

Fundamentos de la Informática I 2022

Viernes 19/08/2022

PARAGUAYO
ALEMANA

Using MIS to Improve Business Processes



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DE CIENCIAS APLICADAS

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CHAPTER TWO OVERVIEW

- **SECTION 2.1 – Decision Support Systems**
 - Making Organizational Business Decisions
 - Measuring Organizational Business Decisions
 - Using MIS to Make Business Decisions
 - Using AI to Make Business Decisions

- **SECTION 2.2 – Business Processes**
 - Managing Business Processes
 - **Using MIS to Improve Business Processes**

LEARNING OUTCOMES

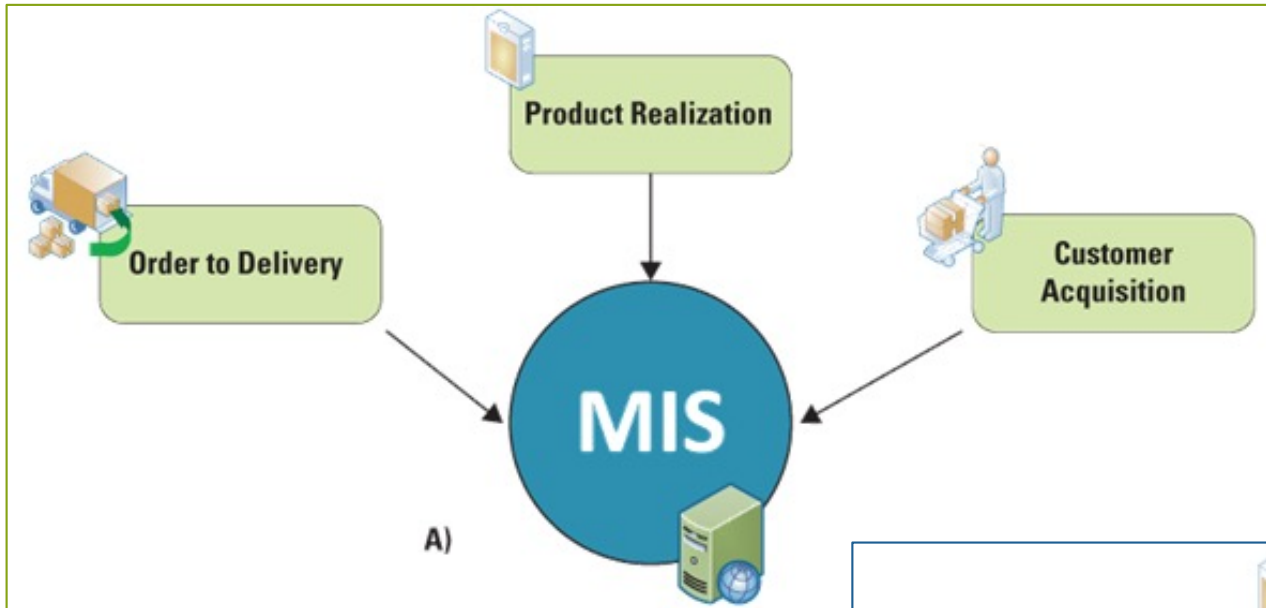
5. Explain the value of business processes for a company and differentiate between customer-facing and business-facing processes
6. Demonstrate the value of business process modeling and compare As-Is and To-Be models
7. Differentiate among automation, streamlining, and reengineering

USING MIS TO IMPROVE BUSINESS PROCESSES

Three conditions indicate the time is right to initiate a business process change:

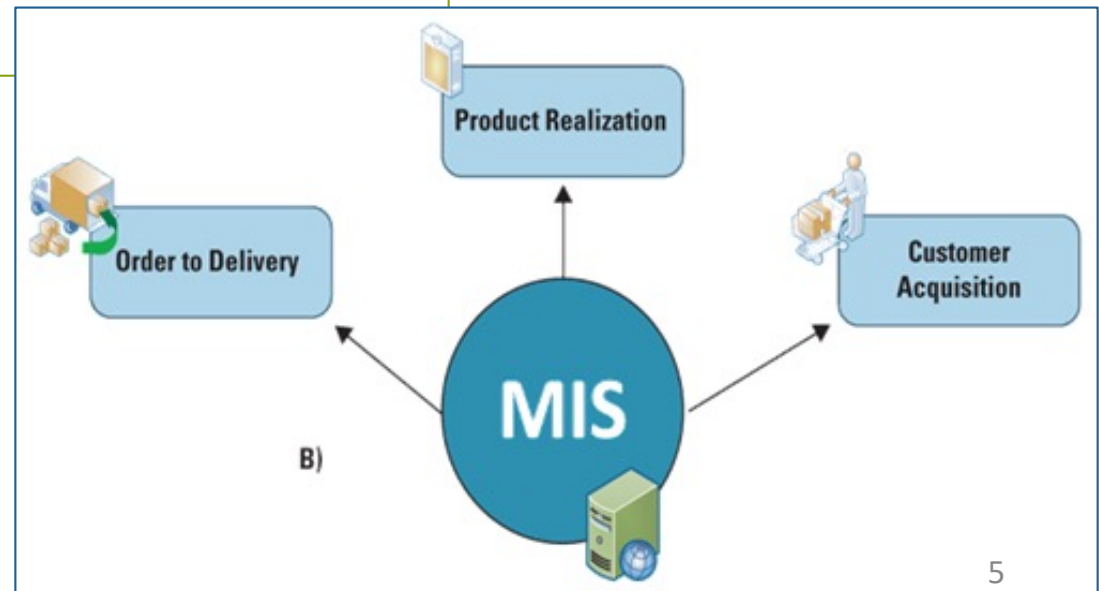
- ❖ There has been a pronounced shift in the market the process was designed to serve.
- ❖ The company is markedly below industry benchmarks on its core processes.
- ❖ To regain competitive advantage, the company must leapfrog competition on key dimensions.

USING MIS TO IMPROVE BUSINESS PROCESSES

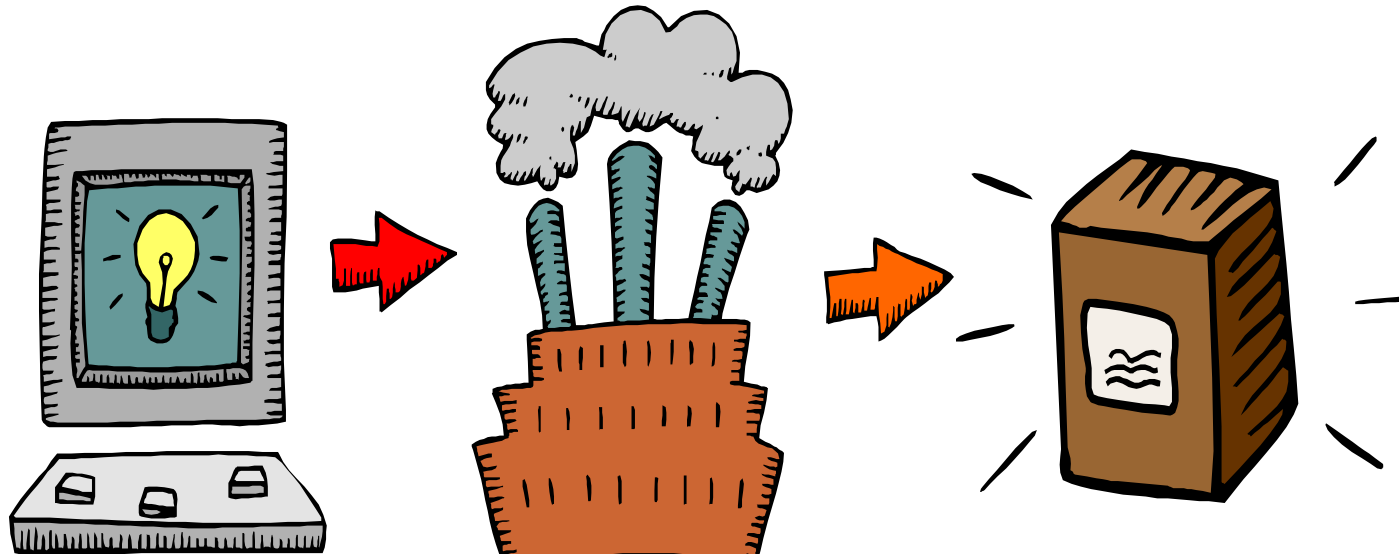


business
processes
MUST drive MIS
choices

MIS choices
tend to drive
business
processes



USING MIS TO IMPROVE BUSINESS PROCESSES

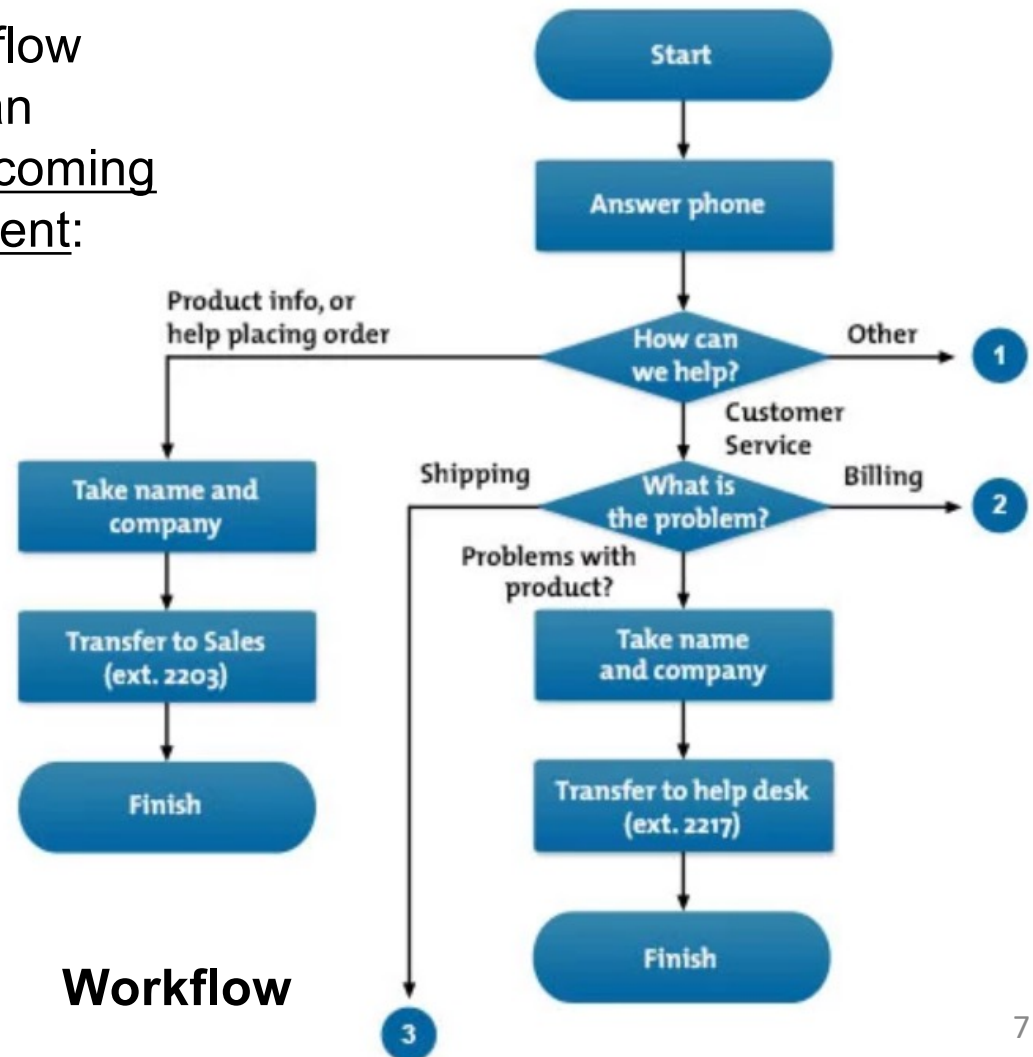


Workflow – Includes the tasks, activities, and responsibilities required to execute each step in a business process

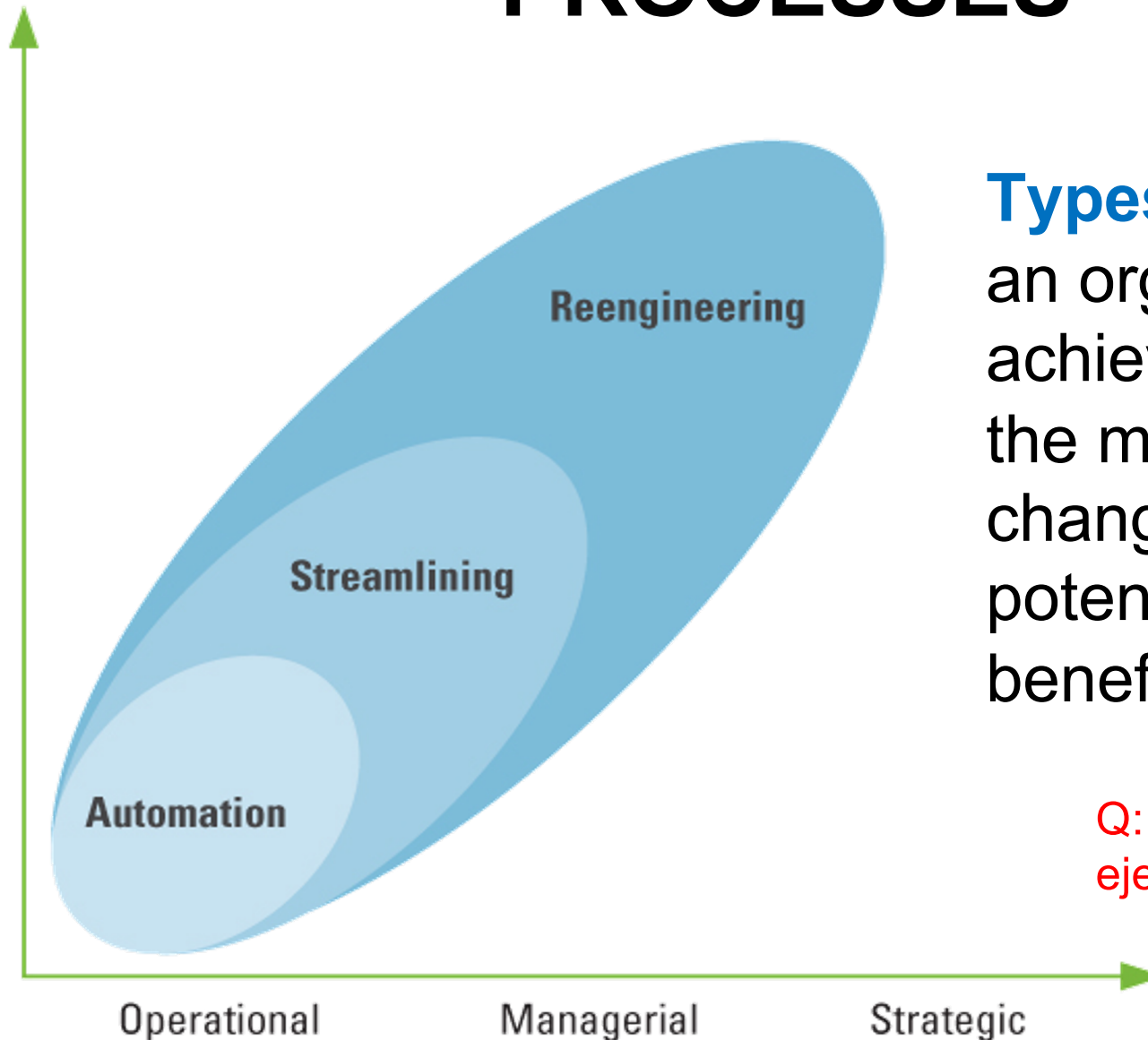
Q: ¿Por qué evaluar los flujos de trabajo puede ayudar a una organización a ganar eficiencia y efectividad?

USING MIS TO IMPROVE BUSINESS PROCESSES

The image below shows part of a flow chart for how the receptionists in an example company should route incoming phone calls to the correct department:



USING MIS TO IMPROVE BUSINESS PROCESSES

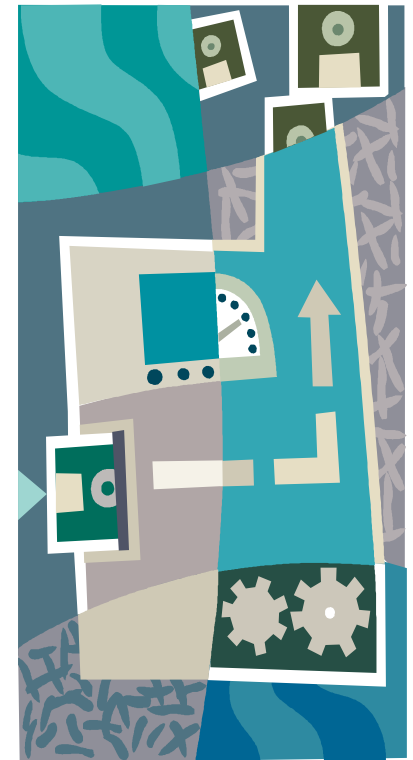


Types of change
an organization can achieve, along with the magnitudes of change and the potential business benefit

Q: ¿Puedes dar un ejemplo de cada tipo?

OPERATIONAL BUSINESS PROCESSES AUTOMATION

- ❖ **Operational business processes** - Static, routine, daily business processes such as stocking inventory, checking out customers, or daily opening and closing processes
- ❖ **Operationalized analytics** - Makes analytics part of a business process



Asegurarse de que la empresa recopile datos -> monitorear y medir automáticamente



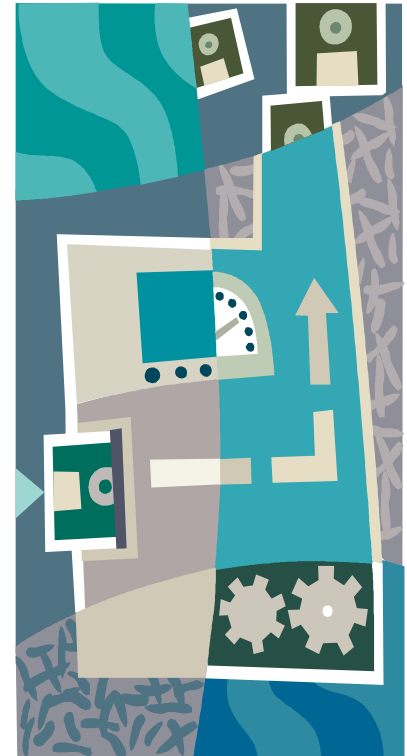
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OPERATIONAL BUSINESS PROCESSES AUTOMATION

Customers are demanding better products and services

Business process improvement –
Attempts to understand and measure the current process and make performance improvements accordingly



Los primeros en adoptar MIS reconocieron que podían **mejorar su cadena de valor** a través de la automatización, lo que reduce los costos y aumenta la velocidad de ejecución de las actividades.

Process Improvement Model

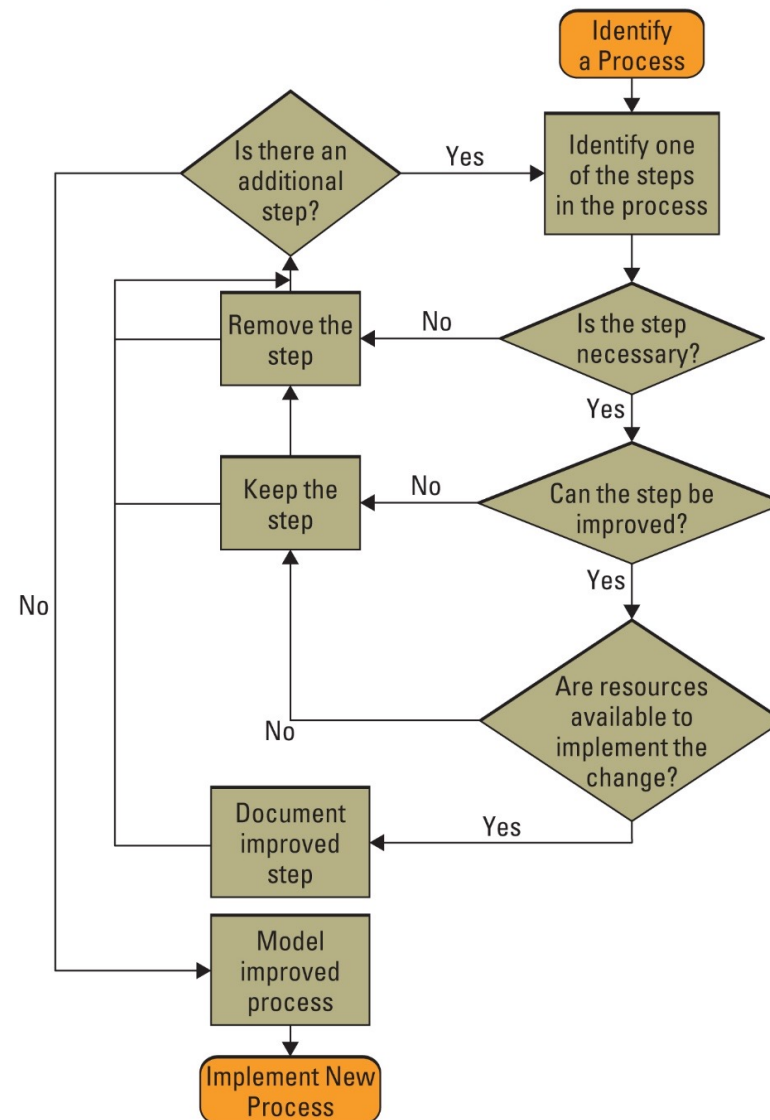


FIGURE 2.30
 Business Process
 Improvement Model

La figura 2.30 muestra un modelo típico de mejora de procesos comerciales¹¹



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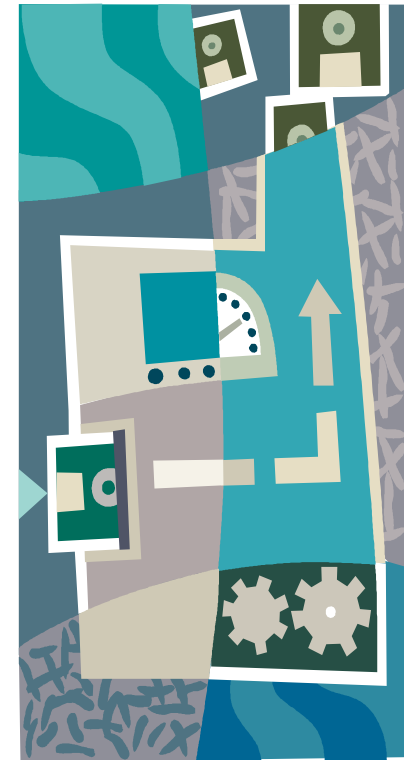
OPERATIONAL BUSINESS PROCESSES AUTOMATION

Automation – The process of computerizing manual tasks

Ejemplos recientes de mejora de procesos de negocio:

- Mejorar la eficiencia
- Mejorar la eficacia
- Agilizar procesos
- Reduce costos, etc.

¡Haga su negocio mejor, más rápido, más barato!





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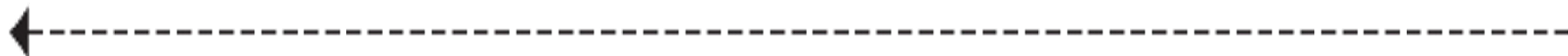
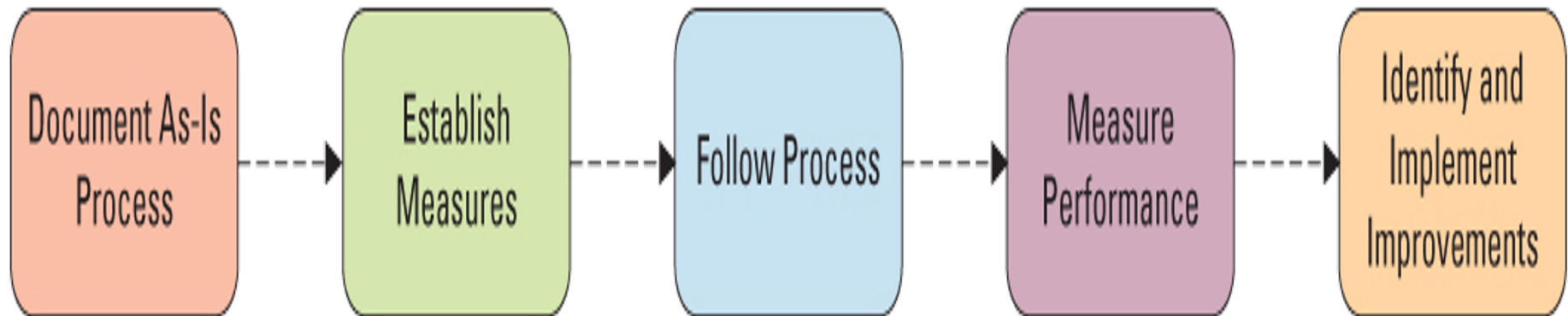
OPERATIONAL BUSINESS PROCESSES AUTOMATION

Q: ¿Puedes nombrar una organización, producto o servicio que no requiera ninguna mejora?

Q: ¿La mejora continua del proceso es un evento único?

Q: ¿Puedes automatizar algún paso en algún proceso que conozcas?

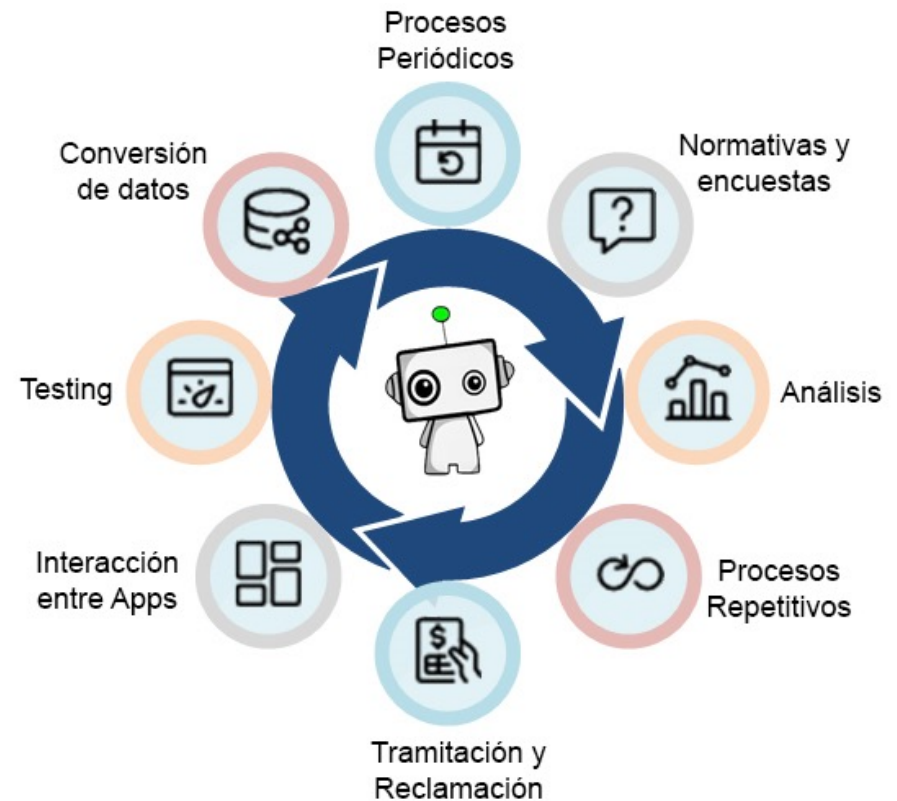
Steps in Business Process Improvement



OPERATIONAL BUSINESS PROCESSES AUTOMATION

Robotic process automation (RPA)

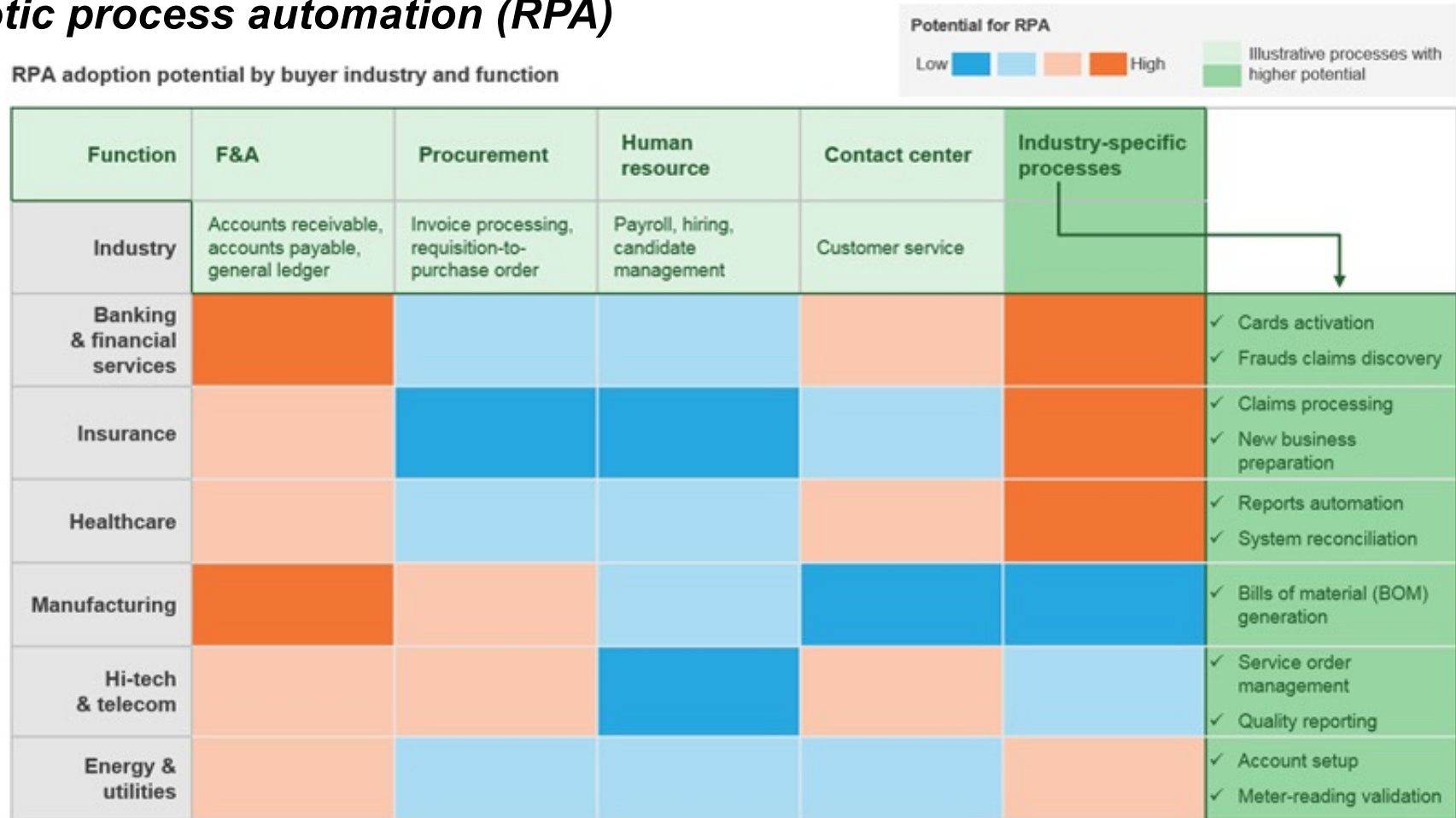
is the use of software with artificial intelligence (AI) and machine learning capabilities to handle high-volume, repeatable tasks that previously required a human to perform.



Fuente Imagen: <https://www.imagar.com/consultoria-informatica-especializada/integracion/que-es-rpa-robotic-process-automation/>

OPERATIONAL BUSINESS PROCESSES AUTOMATION

Robotic process automation (RPA)



MANAGERIAL BUSINESS PROCESSES

STREAMLINING

Streamlining* – Improves business process efficiencies by simplifying or eliminating unnecessary steps



- ☐ **Bottleneck** – Occur when resources reach full capacity and cannot handle any additional demands
- ☐ **Redundancy** – Occurs when a task or activity is unnecessarily repeated

* Se suele traducir como “racionalizar” o “agilizar”

MANAGERIAL BUSINESS PROCESSES

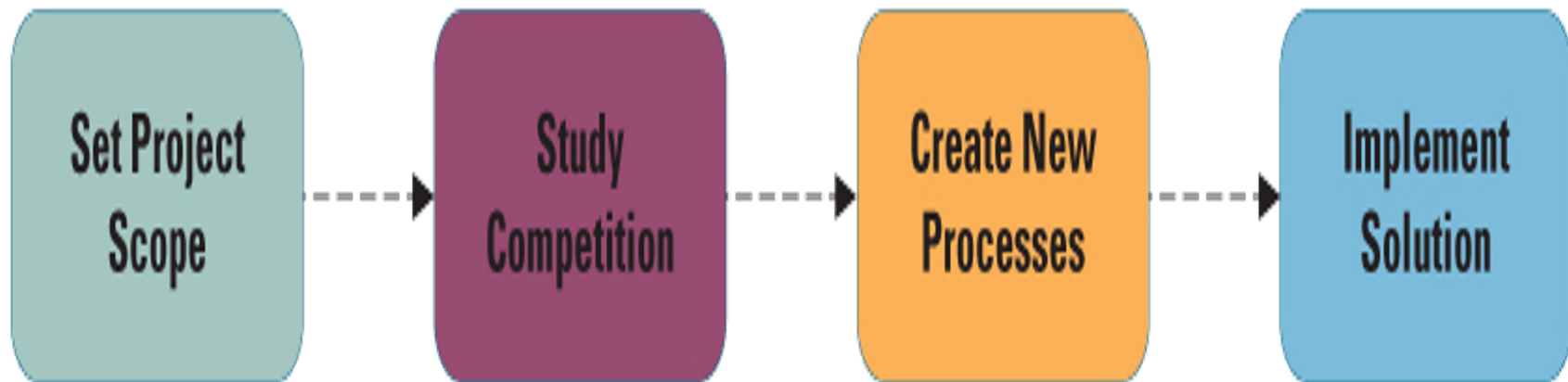
STREAMLINING

Improving Your Team's Processes

- ❖ Step 1: Map the Process
- ❖ Step 2: Analyze the Process
 - Where do team members or customers get frustrated?
 - Which of these steps creates a **bottleneck**?
 - Where do **costs** go up and/or quality go down?
 - Which of these steps requires the most **time**, or causes the most **delays**?
- ❖ Step 3: Redesign the Process
- ❖ Step 4: Acquire Resources
- ❖ Step 5: Implement and Communicate Change
- ❖ Step 6: Review the Process

Keep in mind that you'll need to improve most processes at some point.

STRATEGIC BUSINESS PROCESSES REENGINEERING



Business process reengineering (BPR) -
Analysis and redesign of workflow within and
between enterprises

STRATEGIC BUSINESS PROCESSES REENGINEERING

1990 - Michael Hammer y James Champy
“Reengineering the Corporation”

RULES

1. Organize around outcomes not tasks.
2. Identify all the processes in an organization and prioritize them in order of redesign urgency.
3. Integrate information processing work into the real work that produces the information.
4. Treat geographically dispersed resources as though they were centralized.
5. Link parallel activities in the workflow instead of just integrating their results.
6. Put the decision point where the work is performed, and build control into the process.
7. Capture information once and at the source.

STRATEGIC BUSINESS PROCESSES REENGINEERING



- A company can improve the way it travels the road by moving from foot to horse and then horse to car
- BPR looks at taking a different path, such as an airplane which ignore the road completely

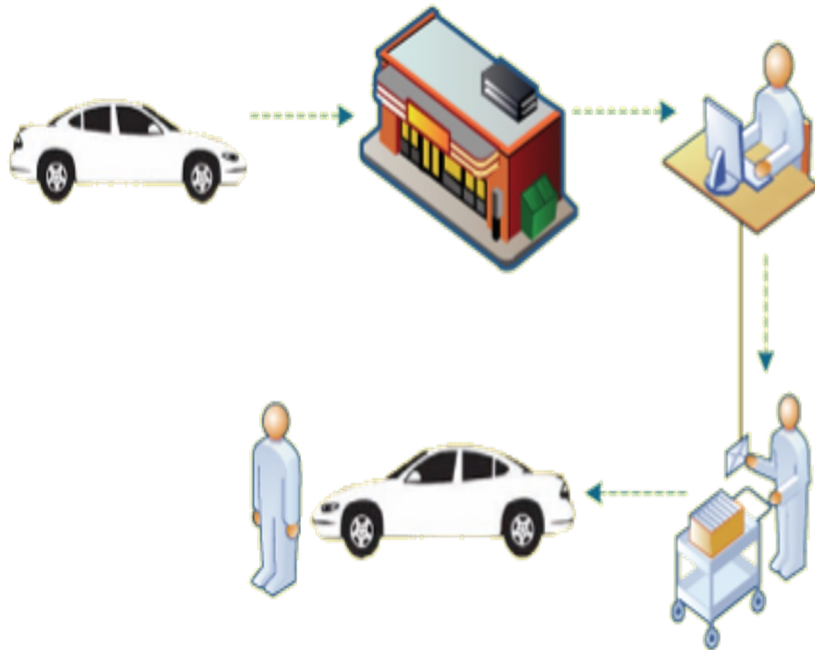
Algunas de las formas clave en las que la reingeniería de procesos de negocio se diferencia de la mejora de negocio.

	Mejora de negocio	Reingeniería de procesos de negocio
Nivel de cambio	Incremental	Radical
Cambio de procesos	Nueva versión mejorada de procesos	Proceso completamente nuevo
Punto de partida	Procesos existentes	Comienzo de nuevo
Frecuencia del cambio	Continuo o de una sola vez	Cambio periódico de una vez
Tiempo requerido	Corto	Largo
Visión típica	Estrecha, dentro de las funciones	Amplia, funcional cruzada
Horizonte	Pasado y presente	Futuro
Participación	De abajo hacia arriba	De arriba hacia abajo
Vía de ejecución	Cultural	Cultural, estructural
Habilitador primario	Control estadístico	Tecnología de información
Riesgo	Moderado	Alto

Fuente: Adaptado de Howard Smith y Peter Fingar, *Business Process Management: The Third Wave*. Tampa, FL: Meghan-Kiffer Press, 2003, p. 118.

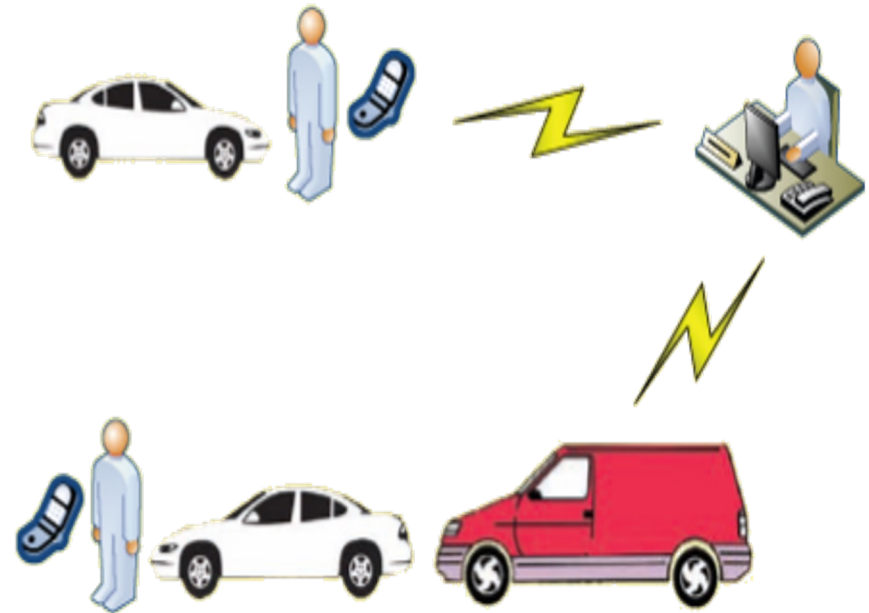
STRATEGIC BUSINESS PROCESSES REENGINEERING

Company A: Claims Resolution Process



Resolution Cycle Time: 3–8 Weeks

Progressive Insurance: Claims Resolution Process



Resolution Cycle Time: 30 mins – 3 hours

Progressive Insurance Mobile Claims Process²²



USING MIS TO IMPROVE BUSINESS PROCESSES



¿PREGUNTAS?



¿Qué aprendimos hoy?

Material Adicional

WORKFLOW/WEB-TO-PRINT

January 1, 2016

Streamline Your Graphic Production Workflow

Being overwhelmed by time-killing tasks is hurting both employee morale and the profits of your operation. Fortunately, there is a better way: utilizing automation to streamline your workflow.



By **Mike Ruff**

<https://www.inplantimpressions.com/article/streamline-your-graphic-production-workflow/all/>

9 Real-World Examples of Automation in the Workplace

by Brittany Ryan

<https://www.askspoke.com/blog/support/examples-automation-workplace/>

Improving Business Processes Streamlining Tasks to Improve Efficiency

You probably use dozens of business processes every day.



<https://www.mindtools.com/pages/article/improving-business-processes.htm>