# Making operational improvements stick

Embed a Value-Driven Continuous Improvement (VDCI) function in your operations organization for superior customer experience and operational efficiency

Credits

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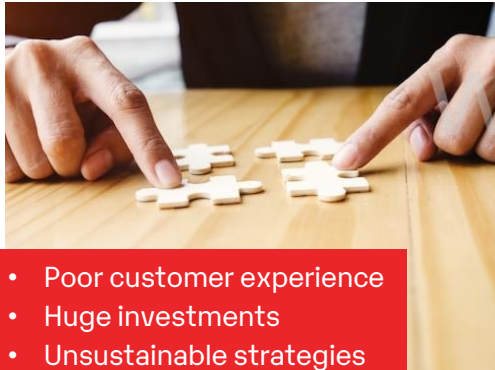
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To win the "fibre race", telecom operators are constantly striving to improve their operations for lower costs while providing delightful experiences
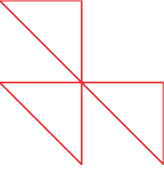
60%
of all corporate six sigma initiatives fail- Link

Most fibre operators rely on traditional operation improvement activities that:
- Focus on one-time process improvement
- Provide benefits for a limited period
- Do not suit a fast-changing fibre environment

Altnets, new fibre operators, and businesses undergoing a major transformation must define a lean operating model, followed by continuous improvement - Read more

Need of the hour for fibre operators?

Challenges faced by fibre operators:
- Inability to meet massive coverage targets in time
- Overshoot budget to keep up with people, process, and technology advancements
- Delay in delivery of services and resolution of customer issues
- Inability to sustain continuous improvement with a lean and scalable operating model

"Massive shift in organizational and cultural construct by practicing **continuous operational improvement.**"

From "giant leaps" to "small steps"

From "know it all" to "always learning"

From "lean" to "lasting"

- Poor customer experience
- Huge investments
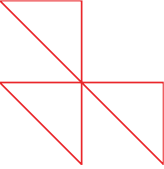- Unsustainable strategies

"

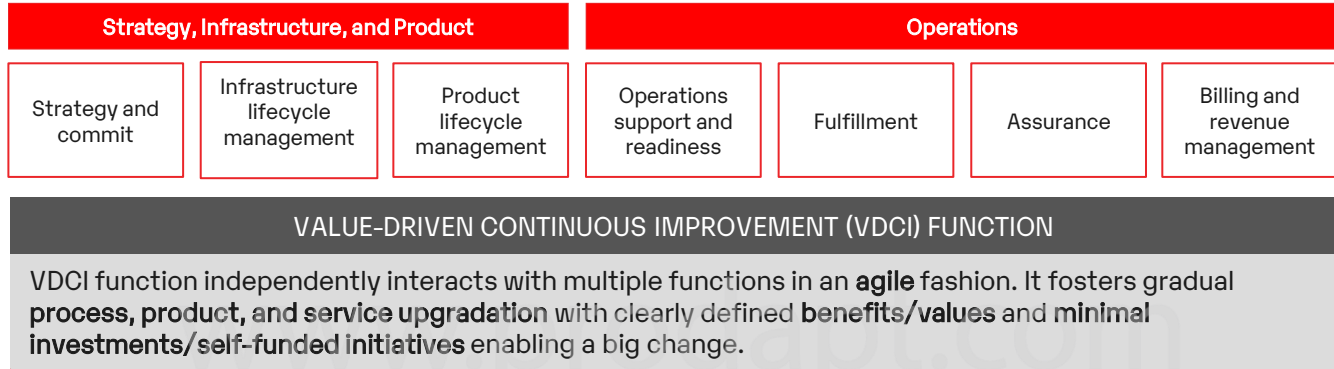*Continuous improvement is an ongoing effort, big or small to improve all elements of an organization.*
- McKinsey

Fibre operators must introduce a "Value-Driven Continuous Improvement" function as an integral part of their operations organization.

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Embed a **Value-Driven Continuous Improvement (VDCI)** function into your organization's structure to instill a culture of constant advancement and stay ahead of the competition
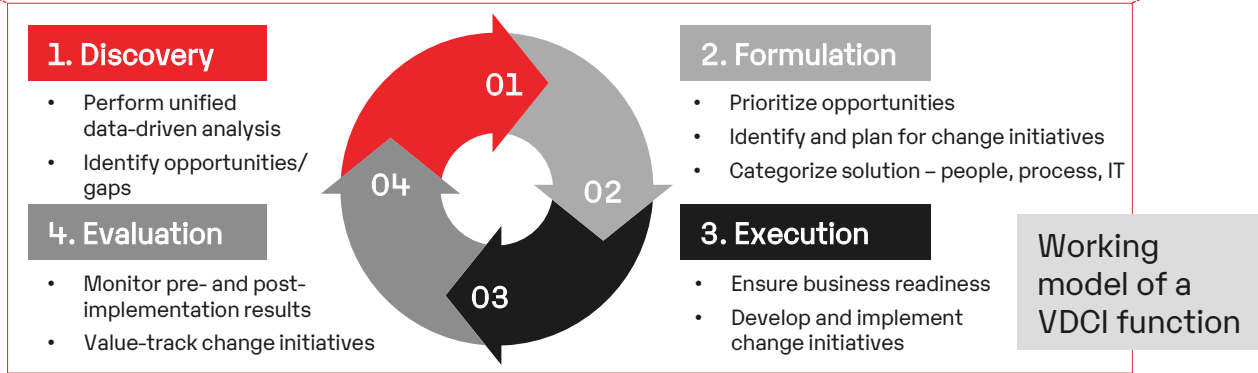
View of a typical fibre operator's organization construct with integrated continuous improvement
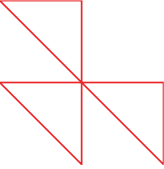
Strategy, Infrastructure, and Product			Operations			
Strategy and commit	Infrastructure lifecycle management	Product lifecycle management	Operations support and readiness	Fulfillment	Assurance	Billing and revenue management

VALUE-DRIVEN CONTINUOUS IMPROVEMENT (VDCI) FUNCTION

VDCI function independently interacts with multiple functions in an **agile** fashion. It fosters gradual **process, product, and service upgradation** with clearly defined **benefits/values** and **minimal investments/self-funded initiatives** enabling a big change.

The transformation of cross-functional operations performs 30-40% better than their single-function counterparts.

-McKinsey

1. Discovery
- Perform unified data-driven analysis
- Identify opportunities/gaps

2. Formulation
- Prioritize opportunities
- Identify and plan for change initiatives
- Categorize solution – people, process, IT

4. Evaluation
- Monitor pre- and post-implementation results
- Value-track change initiatives

3. Execution
- Ensure business readiness
- Develop and implement change initiatives

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02
03
04

Working model of a VDCI function

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Follow a **unified data-driven analysis** approach to identify gaps/opportunities and proactively address issues
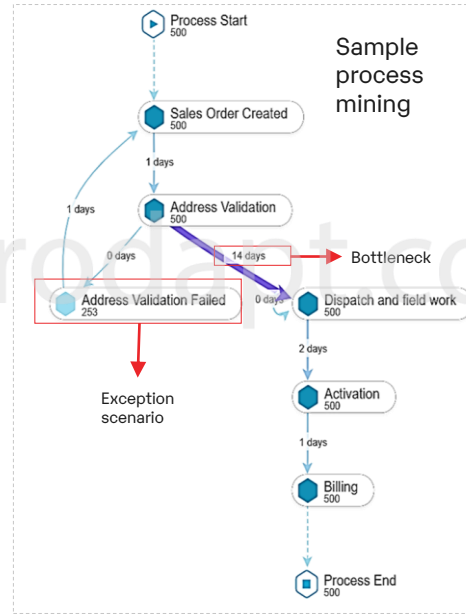
Identify

- Understand the **as-is fibre delivery and assurance processes**
- Prepare **use cases repository,** e.g., jeopardy management, technician dispatches, etc.
- Identify the tracking parameters like **KPIs/SLAs, financials**

Collect

- Conduct workshops to understand and gather data from **multiple functions**
- Benchmark the **as-is fibre processes** through detailed assessments

Unified data-driven analysis

- **Process mining**: Use tools like **Celonis** to discover gaps, monitor and improve processes, fibre journeys, system integration, etc.
- **Predictive modeling using AI/ML:** Use historical data to proactively predict and resolve issues (like network monitoring/failures)
- **Business process analysis:** Use tools like **Aris, Signavio, and Oracle BPM** to create, manage and analyze end-to-end business processes

Sample process mining

Process Start 500

Sales Order Created 500

1 days

1 days

Address Validation 500

0 days · 14 days → Bottleneck

Address Validation Failed 253 · 0 days → Dispatch and field work 500

2 days

Exception scenario

Activation 500

1 days
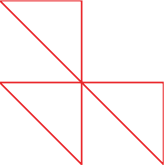
Billing 500

Process End 500

Interpret

- ✓ Identify the **improvement opportunities** and highlight potential issues
- ✓ **Address issues** before they impact customers
- ✓ Create **baseline metrics** to track progress
- ✓ Analyze the impact of operational gaps with **Business Impact Analysis (BIA)**
- ✓ Perform **data validation** with stakeholders
- ✓ Determine the **ROI**

Data-driven analysis is a quantified way of analyzing problems providing clear goals and numbers.

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1 2 3 4

Prioritizing Opportunities

Key Lenses	Risk Assessment
• Strategic alignment • ROI • Customer experience • Regulatory	Identify and evaluate the most vulnerable areas like: • Credit Risk • Data security • Operational risk

Proceed to ideate solutions

Log the opportunities in requirement management tools like **Jira**

★ Get upfront sign-on (agreement) with the business and finance teams on measuring the proposed benefits to prevent uncertainties.

Identify and plan for the change initiatives

a **Check for the best solution**
Conduct workshops and sit-by sessions with business owners and experts to give the best solution options. Consider key elements like **investments, cost benefits**, and **implementation timelines** to shortlist the solution

b **Classify solution types into different categories**
Consider all elements like processes, tools, products, services, etc., for a holistic transformation

Tactical IT Changes
Technology re-use, robotic automation, quick IT configuration changes

People and process changes
Policy, structure, culture, infrastructure changes

Strategic IT changes
Technology, platform, hard code, new application development changes

Create a **RACI matrix** for clear communication and smooth workflows across teams like the order desk, Technical Service Centre (TSC), Network Operations Centre (NOC), etc.

c **Define the To-Be process**
Use tools like **Aris, BPM, Visio,** and **Signavio** to showcase the desired to-be process post-implementation

d **Get sign-off from the concerned stakeholders**

Brainstorming workshops and solution agreements from all stakeholders is the key to a successful solution plan.

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Implement change initiatives to rapidly adapt to changes pertaining to fiberization goals
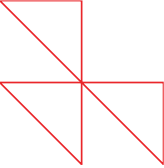
Prepare and empower your organization to adopt change

Change Management

- Leverage **industry consultants** to apply industry best practices to support and manage change while implementing change initiatives
- Ensure that all **change impacts** are known, agreed and evaluated, and **mitigations** are planned
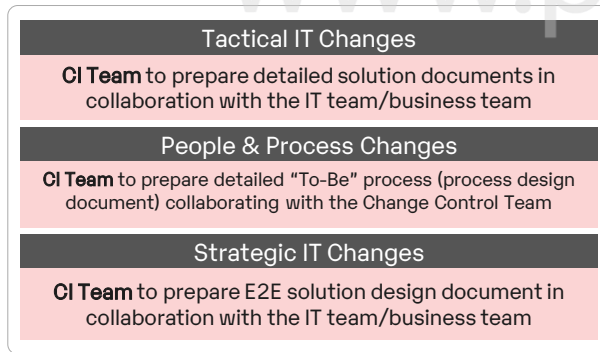- Prepare **valuable references and toolkits** when planning for change

Business Readiness

- Ensure that stakeholders are adequately informed and leaders are prepped for planned changes
- Facilitate **business ownership** for the change
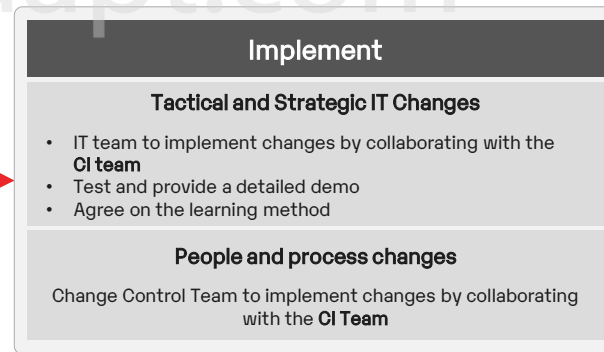- Consider both **functional** and **non-functional** aspects of business readiness

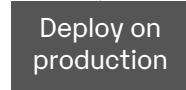## Implement, document, and track change initiatives

Continuous Improvement **(CI)** Team

Tactical IT Changes

CI Team to prepare detailed solution documents in collaboration with the IT team/business team

People & Process Changes

CI Team to prepare detailed "To-Be" process (process design document) collaborating with the Change Control Team

Strategic IT Changes

CI Team to prepare E2E solution design document in collaboration with the IT team/business team

Sit-by sessions

Design review & sign-off

Implement

Tactical and Strategic IT Changes

- IT team to implement changes by collaborating with the **CI team**
- Test and provide a detailed demo
- Agree on the learning method

People and process changes

Change Control Team to implement changes by collaborating with the **CI Team**

UAT sign-off

Deploy on production

Track initiative delivery timelines using a **requirement tracker tool like Jira.**

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Implement change initiatives to rapidly adapt to changes pertaining to fiberization goals
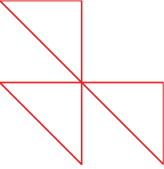
Recommendations:

- **Prioritize business readiness over solution implementation.** Adoption of most change initiatives fail/get delayed/lose impact due to lack of business readiness

- Consider the below **vital dimensions** for business readiness:

Reformed roles

Avoid ambiguity, and effort loss by clearly **defining roles, SLAs, and OLAs,** and taking **sign-offs** from the key stakeholders.

Re-sizing teams

Establish teams with the right size and skill to support change. Re-size/re-align teams to ensure operational readiness.

Right hand-offs

Ensure communication at the right time, using the right channel, and in the right format. Document the change initiatives (such as process, and training).

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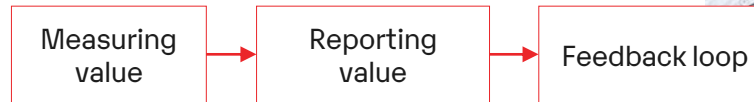# Check the progress of change through continuous monitoring of the solution and its expected benefits

Value track

- Dedicate a team to track the benefits
- Allow time for the solution to **stabilize**
- Derive the **actual realized benefit numbers**
- Link benefits to the **operation and strategic value levers**
- Conduct **retrospective calls** with the stakeholders to present the **cost benefits/value leakage**
- Create a **feedback loop** to assess benefit realization, and identify gaps for course correction and new opportunities to add to the backlog

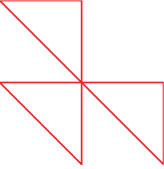### Follow the value diagram for an effective, tangible value realization journey

Measuring value	→	Reporting value	→	Feedback loop

Sample KPIs for fibre operators

On-time delivery, Right first time, Net Promoter Score (NPS), Customer churn, Revenue per user, Cost to serve

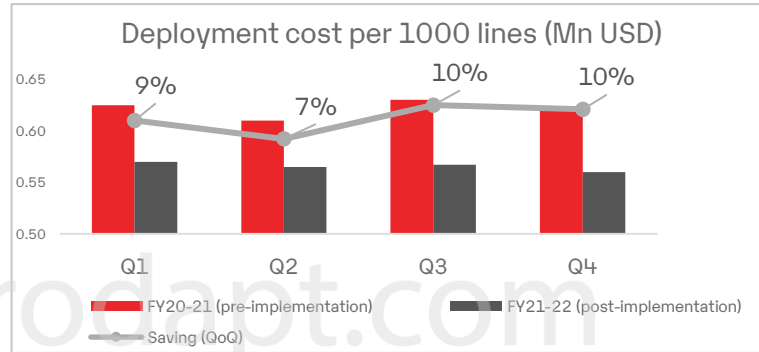## Monitor

- Extract **data insights** to compare the pre- and post-implementation data
- Check if the desired changes are reflected in the data
- Analyze the **KPI metrics** to ensure that the changes are moving in the correct direction

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Recommendations

- **Get the sign-on and sign-off for the desired vs. actual cost benefits from the business teams**

- Use data querying tools (like SQL/Python scripts) for data extraction and analysis

- Create **automated dashboards** for periodic reporting and monitoring

- Define and follow the timeline for value-tracking. The recommended timelines are:
  - Stabilization period: **1-2 weeks**
  - Periodic calculation of actual benefits: **2-3 months**
  - Retrospective calls with stakeholders: **every 2 weeks**

- Track actual benefits for **1 year**

Representative dashboards for value tracking

Deployment cost per 1000 lines (Mn USD)

FY20-21 (pre-implementation) FY21-22 (post-implementation)
Saving (QoQ)

The deployment cost was reduced by 10% in Q4 FY21-22 compared to Q4 FY20-21 due to improved operational efficiency.

Order delivery time

Pre-implementation Post-implementation
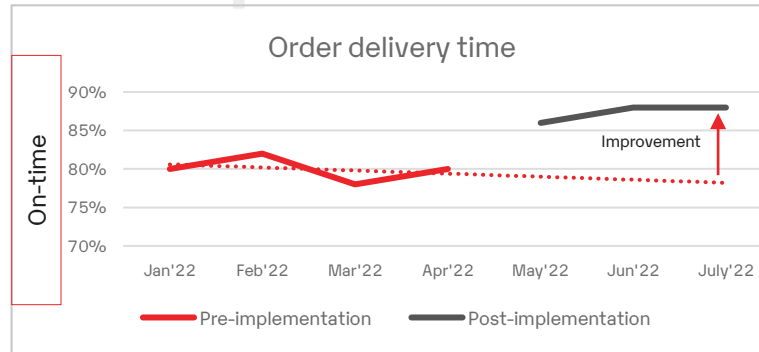
The timely delivery of orders increased by 8% within 7 months.
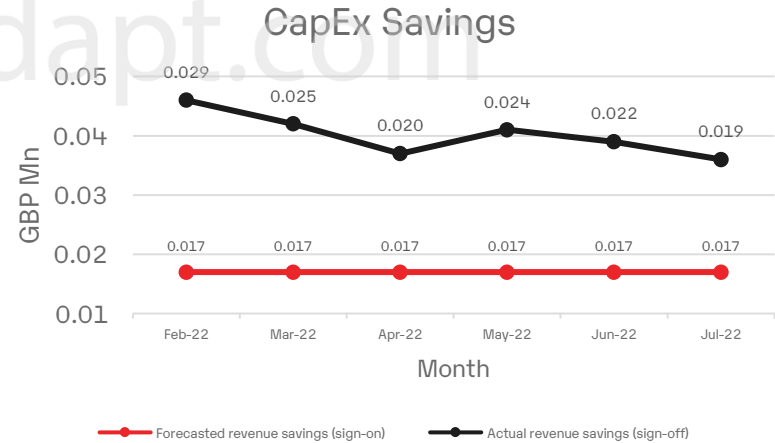
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Sample use cases: Impacts of implementing change initiatives
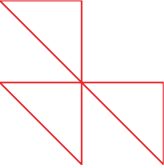
Use Case	Truck roll reduction through correct identification of fault location and sending a technician to get it right the first time
Impact	Operational cost-saving
Change Initiative type	Tactical - IT configuration change
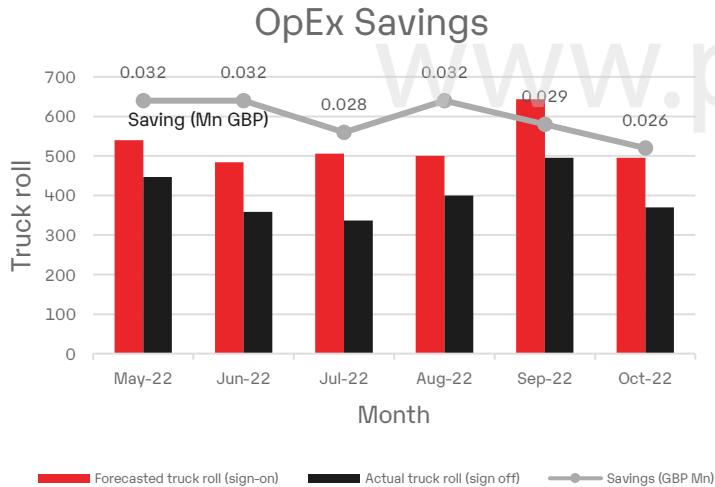
Use Case	Avoid revenue leakage by aborting the network building activity upon the cancellation of customer orders
Impact	Revenue
Change Initiative type	People/process change

OpEx Savings

Saving (Mn GBP)

0.032 0.032 0.028 0.032 0.029 0.026

- Forecasted truck roll (sign-on)
- Actual truck roll (sign off)
- Savings (GBP Mn)

Month / Truck roll

CapEx Savings

0.029 0.025 0.020 0.024 0.022 0.019

0.017 0.017 0.017 0.017 0.017 0.017

Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22

GBP Mn / Month

- Forecasted revenue savings (sign-on)
- Actual revenue savings (sign-off)

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Case Study: UK's largest full fibre operator realized huge cost savings and increased customer satisfaction by implementing the VDCI function in their operations organization
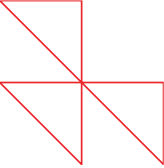
Activities performed

50+ change initiatives identified and awaiting prioritization

10+ Tactical IT changes implemented, and value tracked

3+ people and process changes ideated with ROI

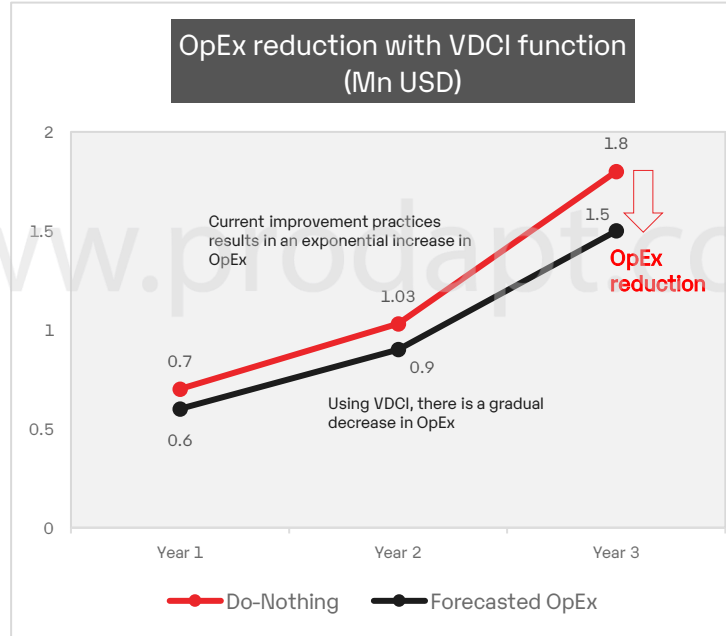5+ Strategic IT changes ideated with ROI

Key deliverables

Process and procedure change documents

Business Requirement Documents (BRD)

Real-time dashboards

Value trackers

Process and solution design documents

OpEx reduction with VDCI function (Mn USD)

Current improvement practices results in an exponential increase in OpEx

OpEx reduction

Using VDCI, there is a gradual decrease in OpEx

Values on chart:
- 0.7 (Year 1, Do-Nothing)
- 0.6 (Year 1, Forecasted OpEx)
- 1.03 (Year 2, Do-Nothing)
- 0.9 (Year 2, Forecasted OpEx)
- 1.8 (Year 3, Do-Nothing)
- 1.5 (Year 3, Forecasted OpEx)

Y-axis: 0, 0.5, 1, 1.5, 2
X-axis: Year 1, Year 2, Year 3

Legend: ● Do-Nothing ● Forecasted OpEx

Satisfied customers

15% OpEx savings in 3 years

KPIs improved

✓ Lower incident rate

✓ Faster order cycle time

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Thank you

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