Integrated Systems Management

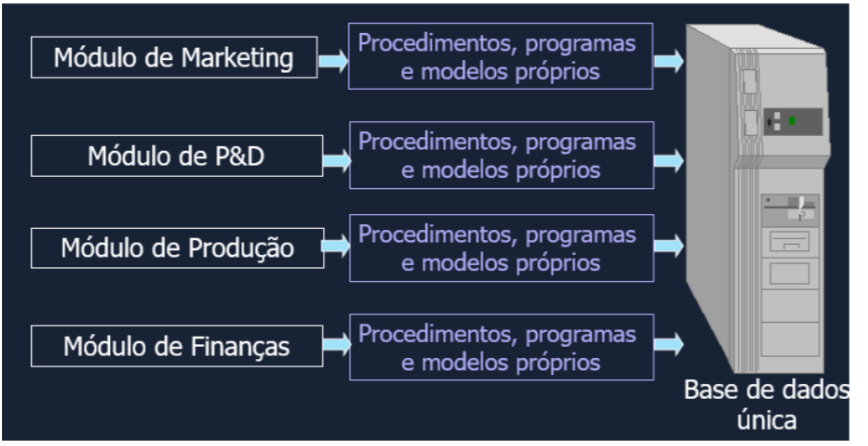
INTEGRATED MANAGEMENT SYSTEM

ERP – History

- Started in the 60s to control product inventory
- With the development of hardware and software, the focus shifted to material requirement planning (MRP - Material Requirement Planning and MRPII), allowing manufacturers to control the flow of components and raw materials, thus being able to carry out planning in advance
- In the 1990s, the systems began to cover all business activities within the company, thus giving rise to ERP (Enterprise Resource Planning)

ERP – what is it?

- Information system that uses a single database, containing several modules that talk to each other and exchange information.
- Each module is responsible for a specific function of the system, enabling the company to access information in an integrated manner, in a single tool and with the same standard for presenting information.
- Commercial software packages
- Incorporate business process models (so-called best practices)
- They are integrated information systems and use a corporate database
- Have a wide functional scope
- Provides support to the essential activities of a company: administrative (finance, human resources, accounting and tax), commercial (customers, orders, billing, logistics and distribution) and productive (design, manufacturing, inventory control and costs).
- Require adjustment procedures so that they can be used in a given company


Módulo de Marketing
Procedimentos, programas e modelos próprios
Módulo de P&D
Procedimentos, programas e modelos próprios
Módulo de Produção
Procedimentos, programas e modelos próprios
Módulo de Finanças
Procedimentos, programas e modelos próprios
Base de dados única


FRM
FINANCE RESOURCE MANAGEMENT
MRP
MANUFACTURING RESOURCE PLANNING
SCM
SUPPLY CHAIN MANAGEMENT
ERP
SYSTEM
CRM
CUSTOMER RELATIONSHIP MANAGEMENT
HRM
HUMAN RESOURCE MANAGEMENT

THE BENEFITS OF AN INTEGRATED MANAGEMENT SYSTEM

STRATEGIC BENEFITS – ALL SYSTEMS ARE SEEN AS PART OF A GLOBAL MANAGEMENT SYSTEM, CONTRIBUTING TO THE CONTINUOUS IMPROVEMENT OF THE ORGANIZATION'S RESULTS. GOALS AND PLANS ARE CONSISTENT AND ALIGNED WITH THE GLOBAL BUSINESS PLAN.

MANAGEMENT BENEFITS – SEPARATE MANAGEMENT SYSTEMS ARE HARMFUL FOR EVERYONE AS THEY DO NOT ENABLE THE BEST SYNERGY AND GAINS IN THE ACTIONS. THE PURPOSE UNIT CONTRIBUTES TO THE TEAM WORK SO NECESSARY TO ACHIEVE RESULTS.

REDUCTION IN FINANCIAL COSTS – ACHIEVED THROUGH THE UNIFICATION OF COMPLIANCE WITH COMMON REQUIREMENTS OF THE SYSTEMS, SUCH AS AUDIT, CONTROL OF DOCUMENTS AND ACTIONS.

OPERATIONAL BENEFITS – INTEGRATED SYSTEMS HELP ENSURE THAT THE CONSEQUENCES OF ANY ACTION ARE TAKING INTO ACCOUNT IN DECISION MAKING (eg design change may not only impact product quality but also the environment).

LOGISTICS BENEFITS – BY ADOPTING MORE THAN ONE MANAGEMENT SYSTEM, IMPLEMENTATION WILL BE EASIER AND POSSIBLY MORE ECONOMIC. DISCIPLINE CONFLICT IS ALSO AVOIDED BECAUSE RESPONSIBILITIES ARE CLEARER.

WHAT IS THE OBSERVED PROBLEM?

THE INTEGRATION OF MANAGEMENT SYSTEMS STARTED TO BE DEVELOPED THROUGH THE COMMON REQUIREMENTS OF THE STANDARDS CONSIDERED IN THE SIG

- politics
- goals (single board panel)
- documents control
- record control
- audits
- unconformities
- actions

THE APPROACH OF EXCLUSIVELY CONTEMPLATING THE COMMON REQUIREMENTS OF THE STANDARDS DOES NOT ALLOW THE EFFECTIVE INTEGRATION OF THE MANAGEMENT SYSTEM.

PAS 99:2006

SPECIFICATION OF COMMON MANAGEMENT SYSTEM REQUIREMENTS AS FRAMEWORK FOR INTEGRATION

PAS 99 IS A SPECIFICATION THAT CONTAINS REQUIREMENTS FOR INTEGRATION OF MANAGEMENT SYSTEMS.

IT HAS SEVEN COMMON REQUIREMENTS FOR MANAGEMENT SYSTEMS, ALIGNED WITH ISO GUIDE 72 (GUIDE TO WRITING MANAGEMENT SYSTEM STANDARDS).

PAS 99 FOLLOWS THE PDCA APPROACH PRESENT IN MOST MANAGEMENT SYSTEMS STANDARDS.

ITS PURPOSE IS TO ENCOURAGE ORGANIZATIONS WITH MORE THAN ONE MANAGEMENT SYSTEM TO TAKE A HOLISTIC VIEW ON THEM AND TO PROVIDE MORE EFFICIENT MANAGEMENT OF THEIR

OPERATIONS.

WHY WAS PAS 99 DEVELOPED?

BEFORE THE LAUNCH OF PAS 99 THERE WERE NO “REQUIREMENTS” FOR INTEGRATED MANAGEMENT SYSTEMS.

THERE WAS A LOT OF UNCERTAINTY ABOUT WHAT REALLY CONSTITUTED AN INTEGRATED MANAGEMENT SYSTEM.

CURRENTLY MANY ORGANIZATIONS HAVE MORE THAN ONE MANAGEMENT SYSTEM IMPLEMENTED AND THEREFORE ARE INTERESTED IN EFFECTIVELY INTEGRATE THEIR SYSTEMS.

WHO IS INTERESTED IN INTEGRATE MANAGEMENT SYSTEMS?

ORGANIZATIONS THAT HAVE MORE THAN ONE MANAGEMENT SYSTEM AND WISH TO GET THE MAXIMUM VALUE FROM THEM.

ORGANIZATIONS THAT STILL HAVE NO MANAGEMENT SYSTEM IMPLEMENTED BUT WISH TO HAVE A HOLISTIC SYSTEM TO MANAGE THEIR ORGANIZATION.

ORGANIZATIONS THAT WISH TO IMPLEMENT SEVERAL MANAGEMENT SYSTEMS SIMULTANEOUSLY.

ORGANIZATIONS THAT HAVE A MANAGEMENT SYSTEM IMPLEMENTED AND WISH TO INTRODUCE OTHER(S)

WHY MANAGEMENT SYSTEMS SHOULD BE INTEGRATED?

TO DECREASE COSTS.

TO ALIGN THE REQUIREMENTS OF VARIOUS STANDARDS USED.

TO AVOID REDUNDANCY AND BUREAUCRACY.

TO REDUCE PROCESSES AND PROCEDURES WHERE THESE CAN BE COMBINED.

TO IMPROVE THE EFFICIENCY OF THE ORGANIZATION.

TO HELP EMPLOYEES AND CONTRACTORS IN THE CORRECT UNDERSTANDING AND NEEDS OF THE MANAGEMENT SYSTEM AND HOW THEY CAN CONTRIBUTE TO ITS EFFECTIVENESS.

- General requirements

- Identification of GIS processes
- Determining the sequence and interaction of processes
- Determination of criteria and methods for operation and control
- Availability of resources and information for operation and control
- Monitor, measure and analyze processes
- Implement actions for continuous improvement

– Management System Policy

- Defined by Top Management

- Appropriate to activities, products and services
- Includes commitment to meeting all relevant requirements
- Includes commitment to continuously improve the effectiveness of the GIS
- Provides structure for establishing and critically analyzing objectives
- Communicated to all involved
- Regularly reviewed for ongoing adequacy

Planning

Identification and assessment of aspects, impacts and risks

- Procedure to identify aspects of activities, products and services relevant to the scope of the GIS.
- Procedure for assessing the risks to the Organization.
- Determine and record aspects that have or could have a significant impact.
- Ensure that significant aspects are considered when establishing, implementing and maintaining the GIS

Identification of legal requirements and other

- Procedure for determining legal and other requirements related to activities, products and services relevant to the scope of the GIS.
- Ensure that legal and other requirements are considered when establishing, implementing and maintaining the GIS

Contingency planning

- Procedure for identifying and responding to any unplanned event, potential emergency and disaster.
- Prevention or mitigation of consequences of such occurrences.

• Consider continuity of operation.

Goals

• Set goals considering significant aspects, legal requirements, other applicable requirements and your commitment to continuous improvement.
• Goals must be measurable.
• Establish, implement and maintain programs to meet the objectives.

Organizational Structure, Roles, Responsibilities and Authorities

• Senior Management Representative.
• Identify, document and communicate roles, responsibilities and authorities to those involved with the GIS and their interrelationships.

Implementation and Operation

Operational control

- Ensure that operations associated with significant aspects are carried out under controlled conditions.
- These conditions must ensure compliance with the Organization's Policy and Objectives, in addition to applicable requirements.

Resource management

- Scope of GIS.
- Constituent GIS standards.
- Policy and Objectives.
- GIS Manual.
- Procedures and records defined by the standards that make up the
- GIS and others defined by the Organization.
- Documented procedure for controlling GIS documents.
- Documented procedure for controlling GIS records.

Communication

- Internal communication at various levels of the Organization.
- Receive, record and respond to relevant communications from Stakeholders.
- Record of decision on communication with external Stakeholders.
- Establish and implement methods of communication with external Stakeholders.

Performance Evaluation

Monitoring and measurement

- Implement monitoring and measurement activities to determine the extent to which applicable requirements are met.
- Record information to track operational control performance and to assess compliance with objectives and the ability of processes to achieve planned results.

Compliance assessment

- Periodic assessment of compliance with legal requirements that are relevant to the scope of the GIS.
- Record the result of this assessment

Internal audit

- Establish and maintain an audit program based on the significance of the aspects, risks, performance of the Organization and results of previous audits.
- Evaluate compliance with GIS and constituent standards.
- Assess whether the GIS is correctly established, implemented and maintained.
- Independent auditor of audited functions.

Treatment of non-conformities

- Non-conformities identified
- Action to mitigate its impact.

Improvement

General

- Continuous improvement of GIS effectiveness
- Define responsibility and authority for improvement actions.

Improvement, corrective and preventive action

- Critical analysis of actual and potential non-conformities, including comments from Stakeholders.
- Determine the cause.
- Assess the need for action based on the risks found.
- Determine and implement required action.
- Record the result of the action taken.
- Evaluate the effectiveness of the action taken.

Critical analysis

General

- Top management conducts critical analysis at planned intervals.
- Purpose is to ensure continued adequacy, relevance and effectiveness.
- Includes assessment of opportunities to improve the SIG and change the Policy and Objectives.
- Keep records of critical reviews.

Entries

- Audit results.
- Feedback from Stakeholders.
- Corrective and preventive action situation
- Monitoring of previous actions.
- Change situations related to aspects of the Organization and associated risks.
- Recommendations for improvement.
- Organization performance data and information.
- Results of the assessment of legal compliance and other requirements.

Exits

- Record decisions and actions related to:
    - Improved GIS effectiveness.
    - Improvement related to Stakeholder requirements.
    - Need for resources to improve GIS and its processes.