

# **Digital Transformation**

Recent strategic & technical developments for an efficient & fast standardization process

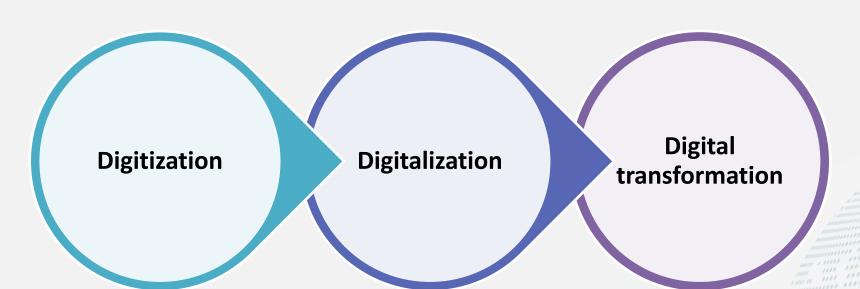
# **Indian Strategy**

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### **Digitization, Digitalization and Digital Transformation**



- process of converting analogue materials into digital form [ISO 5127:2017]
- process of employing digital technologies and information to transform various business operations
- evolution of business processes, organizational activities, and customer experience by leveraging the opportunities of digital technologies and their accelerating impact across society in a strategic and prioritized way.

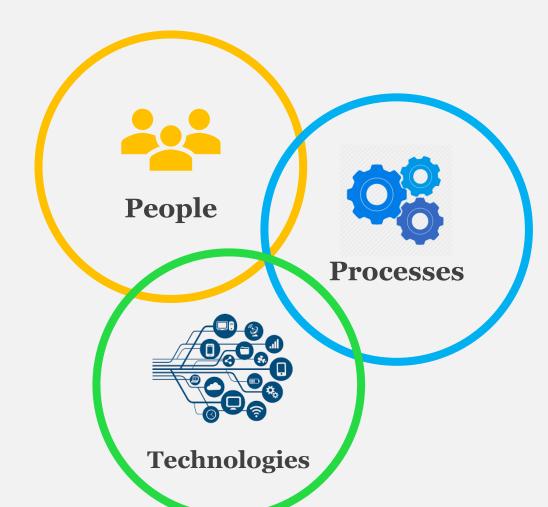








### **Digital Transformation**



### **Capabilities**

- High productivity
- Quality
- High flexibility
- Optimization
- Agile/Responsive
- New business models
- New services











### **Digital Transformation and standardization**

- Hard copy to electronic copies
- Courier to email
- F2F meeting to Video conferencing/online meeting
- Processing draft standards from one stage to next through IT systems







## Recent strategic & technical developments

### The Indian National Strategy for Standardization (INSS)

- Recognizes standardisation as one of the key elements of the quality infrastructure of the country.
- Identifies the need to position standards as a key facilitator of all economic activities.
- The strategy has further acknowledged the importance of developing a comprehensive ecosystem for standards development in India by adopting the best international practices and creating a response mechanism to meet the standardisation challenges.







### **Standards National Action Plan (SNAP)**

#### **Objectives**

- 1. Identification of standardisation needs and enhancing stakeholder involvement
- 2. Making standardisation processes efficient and fast
- 3. Ensuring harmonious standardisation activities in the country
- 4. Increased participation and involvement in international standardisation activities
- 5. Increasing awareness and implementation of standards







### Making standardization processes efficient and fast

- Extensive use of web conferencing in Technical Committee meetings
- Constitute E-Committees
- Create National Commenting Platform online commenting/ feedback mechanism on existing standards/ draft documents
- Strengthening Project Management approach in standardization work
- Conversion of standards to XML format
- Improve the process of reviewing of standards
- Create online authoring and collaboration platform







BIS – in the path of digital transformation

### Transformation in the digital world

- Transformed BIS website
- Development of standards Formulation Module
- BIS Connect
- Enabling online meeting facilities through webex







### Transformation in the Physical world (People & Processes)

- Revision of time norms for Standards development
- Stakeholder Consultation meets and Interactions
- Infrastructure development
  - Physical infrastructure
  - IT infrastructure
- Capacity building







### **BIS Standards Formulation Module**



Committee Management

Membership Management Work Programme Management

Meeting Management

Standards Development

#### **Interface Modules**

National Comment register

Committee Members

MIS Module

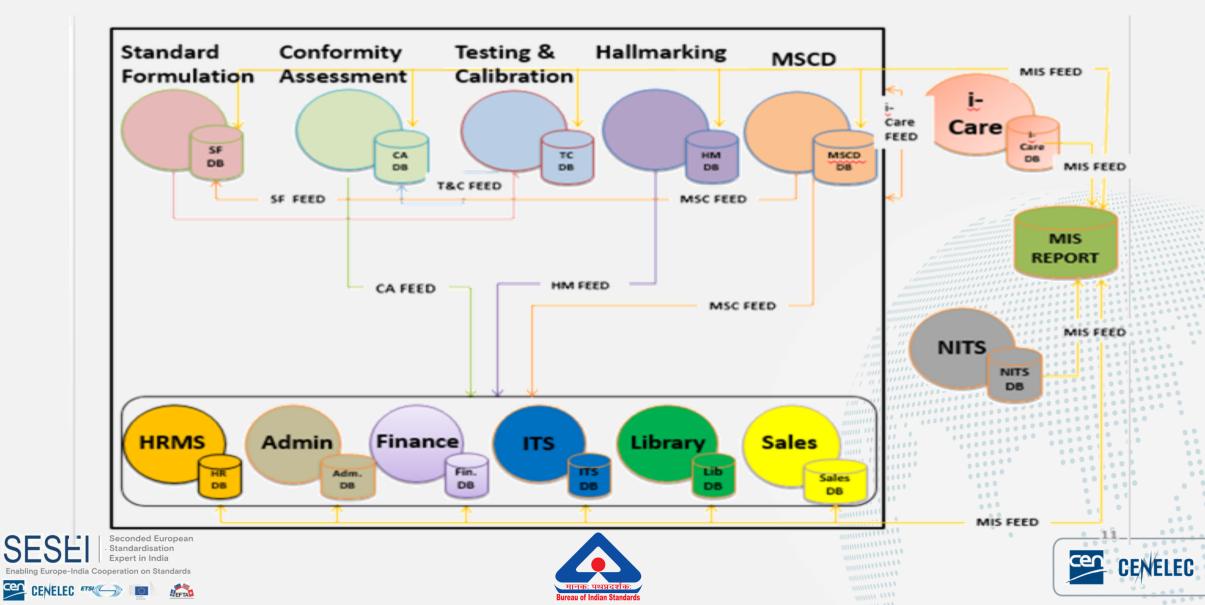
**View Modules** 







### <u>Integration of various activities within BIS</u>



### **BIS SFM Features**

- Real-Time data (Standards and work programme)
- Committee management
- Membership management
- Work programme Management
- Meeting management
- Standards development







### **BIS Connect**

- Interface for members to view all the data and documents floated in their respective committees.
- Document Repository
- Discussion forum
- Comment collation tool







### **Revision of Time norms for Standards Development**

Priority II

Normal

Required urgently in view of regulatory needs

9 months indigenous/6 months adoptions

(earlier 12 months)

Areas having very high impact on economy, environment, health and safety

18 months indigenous/
9 months adoptions

(earlier 24 months)

All other subjects agreed to by the Committee

24 months indigenous/ 12 months adoptions

(earlier 28 months)







### **Our Vision**

- Mobile friendly environment
- Collaborative editing
- Developing and publishing standards in multiple forms
  - Xml and html docs and epubs
  - Algorithms
  - Standards as codes/software
- Developing Standards mapping tools for complex areas
- Graphical tools to navigate the user through related Standards
- Developing analytics tool for identifying the stakeholder interests







## **Emerging Technologies and BIS standardization**

### BIS Standardization activities on emerging technologies

- LITD 27 Internet of Things
- LITD 28 Smart Cities
- LITD 29 Blockchain and Distributed ledger Technologies
- LITD 30 Artificial Intelligence
- LITD 31 Wearable devices
- LITD 34 Smart Manufacturing









### NWIP from India on the emerging technologies

#### Smart Cities

- Smart City Reference
   Architecture Methodologies
   (SCRAM)
- Smart City Reference
   Architecture (SCRA)
- Bigdata
  - Process Management framework for Big data analytics

#### Blockchain

- Guidance on Audit of DLT Systems
- Non-Functional requirements of Blockchain
- IoT
  - IoT for strss management,
     Health and Fitness

# Thank you!