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# **Title:** Proposal to imporve productivity for companies providing comprehensive automation and control services

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#### Introduction

Output generally refers to output, that is, the total work capacity delivered by a person or team in a given context.

Productivity, on the other hand, is about how the process and people arrive at that delivery. It is where you can see strategies, structures and tools that enhance the final result through the action of your agents.

The goal of productivity is to maximize output and minimize input.

**Productivity = Efficiency + Effectiveness** 

## Methodology

Pareto's Law applied to productivity

80% of the results come from 20% of the effort. There are 20% of your activities that produce 80% of your results and vice versa.

In this case, improve your productivity by applying the Pareto principle: Dedicate the best hours to those activities that produce 80% of your results. Personally, I spend the morning working with my clients to get the best result. We can dedicate the afternoons to personal training on those days when we are not going to a talk or event to generate networking.

#### Resultados

Results

After collecting information from the companies' senior management about the services provided by the companies in the last 5 months, an analysis was carried out with the support of the Pareto diagram to measure and analyze the productivity of the services provided. The analysis and graphing thereof are presented below.

SERVICIOS CECSA	FRECUENCIA	PORCENTAJE	ACUMULADO	% ACUMULADO
MOTOCOMPRESORES	18	31%	18	31%
TELEMETRIA	10	17%	28	48%
ENERGIA	10	17%	38	66%
AUTOMATIZACIÓN Y CONTROL	7	12%	45	78%
TELECOMUNICACIONES	5	9%	50	86%
INSTALACIONES MOVILES	3	5%	53	91%
CONSULTORIA	2	3%	55	95%
OBRA MECANICA	2	3%	57	98%
MONITOREO	1	2%	58	100%
	58	100%		

Figura 1: information analysis; author's perception

#### Results



After performing the Pareto analysis, it can be noted that the services with the highest productivity index are the Motor Compressor Service and the Telemetry service, which are positioned with 20% of the productivity of the entire company, being the fundamental pillar for the company., with the highest number of services provided in the last 5 months, the rest of the remaining services are presented with 80%, thus becoming the services with the least productivity and the least requirements rates.

## Proposal

The model presented for improving the productivity of companies that is proposed in this research consists of a series of actions that will allow the organization to function better, all with a systematic approach to achieve working in harmony and efficiently, all following a same end.



#### Conclusions

Productivity is, above all, an attitude of the mind. She seeks to continually improve everything that exists. It is based on the conviction that one can do things better today than yesterday and better tomorrow than today. Furthermore, it requires endless efforts to adapt economic activities to changing conditions by applying new theories and methods. Measuring the practices we do today will help improve the practices of tomorrow, that is the key, we need to encourage in people that desire to improve the things they do day by day, that is personal competitiveness. If a person is competitive, the company will benefit from that ability in its staff.

Intellectual capital is the basis of every organization, as are clients, the goal is to make profits, the balance between both parties, money and clients, will determine the future direction of the company. You cannot survive only by focusing on customers and leaving aside the economic part because the company goes bankrupt, but you cannot only focus on money because in this way the company does not generate trust and customer satisfaction.

#### Referencias

Berawi, MA, Kim, AA, Naomi, F., Basten, V., Miraj, P., Medal, LA y Sari, M. (2023). Diseño de un espacio de trabajo integrado inteligente para mejorar la eficiencia energética de los edificios: un estudio de caso de Indonesia. Revista Internacional de Gestión de la Construcción, 23 (3), 410-422.

Bharadiya, JP (2023). Aprendizaje automático e IA en inteligencia empresarial: tendencias y oportunidades. Revista Internacional de Computación (IJC), 48 (1), 123-134.

Haleem, A., Javaid, M., Singh, RP, Suman, R. y Khan, S. (2023). Gestión 4.0: Concepto, aplicaciones y avances. Operaciones y Computadoras Sostenibles, 4, 10-21.

Perano, M., Cammarano, A., Varriale, V., Del Regno, C., Michelino, F. y Caputo, M. (2023). Adoptar la digitalización y la desfisicalización de la cadena de suministro para mejorar el rendimiento de la cadena de suministro: un marco conceptual. Revista internacional de distribución física y gestión logística.

Tong, Q., Ming, X. y Zhang, X. (2023). Construcción de Fábrica Digital Sostenible para Almacén Automatizado Basado en Integración de ERP y WMS. Sostenibilidad, 15 (2), 1022.



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