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STANLEY INSPECTION SA

**NDT Quality Management and
Technological Advancements**

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When we first think about “Technological Advancements”- two words should come to mind:

DIGITAL EXCELLENCE!

We have two unilateral, regulated fields (NDT and Quality Management), just meet the minimum requirements and you are free to explore and enhance your systems to keep up with the everchanging world.

“Change” – that hesitant word that none of us can avoid. We have seen the ISO 9001 standard take a change on emphasising business /operational needs and moving more into the socio-economic risk approach as well as the reservation for technological improvements in our respected fields. The objective on our side as NDT providers is to now set up our systems around the factor where we attract new talent and technical advancements, that save our customer time and us – money

Our strategy for Digital excellence at Stanley Black and Decker is defined as “Leveraging The Power Of Emerging Technologies Across All Parts Of Our Businesses To Drive Sources of Advantage for Stanley Black and Decker”



Digital Excellence Transforming the Way we Live

- **E- Commerce Growth**

The “eCommerce” market number of uses is expected to amount to R26.3M by 2022

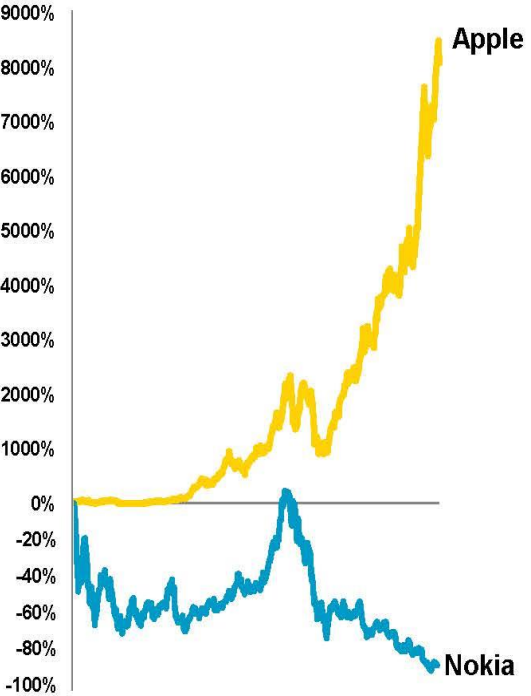
Meaning the way your customers reach you online, for services (globally) will increase.

- **4 of 5 Smartphone Connections will be in Emerging Markets by 2020**
- **50 Connected Devices Per Household by 2022**
- **Bluetooth Standard in 90% of Cars in 2017**
- **CONNECTED CONSTRUCTION MARKET – Rising from \$1B To \$7B by 2022**

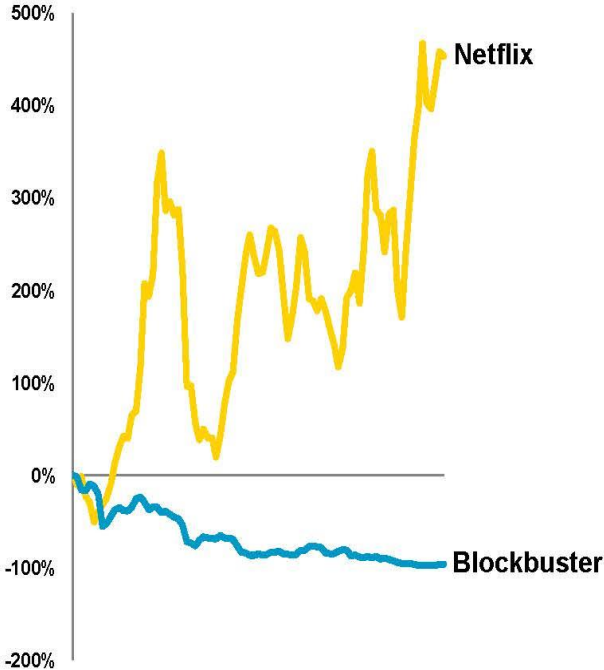
The Stakes Are High



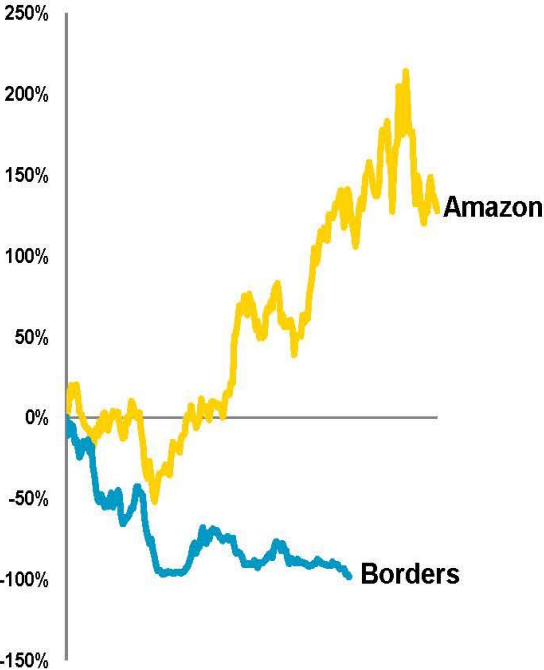
Mobile Phone



Video Entertainment



Media Retail



Graphs Depict Stock Performance

There is no doubt this is the thought process for most business models within the new millennium.



NDT Technological Advancements

NDT Technological Advancements

Many argue that Technology advancements have made Non-destructive Testing More Complex?

This is a misunderstood concept globally and far from the truth

Test identified:

- Digital Phased Array
- 3D Inspection and Measurement
- Digital Radiography
- First Article Inspection (Used more in the automotive industries)
- Wall Thickness
- Eddy Current

NDT Technological Advancements

Advantages of Digital NDT

- **Efficiency** – Image and results available on device instantaneously
- **Image quality** – opposed to sketching and image repositioning
- **Environmentally friendly**
- **Safety**
- **Discretion** - (minimum discretion and security)
- **Profitability** – Cutting inspection time increases the profitability and service quality of the NDT service provider and reduces operational losses.
- **Detection** – Sensitive panels enable increased detection
- **Simplification**: High end software enables improved detection and measurement tools the analysis process simpler and more effective.
- **Data Storage and Management**: Computerised data are stored in an organised fashion, easy for retrieval, analysis and information sharing.

QMS Standard 9001:2015 Clause 8 “Operations”, includes
(Non-destructive testing):

- Planning and Control of services
- Requirements for services (i.e. customer communication, review of services)
- Design and development of services (i.e. inputs, controls and outputs; validation)
- Control of externally provided processes (i.e. subcontracting of the “new” digital process)
- Service provision (Including Identification and traceability, digital transmission of data, post-delivery activities)
- Release of services
- Control of nonconforming outputs (of the Service)

What Clause 8 of ISO 9001 “Operations” is avoiding



How the customer explained it



How the Project Leader understood it



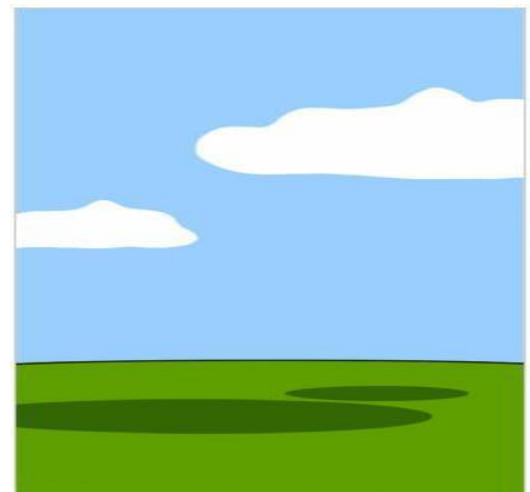
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



How the project was documented.

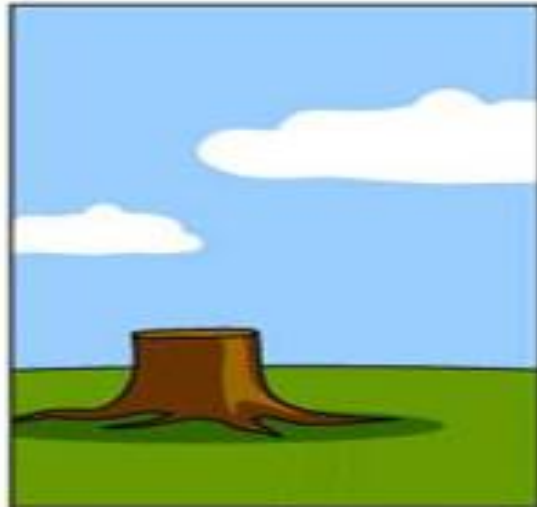
What Clause 8 of 9001 “Operations” is avoiding



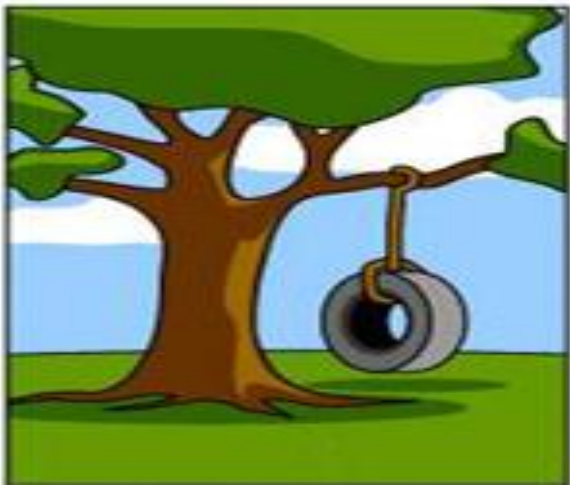
What operations installed



How the customer was billed



How it was supported



What the customer really needed



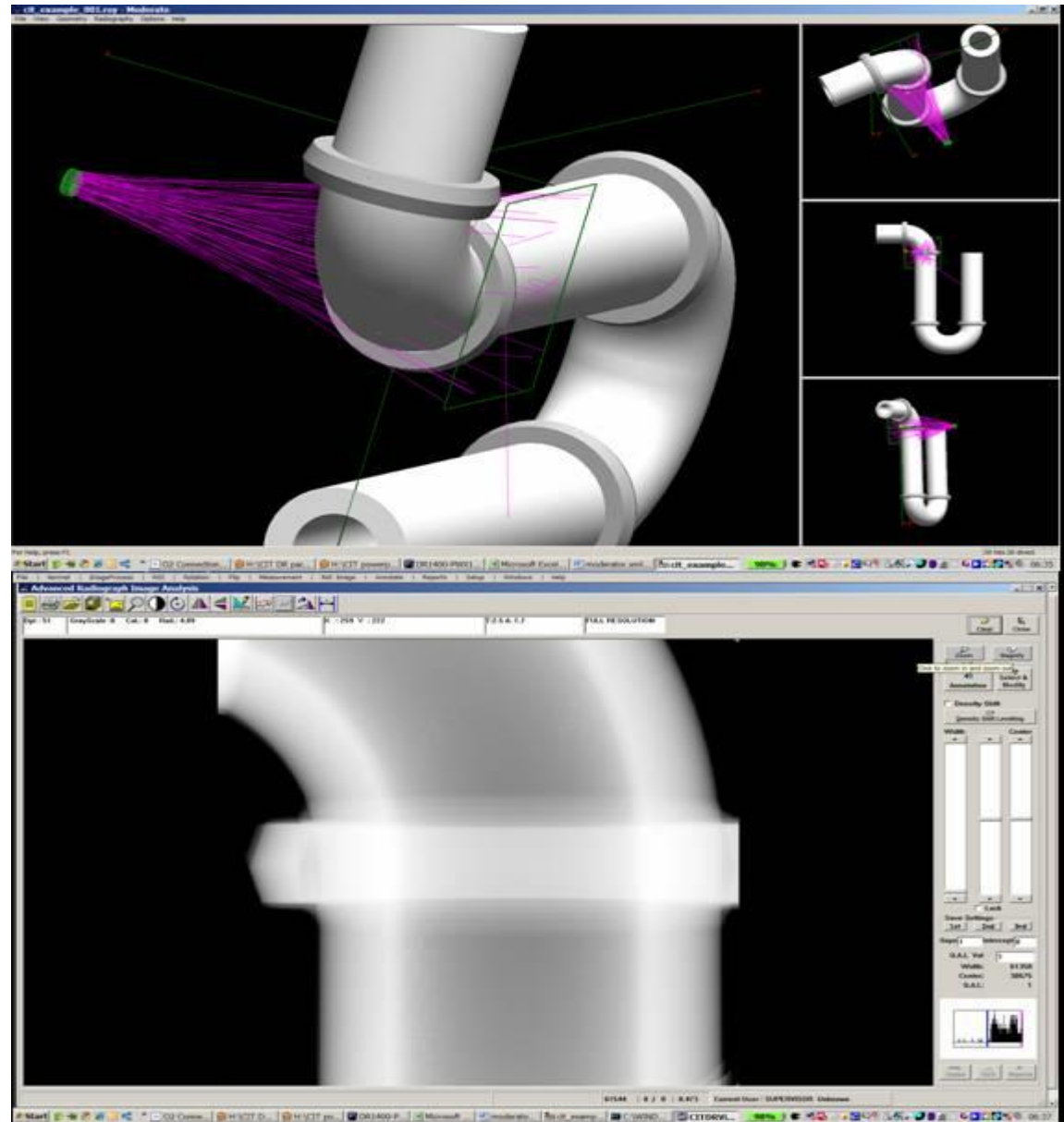
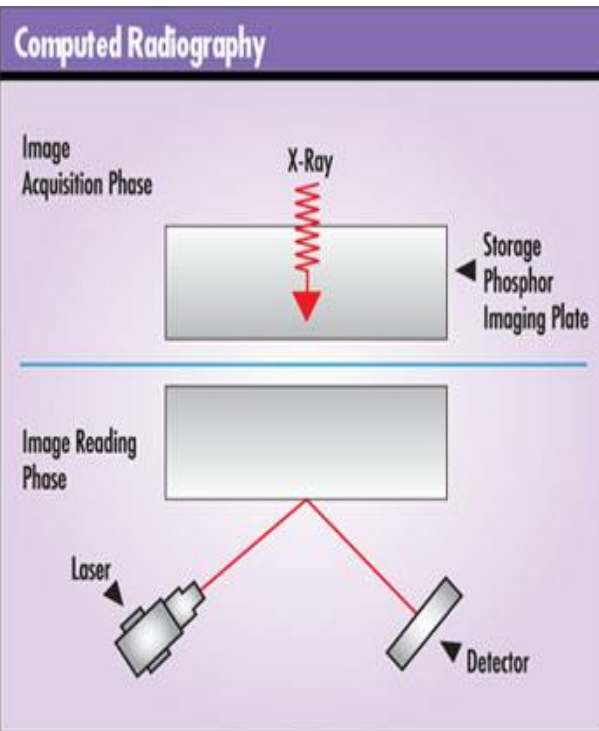
What Clause 8 of 9001 “Operations” is avoiding

What the organisation receives



Stanley Inspection's own implementation in Digital NDT

- CR
- Dynamic team
- Corporate Support



1. Stanley Black and Decker SFS 2.0 - Digital Excellence



2. JoAnna Sohovich (President, Stanley Engineering Fastening) – Digital Excellence – Investor day Presentation

3. News 24: FIN24 – E-commerce growth in South Africa

4. ISO 9001:2015

5. Computerised Information Technology

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