

- /Administration
- /Human Resources
- /Legal
- /Accounting
- /Finance
- /Marketing
- /Publicity
- /Promotion
- /Research
- /Business
- /Development
- /Engineering
- /Manufacturing
- /Planning

Vincula

GROUP

**Coronavirus Restart:
Process Redesign in a
Digital World**

- /Administration
- /Human Resources
- /Legal
- /Accounting
- /Finance
- /Marketing

Vincula Restart Webinar Series

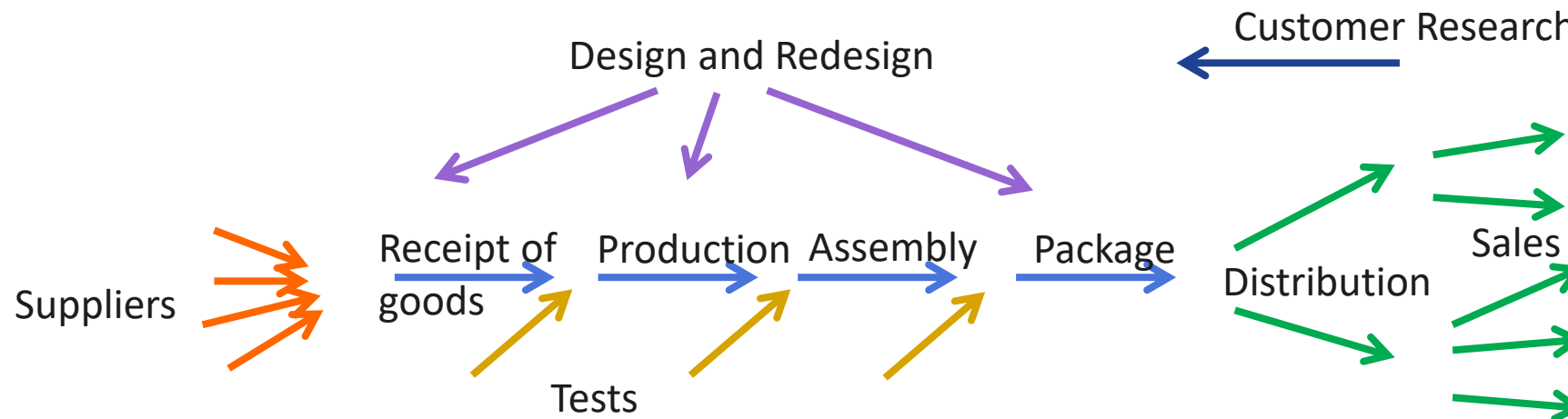
<p>Webinar 1: <i>Crisis Assessment and Strategy Development</i></p>	<p>May 27</p>	<p>Ray Sheen</p>
<p>Webinar 2: <i>Process Redesign in a Digital World</i></p>	<p>June 3</p>	<p>Ray Sheen</p>
<p>Webinar 3: <i>Supply Chain Transforms to a Supplier Network</i></p>	<p>June 10</p>	<p>Dale Scott</p>
<p>Webinar 4: <i>Transformed Digital Customer Expectations</i></p>	<p>June 17</p>	<p>Ray Sheen</p>



Ray Sheen has over 30 years of business management and project management experience. He has a BS from the US Air Force Academy and an MS in from MIT, Ray is a certified PMP and Lean Six Sigma Blackbelt. Ray is author of the book ***Building Your Business Case*** published by Harvard Business Review Press.

Business As A System of Processes

- Business are made up of multiple inter-related processes.
 - Performance of one process impacts the performance of other processes.
- Quality, cost, and operational success is based upon the interactions of the processes.
 - Inadequate or unstable processes undermine the entire system.



“Out of the Crisis,” W. Edward Deming

Portfolio of Risks

- Business management can be described as managing a portfolio of risks.
- Some risks are beyond the ability of business management to control.
 - Economic recession, warfare, pandemics
- Some risks can be influenced by business management, but not controlled.
 - Customer satisfaction, Industry pricing, Supply Chain resiliency
- Some risks can be closely controlled by business management.
 - Personnel costs, capacity, inventory levels
- Balancing the risks is at the core of business management



Goals of the Restart

- Restart strategy sets the business goals and priorities during your restart.
 - 30 day, 60 day, 90 day, 6 month
- Process performance is needed to execute strategy – but processes have changed?
 - Pre-Coronavirus process or new Coronavirus-imposed process or a combination?
 - Changed roles, responsibilities and process activities
- Phygital process definition and management is needed.
 - Speed of execution
 - Flexible in a changing environment
 - Scalable – with burst capability



Phygital Processes

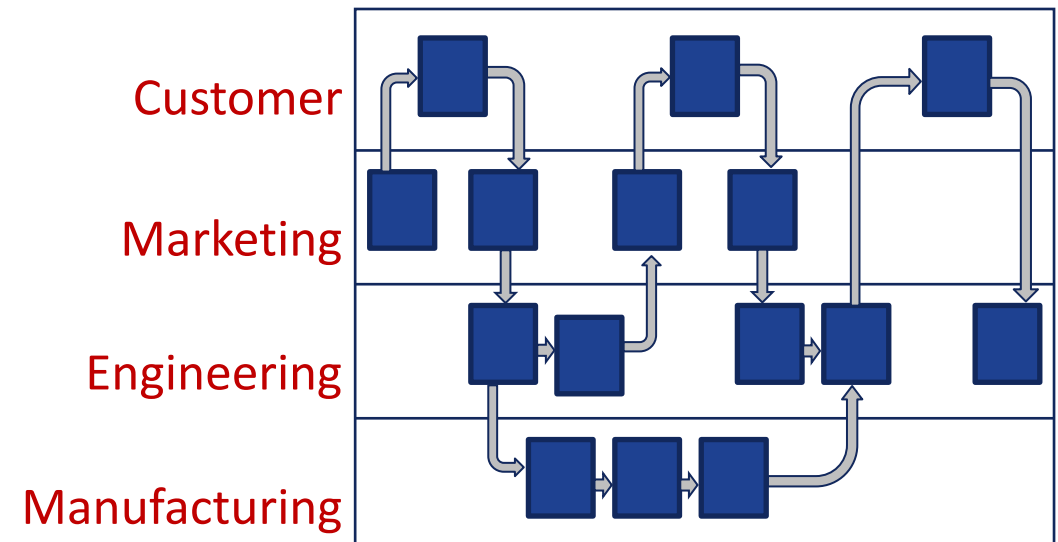
What is a Phygital Process?

- Phygital is a combination of “physical” and “digital”
 - A portion of the process is executed in the physical world
 - A portion of the process is executed in the digital world
- Four critical components that define a phygital process
 - Physical facilities, equipment, and the physical attributes of the items in the process.
 - Digital communication of digital data, information, and control
 - Stakeholders and resources who perform process activities
 - Timing or sequence of activities in the process.
- Interactions regularly occur between all four and within each component area
- Managing all four as a system improves process performance leading to higher margins
 - Managing each area separately leads to sub-optimization
 - Ignoring one of the three leads to errors and interrupted process flow

Phy sic al
Di git al

Physical, Stakeholders, Sequence

- Traditional process maps and Lean Value Stream maps normally capture this flow.
- Physical process items move from step to step and between stakeholders.
 - Process flow may include branches and loops.
- Typical problems that occur with this flow:
 - Tangled flow – delays and rework
 - Poor process step definition – errors and scrap
 - Communication breakdown between stakeholders – delays and rework
 - Non-value-added activities – wasted effort
- During the coronavirus shutdown, many of these process flows changed because the location of stakeholders changed.



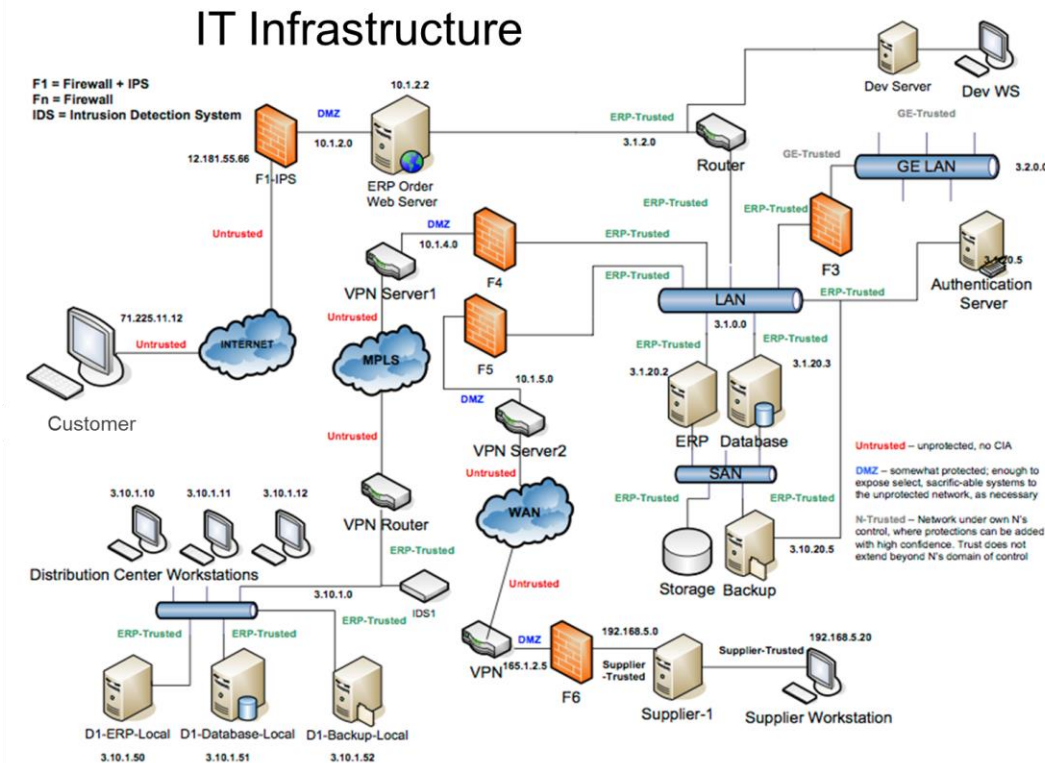
Digital, Stakeholders, Timing

- This flow is often described as the process communication plan
- This documents the data and information that originates in the process or is affected by the process
 - Often describes the approvals or decisions that are based upon the data and information.
- Typical problems that occur with this flow:
 - Data and information is not synced with physical flow – errors and delays
 - Stakeholders are unaware of data and information – or unable to easily access it – delays and errors
 - Stakeholders are not held accountable for delays or errors they create in the flow – repeated errors
- During the coronavirus shutdown many of these problems came to the forefront

Information	Sender	Receiver	Timing	Method
System status	PS335	AS400	Constant	Network
Work order status	ERP	Master schedule	daily	Network
Inspection status	QC	Master schedule	daily	Manual entry
Quality Disposition	MRB	Master Schedule	weekly	Manual entry
Shipping status	Dist. Center	Master Schedule, Finance	daily	LG10 System

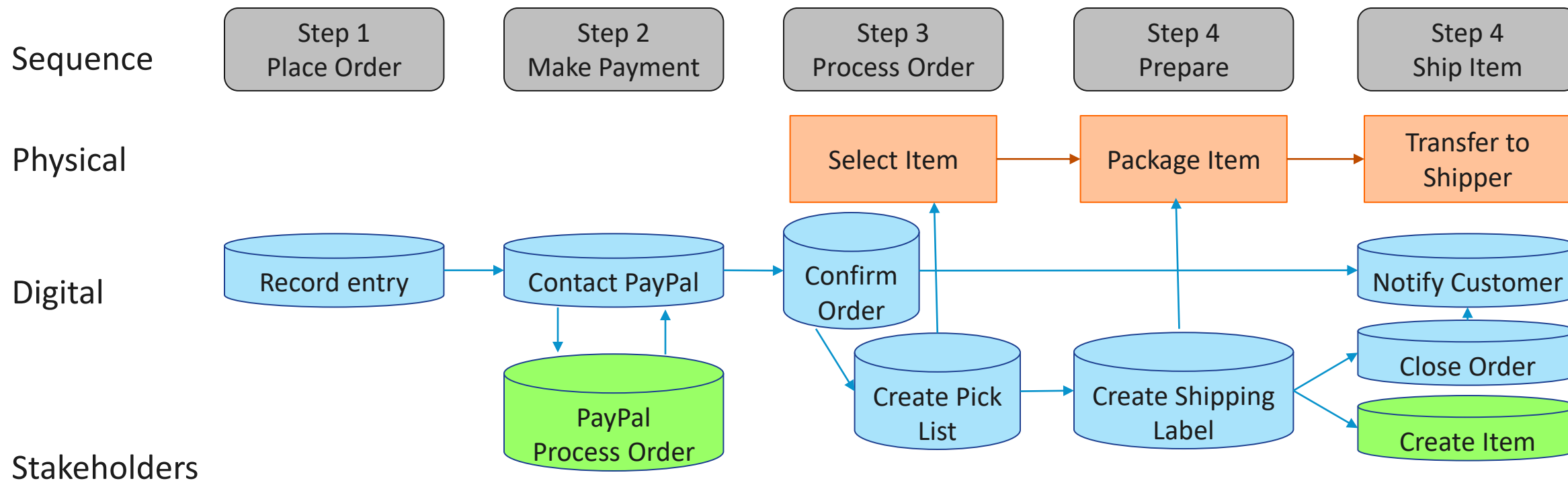
Physical and Digital

- This is the flow of process data and information from the process steps to the applications.
- This is ontology is often referred to as a wireframe or system architecture diagram.
- Often described with IT components and systems
- Normally includes a data dictionary
- The problems that occur with this flow are:
 - The sequence of steps is often missing - delays
 - Some data is captured, and some is not - errors
 - Data and information is often collected on different systems that are not integrated – confusion
 - There are often major gaps in the physical flow where no data or information is collected - errors
- During the coronavirus shutdown, many of these problems caused confusion and unsustainable workarounds were created.



Physical – Digital – Stakeholders – Timing

- A phygital process analysis will consider all four components



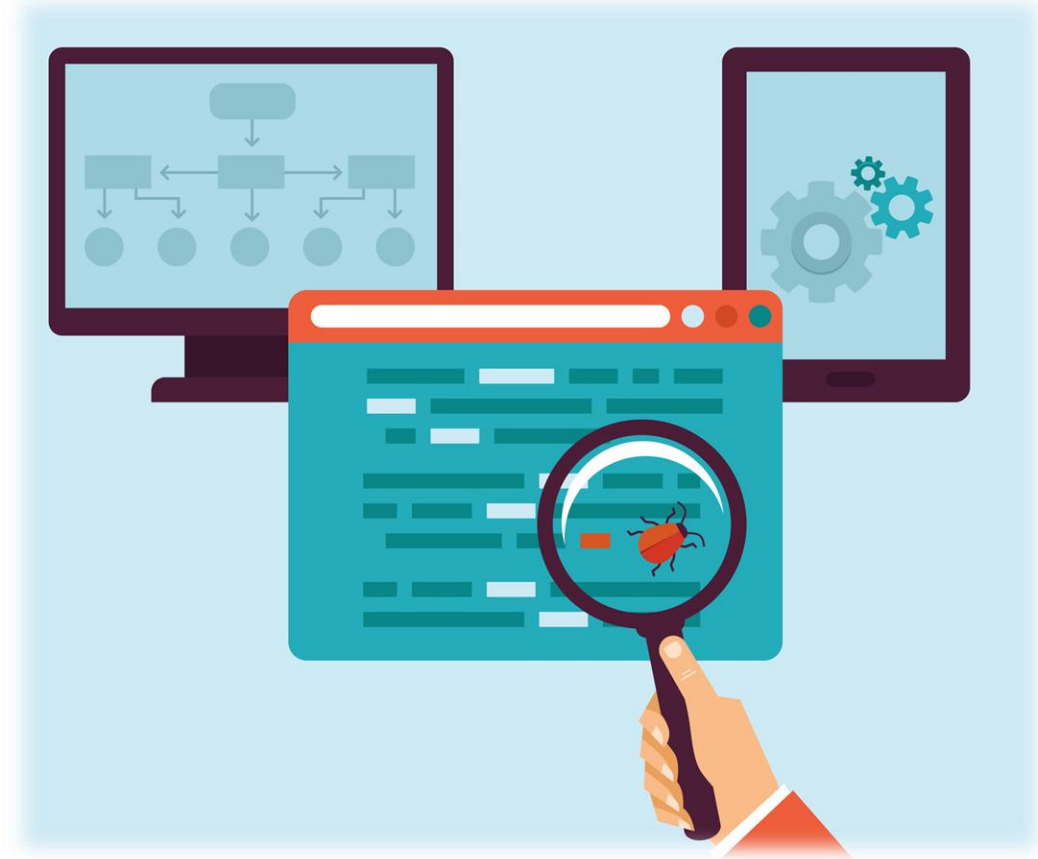
Stakeholders

Customer	Lead	Lead	Monitor		Monitor
Warehouse			Lead	Lead	Lead
Shipper					Collaborate

Phygital Process Management

Phygital Process Metrics and Analytics

- “You can’t manage what you can’t measure.” Peter Drucker
 - Portfolio of risks
- Phygital processes can (and often do) generate process performance data streams.
 - Time-stamped process transactions
- Process dashboards and analytics must be created for the entire process
 - Physical and digital
 - Targets for performance
- Focus for process management is normally on decision points and handoffs
 - Delays
 - Errors



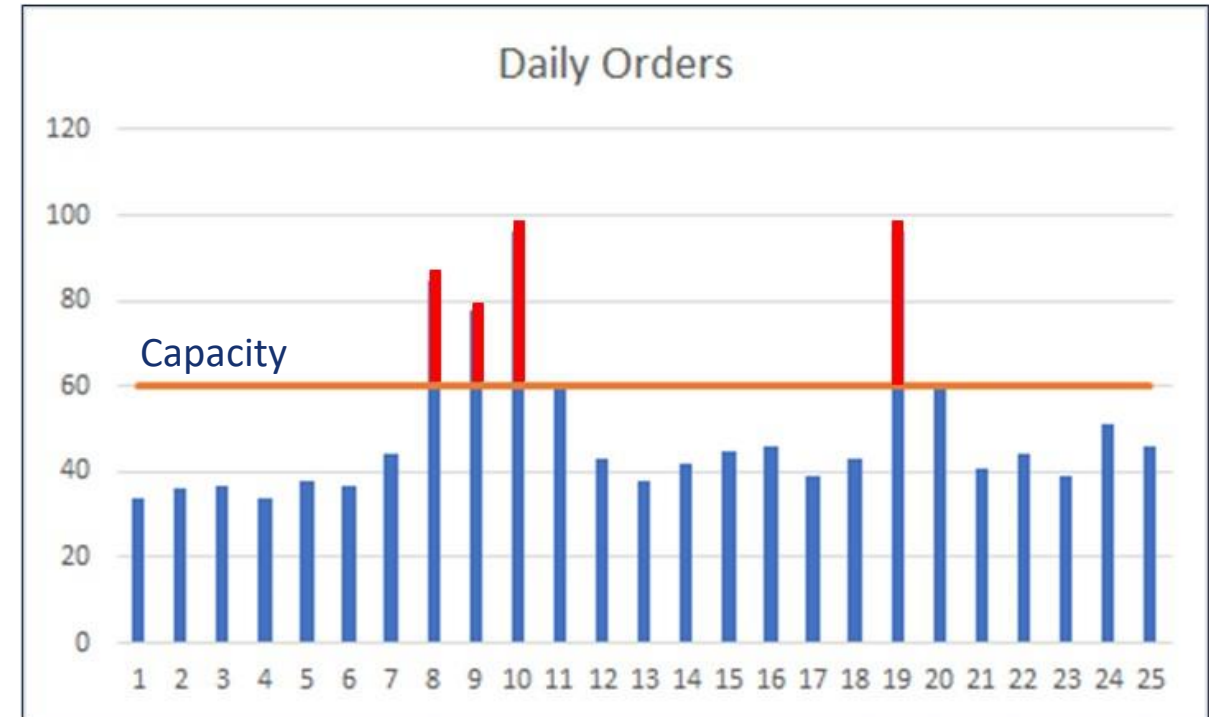
Phygital Process Waste

- Wasted time
 - Physical processing delays for non-value-added time
 - Digital processing delays for batching or awaiting approvals
 - Delays at handoffs – especially due to virtual operations
- Wasted effort
 - Processing non-value-added steps
 - Processing wrong priorities due to push scheduling
 - Unnecessary meetings or approvals
 - Undo – redo loops to correct errors
- Missed opportunity
 - Missed customer calls or requests
 - Delayed response to customers
 - Incorrect response to customers



Phygital Process Resource Challenges

- Physical resource process capability
 - Capacity to respond to surges and spikes
 - Process capability (Sigma level)
- Digital resource connectivity
 - Sensors/data streams – capture and process
 - Edge computing/cloud computing
 - Remote access/on-site access
 - Digital system compatibility
- Stakeholder availability
 - Virtual / on-site
 - Decision making authority and backups
- Security
 - Network protection
 - Data protection



Phygital Process Improvement

- Root cause of delay: physical or digital or both?
 - Eliminate unneeded steps
 - Eliminate tangled flow
 - Ensure physical and digital stay in sync
- Do virtual stakeholders delay approvals or flow?
 - Ensure virtual stakeholders have access, training, and information
 - Decisions made at “best” process step for optimal performance
- Do the processes have capacity and are they scalable?
 - Ensure the physical and digital resources are capable
 - Plan for “spike” response, backups for virtual resources
- What are the common errors?
 - Conduct root cause analysis and correct



Phygital Process Redesign

1. Start with the “perfect” process result – business goal is met
2. Identify the physical elements of the process that must occur
3. Identify the digital elements of the process that must occur
4. Identify the stakeholders who must engage with the process
5. Starting with the end point, work backwards for what must happen to deliver that result
6. Determine measurements and monitoring elements
7. Ensure each step is biased for success
8. Remove barriers and delays along the path of primary flow
9. Ensure resources and contributing subprocesses have capability and capacity
10. Ensure digital and physical systems are connect with no delays



Restart Process Management

Assess Your Restart Processes

Restart Process is Working Well

- If analytics are not available, add them
- If process is not documented, document it
- Continue to manage the process

Restart Process is NOT Working Well

- Map the process and identify weaknesses
- Modify/redesign the process to improve it
- Add metrics and analytics
- Implement and train the stakeholders
- Manage the process

Restart Process does NOT Exist

- Define desired process design
- Procure/create the resources needed to perform the process
- Implement the process and train stakeholders
- Test/validate the process
- Manage the process

Contact the Vincula Group for information or assistance as your organization restarts.

www.vinculagroup.com

864-360-9415

info@vinculagroup.com

Vincula Group, LLC

P.O.Box 513

Greenville SC 29602



Questions?

Next Session: Supply Chain Transforms to a Supplier Network, June 10

Register at:

<http://vinculagroup.com/freewebinar.html>