

VIRTUAL

Mexico's Manufacturing Supply Chain Summit

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Industry 4.0: Is Mexico Up to the Challenge?

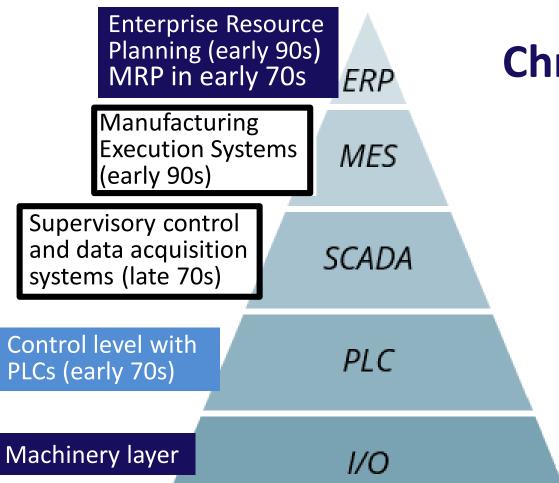
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MexicoNow
Manufacturing Supply Chain Summit

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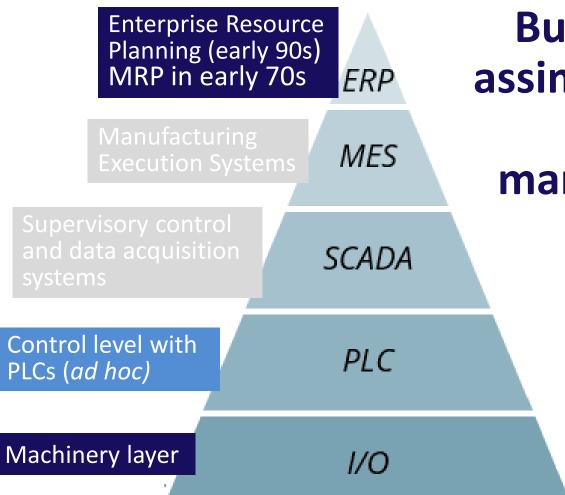
5-layer architecture



Chronological development...



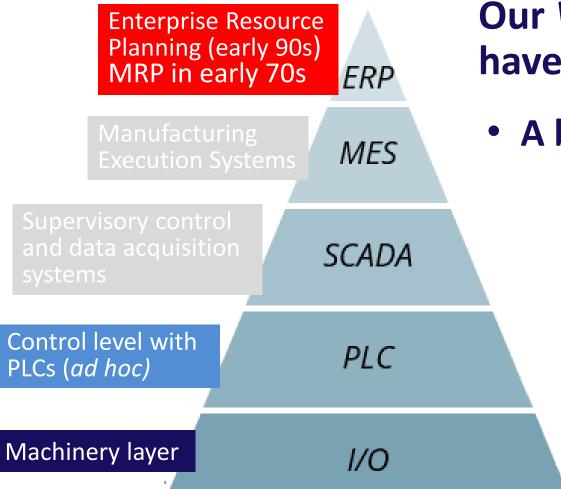
5-layer architecture



But the implementation and assimilation process followed by many North American manufacturing companies has been...



5-layer architecture



Our *VUCA* world and the ERP "logic" have created:

A binomial distribution in inventory.



5-layer architecture

Enterprise Resource Planning (early 90s) MRP in early 70s ERP MES SCADA Control level with PLC PLCs (ad hoc) Machinery layer 1/0

Our *VUCA* world and the ERP "logic" have created:

- A binomial distribution in inventory.
- Widespread use of Excel spreadsheets to "supplement" the global business system (that shouldn't happen with an ERP!).



5-layer architecture

Enterprise Resource Planning (early 90s) MRP in early 70s

ERP

Manufacturing Execution System

MES

Supervisory control and data acquisition systems

SCADA

Control level with PLCs (ad hoc)

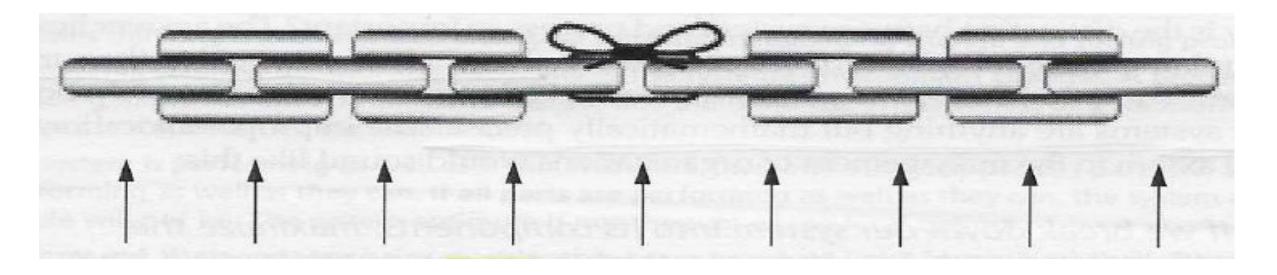
PLC

Machinery layer

1/0







Should we try to improve <u>ALL</u> the operations?

In this context, does it make sense to seek a high Overall Equipment Effectiveness (OEE) of the whole process?





"The **first rule** of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency.

The **second** is that automation applied to **an inefficient operation** will magnify the inefficiency."



Clients















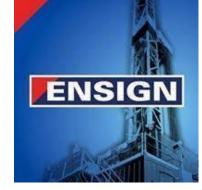


















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Thank you!

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