

	Process Structure	System Integration & Strategy	Timeline	Outcomes
Project				
Phase 1				
Phase 2				
Phase 3				
Phase 4				

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00:00:01,570 --> 00:00:09,690

\h Host Voice: Please welcome Eric Katencamp, Director of Information Technology for Publix Supermarkets.

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00:00:09,690 --> 00:00:11,770

\h Erik Katencamp, IT Director, Publix Super Markets: Good morning.

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00:00:11,770 --> 00:00:17,760

\h So you probably think it's a little bit unlikely to hear from a supermarket guy at something like this,

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00:00:17,760 --> 00:00:23,110

\h but I wanted to start off by telling you a little about myself. I actually started off here.

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00:00:23,110 --> 00:00:28,350

\h My career started here at Kennedy Space Center about 19 years ago, believe it or not.

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00:00:28,350 --> 00:00:32,720

\h And I worked in a group called rtsoe2.

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00:00:32,720 --> 00:00:35,200

\h I don't know if that means anything anymore to anybody.

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00:00:35,200 --> 00:00:42,540

\h But it was the industrial and safety -- industrial and payload safety

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00:00:42,540 --> 00:00:46,390

\h processing group and it was a great experience.

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00:00:46,390 --> 00:00:54,660

\h But I did move on after a couple of years. And went to Publix, where I've now been for 17 years.

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00:00:54,660 --> 00:00:59,670

\h And I've worked in a lot of different parts of the company,

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00:00:59,670 --> 00:01:04,170

\h but I currently run part of the information technology department.

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00:01:04,170 --> 00:01:08,910

\h And you may wonder what kind of innovation we do there,

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00:01:08,910 --> 00:01:11,820

\h but there's actually a lot more than you might expect.

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00:01:11,820 --> 00:01:18,780

\h And I spoke here about a year ago at a systems engineering graduation

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00:01:18,780 --> 00:01:22,700

\h ceremony and talked about some of the innovative things we're doing.

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00:01:22,700 --> 00:01:26,690

\h And a lot of the things that I've been able to do as an engineer moving into the

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00:01:26,690 --> 00:01:35,380

\h supermarket industry is bring a lot of the higher mathematics and technology to how we replenish products

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00:01:35,380 --> 00:01:40,500

\h how we forecast sales demand, how we decide what products go on what shelves,

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00:01:40,500 --> 00:01:45,860

\h what -- what shelf to put them on, what mix of products to put in each store,

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00:01:45,860 --> 00:01:50,370

\h how we get product from California to Florida and how we move product

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00:01:50,370 --> 00:01:53,470

\h from our warehouses to our stores, et cetera, et cetera.

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00:01:53,470 --> 00:01:57,760

\h So there's a lot of optimization logic and things that we've employed.

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00:01:57,760 --> 00:02:01,760

\h And as computing power has gotten more powerful, we're able to crunch tens

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00:02:01,760 --> 00:02:05,680

\h and hundreds of millions of calculations so that we can get product to the

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00:02:05,680 --> 00:02:09,770

\h right place at the right time in the right quantities.

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00:02:09,770 --> 00:02:14,140

\h So I actually was going to take a little bit of a different slant today

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00:02:14,140 --> 00:02:22,240

\h and talk more from an organizational standpoint how we do collaboration.

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00:02:22,240 --> 00:02:26,560

\h And I understand that collaboration was a big part of The theme today, as well.

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00:02:26,560 --> 00:02:28,650

\h And I called this the collaboration myth.

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00:02:28,650 --> 00:02:32,290

\h I'm going to talk some from my own experience of what has worked and what hasn't worked.

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00:02:32,290 --> 00:02:36,870

\h I'm going to tell a story about where our information systems department

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00:02:36,870 --> 00:02:41,500

\h was and where it is now from an organizational standpoint.

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00:02:41,500 --> 00:02:46,210

\h We've made changes to be more effective.

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00:02:46,210 --> 00:02:49,110

\h So real quick on Publix.

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00:02:49,110 --> 00:02:51,420

\h I'm sure most everybody has been to Publix.

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00:02:51,420 --> 00:02:57,250

\h We have 150 stores in five states across the southeastern United States.

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00:02:57,250 --> 00:03:00,440

\h We have about 28 warehouses and ten manufacturing plants.

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00:03:00,440 --> 00:03:06,160

\h It's a complex operation, about 40,000 items in each store.

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00:03:06,160 --> 00:03:11,610

\h So orchestrating that whole supply chain and network is not a straightforward process by any stretch,

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00:03:11,610 --> 00:03:15,440

\h and we believe we're on the leading edge of being able to, like I said,

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00:03:15,440 --> 00:03:18,540

\h get product in the right place at the right time.

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00:03:18,540 --> 00:03:24,060

\h The myth that I wanted to talk about that I've seen and experienced is that

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00:03:24,060 --> 00:03:27,040

\h if you put a bunch of really smart people Together and give them an objective,

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00:03:27,040 --> 00:03:30,940

\h you're going to get great results and they're going to succeed.

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00:03:30,940 --> 00:03:34,940

\h That is not a given, and I think everybody would probably agree with that.

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00:03:34,940 --> 00:03:41,500

\h I see organizational structures get set up in a way that assumes that this is true.

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00:03:41,500 --> 00:03:46,910

\h And I want to go back to when I joined the information systems group there at

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00:03:46,910 --> 00:03:54,030

\h Publix how we were structured and the type of issues we had and how we solved it.

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00:03:54,030 --> 00:03:59,760

\h So when I got there, we had a fairly traditional matrix-type project structure.

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00:03:59,760 --> 00:04:04,600

\h I'm sure most people in here are familiar with that kind of organizational structure, where you have

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00:04:04,600 --> 00:04:11,610

\h functional groups of like-skilled people with a manager that typically has that skill, too.

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00:04:11,610 --> 00:04:18,990

\h And those folks in those functional departments are allocated out to projects.

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00:04:18,990 --> 00:04:23,770

\h And I just show the projects along the side to depict it. You had functional groups going up and down.

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00:04:23,770 --> 00:04:29,250

\h In our case it was process analysis and system requirements and design and data base and architecture

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00:04:29,250 --> 00:04:32,250

\h know here at NASA those would be different things. Then we have various projects.

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00:04:32,250 --> 00:04:39,190

\h So these folks would be allocated out to the projects, and a project manager would lead the work, whether

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00:04:39,190 --> 00:04:46,980

\h was an innovative type, innovation-type solution, delivery of a particular project or solution,

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00:04:46,980 --> 00:04:51,360

\h and what we found is that this was highly ineffective. It was very slow.

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00:04:51,360 --> 00:04:57,420

\h And I'll just talk about a number of the specific issues that we encountered.

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00:04:57,420 --> 00:05:02,500

\h And I know this is conventional wisdom, kind of an engineering mindsets, right, that I compartmentalized

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00:05:02,500 --> 00:05:08,630

\h like resources and allocate them out to projects to deliver results.

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00:05:08,630 --> 00:05:15,820

\h But some of the key issue we saw in this environment included, first of all, the managers of these

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00:05:15,820 --> 00:05:20,370

\h functional groups often times are not engaged in the projects.

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00:05:20,370 --> 00:05:26,930

\h They might have 20 or 25 people, and they naturally gravitate toward being what I call a resource mana

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00:05:26,930 --> 00:05:31,110

\h Something I have no liking or desire to be.

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00:05:31,110 --> 00:05:35,240

\h Someone that just kind of manages people and pushes paper around and so on.

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00:05:35,240 --> 00:05:40,250

\h We found they were not deeply engaged with the customer, the end result of

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00:05:40,250 --> 00:05:43,290

\h whatever project their folks were allocated to.

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00:05:43,290 --> 00:05:47,250

\h As a result, they weren't really contributing to the ultimate delivery

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00:05:47,250 --> 00:05:51,200

\h of the solutions that Were being worked on.

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00:05:51,200 --> 00:05:57,550

\h Another issue is you have a natural problem here where you have people that have kind of divided loyal

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00:05:57,550 --> 00:06:03,670

\h you have people who report up to one manager but have some temporary allegiance to the project man

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00:06:03,670 --> 00:06:08,060

\h the person leading the particular effort they're assigned to.

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00:06:08,060 --> 00:06:17,780

\h And again, that happens a lot, but in my experience, preventing that to the degree possible is optimal.

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00:06:17,780 --> 00:06:21,880

\h The other problem we would have here is a lot of conflict arise.

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00:06:21,880 --> 00:06:26,700

\h So you can have competing objectives in the structure where you have a particular manager,

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00:06:26,700 --> 00:06:32,000

\h particular person from one of the functions that has a strong opinion about something

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00:06:32,000 --> 00:06:36,210

\h that should happen on the project that may contradict someone else on the project and possibly contradict

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00:06:36,210 --> 00:06:40,640

\h what the overall project manager has as their mission.

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00:06:40,640 --> 00:06:45,440

\h The problem is oftentimes that project manager role has very little authority.

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00:06:45,440 --> 00:06:52,780

\h So resolving these types of Conflicts oftentimes has to go way up high in the organization and is painful

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00:06:52,780 --> 00:06:57,690

\h Meetings, prep for meetings, sometimes getting on schedules a month out.

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00:06:57,690 --> 00:07:03,330

\h And the decision making process is incredibly slow in this environment.

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00:07:03,330 --> 00:07:09,380

\h And so we came to a point where we were just overly frustrated with our inability to get

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00:07:09,380 --> 00:07:15,270

\h work done and make decisions toward the things we were trying to achieve.

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00:07:15,270 --> 00:07:18,330

\h So I'm going to talk a little about what we did about this.

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00:07:18,330 --> 00:07:22,620

\h So in -- this is actually I have found in talking to other companies,

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00:07:22,620 --> 00:07:26,930

\h it's actually quite rare in an IT organization today.

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00:07:26,930 --> 00:07:32,360

\h And what we do is we went from this matrix structure to more of what we call a line of

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00:07:32,360 --> 00:07:37,440

\h business structure where teams were defined as more permanent structures.

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00:07:37,440 --> 00:07:44,160

\h So we took these managers, basically got rid of the project manager role altogether and got rid of the

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00:07:44,160 --> 00:07:50,270

\h functional manager role altogether, and we defined roles called line of business managers.

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00:07:50,270 --> 00:07:54,920

\h What's neat about this role is it's an individual who has overall accountability to a particular

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00:07:54,920 --> 00:08:01,060

\h business area or customer, but they also directly manage the resources -- pay,

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00:08:01,060 --> 00:08:04,070

\h performance reviews, career planning, and so on.

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00:08:04,070 --> 00:08:09,600

\h And it allows that person to balance supply and demand and to be totally accountable to the customer a

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00:08:09,600 --> 00:08:14,110

\h have the authority and the autonomy to make the decisions that need to be made quickly,

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00:08:14,110 --> 00:08:19,890

\h and that person also lives with the results, balancing short term and long term.

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00:08:19,890 --> 00:08:27,390

\h For example, immediate project delivery versus helping people grow and go to conferences and learn a

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00:08:27,390 --> 00:08:29,880
\h Trying to balance that short term and long term,

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00:08:29,880 --> 00:08:33,060
\h that individual owns both of those as opposed to the previous structure.

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00:08:33,060 --> 00:08:39,370
\h It was conflict between the resource manager trying to grow their people and the project,

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00:08:39,370 --> 00:08:42,270
\h trying to deliver and actually get results.

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00:08:42,270 --> 00:08:47,290
\h So what we have found is that this structure is extremely fast. It's extremely effective.

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00:08:47,290 --> 00:08:55,710
\h We have grouped within these line of business teams cross-functional people that have all the skills need

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00:08:55,710 --> 00:08:58,870
\h in our case, deliver information technology solutions.

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00:08:58,870 --> 00:09:02,520
\h And there's a manager in place that can make the decisions and Drive the results.

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00:09:02,520 --> 00:09:05,110
\h So the projects go more up and down.

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00:09:05,110 --> 00:09:11,480
\h The projects are not executed by pools of people from different structures.

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00:09:11,480 --> 00:09:16,810
\h They all report to the same manager. If we get a new initiative or business area to support, we create

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00:09:16,810 --> 00:09:20,960
\h another permanent structure with a manager, a "permanent" in quotes,

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00:09:20,960 --> 00:09:25,610

\h nothing's permanent in this world, but a manager who has people reporting up to

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00:09:25,610 --> 00:09:32,100

\h them directly so they can be accountable to the customer and own the resources.

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00:09:32,100 --> 00:09:36,270

\h So I was actually going to talk about an analogy of how we run our stores,

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00:09:36,270 --> 00:09:41,410

\h but I was thinking more it there's a continuum of types of work here.

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00:09:41,410 --> 00:09:45,900

\h And you might be saying to yourself, that sounds fine for an operational execution environment,

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00:09:45,900 --> 00:09:50,950

\h but in a project or innovation type environment, it doesn't make sense.

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00:09:50,950 --> 00:09:57,540

\h And I was thinking about kind of this continuum of work types with one extreme being kind of wartime

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00:09:57,540 --> 00:10:03,250

\h military where there's no room for consensus building, there's no room for negotiation and so on.

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00:10:03,250 --> 00:10:09,730

\h It's a straight chain of command, command and control structure that's required to make decisions for or

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00:10:09,730 --> 00:10:16,040

\h All the way to the other extreme which would be more like a think tank where folks are there contributing

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00:10:16,040 --> 00:10:22,760

\h it's more loose decision making, rapid decision making isn't as critical, and so on.

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00:10:22,760 --> 00:10:29,450

\h But I would argue that what I've seen is that orb structures gravitate more toward the think tank side,

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00:10:29,450 --> 00:10:35,820

\h to far to the think tank side and less toward the good, old-fashioned command and control structure.

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00:10:35,820 --> 00:10:39,100

\h It's like somewhere about 15 years ago the idea of chain of command

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00:10:39,100 --> 00:10:42,430

\h and command and control structure became like a bad word.

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00:10:42,430 --> 00:10:46,410

\h Like what was talked about with self-directed work teams and stuff like that,

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00:10:46,410 --> 00:10:49,080

\h not traditional command and control structures.

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00:10:49,080 --> 00:10:59,330

\h My experience has been that good, old-fashioned line of command structures work best.

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00:10:59,330 --> 00:11:04,860

\h Now what's critical in this role, in this structure is that line of business manager.

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00:11:04,860 --> 00:11:09,960

\h You have to find people that have very good mix of skills to run a

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00:11:09,960 --> 00:11:14,840

\h cross-functional organization and be accountable to a customer and so on.

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00:11:14,840 --> 00:11:19,530

\h The first thing is they've got to have technical skills which means they've gone deep,

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00:11:19,530 --> 00:11:22,050

\h that's what we call it. They've gone deep once into something and

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00:11:22,050 --> 00:11:26,010

\h really understand technology and the complexity of technology.

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00:11:26,010 --> 00:11:28,650

\h They obviously have business skills, project management skills,

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00:11:28,650 --> 00:11:31,170

\h and leadership management and people skills.

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00:11:31,170 --> 00:11:34,630

\h And I'll admit it's tough to find people that have that complete package.

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00:11:34,630 --> 00:11:41,020

\h And we actually use kind of a pie chart where we classify everybody and say -- you know,

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00:11:41,020 --> 00:11:43,840

\h one person has two pieces of pie, another has three pieces of pie.

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00:11:43,840 --> 00:11:47,860

\h We want a lot of managers that have all four pieces of that pie that

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00:11:47,860 --> 00:11:52,570

\h can actually run teams from end to end.

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00:11:52,570 --> 00:11:55,980

\h The other thing I'll add is facilitation skills.

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00:11:55,980 --> 00:11:57,830

\h We obviously are dealing with professionals.

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00:11:57,830 --> 00:12:04,320

\h So this command and control-type structure has to be there for decision making and expediency,

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00:12:04,320 --> 00:12:08,400

\h but the reality is with professionals, folks have to be heard.

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00:12:08,400 --> 00:12:14,810

\h So it's important that the manager also has the capability to get input from everybody and facilitate disc

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00:12:14,810 --> 00:12:21,060

\h But at the end of the day has to make decisions and do it in a rapid manner.

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00:12:21,060 --> 00:12:23,870

\h And I'm going to close with this concept called work.

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00:12:23,870 --> 00:12:27,860
\h I'll tell you just a little about our president at Publix.

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00:12:27,860 --> 00:12:33,860
\h The president of Publix of a multibillion dollar organization has a high school education.

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00:12:33,860 --> 00:12:39,030
\h He's one of the most brilliant people I know. He often talks about this concept of work.

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00:12:39,030 --> 00:12:43,030
\h He has this book actually sitting in his lobby.

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00:12:43,030 --> 00:12:49,990
\h And he often talks -- it's a "national geographic" book, has pictures of all types of work like this.

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00:12:49,990 --> 00:12:52,420
\h I'm not exactly sure what types of work those folks are doing.

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00:12:52,420 --> 00:13:00,450
\h The concept is whether someone is sweeping a floor in a store or building an optimization algorithm,

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00:13:00,450 --> 00:13:05,350
\h at the end of the day everybody's trying to produce output, everybody's trying to do work.

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00:13:05,350 --> 00:13:14,290
\h And I've seen organizational structures get too focused on thinking, conceptualizing, and so on.

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00:13:14,290 --> 00:13:19,190
\h At the end of the day, we all have to have output. We all have to have work that needs to be done.

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00:13:19,190 --> 00:13:24,840
\h I would just suggest as I've had to do myself, next time a big project or

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00:13:24,840 --> 00:13:29,590
\h endeavor comes up and you're figuring out how to structure it,

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00:13:29,590 --> 00:13:35,800

\h at least consider building an actual structure with a command and control environment

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00:13:35,800 --> 00:13:39,540

\h where there's a manager ultimately accountable and the team directs to them directly

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00:13:39,540 --> 00:13:44,020

\h as opposed to a matrix environment where folks are there,

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00:13:44,020 --> 00:13:50,090

\h the project manager doesn't have a lot of authority, and you're spending weeks and months trying to res

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00:13:50,090 --> 00:13:55,680

\h And I know there are lots of models in between, but the challenge I would offer and something

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00:13:55,680 --> 00:13:58,990

\h I've had to do is just to -- the thing about structuring work the good

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00:13:58,990 --> 00:14:03,280

\h old-fashioned way where somebody's in charge as opposed to loose structures