
PERMISSIONLESS SOCIETY

Segment Length: 6:01 minutes

Lesson Description:

What would life be like for us today if people didn't innovate? How different would life be if innovators needed government's permission to innovate? Would that permission be based on politics? Would it be based on what politicians think is best for us? This segment looks at the importance of permissionless innovation.

Concepts & Key Terms:

Precautionary Principle – The principle that the development of a product or process should be resisted if its effects are disputed or unknown.

Objectives:

Students will be able to:

- discuss the debate over permissionless innovation and precautionary permission-based controls.
- explain the benefits and drawbacks of permissionless innovation and precautionary permission-based controls.
- evaluate the effects of government involvement in technological innovations, such as app-based car services, driverless cars, and medical breakthroughs.

Preview Activity and Questions:

Have students answer the following questions in their notebooks:

Should there be an agency that approves inventions before people are allowed to buy them?
Why / Why not?

OR

Name an innovation that people now use regularly. Why do they use it? Can there be a negative side to its use? Explain.

Use Think, Pair, Share to have students answer the preview question. After a few minutes, poll the students. Ask the students to discuss their answers.

Viewing Guide:

It is recommended that teachers show the video segment twice: once to allow students to view the video and focus on the issues presented, and once to allow them time to complete the viewing guide. After they complete the viewing guide, allow students a few minutes to work in pairs sharing and verifying answers.

Answers to Viewing Guide:

1. developers
2. best case scenarios
3. Google
4. censorship
5. limb deficiencies

Name _____ Date _____

Class _____ Period _____ Teacher _____

Permissionless Society Viewing Guide

Directions: As you watch the video, fill in the blanks with the correct words.

1. I have this cell phone because it was invented without government first having to give the _____ permission.
2. The basic argument that they make is that, you know, there's these hypothetical worst cases that could occur, and they end up basing public policy upon those hypothetical worst case scenarios. The problem with that, you can base all public policy on hypothetical worst case scenarios, then _____ _____ will never come about.
3. Think about 20 years ago. If Mark Zuckerberg of Facebook, or Steve Jobs of Apple, or anybody from _____ had to come to the government, say, the Federal Communications Commission, and get their blessing for a license to operate, you have to wonder, how many of them would even exist today?
4. This is basically _____ on a global scale for not just the internet, but for, in a sense, history and journalism. They're going to scrub history away with this so-called "Right to be forgotten."
5. We have 3D printers today that can actually manufacture, on the spot, all sorts of amazing things, including, as I saw this one day at Johns Hopkins University Hospital at a conference, prosthetic hands for children with _____ _____. Volunteers were making, on the spot, these prosthetic hands for kids, but technically, what they're doing is illegal.

Now, take a few moments to reflect on the video and answer the question below:

What is one lesson you got from this video? _____

Discussion and Analysis:

1. Adam Thierer said there are lots of efforts to impose permission-based systems on new technologies. What if that had happened in the past? Can you envision people using government to stop electricity and cars because of how dangerous they are?
2. If you were a government official and people came to you asking for permission to develop self-driving cars, what would you say? Why?
3. Should businesses be allowed to produce self-driving cars? Should government let them? Should people be allowed to purchase and drive self-driving cars? Should government let them?
4. Does requiring government permission to innovate create political problems? Won't some people try to use government to protect their businesses from increased competition from innovators?
5. What about Uber? Should the government have stopped its development because it takes jobs from cab drivers? What about the customers? Shouldn't they get to decide?
6. Can't someone find negatives for every innovation?
7. Just what is the role of government in all of this? What is the role of government, period?
8. Should fast food restaurants be allowed to use kiosks for customers to order food? Should any of us – should government – even have a say in that? Why / Why not?
9. What can we consumers do if we don't like a new product or service?
10. Adam Thierer said that there will always be risks. Is he suggesting we shouldn't be concerned? What is his point?
11. If companies move development of some products and services overseas, what does that mean for America?

Discuss These Lines from the Video:

1. "Private" seems selfish, secretive. By contrast, "public" or "government-run" sounds like sharing; we're all in this together.
2. But as government takes control of more of life, the private sector is less able to bring us all the wonderful things it has brought us so far.
3. There's a lot of efforts to impose permission-based systems on these new technologies.
4. Basically, France took an industrial policy approach to the internet. They basically wanted to micro-manage our planet from above, but that's not the way innovation happens. It's a more bottom-up or spontaneous kind of thing.
5. And now Europe, threatening Google, has this thing called, "Right to be forgotten."
6. If we have a global internet censorship regime based on the idea of cleaning up everybody's past mistakes, that's going to be a disaster. The whole global internet is going to look like China or Soviet Russia runs it.
7. Europe wants to impose their censorship regime on the rest of the world.
8. Volunteers were making, on the spot, these prosthetic hands for kids, but technically, what they're doing is illegal. The FDA says you need to have rules and licenses for these

sort of things, even though it's all being done free, for very cheap, for parents who need these things for kids that usually cost thousands of dollars. Why would we stop that innovation?

Quotes for Discussion:

We are on the eve of innovations whose scope cannot be foreseen.

– **Ludwig von Mises**

I cannot help fearing that men may reach a point where they look on every new theory as a danger, every innovation as a toilsome trouble, every social advance as a first step toward revolution, and that they may absolutely refuse to move at all.

– **Alexis de Tocqueville**

We humans have a love-hate relationship with our technology. We love each new advance and we hate how fast our world is changing.

– **Daniel H. Wilson**

I don't want to have anything to do with the government. And yet if we don't have any regulations, there goes civilization, there goes security, and there goes protecting you against what people are going to sell you.

– **Charles Grodin**

Government is the ultimate monopoly. And monopolies, as any economist will tell you, often breed complacency and a lack of innovation.

– **Gavin Newsom**

The media has brainwashed the electorate to expect the government to do something. The best economic policy of any government is to do nothing but reduce the size of the government, reduce the size of the laws, and reduce the size of regulations.

– **Marc Faber**

The more restrictions and limitations there are, the more impoverished men will be.

– **Lao Tzu**

There's a popular saying that the Internet interprets censorship as damage and routes around it. Desire and innovation will trump policy, the argument goes, as clever programmers circumvent controls.

– **Virginia Postrel**

Investing capital in the free market creates innovation, businesses, jobs and economic growth. Investing capital in the government creates more bureaucracy, more paperwork and inefficiency.

– **Michael Ramirez**

Entrepreneurship, entrepreneurship, entrepreneurship. It drives everything: Job creation, poverty alleviation, innovation.

– **Elliott Bisnow**

An important scientific innovation rarely makes its way by gradually winning over and converting its opponents: What does happen is that the opponents gradually die out.

– **Max Planck**

The statesman who should attempt to direct private people in what manner they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority which could safely be entrusted to no council and senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it.

– Adam Smith, *The Wealth of Nations*

Innovation is the calling card of the future.

– Anna Eshoo

The key is to embrace disruption and change early. Don't react to it decades later. You can't fight innovation.

– Ryan Kavanaugh

Activities:

1. Have students complete the PMI chart graphic organizer (page 11).
2. Have students complete the Exit Ticket (page 12).
3. Show the class one of these bonus videos on the DVD: Economics Made the World Great, Elijah McCoy, or Hockey Stick of Human Prosperity. Ask the students to relate the bonus video to the Permissionless Society segment.
4. In groups, research arguments for and against permissionless innovation. Then, conduct a classroom debate. (See link in the Resources section for a guide to conducting classroom debates.)
5. Research Minitel. Who developed it? Why? How did it go from a leading technology to an antiquated system? How did the need for permission affect its development? Report your findings to the class in a slideshow. (See link in the Resources section for help in preparing a slideshow.)
6. Research and write an essay about the precautionary principle and the scientific groups that support and oppose its use.
7. Show the class the video, An Orgy of Innovation, and ask the students to relate it to the Permissionless Society video.
<https://www.mruniversity.com/courses/principles-economics-macroeconomics/hockey-stick-prosperity-innovation-and-entrepreneurship>
8. Produce a “man-on-the-street” video in which you ask people if entrepreneurs and innovators should need permission from the government to develop and produce new products and services. Be sure to ask them to explain their answers. (See links in the Resources section for help in producing man-on-the-street videos.)
9. Research the FDA. What is it? What are its goals? Does it really slow down the pace of innovations that could help people? Why? What are the arguments for going slowly? Write an essay to report on your findings.
10. Read one of the articles in the Resources section. Then write a summary using Cornell (two-column) notes. (See link in the Resources section for help in taking Cornell notes.)
11. Watch one of the videos listed in the Resources section. Then, write an essay about the video.

12. Research the concept of the “right to be forgotten” and the attempts to enforce that. Does it really give someone a chance to correct the record, a do-over or another chance, or is it an attempt to allow people to alter the historical record? Are there any limits? Is any proof required? Can this be misused? Write an essay about the controversy or choose a side and write a persuasive essay arguing your position. (See links in the Resources section for help in writing persuasive essays.) As an alternative, write and deliver a speech to the class in which you try to persuade the other students to agree with your position. (See links in the Resources section for help in speaking to a class.)
13. Read either *Anthem* by Ayn Rand or *The Law* by Frédéric Bastiat. Then write a book report on it. How does this book relate to the video? (See link in the Resources section for help in writing a book report.)
14. In *Human Action: A Treatise on Economics* (1949), Ludwig von Mises wrote, “But competition does not mean that anybody can prosper by simply imitating what other people do. It means the opportunity to serve the consumers in a better or cheaper way without being restrained by privileges granted to those whose vested interests the innovation hurts.” How does this quote relate to the video?
15. Write a tweet, poem, or song about the permissionless society, precautionary permission, the concept of the right to be forgotten, the FDA, or any related topic.

Resources:

Guides

A good explanation of K-W-L, with a sample chart, and a chart for downloading:

<http://www.readingquest.org/strat/kwl.html>

Also helpful for K-W-L:

<https://www.teachingchannel.org/videos/structured-learning-teaching-tip>

Think, Pair, Share

A brief explanation of the Think, Pair, Share instructional strategy, with examples:

<http://www.readingquest.org/strat/tps.html>

A video explanation of Think, Pair, Share:

<https://www.teachingchannel.org/videos/think-pair-share-lesson-idea>

Conducting classroom debates:

<http://712educators.about.com/cs/lessonsss/ht/htdebate.htm>

http://www.edu.gov.mb.ca/k12/cur/socstud/frame_found_sr2/tns/tn-13.pdf

<http://busyteacher.org/7245-conducting-class-debate-essential-tips.html>

How to write a book report:

<http://www.infoplease.com/homework/wsbookreporths.html>

How to write a persuasive essay:

https://www.scribendi.com/advice/how_to_write_a_persuasive_essay.en.html

<http://www.infoplease.com/homework/writingskills7.html>

How to produce a man-on-the-street interview:

<http://onemarketmedia.com/2009/02/16/seven-ideas-to-help-get-the-most-out-of-a-man-on-the-street-interview/>

<http://www.wikihow.com/Make-a-Man-on-the-Street-Interview>

http://www.ehow.com/how_2283844_do-man-street-interviews.html

For a clear, simple explanation of the Cornell note-taking system:

<http://coe.jmu.edu/learningtoolbox/cornellnotes.html>

<http://www.bucks.edu/~specpop/Cornl-ex.htm>

For help in speaking to a class:

<https://www.hamilton.edu/oralcommunication/tips-for-effective-delivery>

Preparing effective slideshow presentations:

http://www.ehow.com/how_5032561_prepare-effective-powerpoint-presentation.html

<http://www.microsoft.com/en-us/showcase/details.aspx?uuid=22f09a63-cecb-4260-a44f-8223d07dd031>

<http://blog.synapsiscreative.com/the-info/7-big-powerpoint-mistakes-you-just-cant-afford-to-make>

Articles

“Drone Registry Repeal a Victory for Permissionless Innovation” by Andrea O’Sullivan

<http://reason.com/archives/2017/05/24/drone-registry-repeal-a-victory-for-perm>

“Elon Musk Is Wrong about Artificial Intelligence and the Precautionary Principle” by Ronald Bailey

<http://reason.com/blog/2017/07/18/elon-musk-is-wrong-about-artificial-inte>

“Oh, Elon. Building Infrastructure For The Hyperloop Doesn’t Work Like That” by Aarian Marshall

<https://www.wired.com/story/infrastructure-hyperloop-nope/>

“How Deregulation Gave Us FM Radio, HBO, and the iPhone” by Justin Monticello & Nick Gillespie (with accompanying video)

<http://reason.com/reasontv/2017/05/22/markets-spectrum-fcc-net-neutrality>

“Let Driverless Car Innovators – Not Bureaucrats – Work Out Security, Privacy Issues” by Andrea O’Sullivan

<http://reason.com/archives/2017/06/14/let-driverless-car-innovators-not-bureauc>

“Safety Advocates Urge Congress to Go Slow on Driverless Cars” by Ryan Beene

<https://www.bloomberg.com/news/articles/2017-06-27/auto-safety-monitors-urge-congress-to-go-slow-on-driverless-cars>

“‘You’re killing people’: Elon Musk attacks critics of self-driving cars” by Cara McGoogan

<http://www.telegraph.co.uk/technology/2016/10/20/youre-killing-people-elon-musk-attacks-critics-of-self-driving-c/>

“Why Self-Driving Cars Must Be Programmed to Kill” from MIT Technology Review

<https://www.technologyreview.com/s/542626/why-self-driving-cars-must-be-programmed-to-kill/>

Books

Anthem by Ayn Rand

Copy Fights: The Future of Intellectual Property in the Information Age

edited by Adam Thierer and Clyde Crews

Hands Off: The Future of Self-Driving Cars

by United States Senate Committee on Commerce, Science, and Transportation

Human Action: A Treatise on Economics by Ludwig von Mises

The Law by Frédéric Bastiat

Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom

by Adam Thierer

Who Rules the Net?: Internet Governance and Jurisdiction by Adam Thierer and Clyde Crews

Videos

Bee the Change

http://izzit.org/products/detail.php?video=bee_the_change

Inventing the Future

http://izzit.org/products/detail.php?video=inventing_the_future

An Orgy of Innovation

<https://www.mruniversity.com/courses/principles-economics-macroeconomics/hockey-stick-prosperity-innovation-and-entrepreneurship>

The Paradox of Progress

http://izzit.org/products/detail.php?video=paradox_of_progress

Permissionless Innovation

<http://permissionlessinnovation.org/video/>

Permissionless Innovation: An interview with Nick Gillespie (reason.com)

<https://www.youtube.com/watch?v=0N75MVVP24k>

The Vanishing Entrepreneur

<http://www.learnliberty.org/videos/the-vanishing-entrepreneur/>

Websites

Mercatus Institute

<https://www.mercatus.org/>

Permissionless Innovation

<http://permissionlessinnovation.org>

Name _____ Date _____

Class _____ Period _____ Teacher _____

Permissionless Society PMI Chart

P = Plus: What are some positive effects of innovation?

M = Minus: What are some negative effects of innovation?

I = Interesting: What are some interesting aspects of innovation?

+ Plusses +	- Minuses -	I

Do you think regulation of innovations would have led to more and faster development of innovative products and services or less and slower development of innovative products? Explain. _____

Would you be willing to accept fewer and slower development of innovative products and services? Why? / Why not? _____

Name _____

Admit One

Why do some people support government rules on technological innovations?

Why do some people oppose government rules on technological innovations?

Admit One

EXIT TICKET

Name _____

Admit One

Why do some people support government rules on technological innovations?

Why do some people oppose government rules on technological innovations?

Admit One

EXIT TICKET

Name _____

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