QUALITY POLICY

Navigation Instructions: Use the navigation symbols ‹ › in the lower right corner of the screen to move forward or go back.

The learning unit contains videos. Make sure you turn on the sound for an optimal learning experience.

LET'S START →

Introduction

Welcome!

Netafim is a pioneer and global world leader in smart irrigation solutions. Since our establishment in 1965, Netafim has led the drip industry by developing innovative products and leading drip irrigation technology.

Our purpose is to help the world grow more with less in order to achieve food security through mass adoption of precision irrigation and agriculture solutions that maximize yield while using minimal resources to drive a sustainable food chain.

How do we remain at the forefront in this field and how can we continue to grow and develop?

This study unit focuses on Netafim's quality policy, how it contributes to Netafim's success, and what we can all do to ensure this success continues.
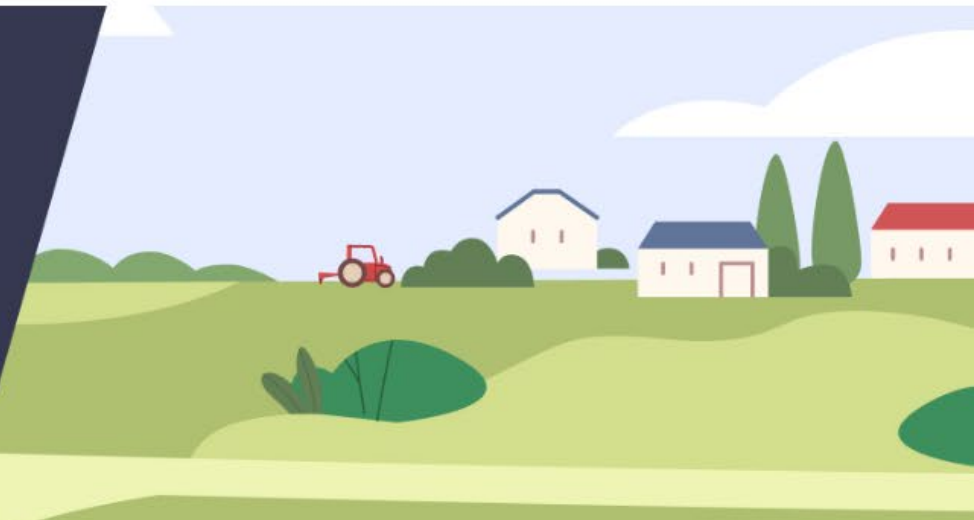
Introduction

Watch Netafim President & CEO, Gaby Miodownik, address the United Nations at the UN Water Conference (March 2023):

00:00 / 00:39

Netafim's quality policy is based on four core principles:

1. Striving for excellence and continuous improvement

2. Customer satisfaction

3. Meeting standards and regulations

4. Adhering to quality planning principles

Click on the first sign to learn about the Netafim quality policy

1 Culture of excellence & continuous improvement

2 Customer satisfaction

3 Standards & regulations

4 Quality Planning Principles

Culture of Excellence & Continuous Improvement

In earlier times, during periods of monopolies and centralization in the economy, companies often opted to raise their product prices to boost their profits.

However, in today's more competitive business landscape, it is imperative that we focus on maximizing profits by continually striving for excellence, offering high-quality products at premium prices, and minimizing waste as much as we can.

Let's delve into the strategies for achieving this in the modern era.

Economy in the past

Economy in the modern era

Culture of Excellence & Continuous Improvement

Cultivating a Lean Culture

The adoption of a Lean culture represents a fresh perspective on economic thinking.

But what exactly is Lean Culture?

Lean Culture is a well-established **managerial framework** that enhances our competitive advantage. This is accomplished by delivering greater value to customers through improved products and services, all while minimizing unnecessary costs and waste that do not contribute to value.

Lean culture prioritizes work stages that **add value** to the overall process and incorporating tools that aid in **waste reduction**.

These fundamental principles serve as the foundation of Netafim's quality policy.

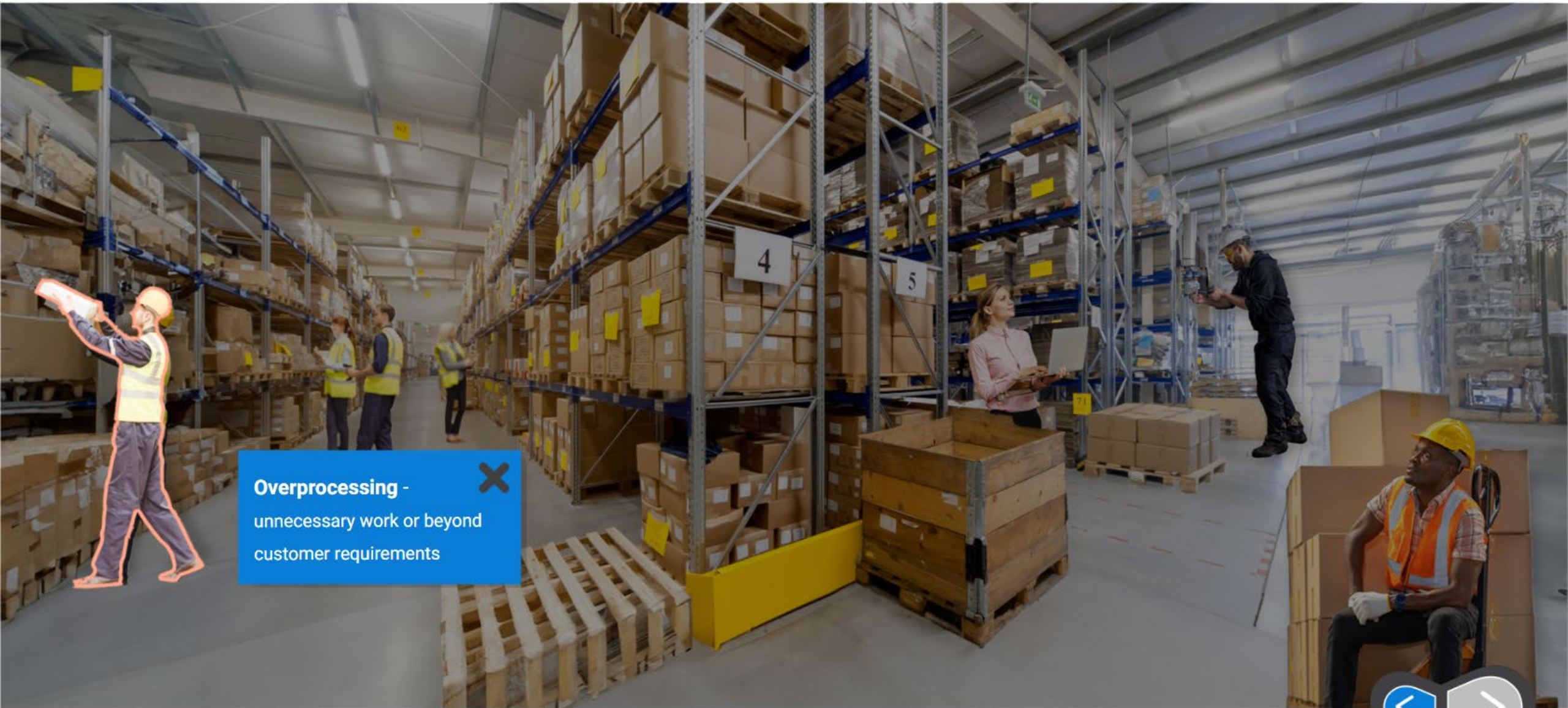# Culture of Excellence & Continuous Improvement

Minimizing Waste

The core objective of Lean Culture is the elimination of any non-value-adding steps from the process—anything that doesn't benefit the customer. This represents a foundational principle within Netafim's quality policy.

There are eight typical sources of waste. Let's delve into how they become evident.

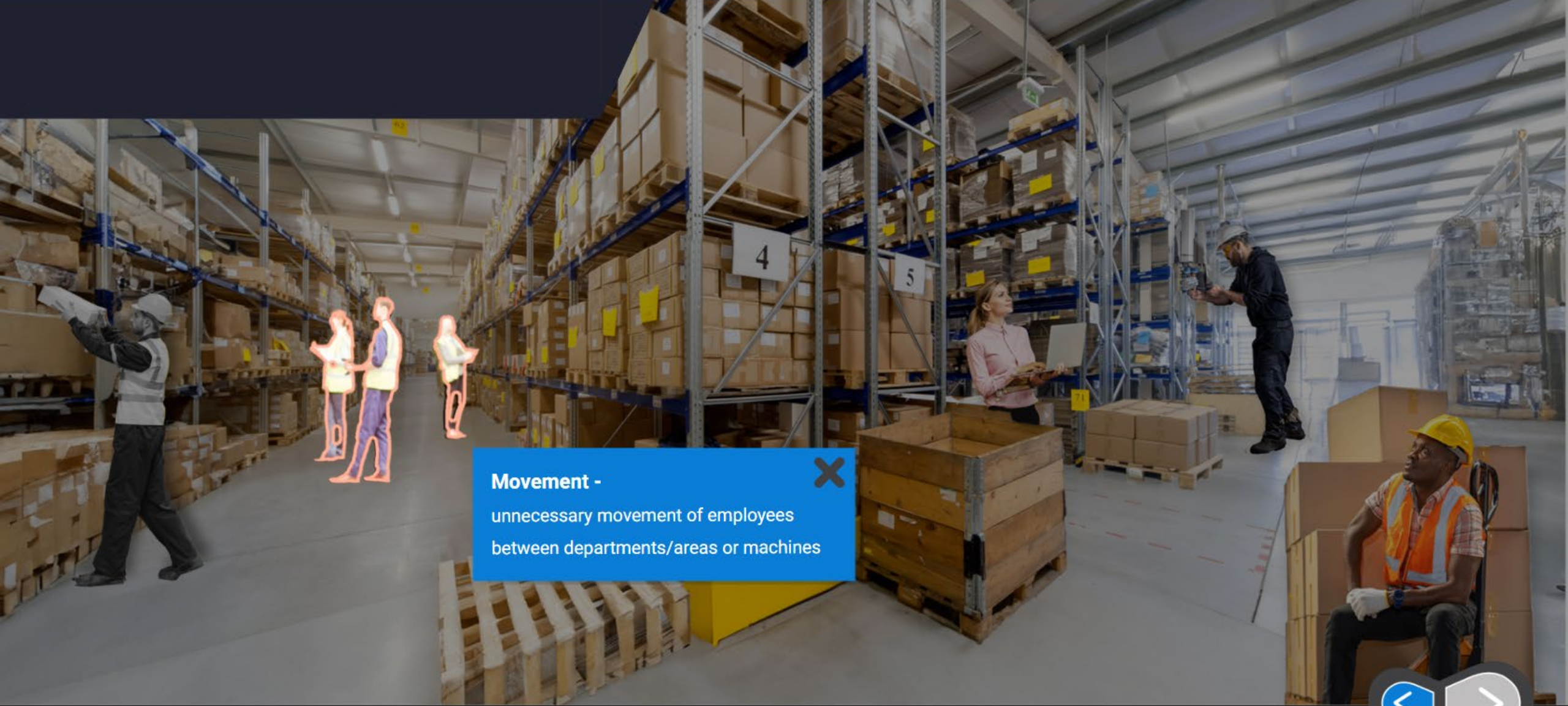# Culture of Excellence & Continuous Improvement

Overprocessing - unnecessary work or beyond customer requirements

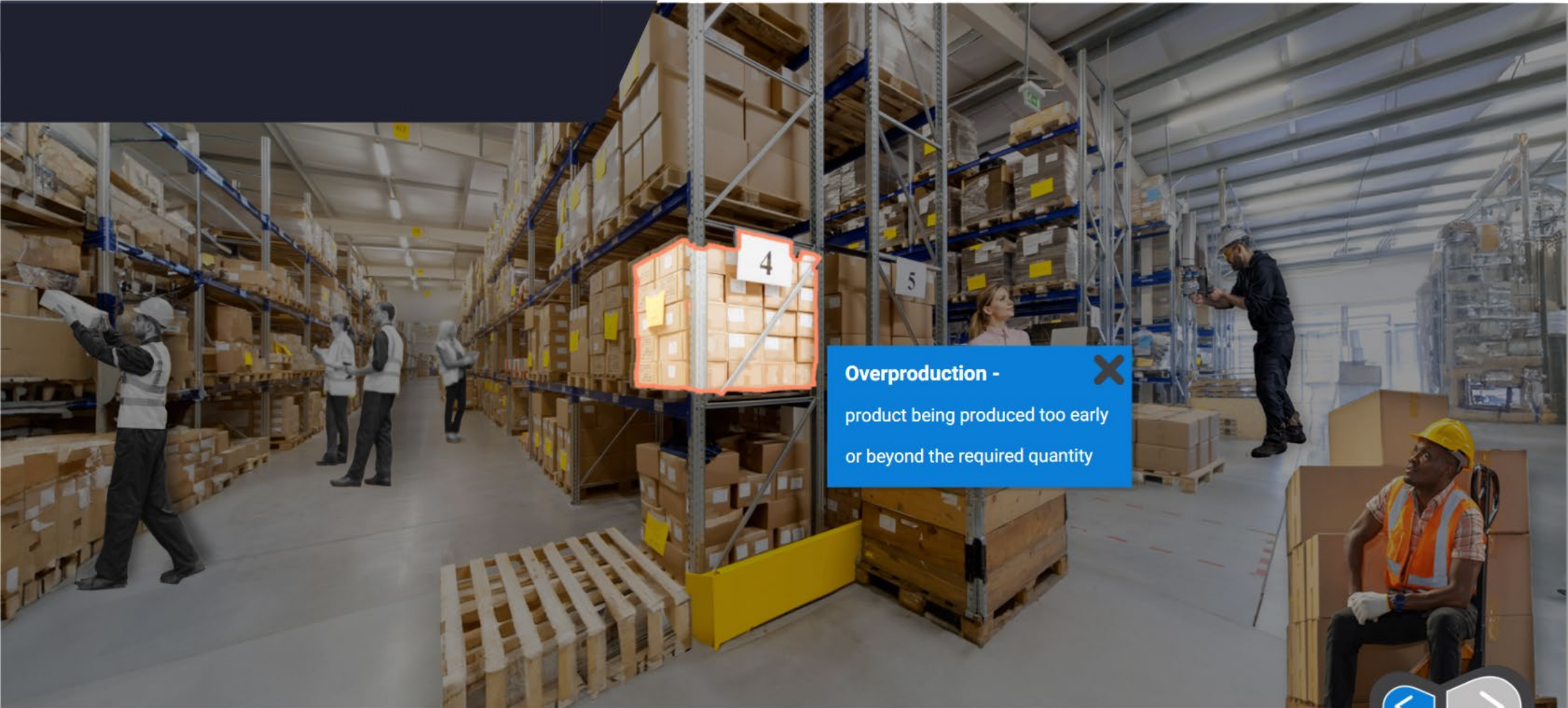# Culture of Excellence & Continuous Improvement

Movement -

unnecessary movement of employees between departments/areas or machines

Culture of Excellence & Continuous Improvement

Overproduction - ✕

product being produced too early

or beyond the required quantity

Culture of Excellence & Continuous Improvement

Inventory -

finished product or raw material

before of after processing

Culture of Excellence & Continuous Improvement
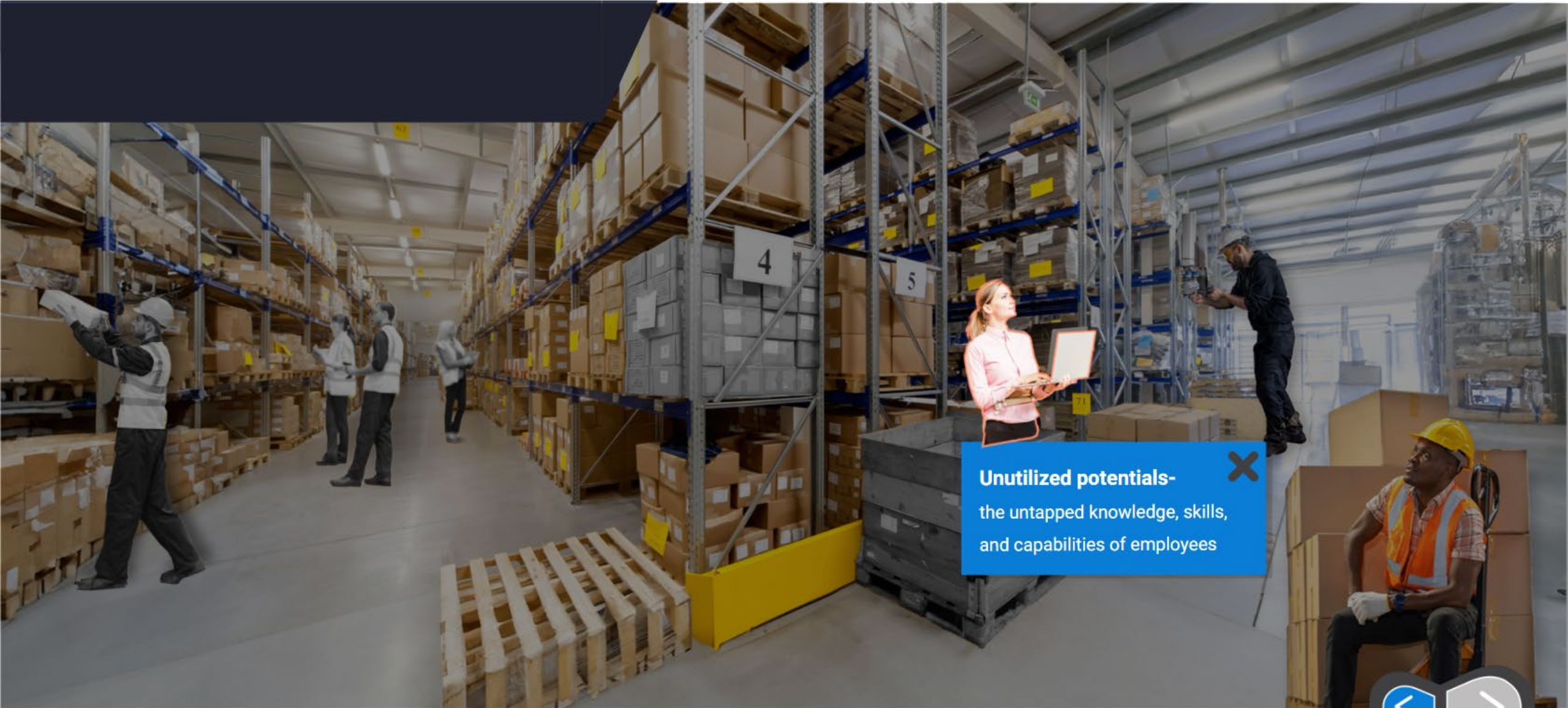
Unutilized potentials- the untapped knowledge, skills, and capabilities of employees

Culture of Excellence & Continuous Improvement
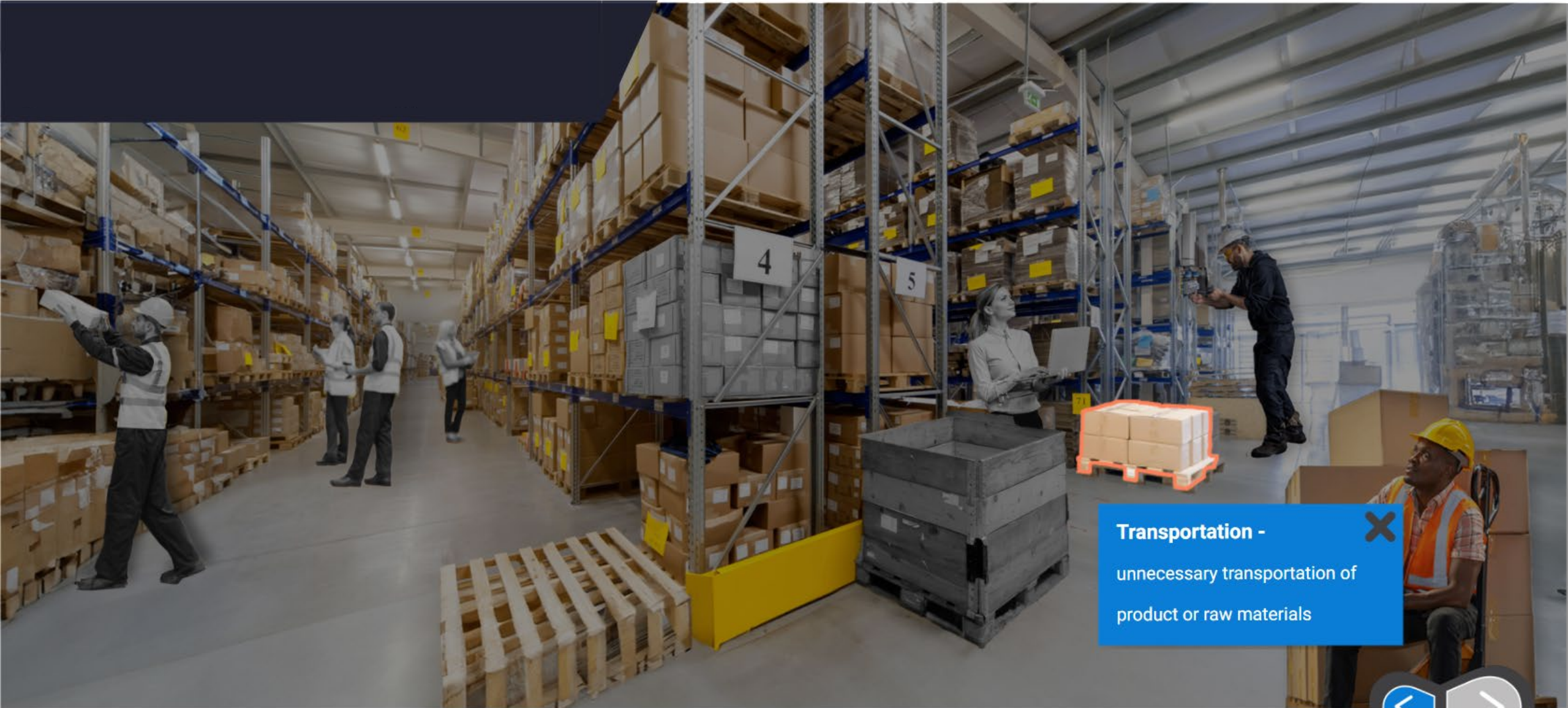
Transportation - unnecessary transportation of product or raw materials

Culture of Excellence & Continuous Improvement

Defects

Defects occurs when the product is not fit for use.

This typically results in either reworking or scrapping the product.

Culture of Excellence & Continuous Improvement
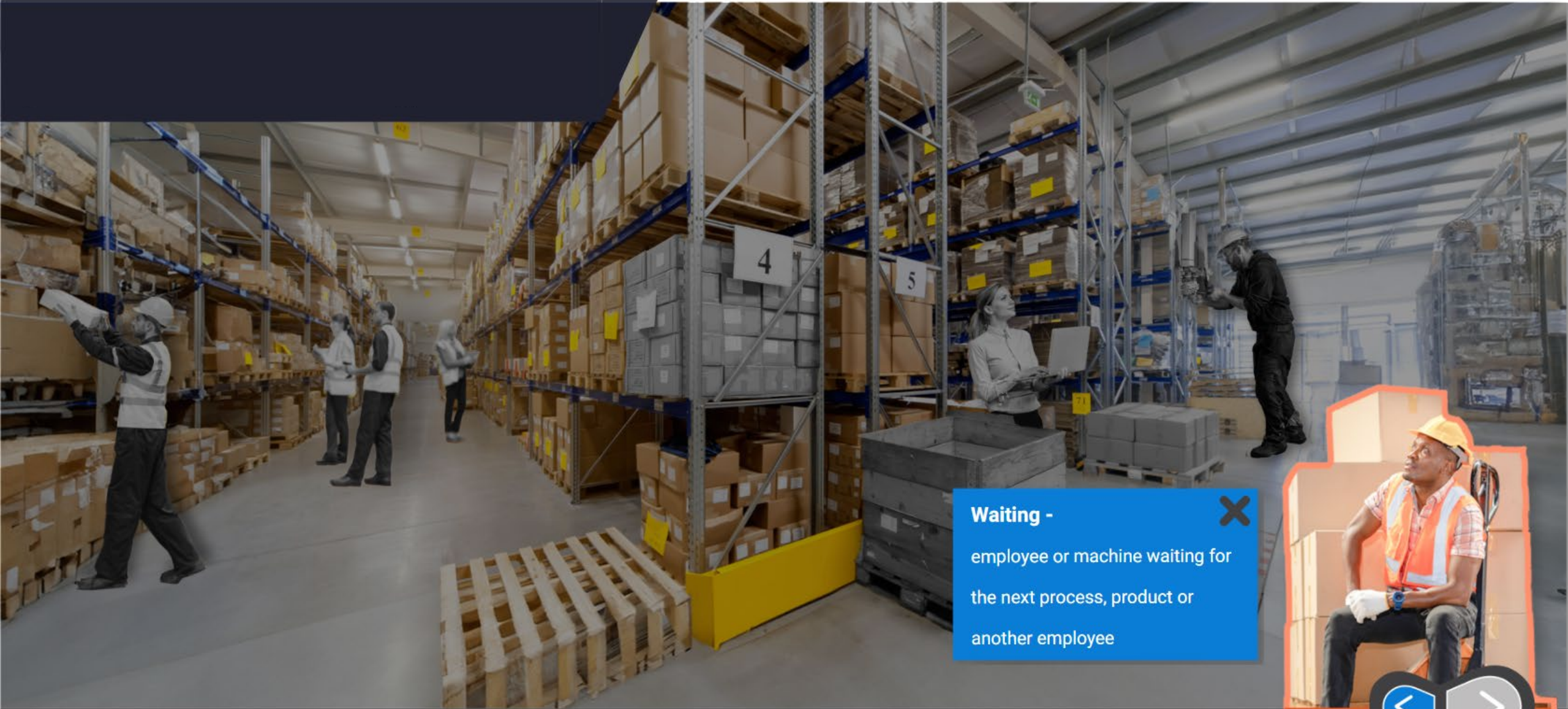
Waiting - ✕

employee or machine waiting for the next process, product or another employee

Culture of Excellence & Continuous Improvement

There are times when we need to change our management or work methods.

However, our fear of change may discourage us from making the actual change.

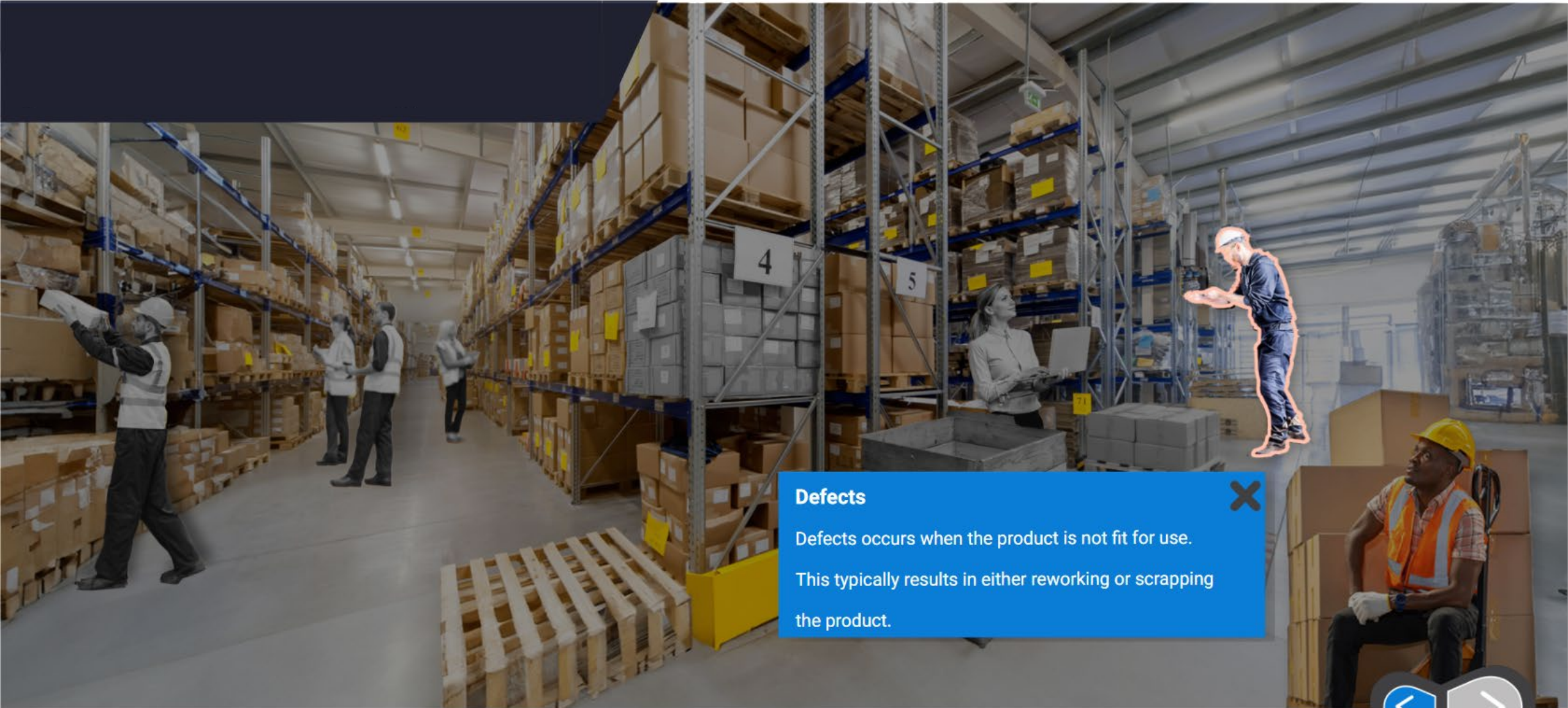Dr. Robert Maurer, a psychologist and Kaizen expert, writes in his book *The Kaizen Way* (2006):

"All changes, even positive ones, are scary. Attempts to reach goals through radical or revolutionary means often fail because they heighten fear.

But the small steps of Kaizen disarm the brain's fear response, stimulating rational thought and creative play."

Would You Like To Learn More About Kaizen?   CLICK HERE →

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Food for Thought: The Kaizen Culture

Originated in Japanese culture, Kaizen — consisting of two words, Kai = Change and Zen = Good (change for the good)— serves as a way of life through constant incremental enhancements.

As this commitment to continuous improvement becomes ingrained in daily living, minor modifications gradually evolve into lasting, positive transformations.

The Kaizen Culture fosters small, ongoing changes, aligns employees with company objectives, and reduces resistance among the workforce.

Well done!

The crops are starting to grow.

Click on the next sign to continue studying

1 Culture of excellence & continuous improvement

2 Customer satisfaction

3 Standards & regulations

4 Quality Planning Principles
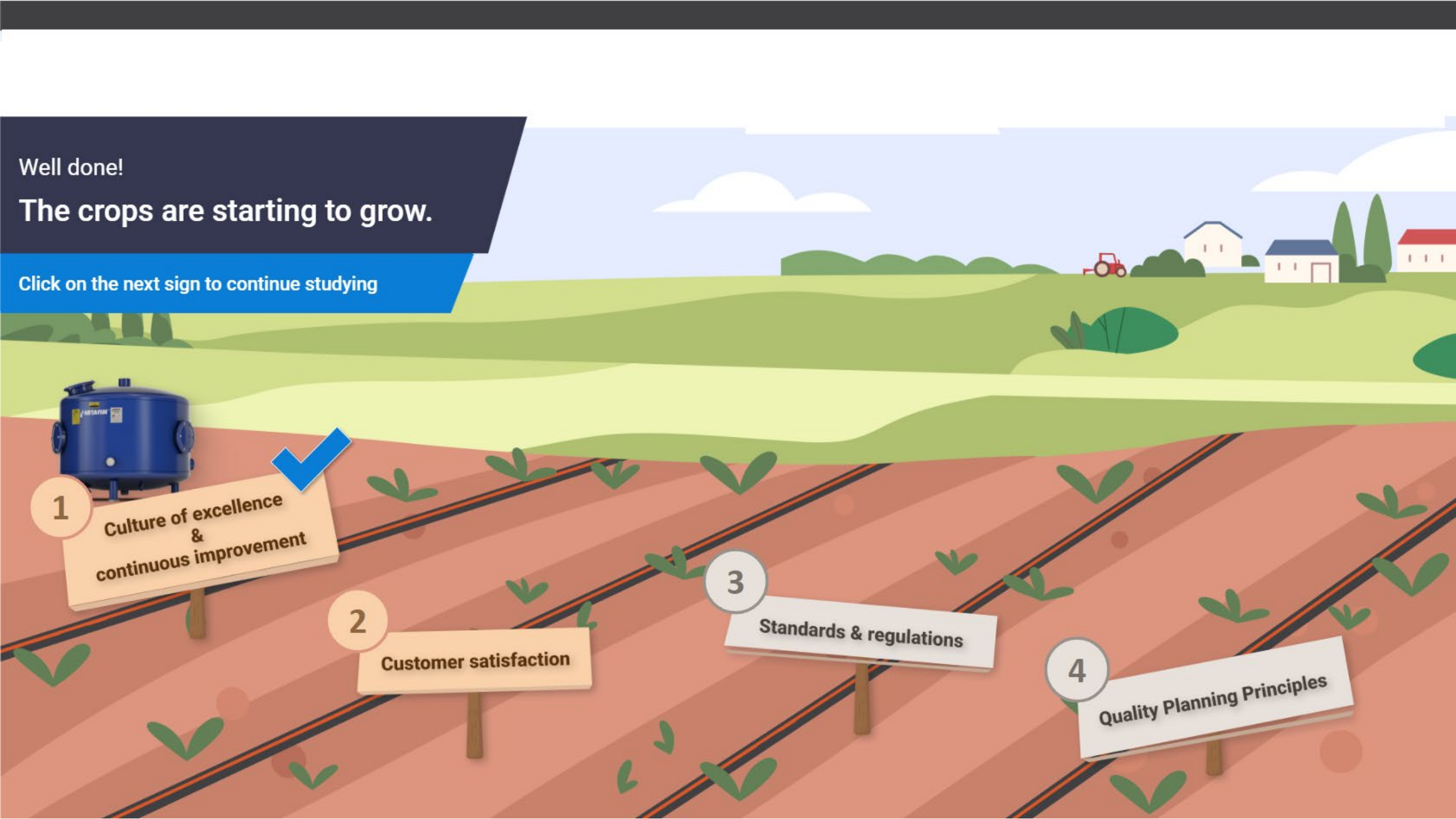
Customer Satisfaction

Our customers are the source of Netafim revenue and pay our bills. To uphold customer satisfaction and, consequently, Netafim's business success, it is crucial to consistently deliver high-quality products and services over the long term.

00:00 / 02:04

Customer Satisfaction

One of the models explaining customer satisfaction is the Kano model

This model charts customer satisfaction on a vertical axis and the level of performance (meeting customer requirements) on a horizontal axis.

Additionally, satisfaction is influenced by not just the performance level but also by product and service attributes and expectations, which can be categorized into three levels, which also changed over time.

Basic	Performance	Excitement

Customer satisfaction

Excitement feature

Fulfillment of customer requirements

Performance feature

Basic feature

Customer Satisfaction

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Basic	Performance	Excitement

This is the minimum level of service the customer expects from us. Without it, customers will be extremely dissatisfied. Unless we can meet 100% of the following basic characteristics , we will not satisfy the customer and we will cause only to dissatisfaction. For example:

- Flow, Dripline Diameter, and length are on spec
- No squirting
- Delivery on time without missing parts or wrong parts

Customer Satisfaction

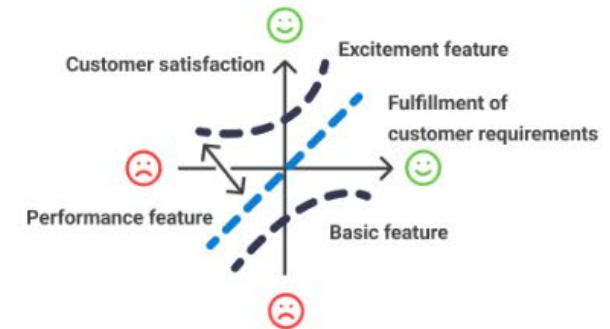**One of the models explaining customer satisfaction is the Kano model**

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Basic	Performance	Excitement

Customer satisfaction increases as product performance meets specifications and is better than competitors.

For example:
- Capabilities of Features per the spec such as: AS, CNL
- Filtration - level of unclogged drippers
- Durability to chemicals
- Durability to insects

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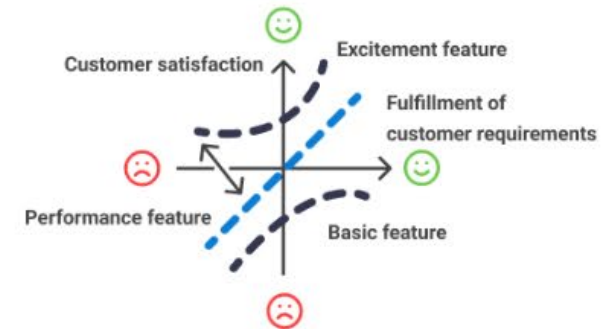
Basic	Performance	Excitement

At this level, customers are surprised by the product characteristics, or level of service, that the competition doesn't offer, such as new or special features.
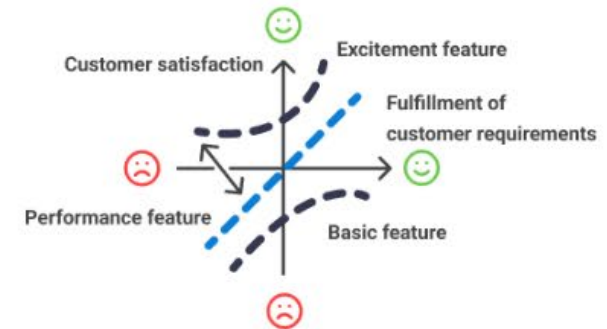
Good job!

Crops are continuing to grow

click on an additional sign to continue studying

1. Culture of excellence & continuous improvement

2. Customer satisfaction

3. Standards & regulations

4. Quality Planning Principles
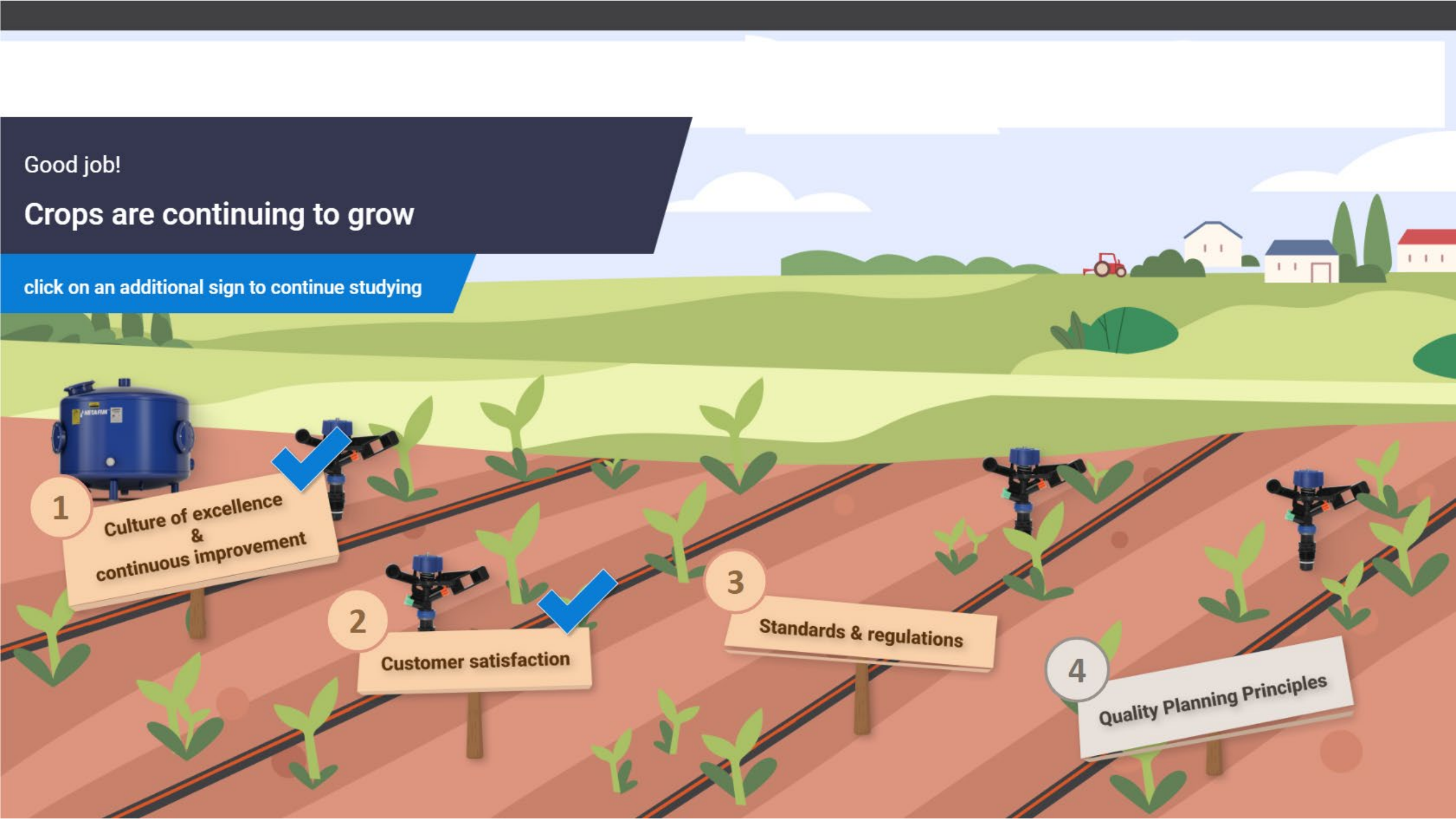
Standards & Regulations

Standards and regulations are instrumental in meeting the expectations of our stakeholders and in maintaining a high level of quality and uniformity across our factories. This strategic approach not only provides us with a competitive advantage, but also aligns us with international markets. It is crucial that we have a comprehensive understanding of the standards that are relevant to our roles, and that we strictly adhere to them.

What is a standard?

A standard outlines technical or functional requirements for a product or service, along with any examination methods.

There are different types of standards. In this section, we will discuss **2** types:

Quality management standard

Product standards

Standards & Regulations

The standards and regulations help us meet market and customer demands and maintain quality and unified standard between the factories thus, enabling us to create a competitive advantage and positioning us on the same level with the international market. Each

What is a sta

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What standards

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Quality management standard – ISO 9001

ISO 9001 is a globally recognized standard that outlines the requirements for establishing, implementing, and maintaining a quality management system (QMS) within an organization.

Key elements of ISO 9001 include:
1. Customer Focus: The standard places a strong emphasis on understanding and meeting customer needs and expectations. It requires organizations to monitor customer satisfaction and take actions to address any issues.
2. Leadership: Top management within the organization is expected to take a leadership role in establishing and maintaining the QMS, ensuring it aligns with the organization's goals and strategic direction.
3. Process Approach: ISO 9001 promotes the use of a process-oriented approach to managing operations. This involves identifying, documenting, and continuously improving key processes to enhance efficiency and quality.
4. Continual Improvement: Organizations are required to continually assess and enhance their QMS. This involves setting objectives, monitoring performance, and taking corrective actions as necessary.
5. Involvement of People: ISO 9001 recognizes the importance of involving employees at all levels in the QMS. Their participation is crucial for implementing and maintaining the system effectively.
6. Evidence-Based Decision Making: Decisions within the organization should be based on data and evidence, promoting informed and effective decision-making.

The standards and regulations help us meet market and customer demands and maintain quality and unified standard between the factories...

...market. Each...

What is a st...

A standard i...

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What standa...

Product standards – ISO 9261, REACH and PROP65

Along with ISO-9001, Netafim products shall adhere to international such as the following:

ISO 9261

ISO 9261 gives mechanical and functional requirements for agricultural irrigation emitters and emitting pipes, and, where applicable, their fittings, and provides methods for testing conformity with such requirements. It also specifies the data to be supplied by the manufacturer to permit correct information, installation and operation in the field. It is applicable to emitters, emitting and dripping (trickling) pipes, hoses, including collapsible hoses ("tapes") and tubing of which the emitting units form an integral part, to emitters and emitting units with or without pressure regulation and with flow rates not exceeding 24 l/h per outlet (except during flushing), as well as to fittings dedicated to the connection of emitting pipes, hoses and tubing. It is not applicable to porous pipe (pipe that is porous along its entire length), nor does it cover the performance of pipes as regards clogging.

REACH

REACH stands for "Registration, Evaluation, Authorization, and Restriction of Chemicals." It is a European Union regulation that aims to protect human health and the environment from the risks posed by chemicals.

Standards & Regulations

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What is a sta

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Product standards – ISO 9261, REACH and PROP65

REACH requires companies to register and provide safety information about the chemicals they manufacture or import into the EU, and it can lead to the authorization or restriction of certain chemicals if they are found to be hazardous. The regulation promotes the responsible use of chemicals and the substitution of harmful substances with safer alternatives.

Proposition 65

Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, is a California law that requires businesses to provide warnings to consumers about significant exposures to chemicals that are known to cause cancer, birth defects, or other reproductive harm. This law aims to inform Californians about potential chemical exposures from products and environments. Businesses must label products or areas containing these chemicals with warning signs to alert consumers and the public to potential health risks.

Well done!

Crops in the field continue to grow

click on an additional sign to continue studying

1. Culture of excellence & continuous improvement
2. Customer satisfaction
3. Standards & regulations
4. Quality Planning Principles

Quality Planning Principles

Netafim's quality policy outlines five key quality planning principles:

Let's delve into each of these principles and examine associated examples

1 Right the first time

2 End-to-end quality process

3 Risk-based thinking

4 Preventing issues at the source

5 Utilizing advanced quality planning and analysis tools

Quality Planning Principles

1 Right the first time

Our goal is to get things right the first time.

Why?

- T2M – Time to Market – reduce time to market - Enable quicker release of products to the market
- Minimize rework and failure costs
- Minimize costs
- Increase customer satisfaction

Examples:

- Netafim Product Development Process (NPD), Engineering Change Orders (ECO), and Change Management (quality planning and validation) process. When developing new products and making changes follow the above processes.
- New employee training and certification system.
- Sign-off process for every setup.
- Standardizing processes through the development of procedures.

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Quality Planning Principles

2 End-to-end quality process

Quality is determined by the entire "E2E" control activities, both upstream and downstream.
The entire chain is affected by the quality of its weakest link.

Examples:

- Review of the raw material Certificate of Analysis (COA)
- Implementation of Standard Work Instructions (SWIs) for several production line operations.
- Barcode scanning of finished good to ensure product and quantity accuracy.
- Assuring the quality of suppliers by implementing quality management principles.

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Quality Planning Principles

3 Risk-based thinking

The concept of risk-based thinking refers to taking proactive measures to address risks or seize opportunities.

Examples:

- FMEA methodology for risk assessment of the entire production process.
- A quality plan for each facility based on a Pareto analysis of the main causes of scrap and complaints.
- Escalation process

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Quality Planning Principles

4 — **Preventing issues at the source**

Rather than just identifying problems when they occur, the emphasis should be on eliminating their underlying causes. This proactive approach ensures a lasting solution, reduces the necessity for ongoing detection, and cuts down on waste or scrap.

Examples:

- Automated punch counting system to trigger punch change (preventive).
- Monitoring the pressure in the extruder in order to detect and eliminate any changes.
- Proactive safety reporting.
- Kanban of critical spare parts and packaging items to avoid stock shortage.

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Quality Planning Principles

5 **Utilizing advanced quality planning and analysis tools**

Utilizing advanced quality planning and analysis tools to increase the effectiveness and efficiency of quality related activities.
This can involve also the usage of statistical methods and tools as well as AI systems for predication, detection and control.

Examples:

Use of advanced quality planning and analysis tools such as:

- Six-Sigma tools
- Process Capability Analysis
- GR&R − Gauge R&R analysis
- SPC (Statistical Process Control)
- NPD, ECO, and Change Management planning tools
- AI systems for predication and control

Great work! You've completed all four sections.

As a result of your efforts, the field is flourishing, and we have another satisfied customer.

1 Culture of excellence & continuous improvement

2 Customer satisfaction

3 Standards & regulations

4 Quality Planning Principles

Summary

Congratulations on completing this study unit!

Remember, Netafim's quality policy is based on four core principles: striving for excellence and continuous improvement, customer satisfaction, meeting standards and regulations, and adhering to quality planning principles.

Click here to download Netafim's complete quality policy.

To download the Netafim complete quality policy file please **click here**

END