**Introduction and Background:**

**Perceptions of AI in General:**

**AI in Studies:**

**AI in Facility Management:**

**Impact of AI in Facility Management:**

**Campus Facilities**:

**AI in Space Optimization:**

**Predictive maintenance:**

**Security and privacy:**

**Conclusion:**

**Call with Dimitrova, Simona (222667)-20231025\_093656-Meeting Recording**

0:04  
Do we have five teams or you use.

0:07  
Yeah for it.

0:08  
Yeah, we are using teams.

0:09  
Yeah.

0:10  
Yeah, yeah, that works.

0:11  
Works perfect.

0:12  
Yeah.

0:13  
All right.

0:15  
So I'm Matei from data science and artificial intelligence second year student.

0:20  
And we have our research to for a facility management program to help how to improve AI in.

0:29  
Yeah, in the program to integrate it.

0:31  
Specifically, I'm my project, my research folks about predictive maintenance.

0:36  
But we're doing interview about every single aspect.

0:40  
So do I have your agreement to record the everything?

0:44  
Yes you have my name by the way is Will Hoskins.

0:47  
I'm a lecturer at the International Facility Management Education and Vivas, right.

0:56  
So the first questions is first questions are going to be about your your game background.

1:03  
You already said who are you etcetera.

1:07  
So can you tell me what's your experience in facility management and what motivates you to pursue in these fields?

1:13  
Yeah, my experience already for a long time.

1:15  
I actually did a bachelor facility management many years ago.

1:19  
I think I finalized that in 83.

1:22  
Then I worked for about 17 years in the facility management industry.

1:27  
Different topics.

1:28  
I used to work with a cleaning company, middle management.

1:33  
I used to work with a catering company as a director of strategy and business development for five years.

1:39  
And I worked for almost 12 1/2 years at the Dutch National Post and Telecom Organization as a facility professional.

1:50  
And then I started teaching for more than 18 years at Buas within the facility management program.

1:57  
And till three years ago, I was the program manager for for the same course for more.

2:03  
For almost 10 years.

2:04  
No, not ten.

2:05  
I'm lying.

2:05  
Eight years.

2:06  
Eight years, right.

2:10  
What are the top three skills that you consider are the most important in to learning facility management and how do you do you see yourself applying this in real life situation or how you have applied them in a real life situation?

2:22  
Yeah.

2:22  
Like I, like I just said, I, I work my whole life in facility management.

2:26  
And what I like about facility management, it's a people's business and you're basically able to helping people, having a nice environment, having well building within a building, offering the services.

2:40  
So yeah, it is something you can do and it's, yeah, like I said, you work with people the whole day, so that makes it interesting.

2:50  
It's not that you're sitting behind the desk the whole day, right.

2:55  
The next question is about the perception of AI in general.

2:58  
Of course, we know AI is a really big thing right now and it's it's, it's evolving, not evolving, but improving really fast over the time and it's getting over, it's getting every single domain.

3:10  
So the first question is about when did you first, what was, when was the first time you actually started hearing about the AI?

3:18  
And and can you tell me in a few words, how would you describe your understanding of AI?

3:22  
I think first time was maybe 1 1/2 year ago.

3:27  
I heard it from my daughter, She was working with it.

3:31  
I'm working also some chat bots of course are known for a longer time, but they had to be honest, four years ago.

3:38  
That wasn't, for me at least not seen as AI.

3:41  
But apparently it also has to do with AI.

3:44  
So you have a lot of things which are already there for more years predicting.

3:51  
I used to work with Excel predicting the future with that.

3:57  
So that is a kind of AI and I'm working already for many years with that.

4:04  
I was seen as the Excel expert within the organization.

4:08  
So, and to be honest, I'm not really, most people are even better.

4:12  
But just knowing how it works helps you a lot, especially if you're management.

4:17  
You're always a step ahead because you can analyse and see what is going to happen, right?

4:27  
Are there any fears you have associated with AI?

4:33  
It can, it can be disruptive.

4:35  
On the other hand, I'm old enough to recognize that it is also hype.

4:40  
And every four or five years there's a new hype and we survive them all.

4:46  
But there can be a kind of disruptive thing.

4:49  
On the other hand, I think that society will solve them.

4:53  
It can be really disruptive because it can lose a lot of jobs.

4:56  
It can have a totally different impact on the labor market.

5:01  
But OK, the atomic bomb after the first Second World War was also disruptive.

5:07  
We could be wiped out within a day.

5:10  
Yeah, that didn't happen because society found a solution for that.

5:18  
And the humans are really adaptive.

5:19  
So the humans are really adaptive.

5:21  
Yeah.

5:22  
Yeah.

5:22  
And I I hope on that, that at least people are smart enough to recognize, OK, this is what we should do and this is what we shouldn't do.

5:31  
Yeah.

5:34  
In your opinion, ways are most commonly used in today's world.

5:37  
Yeah, you mentioned your your experience in Excel, but what do you where do you think it's used now?

5:45  
Where what is the question is where is AI most commonly used in today's worlds?

5:51  
Yeah, I think I hear around me a lot of people in chat bots in in predicting the future, analysing data, Power BI, those kind of things.

6:01  
They were already for many years and especially of course in finance.

6:05  
Yeah, if you, if you don't know excel in finance, you can't find a job I guess, because everything is done there in that business.

6:16  
OK.

6:17  
Now question about the BLAS campus facilities.

6:21  
So yeah, our focus is around facility management programming.

6:24  
And of course when we talk about, we will talk about the campus itself.

6:28  
So the question is how do you think AI Technologies can improve the campus in BLAS?

6:34  
Yeah, we have of course that workplace registration app, although a lot of people don't work, but this is my experience to be almost but OK, I can see the advantages especially if you think about emergency important emergency procedures when people have to leave the building that we could perform on that for energy consumption, registration, saving energy.

6:58  
So achieving the SDG targets from Paris, AI can really help with that.

7:07  
But also in our core business, of course AI can help.

7:11  
It can help students finding staff, finding the right literature for their BTS.

7:16  
But it can also help in in the future teachers with with the grading and with of thesis is there's a lot of potential that it could easily make a lot of colleagues breathless I would say.

7:33  
But again you can you can focus then a lot of things of course.

7:39  
So if you don't see the threat then yeah it really helps.

7:43  
And in our core business, of course facility has a lot to with registration, a lot of Internet of Things is that was the previous hype I would say, yeah, everything had to be connected.

7:56  
But OK, you've got so much data that basically we didn't know what to do with it and that's what AI can solve.

8:04  
Of course, it can automate all the information we get from the building or from the people in the building and make that for for our benefits.

8:16  
All right.

8:18  
Yeah.

8:18  
Also in our program that there is a motor monitoring of our attendance.

8:24  
So we, it's not exactly an AI, but theories and technologies instead of the features.

8:29  
Yeah.

8:29  
The new, the new bright space also does it there.

8:32  
Yeah.

8:33  
But I'm afraid those things are not going to work.

8:37  
All right.

8:37  
So now we're going for artificial intelligence in the studies.

8:42  
The next question is how have you used?

8:45  
Have you ever used the AI tools or applications to assist in your university work?

8:50  
Bits, written studies?

8:51  
But you're not a student anymore?

8:54  
No, but I use it for for checking bachelor thesis.

8:58  
I'm experimenting with grading using AI using share GTP.

9:06  
I use it for advising students for since yesterday I have a bachelor thesis and they had to find a new name.

9:14  
They were working with performance analytics and they said yeah, but the evaluation, evaluation reports, that evaluation is a word that's yeah, that's not fancy and it's like checking.

9:30  
So they found out that they want a different word for evaluation.

9:35  
And then they came up with a word where I was saying that's basically the same.

9:40  
And then you just type in an AI on Chachi to be OK, Can you give me some alternatives for an evaluation report?

9:47  
15 suggestions, all better than the one they were thinking about.

9:52  
And that was one of the major cleaning companies in the Netherlands with, yeah, more than 100,000 employees.

9:59  
So basically, can generate IDs, It can support you.

10:04  
Yeah.

10:05  
So that's that's a good future for that and I use that because yeah, I'm also not that creative finding new names but you can of course do that in many things.

10:16  
All right.

10:17  
The next you actually answer to the next question which is about the chat bots like ChatGPT for academic purposes and you just have later in.

10:25  
So I'm just going to move on to the next question.

10:28  
Nah, maybe.

10:29  
I think chat bots s s the there is kind of rich because what you see with chat bots using by energy companies is basically they don't help you, not really.

10:41  
So if there is an involvement in chat Foss that they really look at the person behind the question and not a technical solution.

10:50  
Otherwise it will turn out the other way.

10:52  
If you most people have now the experience, if they call a call centre and the chat bot is just an automated call centre, they they're not helped that basically even more angry very often than when they started to call and that's because of the procedures.

11:10  
So if that is the same with chat bots, it is, yeah, it's going the same way.

11:17  
Yeah, right.

11:19  
The next question is, yeah, I think it's almost you answered to it again, Can you envision your academic experience without the, Oh no, no, you didn't.

11:27  
Can you envision your academic experience without the systems of AI tools and chat bots probably years ago, right, Yeah, Yeah.

11:34  
Chat bots are of course used in facility management information systems and because it's basically automating the service desk.

11:42  
So that's helpful and I have, yeah, I used to have experience with hence here and hence here was a kind of tool that helps you with evaluations, but that's already many years ago.

11:57  
I wouldn't say it's AI, but probably you would now automate it in AI.

12:03  
All right.

12:04  
The next question is about the workshops related to AI.

12:08  
Have you had the opportunity to take any courses or to attend one of those workshops in bus or somewhere else?

12:16  
No, not in Boas, but it was a couple of weeks ago.

12:18  
He also to Denver conferences convention for a facility management that's an annual conference convention and there were a lot of workshops about AI and even the keynote speakers of the conventions the topic was AI.

12:36  
So that was really interesting was was a lecture from MIT in in in America.

12:42  
And he had the whole presentation about AI, the advantages and disadvantages and where it's used, etcetera.

12:51  
So really interesting.

12:53  
Yeah.

12:53  
And MIT is one of the best universities.

12:55  
Yes.

12:56  
One of the best in the world.

12:57  
Yeah.

12:57  
Not yet They are.

12:59  
They're able to pay such a guy €20,000.

13:01  
So then you can afford to getting the best, of course.

13:06  
Yeah.

13:07  
Do you think this, this type of workshops can be useful for the students?

13:12  
Yeah, of course.

13:13  
Yeah.

13:14  
If you have the key people who are at the beginning of those developments, they have interesting stories.

13:20  
I think last time when we met, I told you the story about that entrepreneur that started an AI business, AI made her whole website.

13:30  
She was also talking about what I just said about that disruptive kind of thing that AI can be, and she gave me that example about what I was just telling about yet.

13:40  
And mom said, yeah, they're they're more disruptive things in the in the past and we solved them.

13:47  
So it helps that story helps people to to look at AI imbalance to to know there are there, it can be disruptive that can be bad things done by that.

14:04  
But how can we solve it?

14:08  
Right now we're going for AI in facility management.

14:13  
This is one of the research questions of our group mates.

14:17  
And the question is in what aspects of, in what specific aspects of facility management do you believe AI will play a significant role?

14:25  
For instance, can IAI contribute to energy efficient facility measurement?

14:29  
If so, how?

14:30  
Yeah, both of course the discussion and I think I came up with those.

14:34  
Yeah, no, it's already used in measurement.

14:37  
Of course, it's is already kind of used in in productive and in maintenance, but also in connection with Internet of Things registration data.

14:49  
And there's a huge opportunity for AAI, especially in the Western world with the aging double aging of people.

14:57  
We don't have enough people to do all the maintenance.

15:00  
So AI can help you to oversee where where it's needed most.

15:08  
So if you have enough people you can repair everything.

15:11  
If you don't have enough staff, you have to set priorities and that's what you can do of course with AI.

15:18  
What they're already doing in America, and I don't know in the West also is basically registration temperatures of of of air course, or registration the temperature of a of a of an engine And to see, OK, if the engine is too high, yeah.

15:38  
And maybe you have to do the service within 30,000 kilometers of a car, otherwise you will really have high costs.

15:48  
So instead of going every six months to do your maintenance, if you don't have the equipment and you don't have the mechanics anymore, you should basically when it's needed.

16:01  
And that's this way I can help of course, but also with registration measurements, chat bots, the things we just discussed now, right.

16:14  
Do you believe that perceptions and attitudes towards the use of van for CT measurement very vary vary among different age groups?

16:22  
Yeah, of course.

16:23  
But I wouldn't say it's, it also has to be with how we're in that.

16:29  
I used to be my whole career.

16:31  
Yeah, a large part of my career, director, strategy and business development.

16:34  
So I'm open for new things.

16:37  
That was my job.

16:39  
And that's of course, I think it's easier adaptable for young people to be open for it, but not necessarily what you would see though if you look at the workforce, they probably would see it as a kind of game changer and as something that would take their jobs.

17:01  
And that will happen for sure.

17:04  
And probably it's just really important for inflation of the perception of AI.

17:08  
Yeah, not necessarily.

17:10  
But if you look in real life, it there is a difference, of course.

17:14  
Yeah.

17:15  
Because probably the younger people are more able to, to adapt, they're more open for it.

17:21  
Yeah, but on on the other hand, do they have enough experience to balance it out?

17:28  
That's that's what you see now with Facebook.

17:31  
Everybody is doing everything and your whole life is there.

17:35  
Yeah, I know the time in the Second World War that basically the germs were very happy to know who was a Jew because.

17:44  
And we're not talking about AI, We're just talking about the registers in in, in, in, in, in government at the local City Hall.

17:56  
I don't hope and I don't think it will happen again.

17:58  
But there is a downside, of course on AI.

18:02  
All right.

18:05  
In in your opinion should students be actively involved in decision related to AI implementation in facility management at home as yeah, the problem is we talk too much over people and not with people.

18:18  
But that's a general thing that's not only applicable for AI.

18:22  
We think as organization we know what's best for you without asking and who do we who do we are to to be able to think that but OK that that's a common thing I saw my whole career to be honest.

18:37  
So I'm afraid Ford go away.

18:39  
Yeah.

18:41  
OK you probably will be just the same in 30 years.

18:46  
I hope not, but I'm afraid, yes.

18:48  
Yeah, I still have time to.

18:50  
Yeah, yeah, yeah.

18:51  
You have to learn it the hard way.

18:54  
That's how it goes.

18:56  
How might variations in perceptions among different age groups impact the adoption and integration of AI driven solutions in the future facility management?

19:06  
I think as soon as we're able to explain the workforce, that is not a threat, but it's basically it can support them and make their life easier.

19:17  
They're willing to adapt, but it's all about communication and it's about change management.

19:23  
And I think one of the key things in adapting is behavioural change.

19:29  
So it's not even a technical thing.

19:31  
It is how can you persuade people to to go the other way?

19:37  
And you can do it of course, with the carrot and the stick.

19:41  
I rather use the carrot to be honest, but I think that is the biggest challenge.

19:47  
Challenge how you how you can change the behaviour of people and of course it will be easier with young people and more difficulty who you are.

19:58  
But yeah, like I said, not necessarily, it's what's your experience with that.

20:04  
If you have a great experience and that every job, job rotation went well for you, yeah, you're not critical.

20:14  
Again change.

20:17  
Yeah, I know.

20:18  
Yeah, obviously it depends.

20:19  
Yeah, I hope when we are, yes, If you're more conservative and you're scared of that, of course you're not going to be more no.

20:25  
And I think one of the key things is in that side why I think it's not that threatening you for facility management.

20:31  
Facility management is a people's business in the end, it's people.

20:34  
Technology was already there for many years and that's not a threatening thing because we're aware that we have to work with technology.

20:43  
We're working with smart buildings, We're working in that environment.

20:47  
But in the end, it's the people who made the difference.

20:52  
OK, yeah, I agree.

20:55  
Now we can move on to campus facilities.

20:57  
Again on our supervised question, how would you define your present experience with West Campus facility, particularly in terms of comfort and convenience?

21:07  
I'm pretty satisfied to be honest.

21:09  
But I know it can be worse.

21:11  
It can be, it can be better also.

21:15  
But it's, it's again, it's what is your perception and what are you?

21:21  
Yeah, yeah, yeah.

21:23  
What is your experience with that?

21:25  
Just in the remark I made about how you're sitting, that's really bad.

21:29  
That's chicken setting, I would say.

21:33  
That's what you find in London where you pay maybe €10,000 square meter or something.

21:40  
In that case, you really would have been together.

21:43  
But this is not good.

21:45  
It's not healthy.

21:47  
No.

21:49  
So we can improve for sure.

21:50  
On the other hand, when you see those facilities, yeah, beautiful.

21:54  
And you see the new screens.

21:57  
You always have to realize that.

21:59  
Yeah.

21:59  
You have to work with limited budgets.

22:02  
Yeah.

22:02  
Boas, I think, in my opinion have really.

22:04  
Yeah.

22:05  
As a buildings, they look really good.

22:07  
And also.

22:07  
Yeah, they're really convenient.

22:09  
Yeah.

22:09  
And I like the campus ID.

22:11  
The, the ID behind that is that you have exchanged between different academies that.

22:16  
Yeah.

22:17  
OK.

22:19  
How would you define an ideal learning environment within Boas campus facilities and what elements do you consider most important?

22:26  
Yeah, Living labs, I think that's the discussion we're getting to.

22:29  
Well, I think that is the future and again that's basically focus on your personal or professional development in working in teams, because that is also reality in your work life later on.

22:45  
So if you if you gain that experience during your study, you see the, the positive but also the negative things and that's why you learn.

22:54  
Of course learning is by doing and especially by failing.

23:00  
Yeah I it's exciting programming especially it's can be conscribed as that because it's very practical.

23:06  
You don't when you start writing codes and you do mistakes you just at some point you learn it.

23:13  
Yeah.

23:13  
And if you really.

23:15  
Yeah well not able to say the words then you have to be careful.

23:22  
But you know what I mean.

23:23  
Yeah.

23:23  
Yeah that that's the way you are.

23:26  
I know.

23:27  
I started with programming and in BASIC, and when you were doing that, it was a dot or a comma when you were typing those lists for the game.

23:37  
Yeah, and the dot and the comma and the.

23:40  
You've typed them in thousands sentences and then you thought, OK, there's a difference between the dot and the coma.

23:49  
OK, yeah.

23:50  
Especially if you have to do it over again.

23:54  
And in those days, that wasn't word processing, so it's not shift replace.

23:58  
We really had to go with little lights.

24:05  
The next question is, can you share any specific challenges or inconveniences you have encountered in Bua's campus facilities related to preferred convenience or accessibility?

24:16  
No, no, no, actually, no, not really.

24:24  
I'm pretty, yeah.

24:26  
The service desk, maybe, Yeah, I don't.

24:31  
There are rules and there are certain procedures, but basically I want to be helped.

24:36  
So I don't care what the procedures and rules are.

24:39  
If my computer is broken, I want another computer.

24:44  
And I don't want to hear that, yeah, the procedures that can't be done because yeah, I imagine it, it costs extra money.

24:57  
But OK, nobody said that I'm not willing to pay as an Academy for extra PCs just to have some spares PCs left if if something breaks.

25:09  
Or yeah, who says we don't want one janitor who is available the whole day for fixing the the screens in the classrooms.

25:18  
By the way for the analysis you can ask.

25:21  
So I know you understand those procedure now because budgets are not limited, that's OK Are are there any specific areas or zones within the bus campus facilities, for example, libraries, study room, cafeterias where you believe AI implementation could have the most immediate and positive impact on on the students experience?

25:45  
Yeah.

25:45  
And maybe with finding things.

25:47  
So I see a kind of hard time for the library because, and you already see that when I started 18 years ago, it was still about books and journals.

25:57  
I think the average students has one or two books a year or something they borrow.

26:06  
And that's OK because, yeah, it's more accessible for databases and all kinds of other things.

26:11  
And until now, library people really would be able to help you because they knew where to look, they knew what to find, they knew what the right keywords are.

26:22  
But that can be taken over by chat bots and by they are by AI of course.

26:30  
OK next question, are there any specific facility related tasks or procedures that you feel I simplify or make more convenience?

26:40  
Yeah, the Facility system, Facility Management Information System can make things easier.

26:49  
All kinds of things.

26:51  
Connections.

26:52  
The mechanization, automatization, I would say.

26:57  
So skip the middleman.

26:59  
Skip, skip the person who translates the data into action immediately.

27:06  
If if if if something is not working properly or there's a lot of breakdowns of the elevator, it should send automatically a message to the company to repair it and shouldn't be depending on that somebody is looking at that.

27:25  
All right, next question.

27:26  
How important it is for us to continually invest in campus facilities for benefits of the students.

27:31  
Yeah, it's the war of talent and but it's also the war between the educations.

27:35  
Of course you want to be the best.

27:37  
You want to be the best sustainable, you want to be the best in in AI because yeah, you have all those rankings where everybody looks at.

27:46  
So it's also depending on your future.

27:50  
Like you just said, MIT is the best.

27:53  
I'm pretty sure you don't have proof for that, but they have to name that they are the best.

27:58  
And they probably are because yeah, it costs ages to get that name and you can lose it in a year.

28:07  
Yeah.

28:09  
Have you faced any personal challenges or inconveniences within Buaz Campus facility that you believe AI could address?

28:20  
Yeah, maybe waiting lines in catering.

28:22  
I would say they should know what I'm having for lunch now and as soon as I drive at the premises they should know.

28:34  
OK, he's in today.

28:36  
So get a tea sandwich milk and super ready.

28:42  
Now we move on to impact of AI in facility management, another self research question.

28:49  
So how important is that is the use of artificial intelligence, facility management program from your perspective, what are the potential benefits that AI can bring to this field?

28:59  
Maybe you kind of answer to these questions.

29:01  
Yeah, it supports the business of ours that that's what it does and it helps and it makes in the future people redundant.

29:12  
But that sounds bad, but it's good because we don't have the people anymore.

29:19  
So we really need AI to be able to cope with the facilities to do the job.

29:27  
If, if, yeah, if there are no catering people anymore, no cleaning people anymore.

29:32  
We need the AI to to direct robots to clean or to even prepare food.

29:42  
In your opinion what's the impact will be integration of artificial intangers have on the practice of facility manager in the current years.

29:49  
Yeah.

29:50  
What did you say it Yeah.

29:52  
Do you believe that introducing artificial intanging into facility manage necessary to meet future challenges and demand demands effectively in demand?

30:01  
Do you believe that introducing artificial intelligence in the facility measurement is necessary to meet future challenges and demands for efficiency?

30:10  
Of course, what I just had, yeah, with the aging of people, it is otherwise we can't cope with the problem.

30:20  
Uh, yeah.

30:21  
I I think most of the next questions are, uh, you have answered it, but I would just read them just in case.

30:26  
Mm hmm.

30:27  
Can you provide some insights into when AI should be ideally used in facility management process?

30:32  
Are there specific scenarios for Dash where I could be particularly valuable?

30:36  
Yeah.

30:37  
In the ultimatization of decision making processes and connection from the sensor is from the Internet of Things to really direct decision making and yeah, setting out orders to fix and to repair things.

30:55  
Yeah, we in what specific aspects of facility management do you think AI will play key role?

31:00  
Are there areas where AI could potentially revolution nice.

31:04  
Yeah, I think teaching, degrading, advising, finding the right literature, et cetera, et cetera, Right.

31:14  
We go to AI space optimization.

31:17  
Are you happy with how the spaces in vase are organized and maintained?

31:21  
No, yeah, maintained I'm fine with.

31:25  
Although what you now already see is that from the cleaning aspect it it gets worse because we have the the wrong floorings.

31:33  
You see now the coffee stains and then you see that that the building is slowly the the tearing.

31:41  
I would say that's a pretty, but on the other end, yeah, try to do everything about it, of course.

31:47  
How do you think can be a bit better?

31:52  
Also the building key, the buildings are not really big.

31:55  
For example, we have a limited building and we have a lot of new students.

31:58  
So yeah, that is what we have to solve within the workplace assignments.

32:05  
So what you see in some office buildings, so only 20% of the people are coming back to the office.

32:10  
So they have more than enough room.

32:12  
But the navigation, it's a bit different of course.

32:15  
So maybe to do with online learning, but that's not very popular because student collaboration is one of the key things also.

32:27  
Yeah, no, I don't have really a solution for it.

32:31  
But yeah, it can be challenging, right?

32:35  
Do you think AI can solve the space optimizations issues?

32:39  
Yeah, it can surely help because with the sensoring, it can actually direct people to where the places are.

32:46  
It can help people with collaboration together.

32:50  
You know where your team is.

32:52  
If the team wouldn't be able to go in that room, it can automatically send you somewhere else where there is space.

32:59  
So of course, last question of this section, do you believe that AI will become the norm in space optimization and planning in the upcoming decades?

33:08  
Yeah, but again, don't underestimate behavioural change.

33:14  
People actually do what they want.

33:18  
We are now have open plan and basically don't have a designated desk.

33:25  
Look, in reality everybody has their own desk.

33:30  
Unless you are stupid enough to come later, they don't have a desk.

33:34  
So of course the program is clear and you can assign desks.

33:39  
But yeah, behavioral change again.

33:45  
All right.

33:45  
Now we go to predictive maintenance and can you tell me how familiar you are within the context of facility management?

33:52  
Yeah, I used to work with KPM real estate.

33:54  
So that was our core business.

33:56  
We had a couple of 1000 buildings in the Netherlands and we had to maintain them, Yeah.

34:02  
And in those days we had the workforce was large enough, so we had more than enough people.

34:07  
So maintenance was all very high level and it was state budget.

34:13  
So and and besides that can you provide any other examples how it can be implemented the predictive analysis, yeah basically by using those sensors and automatically registrate what is happening.

34:30  
But also in the in the acquiring of new buildings, SAP already has a blockchain solution for for for the rent of new buildings.

34:41  
Because basically it's a whole process and with blockchain you can actually, and that's the kind of AI.

34:46  
With blockchain you can actually say OK, if the note resigned then it has to go to that person and if he signed.

34:54  
So basically it's a process which doesn't need anybody and you even have predictive maintenance for, for, for, for, for instance the paint work.

35:06  
If you put a sensor on the outside of a of a window frame and you measure how thick the layer of paint is, you can automatically, if it's not thick enough anymore, send the request to the to the painting company and say OK, it's time that you do the painting on that part of the building because that's on the range side and the other part can be a year later, right.

35:30  
How do you, how do you think predictive maintenance can influence decision making within your facility management program?

35:37  
Yeah, yeah, just gave the example and so.

35:39  
So, yeah, why to paint everything in one year, you know, there is a difference between the north and the South side.

35:46  
Yeah, when you're talking about painting.

35:49  
Yeah.

35:49  
And it's the question also there is a continuation where it says yes in the prioritization of maintenance task.

35:56  
Yeah.

35:56  
And yeah.

35:57  
So yeah, yeah.

35:59  
Can you provide example of decisions that were made differently or more effectively with the insights generated by predictive analysis?

36:12  
And then give an example?

36:19  
Yeah, the example I think I just gave about basically you do the job when it's needed and not when it's planned.

36:27  
And again, with the shortage of labour, it's one of the key things that you put your workforce in as efficient as possible.

36:37  
So if you use AI to put sensors on your air conditioning and it says that it's working fine, that there are no no problems with that, OK, why to repair the air conditioning if everything is working fine?

36:53  
There's a nice example about Mercedes trucks in America and you can manage them, yet they are money with it, so they want to have as less downtime as possible.

37:04  
So the Mercedes truck actually has sensors on it for the, for measuring the thickness of the oil, for measuring the heat, all kinds of sensors that will be automatically sent to the garage.

37:16  
And then we'll say, OK, you need to come to the garage within 30,000 kilometres, otherwise it's really goes bad for your engine.

37:23  
They already make your appointments, they already ordered the spare parts because they know exactly what needs to be done.

37:32  
And so the downtime for the truck driver is normally could take him a couple of days and now he's in and out within two hours.

37:42  
And that's not one truck in America that are 100 thousands of trucks and that is already done by AI, by Mercedes.

37:52  
So that's just an example how it can help with predictive maintenance with maintenance in general.

38:02  
The next question is how do you see the future of predictive analysis evolving within the facility management field and what potential impacts or changes do you anticipate it could not, yeah, it will happen till come for sure.

38:16  
It will save costs and it will, will solve the shortage of Labor.

38:22  
Mm hmm.

38:22  
So AI is, yeah, it's it's even necessary and it will help of course with the whole decision making process.

38:30  
So it will also generate data, OK, skip that kind of maintenance or skip that kind of machinery because it's not working.

38:41  
So it also will help you achieving your STA's goal, sustainable development goals, because instead of buying every five or something new, you will really be able to save money because yeah, if you really want to be sustainable, you don't build a new building, you use the existing building and refurbish it and that's what you also can do.

39:10  
Yeah, there's a big benefit.

39:13  
Final question of this section, are there any ethical or privacy consideration that need to be addressed when implementing predictive analysis in facility management?

39:22  
Yeah, of course they're always setting unpredictable.

39:25  
You can actually censor everything and use everything in the AI.

39:30  
So you have to find a solution how to normalize data, and that's of course possible.

39:37  
But the downside is if you're good enough, you can track it back.

39:43  
That's what we see in the whole hacking business.

39:46  
And nothing is safe.

39:48  
And everybody who says that they can't be hacked, so they are big liars.

39:54  
Now we go to the West section, which is security and privacy.

39:58  
Can you share your thoughts or whether AI can help make our compos safer and more secure?

40:03  
Yeah, of course you can use AI for getting the data out of all the cameras doing the facial recognition.

40:11  
See who is not allowed to worry is allowed here.

40:14  
Yeah, and then that's already done then.

40:18  
We have the example about China.

40:20  
I don't know if it's true, I've never been there, but yeah, you can do that Street three strikes out.

40:28  
So if you're crossing the red light times the third time, they automatically come to you and close your banking account apparently.

40:39  
How how do you feel about the idea of using AI to enhance security in our university?

40:47  
Yeah.

40:48  
If long is it for the benefit and not threatening people.

40:51  
So it.

40:52  
Yeah, if it's done for the goods and general accept, of course, especially when you consider what's happening in American schools.

41:01  
Yeah.

41:04  
Are there any specific situations or areas within our school where you think I could be particularly helpful for security and privacy?

41:16  
Yeah, registrating all the data can have a downside, of course.

41:22  
I think you shouldn't store data too long because yeah, you don't want to be confronted as a student that something went wrong in year one and for the rest you did a great job and then there's still knowing your registration that's something when that you never showed up in lessons a year one for instance.

41:43  
I don't know what ideas or suggestions do if do you have to for ensuring that the implementation for security and privacy aligns with the values and needs of our university.

41:52  
Yeah, you have the GDP RN.

41:54  
That's basically a standard and that's very often of course the solution for the threats of society that that yeah.

42:02  
If a company if a system is really abusing the data.

42:09  
Yeah there has to be a higher force who who basically can change that and can you describe the the role you think teach your students and stuff around playing decisions related to implementation for security and privacy in our institution.

42:27  
Again that's a very long one.

42:29  
Can you can you describe the role you teachers students and stuff should play in decisions related to implement?

42:36  
Yeah they should be positive, positive, critical and that's I think always the case in everything.

42:43  
So try to be open in it but don't lose your critical census.

42:54  
And last question from this section is thinking about what we have talked about today.

42:58  
What's one thing you find most interesting or thought provoking about the role of and security and privacy within an educational setting.

43:10  
Yeah, I think if you, if you adapt the the general user about the GDPR then it would work out fine.

43:18  
So if if they don't stick the rules then it gets dangerous and because then it gives you a lot of opportunities which you can misuse I would say and we're going to the last three questions which are closing the interview.

43:37  
In your opinion, what excites you the most about the potential applications of AI in facility management?

43:44  
Yeah, the the, the fact that we can solve the labour shortage in in the future that it really benefits you and that it also gives you the opportunity to focus on the people part.

43:58  
So not doing the errand works and that basically can be taken over easily by AI so that you get additional time for for the for the people side and the professional and the and and the personal development of people.

44:16  
Yeah.

44:17  
Is there anything else you would like to add regarding your thoughts on the eye and it's raw in the future facility management, Yeah, it's inevitable.

44:25  
It will come.

44:26  
Anyhow, you can't stop change and progress and that's good.

44:32  
All right.

44:32  
And last question, finally considering KIS potential transformation.

44:36  
Oh, right.

44:36  
Finally considering AIS potential transformational row, how do you see the future of plus campus facilities and student experience changing in the next years?

44:47  
It it will use more and more AI.

44:51  
But on the other hand, I don't think it will page the changes in the facility department because basically everything is already measured, but now it's done manually.

45:04  
It's nice to have one overview, but OK, it won't really make the difference because it's still, yeah, labour intensive.

45:15  
As long AI can't paint the windows, AI can't.

45:19  
I think the major change will be in the educational system.

45:23  
Like you're like I just said that.

45:26  
Yeah.

45:28  
Why do you need teachers?

45:29  
Yeah, you need them.

45:29  
Of course you can that do.

45:34  
Do that much more efficient.

45:37  
All right.

45:38  
That was an interview.

45:40  
Thank you for participating.

45:42  
You're welcome.

45:44  
I'm really curious what you make of it next week.

45:48  
Yeah.

45:48  
Yeah, Me as well.