

IM 450-01 Issues in IM: *Blockchain, Cryptocurrency, NFTs*

Spring 2022

Class 19—March 31

NFTs

What is the problem to which this technology is a solution?

Whose problem is it?

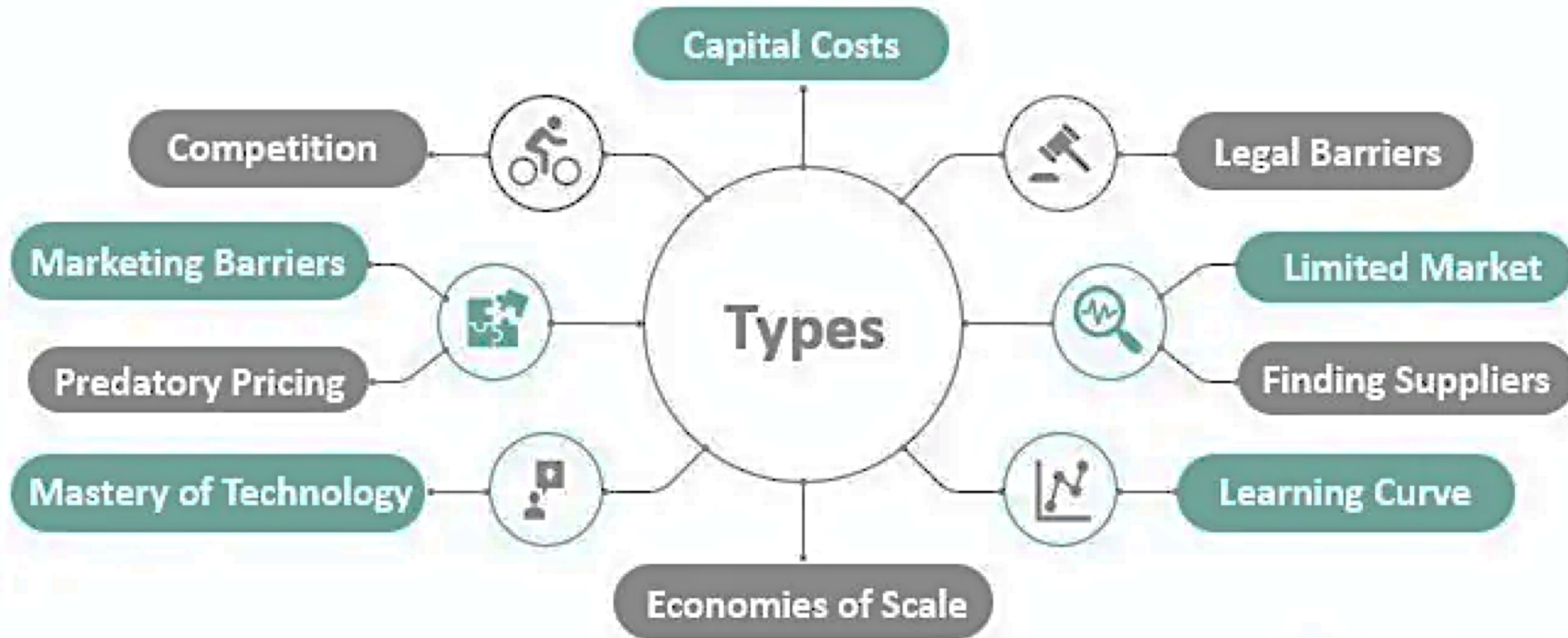
**What is the problem
to which this technology is a solution?
Whose problem is it?**

- **Barriers to Entry**

- **New technologies that successfully challenge/replace legacy technologies (mediums, channels, platforms, applications, etc.), sometimes lower barriers to entry.**
 - **Usually for only a short time. Then major players take over and re-establish the barriers (on their terms this time)**
 - **These changes present entry opportunities for “creatives” who had been blocked by the barriers.**

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Barriers to Entry



What is the problem to which this technology is a solution? & Whose problem is it?

- **Capital Costs** – New entrants require some investment to run a business in the market. For example, they have to buy fixed assets to produce or render service.
- **Competition** – The new entrants have to face competition from the market stalwarts. Big wigs pose a severe threat to start-ups by being in the market and enjoying market share.
- **Legal Barriers** – The government creates hindrances legally to the new entrants by granting a few exclusive rights, patents, etc., to a few companies.
- **Marketing Barriers** – As mentioned about the competition earlier, highly established companies can spend huge amounts on advertisements. In contrast, the new companies may not have the capacity, making it harder for them to show their products.
- **Limited Market** – When there are too many players, each company shares a little market only.
- **Predatory Pricing** – It may not be easy [With predatory pricing](#) prevailing in the market.
- **Finding Suppliers** – When existing firms have dominant market control, it may be almost impossible for new entrants to find suppliers.
- **Mastery of Technology** – The existing players may be able to control the technology prevailing in the market while the new entrants are usually are naïve.
- **Learning Curve** – With experience comes learning, and understanding comes to speed and perfection. The existing players have this advantage over the new entrants.
- **Economies of Scale** – An established firm's main advantage is having lower production per-unit costs because it can achieve economies of scale.

**What is the problem
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Jonathan Seier:

- **Reduce paper for contracts (like real estate)**
 - I'm unclear that NFT's provide a unique/usable solution: Institutions in land sales continue using paper for contracts (digital for all other processes).
- **Make and track a unique document**
- **Make and track a unique file (music, etc.)**

<https://metaversenews.com/what-problem-is-nfts-designed-to-solve/>

What is the problem to which this technology is a solution? Whose problem is it?

- **“NFTs are helping artists solve a vital problem: who owns digital artwork?”**
 - **“using Ethereum, a buyer will pay for a jpeg on the NFT auction platform OpenSea and in exchange receive an address on Arweave confirming the purchase and ownership of the image.”**
 - **This “problem” is more relevant to digital files than analog art.**
 - **The provenance of an analog artwork is an important part of ownership and trading**
 - **It is NOT always accurately tracked**
 - **But there is a system in place that usually works.**
 - **Digital files can be exactly/perfectly copied making “proving” uniqueness, originality, and ownership more difficult.**
 - **Digital artists might benefit from solutions.**

“NFTs are helping artists solve a vital problem: who owns digital artwork?”

<https://www.theguardian.com/artanddesign/2021/apr/03/non-fungible-tokens-digital-art-artists>

What is the problem to which this technology is a solution? Whose problem is it?

- **“If I create an NFT of the photo, the buyer can now be assured that his or her copy is the only legitimate copy — provided, of course, that I don’t turn around and create another NFT of the same photo. And the new owner can then assure future buyers that the picture is the original.”**
- **So the issues of “originality” and “ownership” can be managed with NFTs.**
- **But not so the issue of “value based on scarcity” because, just as with analog items, volume/scarcity is managed by the size of the run NOT by whether you/me/we have one.**

“Here's an explainer on NFTs and the Bored Ape craze.”

<https://www.latimes.com/business/technology/story/2022-02-07/what-are-nfts-bored-apes>

**What is the problem
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- **Standard digital files don't include contracts and executables.**
- **Being able to include those in a single digital file CAN solve a variety of problems faced by the creator who wants to**
 - **Enforce particular constraints on uses and**
 - **Encourage particular affordances on uses.**

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- **“Solving Digital File Security Problems” and/or Reducing Privacy intrusions” are often touted as advantages.**
 - **Neither claim holds up to reality so NFTs DO NOT currently solve problems in these two areas.**
 - **Everyone who uses digital files (especially in business) has security and privacy problems.**
- **“Understanding Security Issues in the NFT Ecosystem”**
 - **Simply put: NFTs on the blockchain do NOT solve security or privacy problems any better than other solutions.**
 - **https://www.researchgate.net/publication/356339205_Understanding_Security_Issues_in_the_NFT_Ecosystem**
- **As recently demonstrated (to the tune of \$1B in 3 months of 2022), there are numerous security holes in these systems.**

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- **We will cover this next time, but certainly NFTs don't solve any of the IP issues raised by ownership and trading on the blockchain.**
 - **“The 'Dune' NFT Copyright Fiasco Is the Least of Crypto's Legal Worries”**
 - **<https://www.wired.com/story/nft-cryptocurrency-art-regulation-law>**

**NFTs—
What is the problem to which this technology is a
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Q&A/comments?**

**April
1**

8:00 am

Level 3 Material 9