# TECHNICAL SPECIFICATION



First edition 2023-06

# Information technology — IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes —

## Part 9: Guidelines on extending process capability assessment for digital (st transformation

Technologies de l'information — Processus du cycle de vie de la délocalisation du processus d'affaires des services activés par IT —

41d900 Partie 9: Lignes directrices relatives à l'extension de l'évaluation des capacités des processus pour la transformation numérique



Reference number ISO/IEC TS 30105-9:2023(E)

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ISO/IEC TS 30105-9:2023

https://standards.iteh.ai/catalog/standards/sist/14922529-3940-4347-afb6-41d90066fa4f/iso-iec-ts-30105-9-2023



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Published in Switzerland

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a> or <a href="https://www.iso.org/directives">www.iso.org/directiv

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 40, *IT service management and IT governance*.

A list of all parts in the ISO/IEC 30105 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u> and <u>www.iec.ch/national-committees</u>.

## Introduction

IT Enabled Services-Business Process Outsourcing (ITES-BPO) services encompass the delegation of one or more IT enabled business processes to a service provider who uses appropriate technology to deliver that service. Such a service provider manages, delivers, improves and administers the outsourced business processes in accordance with predefined and measurable performance metrics. This covers diverse business process areas such as human resource management, administration, health care, financial management, supply chain management, travel and hospitality, media, market research, data analytics, telecommunication, manufacturing, etc. ITES-BPO services provide business solutions to customers across the globe and form part of the core service delivery chain for customers.

Today, people are surrounded by digitalized products and services. Organizations are faced with changing expectations, sometimes driven by their competitive environment, and often driven by the opportunities arising from digital technology and customer expectations. In response to this environment, most organizations seek business transformation supported by technology.

A successful service delivery can deliver value both for the service provider and the customers. ITES-BPO customers expect the service provider to have the digital capabilities to support the customers' business transformation goals. ITES-BPO organizations are also faced with increased competition from innovative service providers who use digital technology to provide innovative solutions to customer needs. Managing the dynamic relationship between the service provider and the customers is key for ITES-BPO organizations embracing the challenge that has arisen from digital transformation. ITES-BPO organizations with a strong innovative competence are beginning to think in terms of a "proactive customer experience": designing customer engagements aligned with personal preferences, based on a service user's interactions. To meet the challenges of this environment, an ITES-BPO provider also requires a programme of digital transformation that ensures it has the digital tools and capabilities needed to support its customers' transformational strategies.

Digital transformation of ITES-BPO involves reviewing, renewing or substituting the processes involved in delivering outsourced business processes by an ITES-BPO provider. The overall objective is to improve the services given to the customers and, when appropriate, offer new services. In many cases, this will be achieved by using evolving technologies, such as AI (artificial intelligence), IoT (Internet of Things), and cloud computing. The ability to utilize such technology for digital transformation is enabled by higher levels of process capability and maturity. This document outlines the improvements in BPO practices required to achieve such improvements when seeking digital transformation for ITES-BPO.

The transformation of businesses has significant risk, that needs to be managed, for both the ITES-BPO service provider and customer organizations seeking to use outsourcing of business processes as part of their business transformation.

This document provides guidelines for a roadmap that an ITES-BPO organization can adopt to establish and improve their digital capabilities. It is aligned to the requirements defined in the ISO/IEC 30105 series, enabling them to deliver more added value to their service users. It outlines seven essentials (4.2) of digital transformation that ITES-BPO organizations should consider.

- Developing a digital strategy and strategic objectives.
- Establishing effective governance and management of the transformation processes.
- Involving and engaging customers during the digital transformation process.
- Establishing the organizational culture and structuring for digital transformation.
- Transforming operations in a digital way.
- Reinforcing the transforming technology infrastructure.
- Establishing an effective partnership ecosystem, in order to achieve the goal of sustainable business development in the digital era.

#### ISO/IEC TS 30105-9:2023(E)

In addition, this document gives guidance for ITES-BPO organizations to implement the organization's digital transformation.

- It specifies the essentials of digital transformation that ITES-BPO organizations should take into consideration during the implementation process.
- It describes the key drivers to enhance the digital transformation capabilities of ITES-BPO organizations.
- It provides guidance to support digital transformation and maturity based on the process reference model and process assessment model defined in ISO/IEC 30105-1 and ISO/IEC 30105-2, outlining the outcomes for a digitally transformed ITES-BPO organization's processes and the corresponding base practices to achieve such outcomes along with the inputs and outputs.

<u>Annex A</u> and <u>Annex B</u> provide informative use cases.

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# Information technology — IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes —

## Part 9: Guidelines on extending process capability assessment for digital transformation

### 1 Scope

This document specifies the essentials of digital transformations and illustrates the key drivers for enhancing the digital transformation capabilities of the organization, while taking account of different stakeholders' interests. It describes elements that ITES-BPO organizations can include specifically for digital transformation when implementing the lifecycle processes in the ISO/IEC 30105 series, and which can assist the organization in achieving their desired process capability levels, hereafter "maturity levels", as defined by the stakeholders. It provides guidance on process capability assessment for digital transformation for ITES-BPO organizations. Additionally, this document:

- covers IT enabled business processes that are outsourced;
- is not intended to address the maturity and capability of the IT processes that support ITES-BPO, but identifies the IT capabilities needed to support the achievement of specific ITES-BPO capabilities;
- is applicable to the service provider, not to the customer;
- is applicable to all lifecycle processes of ITES-BPO;
- provides guidelines to supplement the ISO/IEC 30105-2 process assessment model, enabling assessment of process capability of ITES-BPO organizations undergoing digital transformation.

### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

#### 3.1

#### big data

extensive datasets – primarily in the data characteristics of volume, variety, velocity and variability – that require a scalable technology for efficient storage, manipulation, management, and analysis

Note 1 to entry: Big data are commonly used in many different ways, for example as the name of the scalable technology used to handle big data extensive datasets.

[SOURCE: ISO/IEC 20546:2019, 3.1.2, modified — "primarily in the characteristics of volume, variety, velocity, and/or variability" has been changed to "primarily in the data characteristics of volume, variety, velocity and variability".]

#### 3.2

#### cloud computing

paradigm for enabling network access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on-demand

Note 1 to entry: Examples of resources include servers, operating systems, networks, software, applications, and storage equipment.

[SOURCE: ISO/IEC 20546:2019, 3.1.3]

#### 3.3

#### digital ecosystem

distributed, adaptive, open socio-technical system with properties of self-organization, scalability and sustainability inspired from natural ecosystems

[SOURCE: ISO/TS 18101-1:2019]

#### 3.4

#### digital transformation

process of profound and radical change through digital technologies (including big data, blockchain, cloud computing, internet of things, artificial intelligence, analytics, cognitive solutions, etc.) that orients an organization in a new direction and takes it to an entirely different level of effectiveness, which is based on analytics of data

#### 3.5

#### ecosystem

infrastructure and services based on a network of organizations and stakeholders

Note 1 to entry: Organizations can include public bodies. and ards/sist/14922529-3940-4347-afb6-

Note 2 to entry: Stakeholders can include customers, suppliers and partners.

[SOURCE: ISO/IEC TS 27570:2021, modified — Note 2 to entry has been added.]

#### 3.6

#### robotic process automation

#### RPA

use of software to perform repetitive, high-volume, rule-based business processes or tasks, emulating human actions

### 4 Digital transformation essentials

#### 4.1 General

The certainty of digital influence is expected to intensify across all industries. Data explosion, digital disruption and customer experience are the key drivers for digital transformation.

- Data explosion: there has been an explosion in the type and range of data available. The ability to make data-driven and predictive decisions has become the top driver impacting businesses. However, while significant amounts of data are derived from an ITES-BPO organization's daily operations, this is often overlooked, unstructured and inaccessible. This has created opportunities for ITES-BPO organizations to improve the quality and speed of their business decisions.
- Digital disruption: ITES-BPO organizations face competitive disruption from new entrants and concern about this drives the investments in digital technology. However, digital disruption should

not be viewed as a threat. The opportunities which arise from digital transformation outweigh the threat for a high percentage of ITES-BPO organizations.

— Customer experience: recognizing that a service user's experience with technology can significantly impact customer retention, ITES-BPO organizations are seeking to provide solutions that will enable seamless service user engagement across all an organization's functions, such as human resources, finance or supply chain. The need for a comprehensive service user engagement strategy has emerged as the top digital technology investment driver.

#### 4.2 Digital transformation essentials in ITES-BPO industry

To adapt to such digital influence and drivers as described in <u>4.1</u>, ITES-BPO organizations should investigate and define the implementation path for achieving digital transformation. The following seven key essentials should be considered.

- Developing a digital strategy and strategic objectives: embedded within the overall business strategy, ITES-BPO organizations should identify how technology will be used to transform the business model to increase the organizational competitive advantage. External market environment and competitive capability analysis should be conducted on an ITES-BPO organization's digital capabilities in order to serve as the basis for developing a sustainable digital strategy.
- Establishing effective governance and management of the transformation processes: to assure the success of digital transformation of ITES-BPO organizations, ensure the objectives of digital transformation remain valid, risks, problems and opportunities are identified.
- Involving and engaging customers during the digital transformation process: engagement during planning should consider customer requirements and dependencies. User-centred design enables collaboration with customers and service users to deliver solutions and services that most effectively meet their needs. It addresses the user experience in order to deliver value to users and consequently to the business itself. An agreed approach to change management should ensure all changes from digital transformation are assessed, approved and implemented in a controlled manner. A planned approach to communications and customer relations management should ensure that customers and service users are kept aware of any changes that impact them. This should also include mechanisms to ensure that reviews and feedback from ITES-BPO organization's customers and service users regarding digital transformation initiatives are collected and analysed for further improvements upon digital initiatives.
- Establishing the organizational culture and structuring for digital transformation: ITES-BPO organizations should define and develop the culture and structure needed to support innovation. This includes innovation objectives, the mechanism for funding, oversight of innovation activities and a work environment that fosters innovation. Innovative talent is the centre of ITES-BPO organizations which are established for digital transformation.
- Transforming operations in a digital way: creating new or modifying existing operational processes and tasks in ITES-BPO organizations, using digital technologies to achieve business efficiency and effectiveness, and to develop new products or services.
- Reinforcing the transforming technology infrastructure: in developing the digital transformation strategy, consideration should be given to the technology trends. This includes a data-driven backbone, applied intelligence and cloud computing. This should be subject to periodic review.

Data are poised to become the real lifeblood and currency for ITES-BPO organizations. Those that can master the data volume, velocity and variability will be best-positioned for success. Data-driven decision-making leverages data insights and predictions to inform and validate decisions to optimize performance and achievement of business goals.

Automation, analytics and AI are at the intersection of ITES-BPO business and process transformation in terms of applied intelligence. Expanding over time, other emerging change agents such as block chains and Internet of Things (IoT) will become mature and will be intersected with these three.

Cloud computing is the enabler and foundation tying together all the ingredients of intelligent operations. It facilitates better integration of diverse data and can scale up and down as needed. Cloud-computing-based solutions are helping integrate insights across industry and cloud-based application platforms bring even more power to help companies move toward an as-a-service environment.

 Establish a partnership ecosystem: partner or supplier relationships should be established to strengthen the digital capabilities of ITES-BPO organizations. Such arrangements can bring complementary skillsets and more diverse data that drive innovation and foster continuous evolution, instead of one-time project-focused improvements.

### 5 ITES-BPO in digital transformation

#### 5.1 General

Disruptive and transformative factors across value chains and outsourcing ecosystems require the business process outsourcing industry to adapt. The focus in the industry is shifting from a cost reduction proposition to a broader value proposition. During such changing business drivers, the interests from different stakeholders should be considered and the dynamics of marketplace drivers in ITES-BPO should be outlined. This serves as the basis for ITES-BPO organizations to improve the digital maturity level.

#### 5.2 Different stakeholders' interest on digital transformation

At all levels of an ITES-BPO organization, customers and service users are key stakeholders for the process lifecycle. They have different interests and perspectives that should be considered for digital transformation.

- Customer: improved effectiveness in new product and service development; enhanced customer relationships leading to service user's retention, advocacy and growth; business platform's operations better support the organization's strategy. Customers fund the service development and operations. Therefore, as a result of any process update, including digital transformation, they want a more effective (greater value), more efficient (fewer service user actions) and reduced cost service.
- ITES-BPO organization: optimized processes to reduce cost; established value-based relationships; adopted technologies, responsive and adapted processes to respond to changing customer requirements; strengthened capability to find new opportunities.
- Service users: product or service designed in line with identified potential needs; optimized and seamless interaction process to improve the sales conversion rate; creating customized experiences at each touchpoint of a service user's experience journey; ease of use and availability of the service.

#### 5.3 The drivers of digital transformation

The BPO industry will continue to thrive and show an upward trend, which will be driven by cost optimization, competitive advantages and disruptive technologies. The three accumulative drivers shape the path for an ITES-BPO organization to augment its competitiveness in the industry.

- Cost optimization: traditionally, the practice of ITES-BPO has long been adopted by organizations to achieve cost reduction through labour arbitrage and retain focus on core competencies. Customers and vendors cite a focus on core business functions and cost reduction, respectively, as the primary benefits behind outsourcing spending decisions.
- Competitive advantages: in recent years, an achievement of a multitude of strategic objectives has been highly expected from the marketplace beyond just cost. While cost remains a key driver, the ability for organizations to keep up and stay relevant in the modern age of disruption has become equally critical.

Disruptive technologies: technologies are changing at an accelerated speed. The advent and adoption
of new disruptive technologies are now enabling organizations to formulate disruptive BPO
solutions to achieve both core cost reduction and new strategic imperatives. Organizations across
the industry are recognizing the importance of technology as a means to achieving these benefits.
Moreover, a higher percentage of Shared Service Centres and Global Business Service Centres are
considering adopting disruptive solutions to drive performance, improve time to marketplace, and
increase product and service innovation.

Cloud computing is, and has been by far, the most transformative to date among all new disruptive technologies observed in the BPO industry. Most notably, business process as a service (BPaaS) enabled BPO is emerging in traditional BPO services, demonstrating an aggressive growth trend that parallels the growth of the BPO marketplace.

Robotic process automation (RPA) is a widely adopted emerging technology across the BPO industry, alongside cloud computing, which involves automating actions taken based on decision data available.

AI is a nascent driver in the BPO industry, which includes but is not limited to cognitive computing, machine learning, computer vision, deep learning and natural language processing. Such technologies have the potential to improve productivity, ease decision making and interactions, and enable a new field of innovative services.

Block chains, IoT and other nascent technologies should be taken into consideration. For instance, digital twins based on IoT, machine learning combined with big data and AI can provide live reports containing key performance indicators.

#### 6 Guidance on process capability assessment for digital transformation

#### 6.1 General

#### ISO/IEC TS 30105-9:2023

Digital transformation has been significantly impacting the way ITES-BPO organizations operate their business. Therefore, improving the digital maturity of the organization is a fundamental path to sustaining its business and seeing it prosper in a highly competitive and dynamic environment. In order to address such augmented digital dynamics, the following subclauses provide guidance on leveraging the ISO/IEC 30105-2 process assessment model to support the assessment of process capability for digital transformation. This includes the outcomes, which are either additional, different or both, for a digitally transformed or transforming organization, and the corresponding base practices to achieve such outcomes, along with the inputs and outputs. In the meantime, the processes relating to digital transformation are listed according to the ISO/IEC 30105-1 process reference model.

#### 6.2 Digital transformation and guidelines for strategic enabling processes

#### SEN1: Strategic planning and direction setting

For a digitally transformed ITES-BPO organization, its digital vision and strategy should be outlined, and the role digital vision and strategy is intending to play in the digital ecosystem, within the ITES-BPO organization, should be articulated.

An ITES-BPO organization can implement the following practices, with supporting guidance, to achieve the above outcomes.

- Define the purpose of achieving digital transformations in order to clearly outline a credible digital vision and strategy, and articulate the role digital transformations are intending to play in the digital ecosystem within the ITES-BPO organization. This can be achieved by:
  - communicating internally and externally in order that all stakeholders are able to clearly articulate strategy and roles;