

**Digitalization:**  
The increasing penetration of digital technologies in society with the associated changes in the connection of individuals and their behaviors.

**Digital Transformation:**  
Managed adaptation of companies in light of progressing digitalization in order to assure sustainable value creation.

Berghaus S, Back A (2016) Stages in Digital Business Transformation: Results of an Empirical Maturity Study. In: *MCIS*. Cyprus, p. 22.

## PROJECT GUIDELINES

Project no.70-123-473/27.6.2023  
Project period:27/06/2023 - 26/06/2025

The project "Digital Maturity of Public Libraries in Bulgaria" aims to research and analyze through empirical methods what is the reflection of processes of digital transformation on specific cultural institution.

The aim of the project is to explore the level of digital maturity (DM) of public libraries in Bulgaria and to establish the level of user satisfaction by identifying and adapting a set of indicators relevant to business organizations (type: small and medium-sized enterprises).

The study of public libraries in Bulgaria by adapting and applying successful business models will show whether the library organization is able to participate in the processes of digital transformation in society, what level of DM it has and can achieve and whether it can digitally gain the trust of its users.

As a subsequent benefit of the conclusions and observations is the creation of an innovative approach to evaluate and support the successful involvement of various cultural institutions in Bulgaria in the processes of digitalization of the public sector.

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