

PTC[®] presents

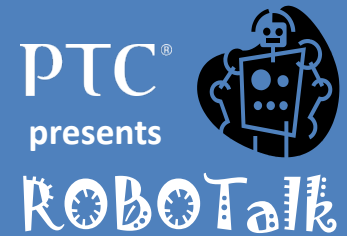
ROBOTalk

Hosted by David Price, the voice of FTC

How to build a
robot from
concept to
competition

November 19th, 2014

WELCOME



- Thank You for joining us!
- PTC Experts on this webinar, and our special guest!



Jordan Cox
Director, PTC K12
Programs



Scott Morris
Windchill & Creo
Expert



Mark Cheli
Creo Expert &
Webex Technical
Assistance



**Kari
Karwedsky**
PTC FIRST
Program Manager



**Techno
Warriors
Advanced**
FTC Team 3486

- Our host,

David Price

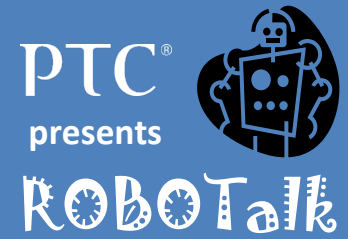


WHERE CITY ARE YOU LISTENING TO ROBOTALK FROM?

**Text 862734 and your message
to 22333**

Poll
Everywhere

AGENDA



- Why FIRST?!? – David Price
- Poll Everywhere
 - Why are you involved with FIRST?
- CAD Data Management – Scott Morris
- A Robot for “*Cascade Effect*” - FTC Team 3486
- Poll Everywhere
 - What was your favorite part of ROBOTalk this season?
- Questions & Answers

WHY FIRST?!?

David Price

Serving F.I.R.S.T. and Changing the World



Engineers have a collective responsibility to improve the lives of people around

- Being a part of a F.I.R.S.T Team is the first step in realizing that you are a part of something much bigger than just YOU.
1. **Serve to discover abundance: the radical shift from 'me' to 'we.'**

When you join a FIRST Team, you discover that often the most important things you have to offer are not things at all. You start to uncover the full range of resources at your disposal -- your time, presence, attention -- and recognize that the ability to give stems from a state of mind and heart, a place much deeper than the material. Inspired by the possibilities this opens up in every moment, you begin to discover humble opportunities to serve -- everywhere.

This process begins a shift from a me-orientation to a we-orientation. You start to look at people and situations with an eye for what you can offer them and not vice versa. You break the tiresome tyranny of questions like "What's in it for me?" The mindset shifts from consumption to contribution.



2. **Serve to express gratitude.** Being a part of a F.I.R.S.T Team in the first step in serving the world.

Such joyful gratitude becomes a foundation in service. When you acknowledge the fullness of your life, you can manifest a heart of service in any situation. In that sense, service doesn't start when we have something to give -- it blossoms naturally when we have nothing left to take. And that is a powerful place to be.

Yes, external change is required for the world to progress, but when coupled with inner transformation, it can affect the world in a radically different way. "We can do no great things -- only small things with great love," maintained Mother Teresa, a woman who made a difference to the lives of millions. It's a matter of what we focus on. Or, in other words, it's not just what we do that matters, but the inner impetus behind our action that really counts.



3. Serve to transform yourself.

Any time we practice the smallest act of service, even if it's only holding a door for somebody, but doing it with a full heart that says, "May I be of use to this person," that kind of giving changes the deep habit of being self-centered. In that brief moment, there is other-centeredness. That other-centeredness relaxes the patterns of the ego, a collection of unexamined, self-oriented tendencies that subtly influence our choices. This is why no true act of service, however small, can ever really be wasted.

To serve unconditionally in this way takes practice and constant effort. But with time and sharpened awareness, we begin to brush against the potential for transformation that is embedded in every act of generosity. It's a realization that "Oh -- when I give, I actually receive." You begin to internalize this



Being a part of a F.I.R.S.T and you will discover

4. **Serve to honor our professions and many connecting people and ideas**

Over time, all of those small acts, those small moments, lead to a different state of being. A state in which service becomes increasingly effortless. And as this awareness grows, you inevitably start to perceive beyond individualistic patterns: each small act of service is an unending ripple that synergizes with countless others.

As Rachel Naomi Remen [puts](#) it, "When you help, you see life as weak. When you fix, you see life as broken. When you serve, you see life as whole." With that understanding, we begin to play our part -- first, by becoming conscious of the offerings we receive, then by feeling gratitude for them, and finally by continuing to pay forward our gifts with a heart of joy. Each of us has such gifts: skills, material resources, connections, presence -- everything we consider ourselves privileged to have. As tools to facilitate giving, we desire to sync up with this vast [in](#)



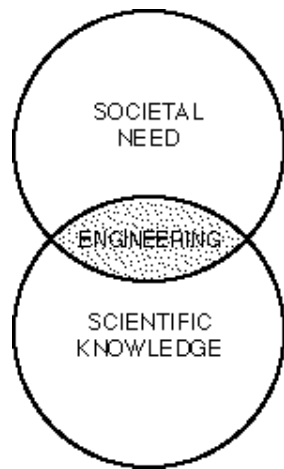
as tools
art to

5. Serve to align with a natural unfolding.

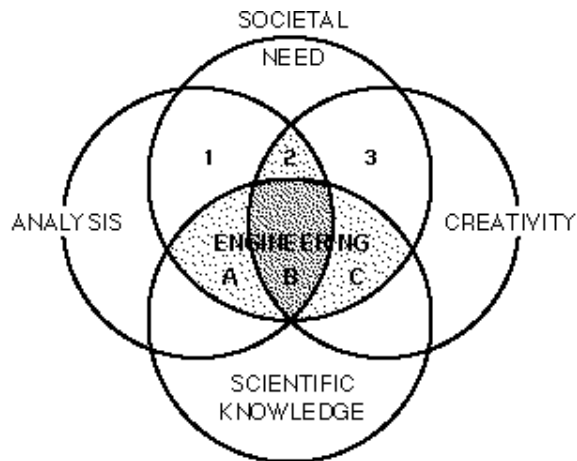
When we increasingly choose to remain in that space of service, being a part of the F.I.R.S.T and you will discover new things. The needs and interactions in many exciting people and ideas situation become clearer, we become instruments of a greater order and consequently our actions become more effortless. When a group of people perform this kind of service as a practice, it creates an ecosystem that holds a space, allowing value to emerge organically. All of this indirect value, the ripple effect, has space and time to add up, synergize with other ripples, and multiply into something completely unexpected. In humble fashion these ripples continue to seed unpredictable manifestations. Such an ecosystem can have its plans and strategies, but places more emphasis on emergent co-creation. So a lot of the ripples will remain unseen for years; some perhaps will be the basis for a seventh-generation philanthropy. It doesn't matter, because they are unconditional gifts.



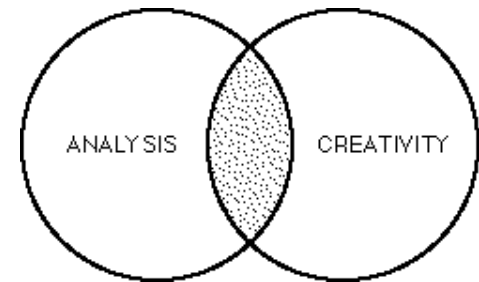
Engineering is at the Center



Engineering solves society's needs with current scientific knowledge.

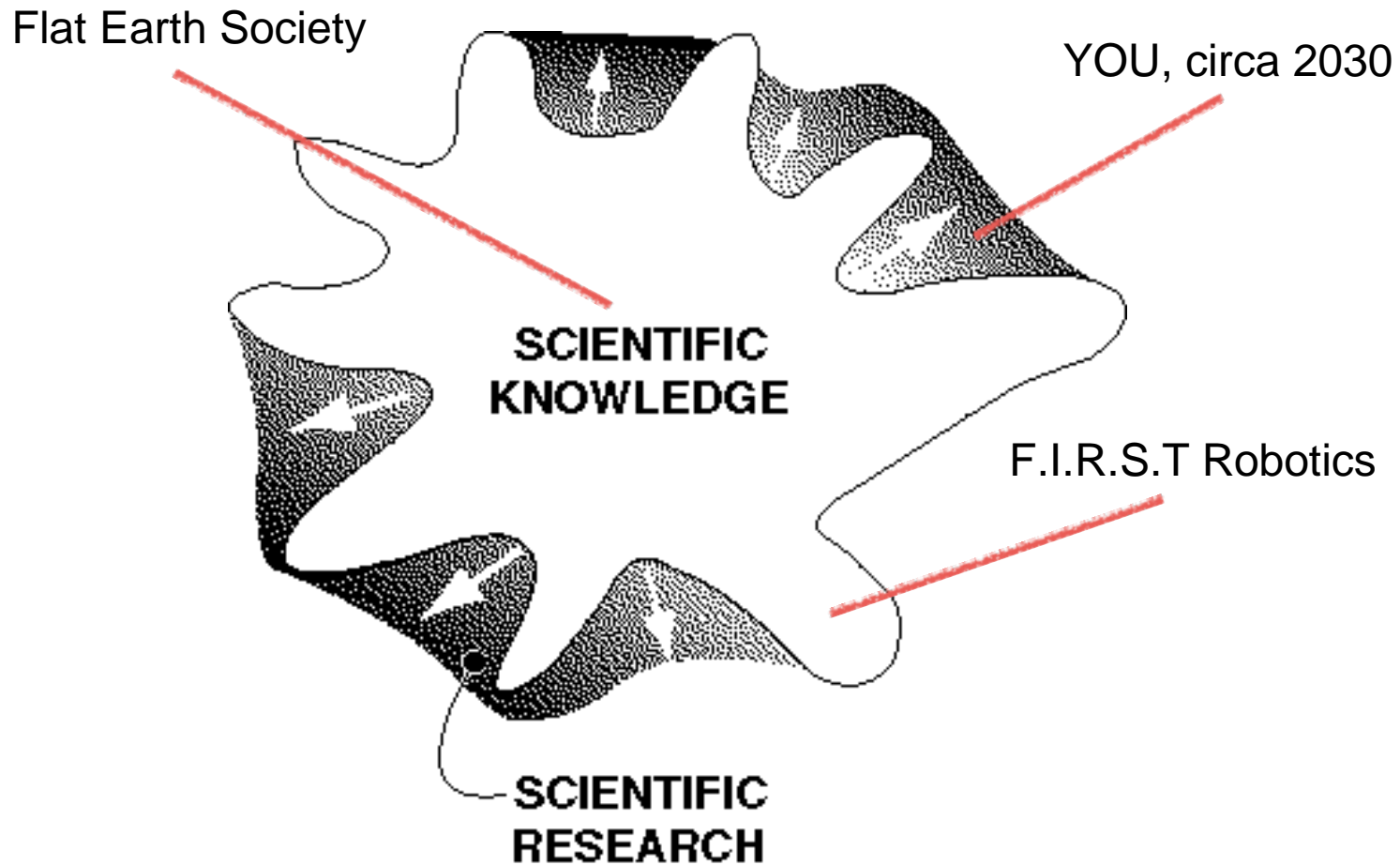


Engineering as at the center.



At the center of being creative and analytical is the world of engineering.

Where do YOU want to be?



WHY ARE YOU INVOLVED WITH FIRST?

**Text 863061 and your message
to 22333**

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CAD DATA MANAGEMENT

Scott
Morris

A ROBOT FOR “CASCADE EFFECT”

FTC Team
3486

**WHAT WAS YOUR FAVORITE
PART OF ROBOTALK THIS
SEASON?**

**Text 446902 and your message
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ASK THE EXPERTS...
QUESTIONS?