TPO48L4 How Business Leaders Get Political Power in 19th an American History class.

We have been talking about the transformation, the industrialization of United States economy in 19th century. As the country shifted from an agricultural to an industrial base, political power shifted too. Businesses became a lot of power went from the government into the hands of business leaders. So, why did this happen? How did an elite group, a few business giants, how did they end up dominating, controlling a number of important national industries in the last quarter of the 19th century? How did they get to be so dominant? How did they figure out? How did they take advantage of the new industrialization of American society? Well, consider the example of Andrew Carnegie and the steel industry. We have already discussed the development of a national network...a national system of railroads. Well, this growth created a tremendous demand for steel. A national railroad system needs a lot of railroad tracks, right? And Carnegie seized the opportunity. He built the world's most modern steel mill. And he came up with a system of business organization called Vertical Integration. Vertical Integration just means that all...every single activity of a particular industry's processing is performed by a single company. In the case of the steel industry, this means the mining of iron ore, the transportation used to get ore from the mine to the mill, turning the ore into the steel, the manufacturing process and sales. Carnegie controlled all of these. He practiced Vertical Integration on such a large scale that he practically owned the whole steel industry. This, of course, gave him a lot of political clout. Just a quick sketch, but you get the idea, right? Here is another example: John D. Rockefeller. Rockefeller owned an oil refinery, but he wanted to expand his business. Since there was lots of competition in the industry, he thought the smart way to go about it would be to buy his competitors' businesses. But at the time it was illegal for one corporation to control another. So what he did was: he created an organizational structure called a Trust. A trust is... well I don't have to go into that now. What matters is that a trust created a single, central management team. And that team directed the activities of what otherwise still appeared to be independent companies. This new legal entity worked so well that at one point Rockefeller controlled 90% of the country's oil refineries, which again gave him lots of political power. So you've got two different approaches to expanding a business, and both were quite effective. Of course, these weren't the only two examples. A number of big businesses run by powerful individuals developed across a wide range of industries, like railroads, food processing, electricity. But what they all had in common was: the government let them operate pretty much how they wanted to. So why did they do that? Why did the government keep such a low profile and allow individuals to gain so much control of the industries? Well, obviously, they had the wealth and the power to influence political leaders. But also, the truth is that these industry leaders made a significant contribution. Their investments in technologies led to the development of many new production techniques, which strengthened the economy. And many of them gave lots of money to charity. Andrew Carnegie was particularly admired for his generosity. But there was one thing in particular that gave them power. And that's they were beneficiaries, probably the biggest beneficiaries of a theory, a dominant political theory in the 19th century, something called Laissez-faire Doctrine. Laissez-faire roughly means "let it alone". And that pretty much summarized the theory's philosophy. The idea was that government should leave business alone, allow it to operate unregulated. Legislators weren't supposed to pass a lot of laws, or worry about regulating business practices. When people did challenge a company's business conduct, I mean, in court cases, well, the few laws that did exist were usually interpreted in favor of business interests. But over time, it started becoming increasingly obvious and troubling to the public that some of these big companies simply had too much control. There were criticisms that owners had too much opportunity to exploit workers, workers and consumers, because they could control prices and wages. And small business owners and small farmers couldn't compete. So there was bad press, bad publicity, enough that the government eventually felt it had to do something. So it passed two key pieces of legislation. One law was designed to regulate the prices set by the railroads; another made it illegal for trusts to be used to limit competition. Both were aimed squarely at reducing the exclusive control that existed in some industries.

TPO42L4 Service Failures Narrator: Listen to part of a lecture in a marketing class.

And that wraps up our discussion of how the retail sector, uh, ways in which retail managers deal with customer complaints. So let‘s shift now to the service sector, which markets not goods but services, intangibles like transportation, food service, career counseling, Oh, there are literally hundreds of examples. Service providers must, of course, constantly strive to meet customers' needs. But as in retail, there are instances of service failure in which the customer is dissatisfied, uh, perhaps to the point of not doing business with you anymore. Some service failures are beyond an organization‘s control, like computer malfunction that leads to missed deadlines. Other failures stem from process problems, like inadequate training for newly-hired employees. Then there's human error. Okay, imagine you manage a car rental agency. A customer calls in a reservation, but your employee marks down the wrong date. So your customer arrives and guess what, the size car he reserved isn't available. But your customer is less concerned about the source of the failure than the solution: what you do about it; what sort of compensation; what service recovery you give. So if you are in the service industry, as a marketer, you always need some kind of service recovery plan. Your plan must be in place before a failure occurs and it must also be communicated promptly to everyone in your organization who deals with customers so they'll know what to do. Service recovery encompasses all the actions taken to get a disappointed customer back to, uh, well, back to a state of satisfaction. So if your car rental agency couldn't provide the size car your customer wanted, but your policy is to provide a roomier car for the same price. Your customer would probably be happy, might even restore his faith in your company. Research has in fact identified service recovery as a significant determinant of customer loyalty. 女: I see what you mean. Every year, my family goes on vacation together. And a few summers ago, when we were in Chicago, it was really hot. And guess what, the hotel's air conditioning broke and everyone was complaining. What the hotel did, they actually didn't charge anybody for that weekend. But the funny thing is that even though we had that horrible experience at that hotel, because they were so quick to appease us, we usually stay at that same hotel every time we go to Chicago. T: Great example! So in this case that hotel chain might consider itself the beneficiary of the so-called service recovery paradox. Um, the paradox basically implies that customers who experience a service failure, well, they could potentially be made more loyal than customers who were satisfied in the first place if an equitable recovery occurred after the failure. Yes, Ben? 男：Wait a minute. If a good service recovery creates more loyalty than, um, if things went smoothly from the get-go, why don't companies like make mistakes on purpose so? Professor: So you could implement a recovery plan that leave your customers delighted as opposed to merely satisfied? Look, it's always better to do things right the first time cause how can you know that the paradox will hold true in every situation? Plus, it's hard to predict if a good service recovery will overcome the negative effect of a service failure, and what about all those failures that never come to your attention? Because statistically about 50 percent of the customers don't complain about service failures, at least not to the service provider. But negative word of mouth, now, that got worse implications for your business. Also, you'd have to pay your employees to execute the service a second time. Typically, a service recovery is gonna involve some kind of compensation, right? So it is gonna cost your company some money that you are going have to account for in your budget. I've actually been researching some of these issues myself cause what we need is a deeper understanding of customers' thought processes and their reactions to service recoveries. How do consumers form expectations? How do they react to different service recovery tactics? Can we predict how any given customer will react to a given service failure? People's expectations, their priorities vary. Like uh, if I am in a hurry, and the French fries I ordered at a fast food restaurant aren't piping hot. I might not complain cause I got them fast. But If I am not in a hurry, I might return the fries even if I had to wait for a fresh batch.

TPO33L1 Mystery of pyramids NARRATOR: Listen to part of a lecture in an archaeology class.

The Great Pyramid of Giza in Egypt might be the most famous building in the world. We know exactly when it was built. Construction started in 2547 B.C.E., about 4500 years ago. We know who had it built. That was the pharaoh Khufu. We know who oversaw its construction—the pharaoh’s brother. We know so many things about it, but the funny thing is: we still don’t know exactly how it was built. This picture will give you an idea of the size of the Pyramid and the size of the blocks it’s made out of that. About two million stone blocks were used to build the Great Pyramid and they are incredibly massive. The average weight is two and a half tons.

The problem that has puzzled scholars for centuries is how were these blocks lifted up the height of this massive structure and then fit into place and without the benefit of modern technology. Of course, there’ve been a lot of theories over the centuries.

The oldest recorded one is by the Greek historian Herodotus. He visited Egypt around 450 B.C.E., when the Pyramid was already 2000 years old. His theory was that cranes were used, much like we use cranes today to construct tall buildings. And Herodotus may have seen Egyptians using cranes made of wood. But the problem with this theory has to do with simple mechanics. A crane needs a wide and sturdy base to stand on or it will fall over. Well, as you get toward the top of the Pyramid, there’s really no place for a crane to stand. The stone blocks are too narrow to provide a base. Well, so much for that theory.

The next one has to do with the use of a **ramp** that would allow workers to drag a stone block up the side of the structure. Of course the ramp can’t be too steep. It has to have a long gentle slope. And that’s the problem. If you build a ramp with a slight slope up to the top of a Pyramid that’s over 130 meters high, it would have to be almost two kilometers long. Well, the Pyramid is built on a flat area called the Giza Plateau. The Plateau is simply not big enough to accommodate a two-kilometer-long ramp.

OK. So what now? Well, if you’ve ever driven on a mountain road, you’d know that it has a lot of twists and turns and bends in it, because that’s how engineers keep the road from having to be too steep. So why not wrap the ramp around the Pyramid? Building the ramp around it as you go. Sounds like a pretty good idea. Except it’s got a serious problem. See…one of the most remarkable things about the Great Pyramid is how accurate the proportions are. The dimensions are almost perfect. To get that perfection, the engineers must have had to measure it repeatedly during construction. And the way you’d measure it is from the four corners of the base. Well, if you got a ramp spiraling up from the base of the Pyramid, those corners would be buried by that ramp during construction.

Well, who says the ramp has to be on the outside of the Pyramid? And now we get to the latest idea. If the ramp were on the inside of the Pyramid, the corners at the base would be exposed, so the engineers could do their measurements while they were building. Well, an architect named Houdin has spent a few years working on making computer models of the building of the Pyramid. And what Houdin believes is that an exterior straight ramp was used to construct the bottom third of the Pyramid, this ramp would have been fairly short. It probably rose less than 50 meters. Then the rest of the Pyramid was constructed using an internal ramp that spiraled around the inside of the Pyramid. But how can we test this idea? Well, there are several ways to look inside the Pyramid. One is called **microgravimetry**.

Microgravimetry is a technique that’s used to detect voids inside a structure. You can then take the data and generate an image that shows any empty spaces in the interior. Well, in 1986, French scientists completed a microgravimetric survey of the Pyramid. And one of the images they produced showed an empty spiral-shaped space inside it. The shape of that space corresponds exactly to what Houdin thought the ramp would look like. I think Herodotus would be convinced. We might very well be at the end of centuries of guessing.

TPO15L1 Distraction Narrator: Listen to part of a lecture in a psychology class.

For decades, psychologists have been looking at our ability to perform tasks while other things are going on, how we are able to keep from being distracted and what the conditions for good concentration are. As long ago as 1982,researchers came up with something called the CFQ - the Cognitive Failures Questionnaire. This questionnaire asks people to rate themselves according to how often they get distracted in different situations, like um.. forgetting to save a computer file because they had something else on their mind or missing a speed limit sign on the road. John? John: I‘ve lost my share of computer files, but not because I’m easily distracted. I just forget to save them. Professor: And that‘s part of the problem with the CFQ. It doesn’t take other factors into account enough, like forgetfulness. Plus you really can‘t say you are getting objective scientific results from a subjective questionnaire where people report on themselves. So it’s no surprise that someone attempted to design an objective way to measure distraction. It‘s a simple computer game designed by a psychologist named Nilli Lavie. In Lavie’s game, people watch as the letters N and X appear and disappear in a certain area on the computer screen. Every time they see an N, they press one key, and every time they see an X they press another, except other letters also start appearing in the surrounding area of the screen with increasing frequency which creates a distraction and makes the task more difficult. Lavie observed that people's reaction time slowed as these distractions increased. 女: Well that‘s not too surprising, isn't it?

Professor: No, it‘s not. It’s the next part of the experiment that was surprising. When the difficulty really increased, when the screen filled up with letters, people got better at spotting the Xs and Ns . What do you think that happened? John: Well, maybe when we are really concentrating, we just don‘t perceive irrelevant information . Maybe we just don’t take it in, you know? Professor: Yes, and that‘s one of the hypotheses that was proposed, that the brain simply doesn’t admit the unimportant information. The second hypothesis is that, yes, we do perceive everything, but the brain categorizes the information, and whatever is not relevant to what we are concentrating on gets treated as low priority. So Lavie did another experiment, designed to look at the ability to concentrate better in the face of increased difficulty. This time she used brain scanning equipment to monitor activity in a certain part of the brain, the area called V5,which is part of the visual cortex, the part of our brains that processes visual stimuli.V5 is the area of the visual cortex that‘s responsible for the sensation of movement. Once again, Lavie gave people a computer-based task to do. They have to distinguish between words in upper and lower-case letters or even harder, they had to count the number of syllables in different words. This time the distraction was a moving star field in the background, you know, where it looks like you are moving through space, passing stars. Normally area of V5 would be stimulated as those moving stars are perceived and sure enough, Lavie found that during the task area of V5 was active, so people were aware of the moving star field. That means people were not blocking out the distraction. 女: So doesn‘t that mean that the first hypothesis you mentioned was wrong, the one that says we don't even perceive irrelevant information when we are concentrating? Professor: Yes that‘s right, up to a point, but that’s not all. Lavie also discovered that as she made the task more difficult,V5 became less active. So that means that now people weren‘t really noticing the star field at all. That was quite a surprise and it approved that the second hypothesis – that we do perceive everything all the time but the brain categorizes distractions differently, well, that wasn’t true either. Lavie thinks the solution lies in the brain‘s ability to accept or ignore visual information. She thinks its capacity is limited. It’s like a highway. When there are too many cars, traffic is stopped. No one can get on. So when the brain is loaded to capacity, no new distractions can be perceived. Now that may be the correct conclusion for visual distractions, but more research is needed to tell us how the brain deals with, say, the distractions of solving a math problem when we are hungry or when someone is singing in the next room.