2023 INDUSTRY STUDY DATA SUCCESS FACTOR
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Study design

Online-Survey

Respondents:

- 126 industry decision-makers (mechanical engineering, automotive, electrical industry, chemical, pharmaceutical, food, medical technology, energy industry, etc.)
- From the following areas: Development, Production, Sales, Service, Purchasing, Business Development, IT, Operations Management
- Position in the company: owner, management, senior management
- Company size: from 40 million euros turnover

Survey period:
November/December 2022
Key results of the study

1. **A storm is brewing**, because in addition to the classic challenges in the supply chain and the labor market, the industry must face new problem areas such as digitization and sustainability. Traditional instruments of corporate governance are not sufficient as a countermeasure.

2. Industrial companies struggle far too often with **flying blind in the data fog**. As a result, they miss many opportunities and create additional hurdles in the course of business.

3. **Weaknesses are bridged by talent for improvisation, but in the long run**, they slow down the force of innovation. Because data exchange via Excel and email is time-consuming and error-prone.
4  Problem identified, problem solved? Unfortunately not. Many companies fail due to technical or cultural hurdles to break down the existing data silos. There is a lack of simple solutions for exchanging information across departments.

5  Emails containing important data often come from the executive floor. However, especially in dynamic environments, this static exchange of information often contains errors. As in the media, nothing is as old as yesterday’s information.

6  The sensitive handling of data among employees is present. But if access to the data is too complicated, risky shortcuts are often taken. Caution: Convenience can be dangerous.

7  Technical data play a central role when it comes to securing your future viability. Innovation-driven companies in particular must therefore pay attention to dynamic and barrier-free data exchange.
2023 Challenges
Diverse challenges for industry

In which areas do you currently see the greatest challenges?

- Profitability
- Supply chains
- Delayed projects
- Sustainability
- Shortage of skilled workers
- Digitization
Unstable supply chains are the biggest challenge for industry

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Very Large</th>
<th>Fairly Large</th>
<th>Rather Small</th>
<th>No Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chains</td>
<td>38</td>
<td>46</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Shortage of skilled workers</td>
<td>36</td>
<td>43</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>Digitalization</td>
<td>34</td>
<td>37</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Sustainability</td>
<td>33</td>
<td>38</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Profitability</td>
<td>26</td>
<td>48</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Delayed projects</td>
<td>24</td>
<td>44</td>
<td>28</td>
<td>4</td>
</tr>
</tbody>
</table>

in %
Using data

Can better use of data help meet the challenges? Which topics does this apply to?

The two biggest challenges facing the industry in terms of data use

- **63%**: Digitalization
- **58%**: Supply chains
- **52%**: Profitability
- **47%**: Sustainability
- **38%**: Shortage of skilled
- **33%**: Delayed projects

The company-wide use of data presents us with problems

- 50%
  - The data is not available equally in all systems
The value of data for industry
Data strategy

Does your business have a data strategy?

- Yes: 47%
- Yes, for the most part: 40%
- Not really: 13%

in %

How important is the use of data in your company?

Only for participants who have a data strategy.

- Improve collaboration in the company: 55%
- Better customer focus: 47%
- Relieving employees from routine activities: 45%
- Compliance with laws (e.g. supply chain law): 45%
- Increased cost transparency: 44%
- Increase in innovative force: 43%
- Drive growth: 40%
- Get products to market more quickly: 40%
- Greater individualization of products and services: 37%
- Development of new, data-based business areas: 36%
Data strategy

How important is the use of data in your company?
Only for participants who have a data strategy.

- 93%: The consistent use of data makes us successful
- 89%: The consistent use of data is one of our most important corporate goals
- 84%: The consistent use of data is vital to our company's survival

Lack of capacity and skills as the main reasons for not having a data strategy
Only for participants who do not yet have a data strategy.

- 79%: We lack the personnel capacities to consistently mine the "treasure trove" of data
- 63%: We lack the technical skills to consistently mine the "treasure trove" of data
- 53%: Our company has not yet recognized the "treasure trove" of data we are sitting on
„To compete in the marketplace, we need to promote the use of data.“

Only for participants who do not yet have a data strategy.

In which areas could the consistent use of data pay off for your company?

Only for participants who do not yet have a data strategy.

- Relieving employees from routine activities: 79%
- Development of new, data-based business areas: 53%
- Improve/simplify collaboration in the company: 53%
- Increase in innovative force: 47%
- Increased cost transparency: 42%
- Better customer focus: 37%
- Drive growth: 32%
- Get products to market more quickly: 32%
- Greater individualization of products and services: 26%
- Compliance with laws (e.g. supply chain law): 21%
Working with data
The number of software applications is constantly increasing

We work in a hybrid world consisting of our own server and cloud solutions
Challenges related to the distribution of data

Data is distributed across many software applications
80% agree with the statement

Data is distributed across different departments/locations
81% agree with the statement

Challenges in data management

- Data from a centralized data tool would be very helpful for making important decisions: 92%
- "Manual" data exchange leads to errors, misunderstandings, etc.: 73%
- Decisions are often made on the basis of outdated/incomplete data: 70%
- Data is kept in parallel without alignment of the information: 70%
- When exchanging data, security requirements are not always taken into account: 67%
Are data exchanged in your company via detours instead of from the systems provided for this purpose, for example via Excel or email?

- Yes: 43
- Somewhat often: 38
- Not often: 13
- No: 6

What channels do you use to exchange data in order to obtain the necessary information?

- E-Mail: 80%
- Excel: 68%
- Data is stored with us not exchanged in a roundabout manner: 17%
- Other: 4%
Data silos and interface problems
The battle with the data silos

Data silos hinder cross-departmental exchange at our company

Data silos weaken our innovative strength/competitiveness
Has the number of data silos increased or decreased in recent years?

- Somewhat increased: 42%
- Stayed the same: 47%
- Somewhat decreased: 11%

What stands in the way of the resolution of data silos in your company?

- Some departments protect their data silos – the power of knowledge
  - Applicable: 37
  - Somewhat applicable: 34
  - Somewhat not applicable: 21
  - Not applicable: 8

- Our corporate culture promotes the emergence of data silos
  - Applicable: 33
  - Somewhat applicable: 33
  - Somewhat not applicable: 24
  - Not applicable: 10

- We have so far failed to create the appropriate interfaces
  - Applicable: 28
  - Somewhat applicable: 43
  - Somewhat not applicable: 20
  - Not applicable: 9

- We strive to bridge data silos with good communication
  - Applicable: 32
  - Somewhat applicable: 53
  - Somewhat not applicable: 12
  - Not applicable: 3

in %
Would you need to adapt your organization for the sustainable dissolution of data silos?

We have stored copies of data in different systems.
Managers and data
Do you have all the information you need to manage your company at the touch of a button?

How often do you exchange data by email?
Employees and data
Can every employee in the company quickly and securely access the data they need for their work?

What does the handling of data look like in the everyday work of your employees?

78% Supporting employees ties up many capacities in our IT department.

75% A lot of data is still exchanged by email (e.g. as Excel tables).

71% Our employees often do not think about using all the data available in the company.
Does training in new programs and applications overwhelm your employees?

- Yes: 24%
- To some extent: 43%
- No, for the most part: 23%
- No: 10%

Do employees in your company ignore or circumvent rules for handling data, for convenience or to save time?

- Yes: 25%
- To some extent: 36%
- No, for the most part: 28%
- No: 11%
What is the level of risk awareness when dealing with data within your workforce?

- Limited: 25%
- Somewhat high: 47%
- Very high: 28%

With what grade would you rate the knowledge/skills of your workforce around the topic of data usage?

- Very good: 20%
- Good: 39%
- Satisfactory: 31%
- Sufficient: 9%
- Deficient: 1%
- Insufficient: 0%
The importance of technical data
Technical data is of paramount importance to us

Why is access to technical data particularly important for various departments in your company?

- **Technical data is central to the entire product lifecycle**: 94%
- **The exchange of technical data enables more efficient work**: 94%
- **Access to technical data promotes innovation**: 90%
- **Access to technical data by various departments reduces costs**: 90%
## Demography

### In what industry does your company operate?

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
<td>23%</td>
</tr>
<tr>
<td>Pharma</td>
<td>17%</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>15%</td>
</tr>
<tr>
<td>Medical technology</td>
<td>14%</td>
</tr>
<tr>
<td>Food</td>
<td>11%</td>
</tr>
<tr>
<td>Electrical industry</td>
<td>8%</td>
</tr>
<tr>
<td>Automotive</td>
<td>6%</td>
</tr>
<tr>
<td>Energy industry</td>
<td>2%</td>
</tr>
<tr>
<td>Other industrial sector</td>
<td>4%</td>
</tr>
</tbody>
</table>

### What position do you have in your company?

<table>
<thead>
<tr>
<th>Position</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder/owner</td>
<td>10%</td>
</tr>
<tr>
<td>Managing partner</td>
<td>9%</td>
</tr>
<tr>
<td>Managing Director/Board</td>
<td>19%</td>
</tr>
<tr>
<td>Senior management</td>
<td>38%</td>
</tr>
<tr>
<td>Area Manager</td>
<td>24%</td>
</tr>
</tbody>
</table>

### In which area do you work?

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>25%</td>
</tr>
<tr>
<td>Operations Management</td>
<td>21%</td>
</tr>
<tr>
<td>Business development</td>
<td>15%</td>
</tr>
<tr>
<td>Development</td>
<td>11%</td>
</tr>
<tr>
<td>Production</td>
<td>9%</td>
</tr>
<tr>
<td>Sales</td>
<td>8%</td>
</tr>
<tr>
<td>Purchasing</td>
<td>6%</td>
</tr>
<tr>
<td>Service</td>
<td>5%</td>
</tr>
</tbody>
</table>

### How big is your annual turnover?

<table>
<thead>
<tr>
<th>Turnover Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>40–100 million euros</td>
<td>20%</td>
</tr>
<tr>
<td>101–500 million euros</td>
<td>44%</td>
</tr>
<tr>
<td>501 Mio. – 1 billion euros</td>
<td>13%</td>
</tr>
<tr>
<td>Over 1 billion euros</td>
<td>23%</td>
</tr>
</tbody>
</table>
With XSPHERE webservices, companies in industry and other sectors can share technical data comfortably. All relevant information can be linked from the familiar working environment across locations and systems. The linked data is automatically updated without any synchronization. Data models remain unchanged. Since XSPHERE does not require any implementation, integration or migration, only low installation costs are incurred without any project risk.

XSPHERE is a product of XPLM, a global solution provider. The core competence of the company, which was founded in 2005, is to connect people, systems and processes. XPLM is headquartered in Dresden and has offices in the USA and Japan.
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