

Speaker: **Marc Ventresca – Strategy and Innovation Faculty at University of Oxford and WC**

Start time: **00:06**

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CONTENT

0:06

OK so happy to be here today, welcome to everyone. I'd like to spend a few minutes here to talk about something that is familiar to me and important to me and that I hope can become useful to you. The talk is really called Infrastructure for Impact. We've been spending a little bit of time this afternoon thinking about this idea of ideas to impact. And the goal of my talk is to ask you to begin to insert into that conversation ideas the impact something about infrastructure. And I'm going to ask you to think with me about what is infrastructure, why it matters, and so on. The kind of orienting question I think in my own research is how do large distributed spaces get organised. So markets and industries - I'm not an economist I'm an economic sociologist. But I'm interested in how big spaces of the world become organised. I think that's also a question that touches on issues around institutions, around innovation and around infrastructure. So that's the the spirit, I'm going to offer you a couple of examples talk about each of them briefly, three examples, three cases if you will, that come out of the nexus of energy, electricity and power. Then I'm going to ask you to reflect with me on how we can think about infrastructure in some new ways. So that's the, this is kind of the spirit of the conversation.

1:29

The first is a set of examples I think are familiar to people, many people in the room, I've done a lot of work with this. A guy called Thomas Hughes a long time ago wrote a wonderful book call Networks of Power. Which is really an effort to understand how is it that in the late 19th century 1870-80's, mostly we didn't know what electricity was. Scientists debated the existence of electricity, people are trying to understand what is electricity - is it real, is it a thing and phenomenon. So, over about 100 years, even more than that lots of debates in the scientific community to understand this phenomenon called electricity. By the 1880s'1890's though, that idea of electricity had some stability, some fact-ness, and all of a sudden a number of people around Europe and in north America began to tread a go from that idea to impact - to commercialise it, to create the infrastructure and capacity to turn electricity from being an idea and a contested idea into a product into something that could be sold, that could light cities and give energy and power to communities. Thomas's book is a really interesting book for two reasons; he says the interesting thing here.

2:45

First of all is that electricity and the electricity grids that were built in the 1880's and 90's early 20th century - look really different in France in Germany in the UK and in the the US. That that is the form that those grids took, the form of power generation had remarkable resonance with the political economy with the political order of those cultures of those national cultures. So in France large singular generating stations in Germany, relatively distributed local small scale distributing activities, so so the argument there, his argument partly is a comparative argument that says electricity this natural phenomenon is materialised in ways that reflect national traditions of engineering and local knowledge and local culture.

3:33

He also says something that has been the basis for work I've done which he said as important as the idea of invention is, as important as the ideas are, as important as the idea of entrepreneurial activity is; the men and women who actually made electricity commercial were not only entrepreneurs, they were what he called system builders. And that's an idea I'd like you to entertain for the next few minutes. For him, system builders are people who actually may well have an idea, they may start with some kind of vision of what's possible. But the people who actually coalesce that idea into practice, into impact, then they do that typically not on their own, they do that typically by moving across like a sea incumbent arenas of activity. They network, they create ties, they invent new kinds of solutions. They invent new models to do that. And importantly Hugh's says that work of building these systems typically and often necessarily involves destroying legacy or alternative systems. So for him system building is as much an activity of un-building legacy, capacity and infrastructure. I want you to hold onto that idea for a minute.

4:45

The second example - and so this is a picture of Edison, one of the kind of American system builders and it's just a visual representation of the many worlds that Edison connected to. Legacy, industries, media, financiers - so again remember the point here is the work of system the work creating commercially viable electricity grids - was an idea but also an enormous amount of creative activity to invent new models and solutions new kinds of funding, new kinds of financing, new coalitions to work across many levels of the state and private interests. This next example another author [correct spellings] Phil Selznick wrote thoughtfully and vividly in the late 1940's about the tendency value authority. Another US experiment that was an effort to bring electricity to the world poor. The TVA was a contested and interesting program in Selznick's book, became the foundation for the world I work in organisational and institutional sociology. And in that book Selznick's said what's interesting about the TVA - and the effort again to take an idea, materialise it in large, physical technology, and to bring that to then deliver to the poor of [inaudible], the kind of world poor of the US - that work was an idea but it was also infrastructure but importantly he said "the wisdom, the lesson of the TVA was to really pay attention to institutional politics".

6:17

How do you begin to mobilise and assemble the actors and coalitions you need; and also another idea that's become I think familiar to most of us - the idea of unintended consequences. His idea was that in understanding the TVA, and the political constituencies, the coalitions and really the wider field of organisational activity, we begin to pay attention to people's intentions and then how those intentions cascade out across incumbent political arrangements, incumbent institutional infrastructure, incumbent activities. And so unintended consequences you may intend something, but the work of that intention often becomes transformed because of the context you're in.

7:00

So his contribution I think for us was to really understand something about kind of the complex, context in which activity happens. The third example here that you see on the screen is is an example a recent set of Alums from here at Said have begun to embark also imaginative and also remarkable. Their aspiration is to bring electricity at the village level throughout Tanzania and over time across the continent of Africa. These colleagues these recent Alums are like many of our Alums; their working in various parts of Africa and other parts of the world, their experimenting in this case with energy. As well as with mobile money, as well as with other activities that take advantages of new technologies and really have to build and bring together new coalitions of actors and literally invent new kinds of distribution mechanisms, invent new kinds of sales capacity, invent new partnerships across in their case - the mobile phone community.

7:59

The cell tower, the providers of cell tower, and the diesel and an energy that provides power to the cell towers and to to kind of in some sense enlist that energy and resell it locally. So, off grid electric I think is one of many ventures and initiatives we see that I'm going to ask you to reflect on in many ways has some of the same aspiration of the Tennessee Value Authority - 80 years or 60 years or 80 years and some of the aspirations of building national grid systems and electricity over 110 and 20 years ago. What different of course and this is and this is what I'd like you to reflect on, the effort to build off grid electricity is not building national grid systems, it's not relying on a powerful aspirational state, it's not relying on trying to create capacity that has a centre, and actually serves and entire country. Instead it says the kind of imprinting context today, 2015, is much more local, is distributed, importantly it's off grid. Many of you in the room know about these kind of experiments, many of you know and probably involved in them. I mention this to kind of bring us up to date - what I'm asking you to think about here is, it's never the technology alone, its actually the set of sensibilities, awareness, imagination that let us work with current technologies and turn them to new purpose.

9:25

If you think about it for a second, most of the inertia, most of the institutional inertia, that we work - regulatory activity, the organisation of large scale technologies like national grid systems, those reflect legacy arrangements that are 50 years old, 100 years old. So there's a kind of an an inertia there that new ideas have to contest with. And this is really at the heart of why over the last couple of years asked people to sort of think about the idea of system building, as a more powerful richer term, that helps helps us understand more fully and more specifically what is the entrepreneurial accomplishes.

10:05

So in a sense as I've said in some other settings, I think the word entrepreneurship is powerful, but what may well be contaminated. It may be too restricted, it may focus us too much on a few conceits that we all know well today about the nature of entrepreneurial activity. I think the idea of system building forces us to think about what's the incumbent systems, how do you co-opt, or move beyond that system. It forces us to think about the kind of impact we intend, and it also forces us to think about infrastructure. In the time I have left I want to ask you to think a little bit about the word infrastructure. Everyone on this room knows that if you read the economist, read the guardian over the next 20 years - the worlds going to invest trillions and trillions US in building infrastructure. What does that mean - it means dams and highways, often electricity, often electrical activity - it may mean in some cases schooling and healthcare activities.

10:59

But that idea of infrastructure like many questions around innovation is still I think unhelpfully linked to automatically to technology. And to a completely fuller understanding of culture meaning belief systems and available models. In the quotes up here on the board, I borrowed from a colleague, a couple of different colleagues, who have tried to get use to start thinking about that important re-coupling of meaning culture models and I ideas, to pure technology. So the top quotes are really about - let me just read them for you, the idea here says "*the key issue in the smart grid debate is how we can create an intelligent infrastructure for sustainable use of resources. [For] smart grid, buildings, vehicles and computing, we can't just focus on whiz-bangs widgets. Rather than we need to invest and to investigate cultural infrastructure that will enable us to create, deploy, and scale up innovations*".

11:57

Shapiro goes on to say this is really about understanding mind-sets, belief systems, its coupling all the kind of soft stuff all of the social insights, the social institutions to what is arguably the more available, materially manageable notion of infrastructure. So in the work I'm doing these days, I'm really trying to dig into these notions of belief systems, cultural models, that in a sense enable us, channel how what we think is important, and how to act. As there still a few minutes to go, if we stay with the imagery and again this is something everyone in this room knows, if we stay with the idea that electricity has to be delivered in national grid systems - we've already given up opportunity and possibility for most of the world. If we say oh off grid is the way to go, I think that's really un-chartered space. And that takes both adventuresome and courageous people; but it also takes this recognition that technology on its own will never be adequate to that purpose. And that we instead have to begin to invest in a common language, in vocabulary, in shared experiences and in knowledge that goes along with and it compliments and extends the pure material infrastructure.

13:10

The this slide is an effort to do something I'm also thinking about more and more and many of you are doing the same thing, we live in a time, a curious time when words like impact and scale have become literally part of the furniture of our minds. We talk about the word impact and we use the word scale almost without thinking. And again in the spirit of kind of the idea that words matter, cultures matters, that belief systems matter, I'm asking you to begin to re-examine notions like impact and scale. And this is where I want to bring the talk to some closure. Again I'll just read the quotes up here. I think their useful to look at. The first comes from a recent paper by a colleague Woody Powell at Stanford where he and colleagues state; "*Organisational life today is beset by demands for accountability and for impact. Calls for ways to demonstrate, document effectiveness.....language and routines attempt to explain to larger world what organisations do and how well they do it*".

14:12

And then I go onto say in some other work I've done; "*in the current climate for impact, the work of infrastructure is too often under-specified if not actively neglected*". In other words the calls for impact assume we do something, we measure it then we know, and that violates one of the most basic insights of innovation which is that innovations take a wide range of times to come to fruition. Innovations mature at different levels, and so to think about it and try to measure impact, in a simple immediate way, may well under specify what's really going to work and what's important.

14:46

That's not a call to ignore impact, it's not a call to ignore measurement, instead it's to say we need to become much more thoughtful, much more richly attentive to how to conceptualise impact, and then how to find metrics there. The, I think the core insight in this is really I think what what we might what we'll end with, words matter for worlds. Words matter for worlds, and when we begin to take seriously language, the power of culture, the importance of developing shared vocabularies - we begin to immediately see impact much more feasible, much more likely to happen.

15:25

So that's my story for today, thank you very much for taking a few minute to listen - and to really remember the point there's [inaudible].

15:34

Thank you.

15:37

[END]