



# SWOT Analysis: digitalization of water sector

Let's brainstorm our strengths, weaknesses, opportunities and threats as part of our planning process.

CREATED BY ZAKHAR MALETSKIY 5 MONTHS AGO

## Process

### Brainstorm

Let's brainstorm our strengths, weaknesses, opportunities and threats.

Everyone can add Brainstorming collaboratively



### Group

Only facilitators can group



### Vote

You have 5 votes You can allocate multiple votes per idea



### Results

Here is our completed and prioritized SWOT for discussion and strategy planning.

Sized by # Votes Showing Top 5 voted ideas

## Participants

Participants 12

	NAME	EMAIL	ROLE	JOINED
A	Aleksander	aleksander@doscon.no	contributor	06/21/2023
AT	Azhar Turmukhambetova	azhar.turmukhambetova@gmail.com	contributor	06/21/2023
B	Birkbjorn	birkbjorn@gmail.com	contributor	06/21/2023
F	Fanjingmeng	fanjingmeng6@gmail.com	contributor	06/21/2023
GI	George Ifrim	george.ifrim@ugal.ro	contributor	06/21/2023
J	Jesper Johansen	jesper.johansen02@gmail.com	contributor	06/21/2023
LG	Liliana Ghinea	liliana.ghinea@ugal.ro	contributor	06/21/2023
O	Ojkrage	ojkrage@outlook.com	contributor	06/21/2023
S	Saradu	saradu@online.no	contributor	06/21/2023
UR	Ulf Rydningen	ulf.rydningen@nmbu.no	contributor	06/21/2023
VY	Viktoria Yavorska	yaviktoria077@gmail.com	contributor	06/21/2023
	Zakhar Maletskyi	zakhar.maletskyi@gmail.com	owner	06/21/2023

Participant Activity 12

	NAME	LAST ACTIVITY	# COMMENTS	# CHAT MESSAGES	# IDEAS CREATED	# GROUPS CREATED	# IDEAS VOTED FOR	# VOTES CAST
F	Fanjingmeng	06/21/2023	1		2		5	5
A	Aleksander	06/21/2023		1	8		5	5
AT	Azhar Turmukhambetova	06/21/2023			4		5	5
B	Birkbjorn	06/21/2023			6		5	5
GI	George Ifrim	06/21/2023						
J	Jesper Johansen	06/21/2023			4		5	5
LG	Liliana Ghinea	06/22/2023			2		5	5
O	Ojkrage	06/21/2023			2		5	5
S	Saradu	06/21/2023					4	5
UR	Ulf Rydningen	06/21/2023						
VY	Viktoria Yavorska	06/21/2023			5		5	5
	Zakhar Maletskiy	11/02/2023			1	2	1	1

## Ideas

Ideas 36

TITLE	DESCRIPTION	CREATED BY	CREATED DATE
Awareness		Ojkrage	06/21/2023
Broad specter		Jesper Johansen	06/21/2023
Competition with more attractive sectors		Aleksander	06/21/2023
Established working principles of hardware (infrastructure)		Aleksander	06/21/2023
Hacking	Lack of skilled worker	Jesper Johansen	06/21/2023
Hardware cost		Viktoria Yavorska	06/21/2023
Hardware costs		Zakhar Maletskiy	06/21/2023
high costbenefit		Zakhar Maletskiy	06/21/2023
High damage potential of failures		Aleksander	06/21/2023
High level of process control		Viktoria Yavorska	06/21/2023
Improves sustainability		Birkbjorn	06/21/2023
Incomatibility with old infrastructure		Birkbjorn	06/21/2023
Increased downtime from more complx issues		Birkbjorn	06/21/2023
Initial investment costs		Liliana Ghinea	06/21/2023
Interest		Azhar Turmukhambetova	06/21/2023
Lack of competence		Jesper Johansen	06/21/2023
Late introduction to digital tools in education		Aleksander	06/21/2023
Learning		Jesper Johansen	06/21/2023
Learning from other more digitally mature sectors		Aleksander	06/21/2023
Learning opportunities		Zakhar Maletskiy	06/21/2023
Loss of operator intuition		Aleksander	06/21/2023
Making a more versatile workforce in the water sector		Birkbjorn	06/21/2023
Malfunction		Ojkrage	06/21/2023
Necessary sector		Aleksander	06/21/2023
New job position for the engineer who work on the Automation and IT		Fanjingmeng	06/21/2023
Operators will need additional training		Viktoria Yavorska	06/21/2023
Operators willingness		Birkbjorn	06/21/2023
Public unawareness		Azhar Turmukhambetova	06/21/2023
Remote control		Birkbjorn	06/21/2023
Remove unnecessary daily manual work		Viktoria Yavorska	06/21/2023
Room for improvement		Aleksander	06/21/2023
Save operation cost (chemicals labour)		Fanjingmeng	06/21/2023
Slow implementation of digital tools in water sector		Viktoria Yavorska	06/21/2023
Technological obsolescence		Liliana Ghinea	06/21/2023
Uncertainty due to climate change		Azhar Turmukhambetova	06/21/2023
Urgency		Azhar Turmukhambetova	06/21/2023


## Comments

Comments by idea 1

	PARTICIPANT NAME	IDEA	COMMENT	DATE
F	Fanjingmeng	Hacking	The possibility of the leakage of information	06/21/2023

## Chat

Chat messages 1

PARTICIPANT NAME	MESSAGE	DATE
 Aleksander	I feel Hacking is bad.	06/21/2023

## Brainstorm

Let's brainstorm our strengths, weaknesses, opportunities and threats.

Ideas 34

TITLE	CREATED BY	LIST (BRAINSTORM)
Awareness	Ojkrage	Strengths
Broad specter	Jesper Johansen	Opportunities
Competition with more attractive sectors	Aleksander	Weaknesses
Established working principles of hardware (infrastructure)	Aleksander	Strengths
Hacking	Jesper Johansen	Threats
Hardware cost	Viktoria Yavorska	Weaknesses
high costbenefit	Zakhar Maletskyi	Strengths
High damage potential of failures	Aleksander	Threats
High level of process control	Viktoria Yavorska	Strengths
Improves sustainability	Birkbjorn	Strengths
Incomatibility with old infrastructure	Birkbjorn	Weaknesses
Increased downtime from more complx issues	Birkbjorn	Threats
Initial investment costs	Liliana Ghinea	Weaknesses
Interest	Azhar Turmukhambetova	Opportunities
Lack of competence	Jesper Johansen	Weaknesses
Late introduction to digital tools in education	Aleksander	Weaknesses
Learning	Jesper Johansen	Opportunities
Learning from other more digitally mature sectors	Aleksander	Opportunities
Loss of operator intuition	Aleksander	Threats
Making a more versatile workforce in the water sector	Birkbjorn	Opportunities
Malfunction	Ojkrage	Threats
Necessary sector	Aleksander	Strengths
New job position for the engineer who work on the Automation and IT	Fanjingmeng	Opportunities
Operators will need additional training	Viktoria Yavorska	Opportunities
Operators willingness	Birkbjorn	Weaknesses
Public unawareness	Azhar Turmukhambetova	Weaknesses
Remote control	Birkbjorn	Strengths
Remove unnecessary daily manual work	Viktoria Yavorska	Opportunities
Room for improvement	Aleksander	Strengths
Save operation cost (chemicals labour)	Fanjingmeng	Strengths
Slow implementation of digital tools in water sector	Viktoria Yavorska	Weaknesses
Technological obsolescence	Liliana Ghinea	Threats
Uncertainty due to climate change	Azhar Turmukhambetova	Threats
Urgency	Azhar Turmukhambetova	Opportunities

## Group

Ideas 2

TITLE	GROUPED IDEAS	GROUP CREATED BY
Hardware costs	<input type="text" value="Initial investment costs"/> <input type="text" value="Hardware cost"/>	Zakhar Maletskyi
Learning opportunities	<input type="text" value="Learning from other more digitally mature sectors"/> <input type="text" value="Learning"/>	Zakhar Maletskyi

## Vote

TITLE	VOTES	# VOTERS
High level of process control	7	6
Incomatibility with old infrastructure	4	4
Hardware costs	3	3
Room for improvement	3	3
Improves sustainability	3	3
High damage potential of failures	3	3
Remote control	3	3
Hacking	3	3
high costbenefit	3	3
Making a more versatile workforce in the water sector	2	2
Remove unnecessary daily manual work	2	2
Learning opportunities	1	1
New job position for the engineer who work on the Automation and IT	1	1
Save operation cost (chemicals labour)	1	1
Public unawareness	1	1
Technological obsolescence	1	1
Loss of operator intuition	1	1
Lack of competence	1	1
Late introduction to digital tools in education	1	1
Increased downtime from more complx issues	1	1
Operators willingness	1	1

# Results

Here is our completed and prioritized SWOT for discussion and strategy planning.

TITLE	DESCRIPTION	CREATED BY	CREATED DATE	COMMENTS	# COMMENT	LIST (BRAINSTORM)	RANK	LIST (GROUP)	RANK	GROUPED IDEAS	GROUPED IDEAS - DESCRIPTION	# GROUPED IDEAS	GROUP CREATED BY
Hacking	Lack of skilled worker	Jesper Johansen	06/21/2023	The possibility of the leakage of information	1	Threats	7	Threats	7				
Hardware costs		Zakhar Maletskyi	06/21/2023					Weaknesses	6	Initial investment costs Hardware cost		2	Zakhar Maletskyi
Incomatibility with old infrastructure		Birkbjorn	06/21/2023			Weaknesses	1	Weaknesses	1				
Room for improvement		Aleksander	06/21/2023			Strengths	1	Strengths	1				
Improves sustainability		Birkbjorn	06/21/2023			Strengths	2	Strengths	2				
High damage potential of failures		Aleksander	06/21/2023			Threats	3	Threats	3				
Remote control		Birkbjorn	06/21/2023			Strengths	6	Strengths	6				
High level of process control		Viktoria Yavorska	06/21/2023			Strengths	7	Strengths	7				
high costbenefit		Zakhar Maletskyi	06/21/2023			Strengths	9	Strengths	9				