Getting the Most from Modernization
Every automation and control system requires upgrading at some point to maintain safe and reliable operations and leverage the latest technology.
Today’s business environment places many demands on executive management and operations. One of the ways to achieve higher levels of competitiveness is through the control system. A well-planned and executed control system migration to the latest technology improves plant availability and provides a more flexible production platform.

Higher levels of flexibility drive many organizations to consider upgrading or replacing their current automation and control system in order to make the most of business opportunities.

A control system can have tremendous performance impact over the lifecycle of a facility.

An aging system can suffer from challenging maintenance issues, including excessive failure rates, scarcity of spare parts and availability of skilled maintenance personnel. Many plants are facing the “aging out” of highly qualified individuals, making it difficult or impossible to find replacements who are capable of understanding a legacy automation system.

An outdated automation system can impact business results due to quality issues and high energy consumption. Contemporary platforms enable many capabilities that focus on product reliability and personnel effectiveness.

Modern human-machine interfaces (HMI) provide a more sophisticated environment attuned to safety and operator performance. This interface allows a manageable migration process, helping to move from an older system to the latest technology.
Preparing for Control System Migration

**Working with Honeywell**—Most plants are not staffed with the required expertise to manage large capital projects internally, especially when it comes to an infrequent effort like a DCS migration. Honeywell offers qualified professional specialists that help with the planning, execution and project management.

The team can help establish goals for the upgrade or migration and develop an organized approach to planning.

Honeywell can help facilities identify and focus on primary migration objectives, such as increased control system reliability, increased control system availability, enhanced alarm functionality, improved utilization of data, and strengthened security.

**Planning and Execution**—Successful control system migrations begin with a comprehensive project plan. Honeywell’s Global Project Management organization delivers projects consistently on time, on budget, and of the highest quality.

Organization and communication are key in a migration effort. Project Managers execute projects using Honeywell’s Global Project Methodology (GPM) and Procore Project Management tool.

As part of Honeywell’s Quality Management System (QMS), GPM is a set of processes, procedures and standards used by all Honeywell projects. This methodology assures consistent execution and implementation of projects around the world and sets the standard for all deliverables.
**Project Management**—LSS Project Managers utilize Procore, a Cloud-based project management software tool to manage and track a project, from request for information (RFI), submittals/transmittals, punch lists, meeting minutes, schedule activities, and action items.

Through the use of Procore Project Managers offer:
- Improved communications and engagement with site personnel;
- Collaboration between project team members;
- Instant access to up-to-date project data and information; and
- Improved project management efficiency.

**Project Execution Excellence**—The Global Project Management organization is dedicated to excellence in project execution.

Project Execution Excellence focuses on:
- **Safety and Quality First**: Safe, Repeatable, and Responsible;
- **The Same Process Everywhere in the World**: Ensured by Global Project Methodology;
- **Standard Deliverables**: Fully-tested functions, migrations ready;
- **Engineering and Productivity Tools**: Simplify engineering, reduce implementation risks;
- **Certification and Skills—Competency and Training**: Professional, disciplined, qualified workforce.
By leveraging the experience, processes, and certification programs of Honeywell’s personnel, customers are ensured of a best practice migration that performs smoother, is completed faster, and minimizes the potential anomalies encountered.
Honeywell’s Global Migration Center of Excellence

The Honeywell Global Migration Center of Excellence (CoE) assists in the successful and timely completion of Honeywell system migrations. The Migration CoE is a dedicated team within Honeywell Process Solutions that focuses exclusively on migrations. The CoE has extensive experience assisting customers and Honeywell project teams with migration strategies, preparation and implementation.

The Migration CoE focuses on the following important tasks in a migration scenario:

**Provide the Right Solution**
Working with customers and their project teams, providing feedback on technical feasibility, including migration strategy and hardware compatibility.

**Risk Mitigation**
The CoE team works with pre-migration checklists, checking data against known issues, and applying previous lessons learned. The team performs upfront database migration and display migration so there are no surprises on-site during the final migration activities. In addition, the team verifies compatibility with third-party software and other Honeywell software.

**Standardization**
The team is dedicated to standardizing the way migrations are engineered and executed globally by creating standard builds. The standard builds include documentation templates, software solution libraries, tools, guidelines, and checklists to improve productivity, quality and global consistency.

Standard builds identify all design aspects that need to be considered, even for sites where customized solutions are required to align with existing systems or rigid end-user specifications.

**Honeywell Certification Programs**
These programs define migration-specific certification for Honeywell engineers. Certification levels are achieved based on global Automation College training, CoE-created training modules, and experience.

**Operational Readiness**
CoE team members are involved in new product development, where they create functional specifications for tools that have an impact on productivity and user experience. Global product champions are assigned to support local Honeywell teams during the entire project lifecycle.

**Continuous Quality Improvement**
The CoE incorporates lessons learned and best practices into the standard build documents. An automated process is in place to capture migration issue feedback from the Global Technical Assistance Center (GTAC). The team uses data mining techniques on migration related issues, splitting issues into different categories and setting up quality improvement programs addressing these issues, forming a partnership with Quality, Global TAC and Development Engineering.