# Managing the what, who, how and when of MCP migrations to operations

wipro

F ollowing on from part one of data wrangling paper, we now talk about how vast migrations should be managed by performing the four 'What, Who, How, and When' migration stages (described below) as the basis for identification and management of migrations, which are then tailored and configured to organizational requirements.

## Stage 1: The 'Who' of migration

Organizations need to identify who will manage and execute the MCP migration to operations by determining if the internal manpower can be leveraged without impacting critical MCP daily activities. Organizations should also consider and manage the following during MCP migration:

- What are the ramifications of utilizing internal manpower to perform migration activities?

- Does the organization have the required migration SME expertise?

- Who are the operational stakeholders?

## Stage 2: The 'What' of migration

MCPs should adhere to organization standards to leverage best practices and restrict access to Personal Sensitive information (PSI), copyright data, commercials, etc., and enforce security measures before migration commences. Furthermore, information must undergo rigorous analysis to identify and remove PSI information to ensure organization compliance.

Evaluation of the completeness of MCP information needs to be performed prior to transfer, by thorough analysis of data and documents to determine the readiness of MCP migration. This includes:

- All documents are at an approved/final revision

- Migrated data files are copied over to the operational system and 'write protected' to prevent information being changed

- Concurrent engineering activities have been completed

- All comments have been addressed and closed

- Files are available in native format where contractually agreed

- Compared against Vendor Master Document registers to confirm receipt of all deliverables

- System placeholders have been removed where documents were not created

- Are controlled hard copies of critical documents such a P&IDs, C&Es, etc., required—if so, have they been identified?

- Are there contingencies in place for access to information in the event of power failures?

## Stage 3: The 'How' of migration

Traditional systems are typically set up to extract individual documents one at a time, which isn't viable during mass migration. MCPs need to accurately populate the target system attribution by performing activities such as:

- Extract metadata from documents and images (document numbers, revisions, authors, well names, well identifiers, dates, etc.)

- Extract technical data from documents (tags, line numbers, bore hole data, etc.)

- Metadata alignment using MCP/operations taxonomies

- Identify sensitive and legal files to avoid data leakage

- Verify content to ensure information is correct and as expected

- Analyse target system security levels to manage end user access

System attribution requirements differ depending on the file type and some content may need to be converted or repurposed from one format to another before migration, such as:

- Foreign language text converted into an English word file (note images/pictures are not converted and transferred to word)

- Identification and removal of illegal characters such as (*%$£"!@&) to allow upload into the target system

- Format standardisation (dates, text cases, formats) to avoid errors during migration loading

- Title description acronyms removed and replaced by whole words to maximise findability by the end users

- Transformation to new taxonomies/numbering schema to align with operational requirements

## Step 4: The 'When' of migration

MCPs need to consider the impact of how system shutdowns can inhibit access to key information, and how the information is backed-up and accessed during these times. MCPs will need to manage and track:

- **System outages:** How will this impact personnel accessing critical information during MCP start-up, operational activities?

- **Personnel access to systems:** What is the process for adding users and how long does it take?

- **Target system error rework and manhour impacts**

- **Information back-ups:** Required during system outages to maintain schedule

- **System decommissioning schedule:** Ensure decommissioning is scheduled after handover to operations and archival of system information

- **System user usage cost:** Monitor and remove personnel access to lower overall monthly costs

## Stage 5: Post migration

Post-migration, on-site support from the project team should remain within operations for an agreed period of time to provide continuous training and knowledge transfer. During post

migration, organizations must archive and back-up the MCP system while communicating the decommissioning schedule to key stakeholders.

## Business benefits of utilizing an experienced IT partner:

IT partners can interrogate structured and unstructured data (including hard drives, USBs, etc.) to enable the identification of data as 'must haves vs. nice to haves vs. don't needs' during data migration from and to companies and systems. Data wrangling services are ideally situated to assist with the identification, deduplication, transformation and migration of files and data. Data wrangling should be tailored to each organization's requirement to ensure that the integrity and sensitivity of information is uncompromised, while releasing and transferring information en masse in a timely manner. Other benefits are:

- Reduction in man hours spent locating documentation and data

- IM expertise, hands on migration experience

- Data-wrangling services to interrogate and identify data for migration

- Removal of organization's technology constraints by utilizing IT partner automation processes

- Identification of true source information when files are duplicated/copied within systems and drives

- Data transformation and alignment to target system and operational requirements

- Creation of searchable PDFs where required —enabling enterprise level search engines to digest the legacy information

- Enhancement of images to maximize textual recovery

- Creation of target system load sheets to populate critical target system attribution, thus ensuring accuracy and findability of files and metadata

## About the author

**Janine Murray**
Principal Consultant, Wipro Limited.

Janine Murray is an IM Consultant with over 15 years of experience in the O&G industry. She has extensive FE/Operations and Major Capital Project (MCP) Information Management experience. She has deep experience with IM brownfield modifications, greenfield enhancements, MCP joint ventures, closeout, and MCP handover to Operations. Additionally, she is experienced with document cleansing and data extraction techniques for digitizing O&G legacy assets.
She can be reached at **janine.murray@wipro.com**

**Wipro Limited**
Doddakannelli, Sarjapur Road,
Bangalore-560 035,
India

Tel: +91 (80) 2844 0011
Fax: +91 (80) 2844 0256
**wipro.com**

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 160,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at **info@wipro.com**