

Basic strategy towards 2030

We believe it is our responsibility to contribute to social challenges in addition to providing stable energy supply.

Our corporate vision for 2030 is to become

Your Reliable Partner for a Brighter Future

and we will fulfill three responsibilities through our business activities:

- Responsibility to protect the environment and lifestyles:
- Energy/material transition to a carbon neutral/circulatory society
- Responsibility to support regional communities:
 - Next generation mobility & community for an aging society
- Responsibility to provide for society with technological capabilities:
- Advanced materials to make it possible to overcome such challenges

We will fulfill the three responsibilities through our business activities.

Idemitsu's Future Plan



Idemitsu's Future Plan



Key issues to be prioritized in the medium-term management plan and examples of initiatives

Structural reforms of revenue-generating core businesses

Expansion of growth businesses

Creation of next-generation businesses

Harmony with the global environment and society

Progress in governance

Acceleration of digital innovations























Examples of initiatives





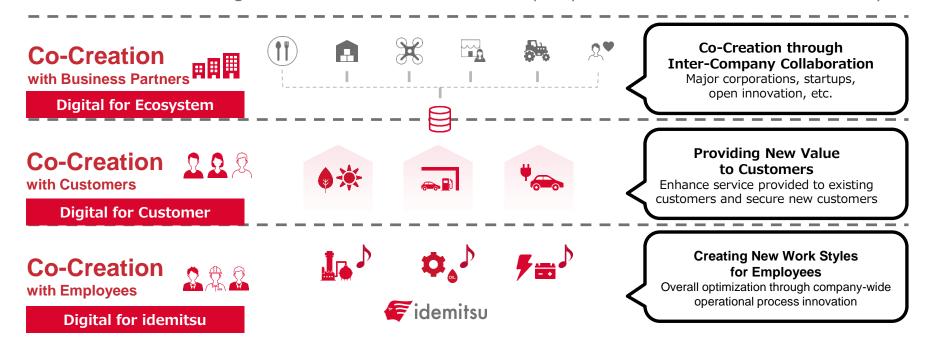
Improving the sophistication and safety of refinery maintenance operations with DX.

The goal is to improve operational efficiency, reduce repair costs, improve safety, and increase worker motivation at the manufacturing site.

What is DX (Digital Transformation)?

Transforming the Entire Business Processes with Digital Technologies to Create New Customer Value and Improve Employee Experience

Idemitsu Kosan is working on co-creation from three main perspectives in order to create an ecosystem



The first step is plant maintenance work.

Digital for idemitsu

Background of Plant Maintenance Business Reform
There were many issues in plant maintenance work, both in terms of management and work sites.

Management





Work site

Increased burden on employees

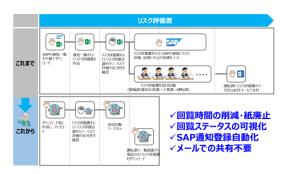
Retirement of veteran employees/ Huge manual work

Problems are concentrated in SDM work.

We developed the SDM applications (Ver1)

Digital for idemitsu

Visualizing Frontline Problems



Materialize

100-day sprint!



ExperimentStart date: October 1, 2020

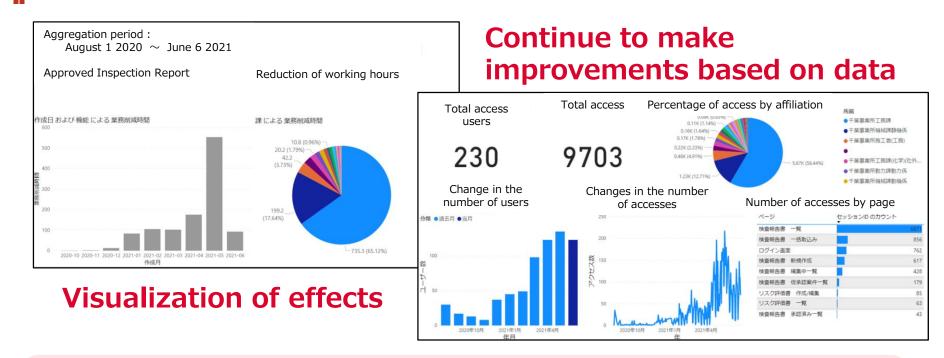
Digital Transformation
Office's first investment criteria



Shifting to a swift experience through a new approach (agile, design thinking)

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SDM Apps Visualization of utilization status



Use a single input , Automate data collection analysis and approval circulation

System input time for risk assessment : $5 \sim 15 \,\text{min} \, / \, 1 \,\text{work} \, \rightarrow \, \text{Few minutes} \, / \, 1 \,\text{work}$ results related to conservation work

Aggregation time for equipment performance data: 47 min / 1 work → 2 min / 1 work

1 work −70%

-30%

Digital for idemitsu

Our team working on agile development.

These initiatives helped create a corporate culture of working as one team to create better products instead of the former relationship with buyers and sellers.

The maintenance operator discusses new features and improvements in the software product with the developers. Developers program immediately and deploy next week



We don't set up regular meetings to discuss about issue, we try to discuss about it right away.

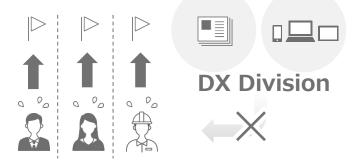


Points noticed through promotion of PJ and Way to proceed

It is important for the members of the work site to experience it.

Issue

Present the strategy/ Approach with technology support







Goal

3 Self-propelled

Business units
promote DX on
their own.



1 Experience

DX Division leads the implementation and verification.

the corporate culture

DX Division

111

111

DX native team



Teach DX skills



Promote understanding of DX



Roadmap for DX Organizing

The present



Transformation Stage

Mature stage DX Native Company

Proof of Concept by project team (7 persons per team)

Verify deployment to business units

Business units run themselves in DX.

Establish DX Division





January 2020 1case September 2020

4~5case



DX Division



- Formulation of a companywide digital strategy
- Building skill teams
- Creating new business



Transformation Center



DX Division take the lead → Business units take the lead(3~12Month)

Promotion of DX in manufacturing sites \sim Toward achieving the SDGs \sim

The three inviolable rules of DX promotion



Serious intentions of top management for employees



Excellent human resources to support management



A corporate culture that promotes challenge

Thank you for your attention