

INTERVIEW WITH RICH CAPLOW

Eric Green: Hello and welcome to a new podcast series from IBM software that explores the challenges IT managers and business professionals are facing today. I'm Eric Green and I'll be talking with a range of experts to discover new perspectives, approaches and examples that can help meet these challenges and introduce you to the capabilities of smarter software from IBM. So let's get started.

Welcome back to the show. So today's topic that we're going to be focusing on today is around asset management and best practices in this area. Here to discuss this with us today is Rich Caplow, with IBM Tivoli Maximo Asset Management. Thanks for joining us, Rich.

Rich Caplow: Thanks, my pleasure.

Eric Green: So I figured we'd start with the basics for our audience on getting your definition of exactly what is asset management?

Rich Caplow: Sure. Asset management is the practice that many companies and enterprises employ to make sure that they're getting the maximum value out of their operating assets and their critical infrastructure that they depend upon to run their business. What we mean by asset management has to do with improving the availability, the reliability, and uptime of all their different types of operating assets.

Typically, it's made up of a variety of different parts, different elements of asset management and it includes making sure that you have basic information about where the assets are located, who's using them, how long they've been in use, where they were purchased from, and their maintenance history. But asset management also includes the process of managing the work that's associated with maintaining those assets. So being able to assign maintenance technicians, electricians, mechanics and so on to work – it can be unplanned or planned maintenance activities.

But it also has to do with in addition to asset and work management, being able to manage the spare parts inventory and the special tools that are used for maintaining assets, the contracts that are associated with them, whether they're leases or warranties, information of that sort. And also service level agreements that might play a role with asset management. And asset management is something that's important to all sorts of different departments

and functions inside an enterprise. It can be people up and down the organization chart, starting with people who might be on the shop floor: the maintenance technicians who are performing the work themselves, the guys with the wrenches and so on, but it's also people on the C level suite who care about long term trends with what's going on with their assets, making asset management investment decisions. And also horizontally across multiple different departments and functions, whether it's the maintenance department themselves, or it might be the finance department, the IT department, or it could include people who worry about risk and environmental management, contract management, procurement – all of these different departments and functions inside an enterprise care a great deal about managing and maintaining this sort of critical infrastructure.

Eric Green: So you talked a bit about internal. What about external? What are the sort of biggest industries that you see as benefiting from an asset management practice?

Rich Caplow: Well, asset management is something that in general applies to asset intensive industries. And we see this across industries like the oil and gas industries, utilities, manufacturing companies. It's something that we sell very substantially into customers in the public sector. We sell to the federal government. But also we've got customers using asset management solutions in manufacturing and so on.

Eric Green: And so within there, are there different kinds of asset management practices?

Rich Caplow: There are different kinds of asset management practices. It starts out in a very simple way, having to do with what we refer to as break-fix. Which is simply waiting until something fails and then recognizing there is a problem, and dispatching somebody to go fix it and repair it. But there's other forms of more advanced, sophisticated asset management that are important, especially when we're talking about a critical infrastructure, such as calendar-based management. If you think about your own automobile, you change the oil in that every three months. But it also could be something like changing oil after 3,000 miles, which is different than changing it every three months. And then you get into more advanced forms of being able to do preventive and predictive asset management. So yes, it takes on different flavors and really depends on how important and how critical those assets are for the enterprise.

- Eric Green: And assets definitely take a different form depending on who you're talking to. You know, the traditional assets might be monetary or physical assets like in particular, buildings and the like. But then, you have everything from workforce vehicles to airplanes to – I mean what kind of assets are we really talking about in this instance?
- Rich Caplow: Sure. Good question. And the way we generally describe it is according to a model of broad categories or classes of assets, and we think about production equipment, where we're thinking specifically of industrial equipment that you'd find on the shop floor at an automotive manufacturing company, for example, or a utility, or a pharmaceutical company. That's one class of assets. Another one has to do with transportation equipment. Here we're thinking about over-the-road vehicles, trucks, it could be rail equipment, it could be aircraft, marine vessels, transportation equipment of that nature. And then also a third category are IT assets, because they are equally important to the operation of an enterprise. IT hardware like laptops and servers and the asset management around that and then also software and those types of assets. And then the fourth general category has to do with facility assets. And these can include office buildings, but also hospitals, hotels, airports, buildings of that sort.
- Eric Green: And so, facility management, I mean all these subsets we could talk about probably all week and there could be multiple podcasts, and hopefully we'll bring you back to talk about these things, but let's talk about facility management to begin with, I guess. I mean, could you discuss that a little but, but moreover, for our listeners give a few sort of examples of, you know, how that works?
- Rich Caplow: Sure. And, the problem of maintaining facility assets is a little more broad in the sense that we don't talk about simply just a matter of being able to maintain the systems inside a building, whether it's the HVAC equipment for air conditioning or whether it's systems like elevators and escalators and so on. But it's also more broadly to include problems of real estate portfolio management, for example. So large companies have got different buildings of various sorts spread across different geographical locations, in some cases, globally. And there's a portfolio of buildings that they need to manage, and they need to manage efficiently. So there's a process of making decisions about consolidating space or expanding space, leasing, buying and so on.

Another category of facility management has to do with space planning. How do I optimize my use of space? How do we improve the utilization of space? How do I keep track of which departments are using portions of my space? And then how do I move people around – departments, multiple moves of people, efficiently across different parts of my portfolio?

And then there's also capital project management, another aspect of facility management. How do I make investment decisions about different types of projects that I might perform? I might choose to put in new windows because they're more energy efficient. I might choose to update the HVAC equipment. How do I figure out which of those investments is more likely to have a better financial return for me?

And then lastly, energy and environmental management is a very big problem for many companies when it comes to improving their consumption of utilities, tracking their greenhouse gasses and carbon footprint and things of that sort.

Eric Green:

So why don't we drill down on that a little bit. I mean, on a lot of people's mind obviously facility management in general – this isn't even the biggest profit center for an organization. There's a large cost involved. But at the same time, the ROI is very important. So how can we cut our costs? How can we maximize productivity, whether it's on a – you know, the floor of a factory or the like, or just a building in general, and minimize our costs? And so how are organizations doing this? Do you have any good examples on that front?

Rich Caplow:

Sure. And there are many different examples across a variety of different industries. But, there are large cities, for example – in New York City where Mayor Bloomberg has made a very public statement about how he intended to reduce their energy consumption back down to 2007 levels by 2015. And there are software solutions that IBM sells to help companies be able to accomplish that sort of thing, whether it's in the public sector like the City of New York or large enterprises of any sort. But this is a big problem, and it starts with being able to simply measure and understand what your consumption is, connecting into some of your building automation systems to monitor in real time what your utility or electric consumption is, and then be able to analyze that and make decisions about how to improve your energy consumption. But along with that comes the issue of being able to

track carbon footprint and keeping track with emissions of various sorts.

Eric Green: So we have a couple of minutes left, so I think if it's okay, we can have you pull out your crystal ball a little bit here. Where do you see asset management going next? Where is the future leading to here?

Rich Caplow: And it's an interesting problem, because there are so many important and urgent matters that come to helping customers and companies do a better job with asset management. Part of it comes down to helping them be more proactive and be more efficient about anticipating future potential failure of critical infrastructure that they depend upon. So this is where we get into predictive asset management, condition monitoring, being able to take signals off of equipment and understand what those signals mean in terms of anticipating what future failure might look like and when it might occur, and then take some action to prevent that from happening. So that's a big part of where we see companies evolving as they become more sophisticated with their asset management processes.

Another important trend that we see has to do with intelligent assets, and by that we mean the operating assets – think of things like a pump or a compressor and something of that nature, dumb iron, perhaps. But now becoming far more intelligent because of the fact that it's got IT now embedded in those assets. And we see this happening more and more frequently now with very complex IT firmware or software embedded in these sorts of assets. And we see it happening, for example, in the rail industry. Positive train control is a trend that's actually been mandated by the U.S. Congress where it's a new system that needs to be deployed by rail companies by the year 2015. And it requires a very advanced sort of capability in managing track, and what happens on the track, and taking electronic signals from that. Now, in that sort of scenario, we're no longer counting on mechanics to be able to maintain assets with a wrench or something of that nature. Now it involves IT software and hardware. And so an asset that might have been fairly straightforward to manage before now becomes much more complex because it's got different people with very different skills required to maintain an asset that's both an operating asset and an IT asset at the same time.

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Eric Green: That's extremely interesting and helpful. I really appreciate that. So Rich, I think we're out of time now, but I really want to thank you for joining us for this podcast.

Rich Caplow: Certainly, my pleasure.

Eric Green: Thanks for listening. Please do visit [IBM.com/software](https://www.ibm.com/software) to connect with our experts, continue the conversation, and to learn more about smarter software from IBM. Let's build a smarter planet.