The Open Source Triple-Play
+
Failing Faster

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Open source and the four freedoms

0. The freedom to **run/use for any purpose**
1. The freedom to **study and modify**
2. The freedom to **copy and use to help others**
3. The freedom to **improve and distribute to your community**

Cf. scientific method

Open source and the four freedoms

Turn one-way consumption => two-way participation

Lower costs w/ increased quality == proven

Focusing on the participants/contributors produces the best software and attracts more interest

Using open source keeps costs down and profitability up

The open source triple play:

1. Reduce total cost of ownership
   - Remove proprietary, replace with open source

2. Invest to improve collaboration
   - Change the way people think and act

3. Enable user-drive innovation
   - Take input from others, give power to customers

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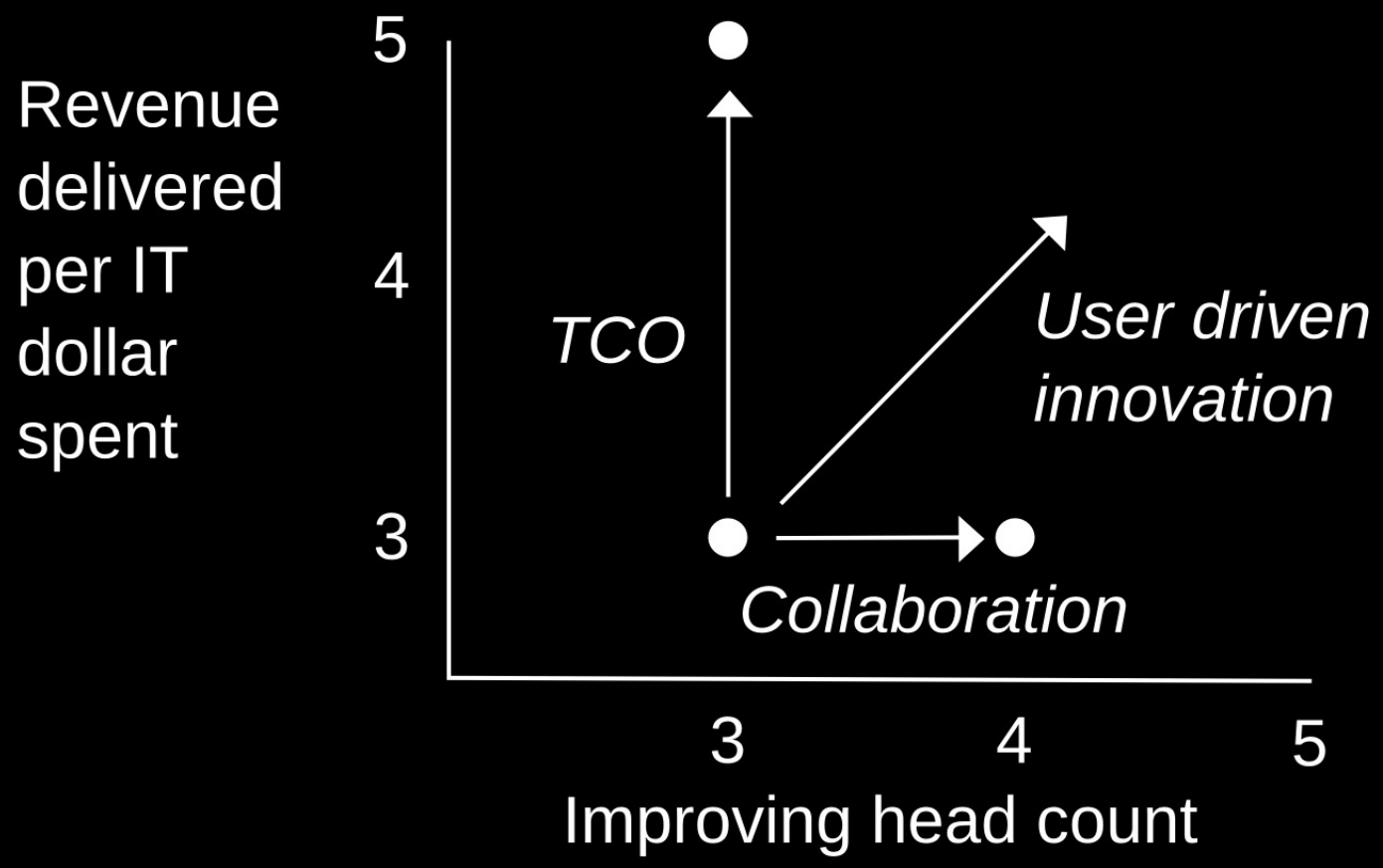
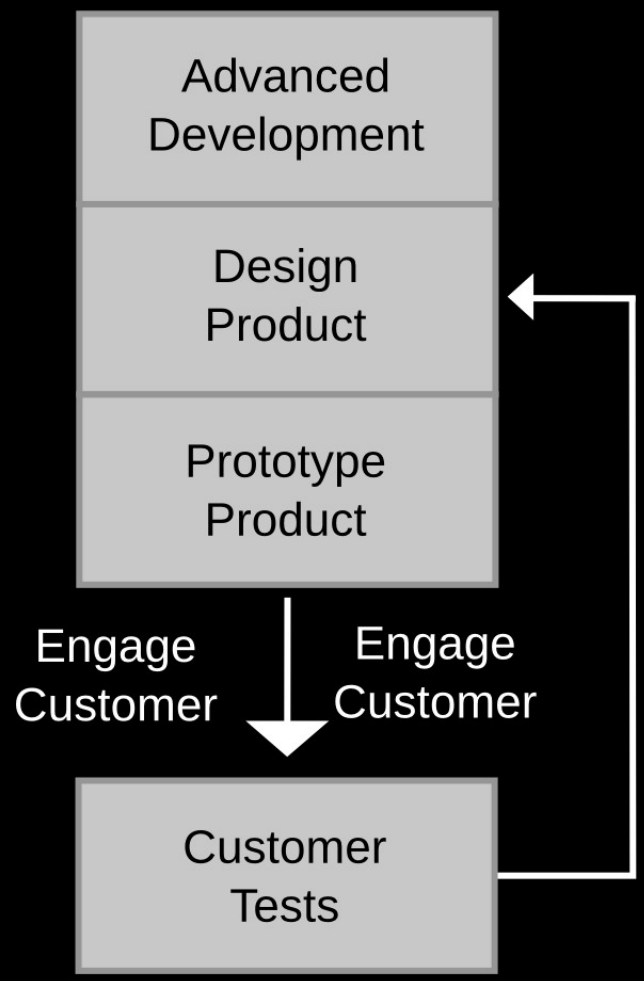


User-driven innovation



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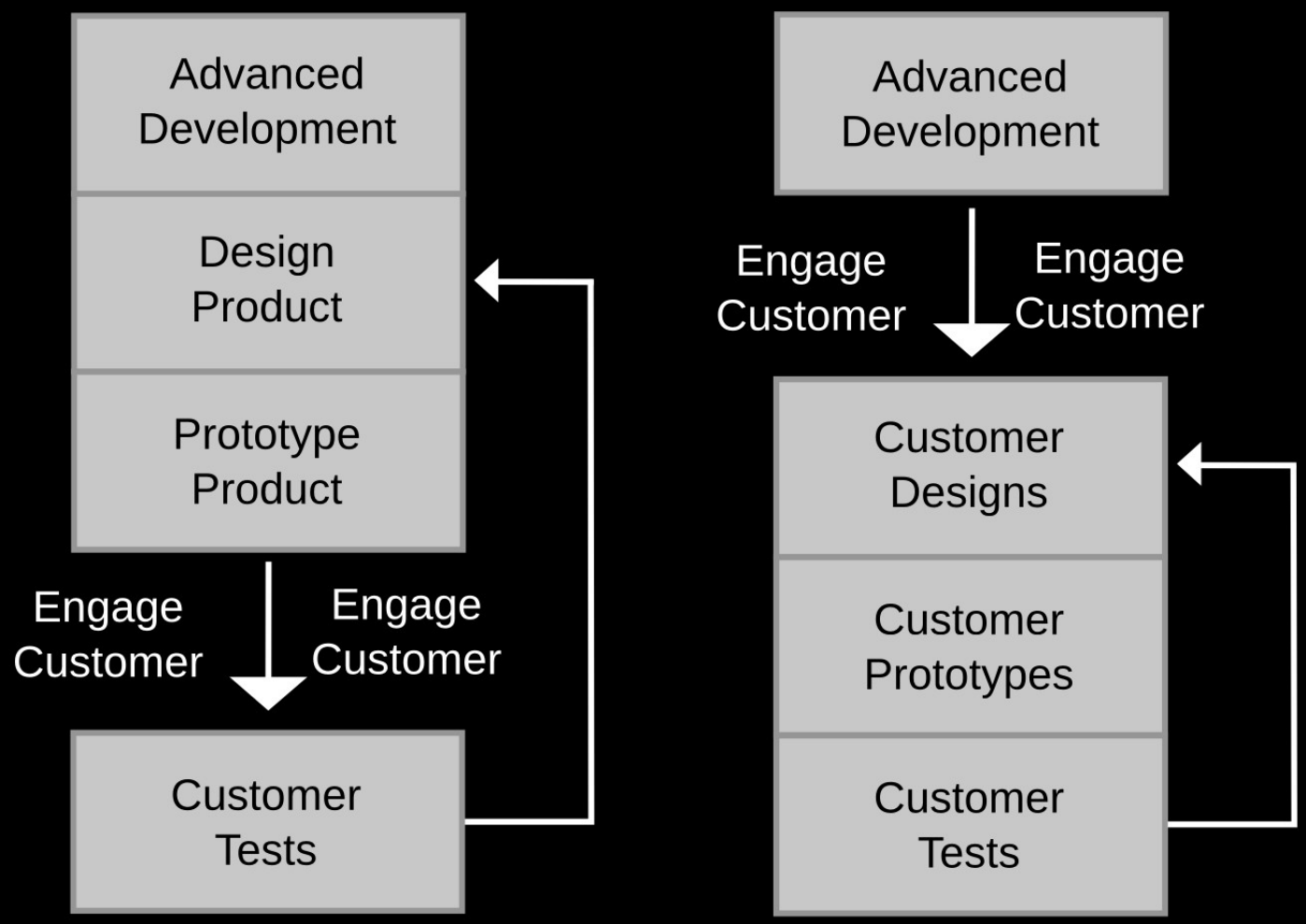


It's about failing faster ...

The open source project is where we do rapid fail + learn

It is the filter for ideas

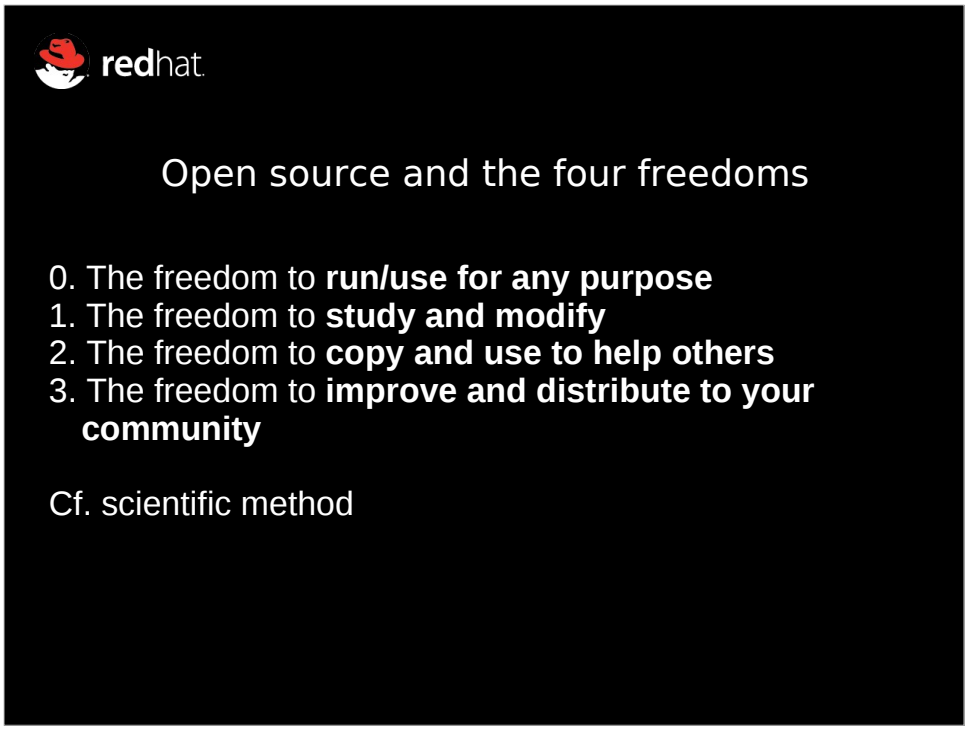
It is why we can make smarter technology bets

Inroduce myself plus say something about Community Architecture:

CA is Red Hat's community team that is looking at strategy across all the open communities Red Hat is involved with. A FLOSS project has a canonical location – a group of people, a website, a repository for source code – this is called the upstream. Red Hat is involved in many hundreds of upstreams, with certain specific ones (kernel, GCC, Xorg, etc.) we are significant or major contributors. Our flagship product, RHEL, is in fact a downstream snapshot of Fedora Linux taken roughly every 18 months. Fedora is the community distribution, released every six months (tomorrow for Fedora 11). It is upstream of RHEL, but it is actually downstream of some many thousands of projects that comprise a Linux distribution.

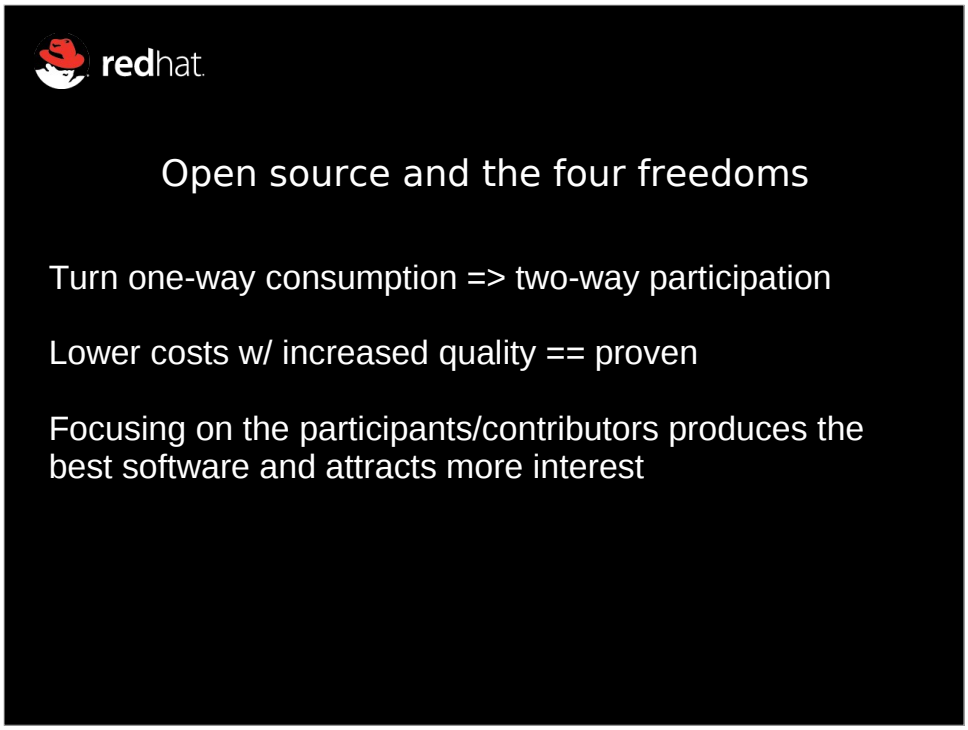
Our job is distilling institutional knowledge about what works and doesn't work in a contributor community, then spreading that knowledge everywhere it is needed. Much of RHT works fine, but especially new projects sometimes appreciate a little consulting/mentoring. Our team uses the Fedora Project as a reference platform, living example, and lens/filter for our own work around setting global community strategy for RHT.

I call myself a community gardener because growing communities is more like gardening – don't overfeed, water enough, weed, prune, and grow to a sustainable level appropriate to the garden.



These are the four freedoms that define free and open source software. They are worth evaluating because all open source must also be free software, that is, provide these four freedoms. Without these freedoms, the software cannot gain the advantages of open source.

Exercising these freedoms is like performing an experiment, and FLOSS has is standing clearly on the shoulders of scientific method genius. If I said I had cold fusion, you would require all my notes, how to do the experiment, and no black boxes filled with flogistan.



The effect of the four freedoms is that communities intentionally and spontaneously grow around projects of interest.

Tradition of purchasing has been a one-way consumption. We pay a lot to have only a small say in the future of this thing we rely upon.

Open source is a two-way street. The more you put in, the more you get back, magnified. There is a force multiplier in effect that is exponential.

A small group of developers can support hundreds of users fairly well. A group of under 2000 people work on the Fedora Linux distribution, and that has 14.7 million users.

I'm going to talk a bit about Total Cost of Operation, or TCO, after this. One thing I take as a given is that open source has proven time and again to lower TCO. I don't want to take up our time proving that point today, that's not really what we are here to wrangle. If anyone wants some good references, come talk with me afterward, and I can point you at a lot of good source material around TCO and open source.

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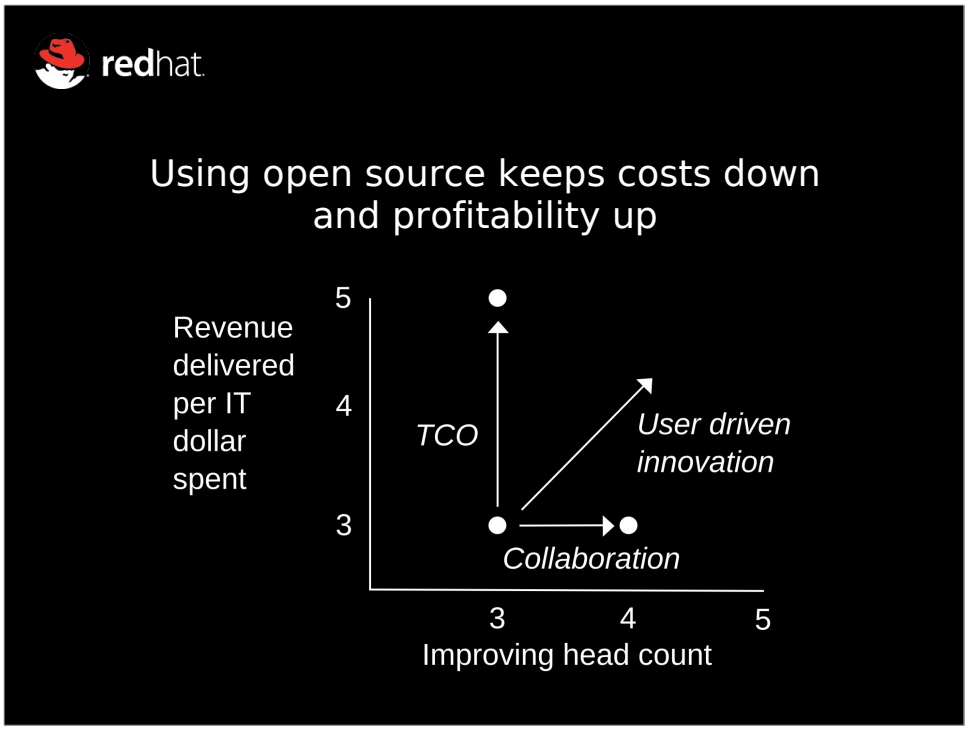
You have probably heard about open source reducing TCO. These costs of operations include hardware, software licensing, power and cooling, datacenter costs, etc. Replacing with open source means more than reducing the number of servers and having them do more work. It means that the same number of people in your IT organizations can do more. You can have huge room to grow the business without growing the IT head count and associated overhead.

Once you have realized some savings with TCO, you don't want to stop there. That isn't enough value from open source, and if you stop at TCO you are losing the vast majority of benefit you can gain. Instead, invest in improving collaboration in your organization. Teach the open source methodology. Get your teams used to working internally and with customers in open, collaborative ways.

When you are comfortable with being able to take input from others, give the power to your customers. Let them tell you what they need, and help them build it themselves.

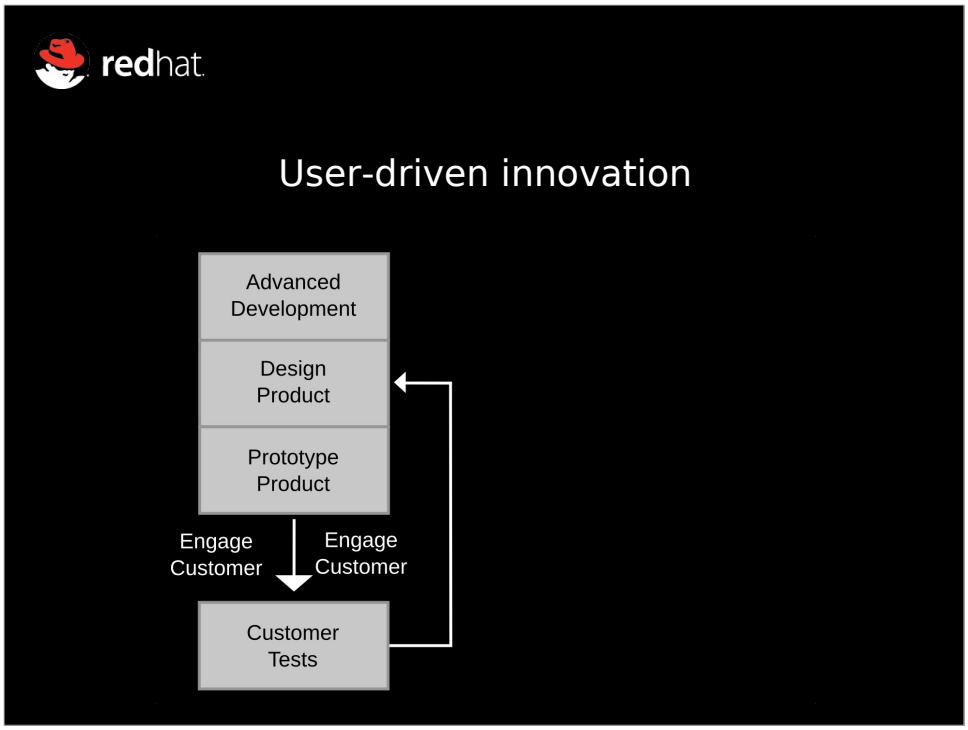
Here's how this works



As you improve revenue with every IT dollar spent, you get more out of your IT head count. For example, if you improve your TCO by 20% while working with effectively 5% less IT head count/per infrastructure, you have a sizeable chunk of money gained.

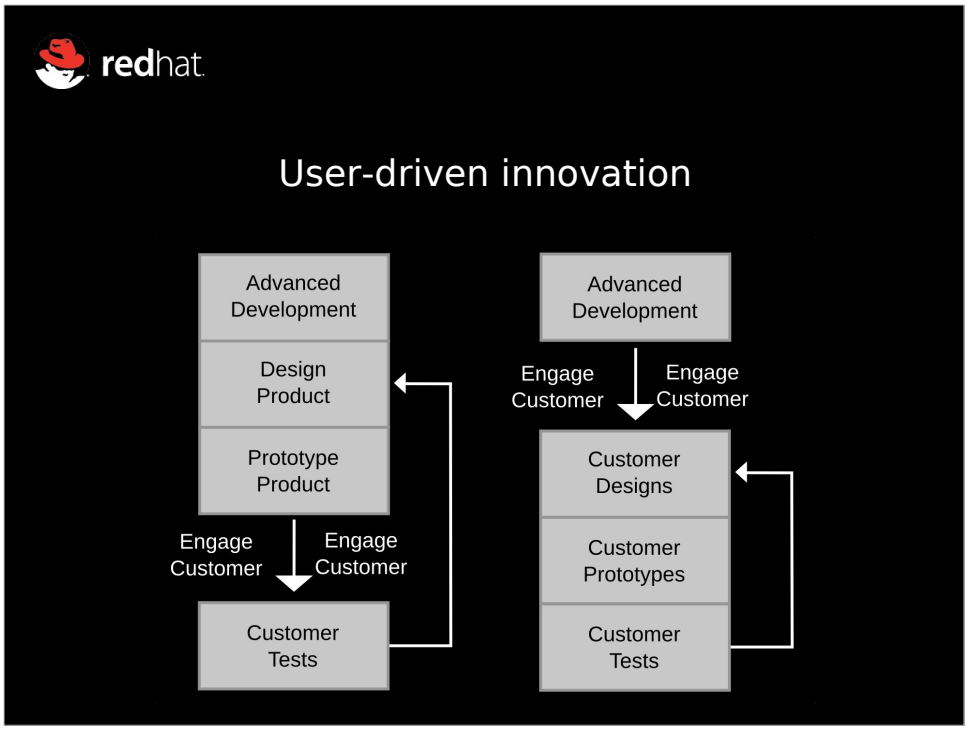
So the additional revenue is from the TCO, and when you improve collaboration amongst your existing teams, that's where you gain additional efficiencies with the same number of people. Then you open yourself to user-driven innovation, and that's what drives the actual profit up and to the right.

Here's how user-driven innovation works ...



In the traditional model, all of the R&D, design, QA, and delivery are on this side before it is exposed to the customer. As often happens, the result gets to hear, the customer says, “That's what I asked for but it's not what I want/need,” and it goes back up to here.

The amount of business you can do with this model is directly driven by how much of the cost of the model the customer can support. You have a limitation when you fill out a market.



Instead, you put your development on making toolkins and frameworks that customers can use to innovate their own solutions.

Delivered to the customer, they can put exactly the amount of effort in that they want, and are able to more quickly gain a useful result.

This model lets you have room to expand to many more markets and customers without having to grow the organization at the same rate.

Sometimes we refer to Fedora Linux as the fail filter. It's where all the good and bad ideas are given their day in the sun. By the time the ideas, the code, and the processes have reached RHEL, they are clear winners in the technology camp.

Rather than trying to figure out all that everyone of our customers could want, we have this arena where we can all interact, the open source communities, and through many and varied means, the customers can drive their own initiatives, just the ones that are important to them.