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The Business Case for Automation: The Practical Considerations

Presented by:

OPEX Corporation

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Presenter



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Why invest in automation?

- **Reduce dependence on labor**
 - Wage rates are increasing
 - Competition for labor is fierce
 - Hidden costs of labor – retention, training, absence, FMLA, worker’s comp risk
- **Better utilize space**
 - Optimize clear height
 - More inventory in “pick” (reduce replenishment delays)
 - Extend life of facilities
- **Increase throughput**

Benefit	Semi-Automated	Automated
DC size (sq. ft.)	400,000	200,000
Throughput Capacity	20,000 orders per day	35,000 orders per day
Labor Cost per Unit shipped	\$0.40 per unit	\$0.15
Order processing speed	4 hours	30 minutes
Headcount	500+	150+
Shifts	2 shifts – 10 hr (7 days)	1 day – 10 hr (5 days) 1 night – replen only

What is a business case?

According to Wikipedia...

“A **business case** captures the reasoning for initiating a project or task.”

“A compelling business case adequately captures both the **quantifiable** and **non-quantifiable** characteristics of a proposed project.”

- Quantifiable = ROI
- Non-quantifiable = Practical Considerations

Let's get practical!

- May be of greater significance than ROI
- Often the tie-breaker
- Provide a holistic view of all benefits
- May identify a showstopper

What factors should I consider?

- Order profiles and product characteristics
- Service level
- Building specifications
- Technology
- Labor
- Human factor

What order and product types?

- Order size
 - Lines and units per order
- SKU count
- Product size and weight
- Fragility

Let's compare service levels

- Processing speed (up to 10X)
- Accuracy (1-2% improvement)
- Quality (less touches = less damage potential)

What are the building spec's?

- Space available & integration with other processes
- Clear height
- Floor flatness and variation
- Electrical requirements
- Seismic considerations
- Fire protection



How important are systems?

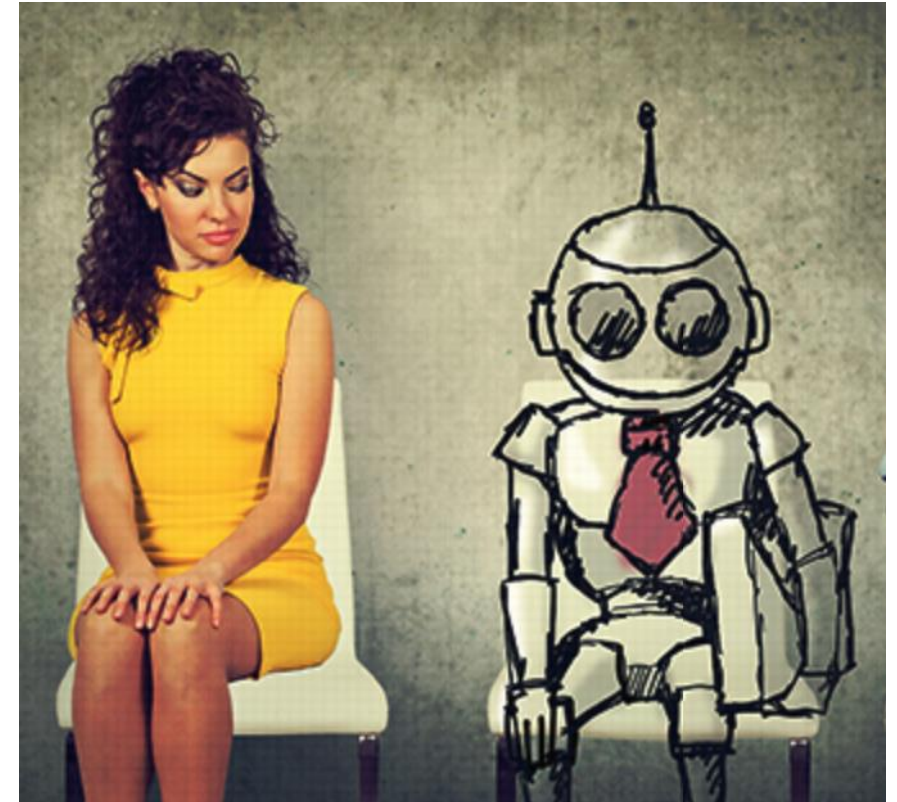
- Sophistication of current systems
- Integration with other systems
 - Host
 - WCS/WES
 - WMS

What are the hidden labor costs?

- Workers comp and FMLA
- Reliability
 - Absenteeism
 - Tardiness
- Retention and morale
- Training

Let's not forget the human relations

- Technology can be threatening
- Interaction with people
 - Process
 - Safety
- May need to be “tech savvy”



Taking it home...

- Investing in automation has a **VERY** strong business case
- More to a business case than ROI
- Practical considerations may be a show stopper or tie breaker
- Consider the impact of:
 - Order and products
 - Building specifications
 - Technology
 - Labor challenges, and
 - The humans that remain

For more information



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