# 1.1 Problem

return to Introduction

As of March 2022, there were around 10,400 Cryptocurrencies available, with a total market cap of around $2 Trillion down from an all-time high of almost $3 Trillion in November od 2021[1),2)]. DIDO implementations and interest in them are currently in the Positive Hype part of the technology Hype-Cycle as defined by Gartner.[3)].

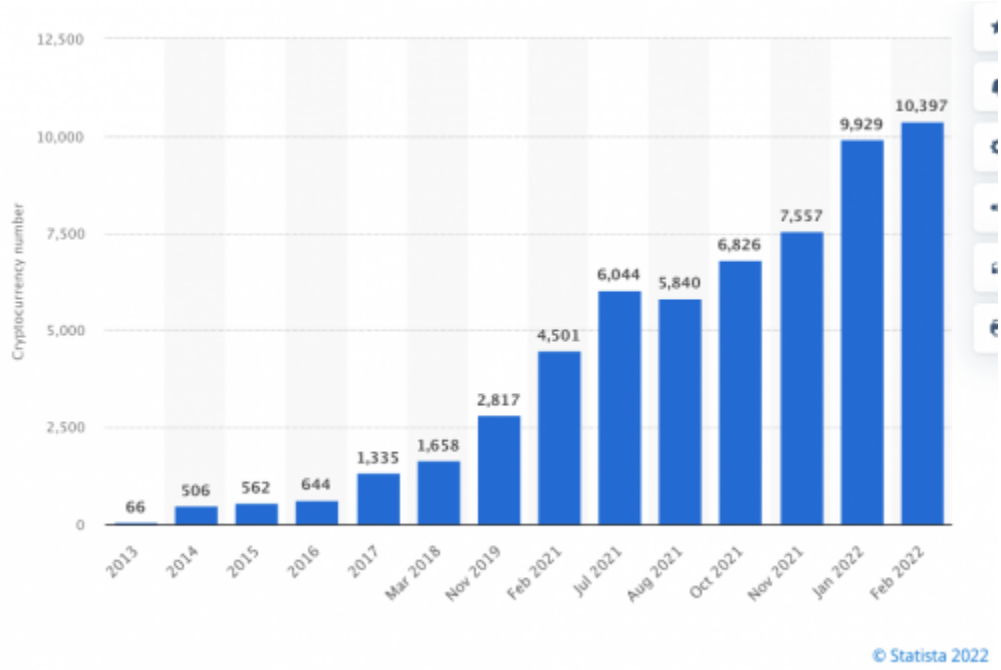
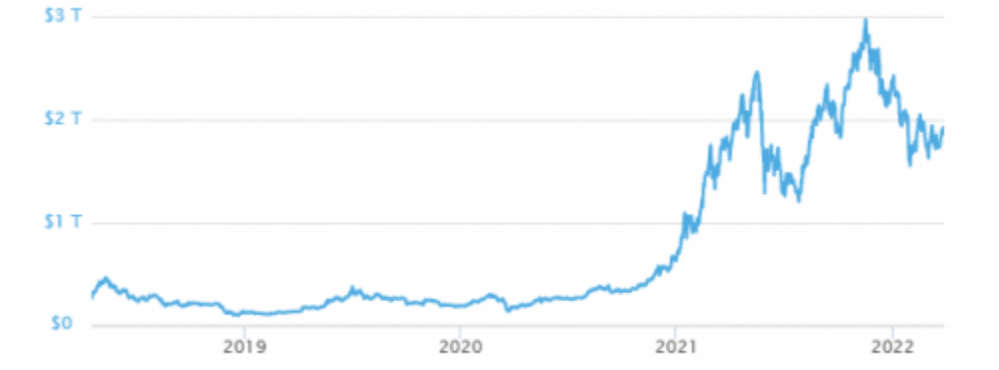



Figure 1: Number of cryptocurrencies worldwide from 2013 to Feb 2022
https://www.statista.com/statistics/863917/number-crypto-coins-tokens/



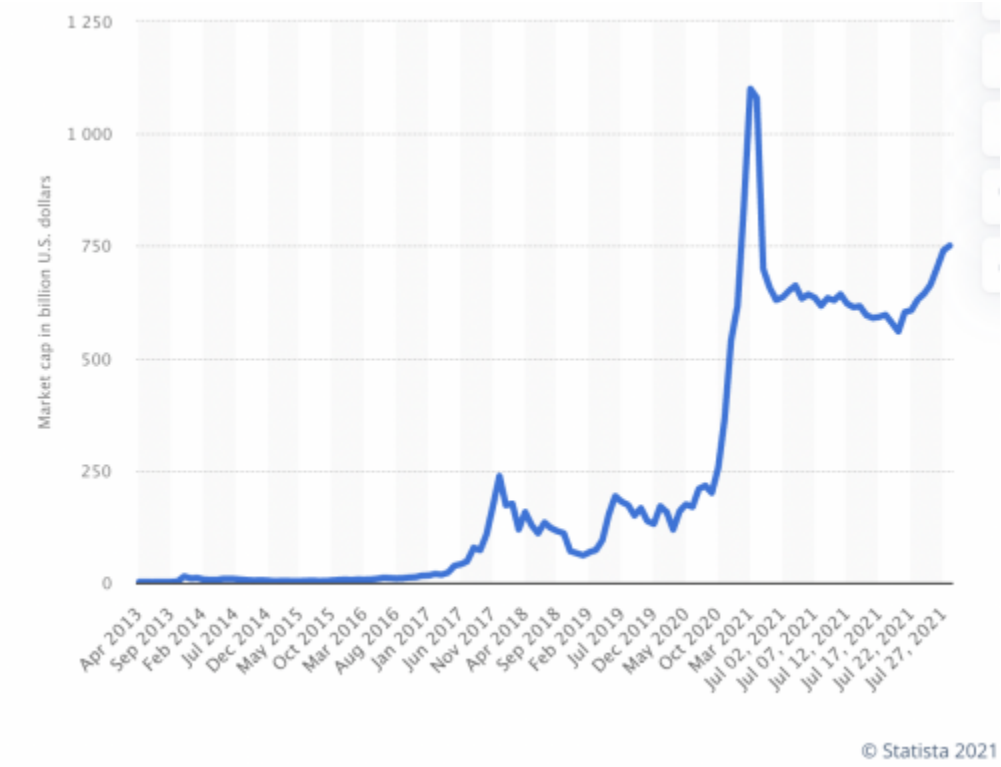



Figure 2: Market capitalization of Cryptocurrenies from 2018 to 2022. [4)]

The naming of the Hypecurve is new, but the understanding of the hype curves has a long history.

> *There is a famous story, we don't know if it's true, about how in the late summer of 1929, a shoe-shine boy gave Joe Kennedy stock tips, and Kennedy, being a wise old investor, thought, "If shoeshine boys are giving stock tips, then it's time to get out of the market." So the story says Joe Kennedy sold all of his stocks and made a killing...*[5)]

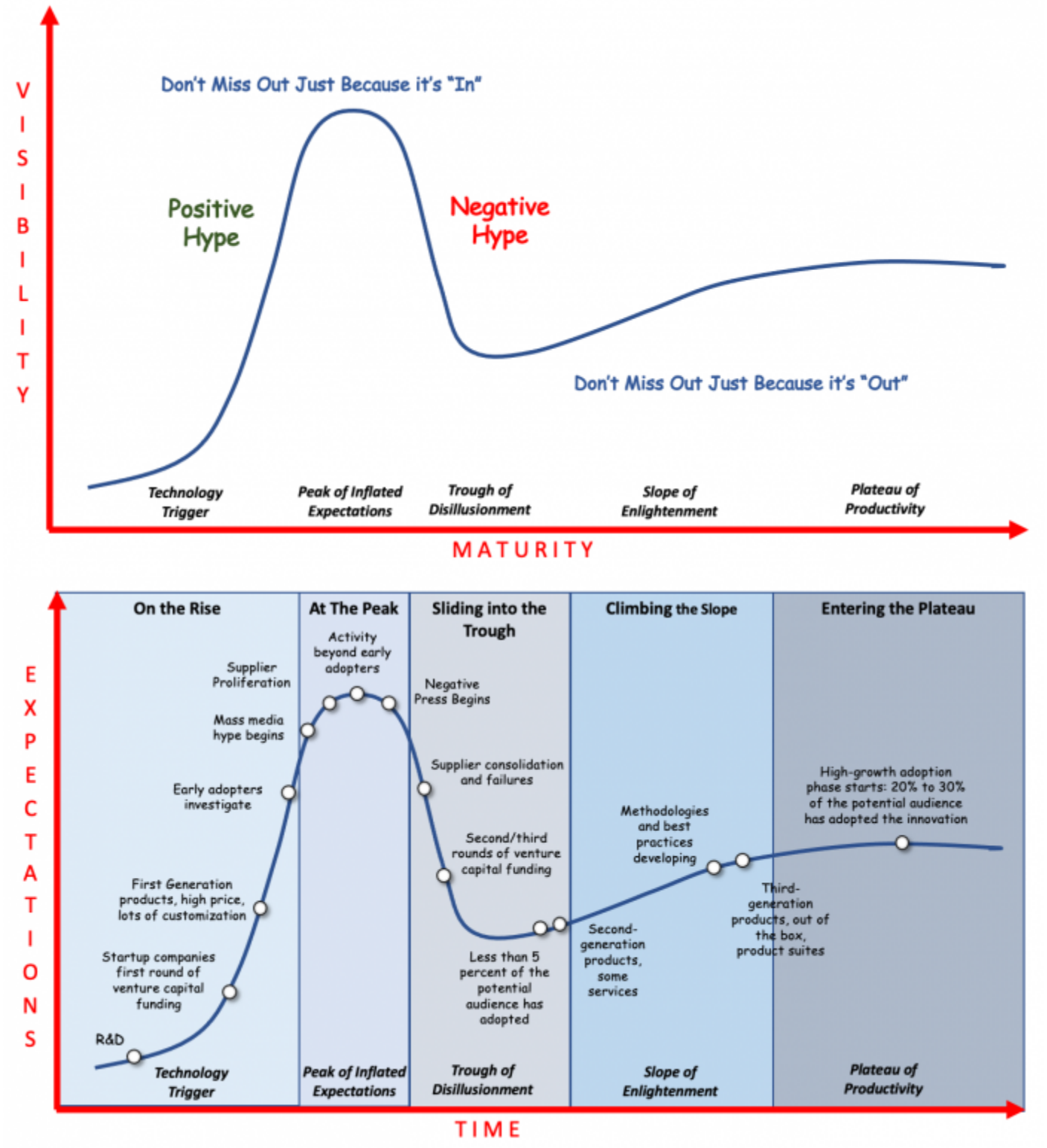



Figure 3: Gartner Group Hype Cycle

A major concern and part of the motivation behind the creation of a Reference Architecture (RA) is the lack of a comprehensive mechanism to evaluate all the risks associated with DIDO implementations (especially cryptocurrencies). Many of the risks to DIDOs are common to distributed computing and have already been identified and addressed using risk mitigators in existing processes, procedures, and standards. An example is vulnerabilities in source code. Unfortunately, no statistics are available regarding how rigorously these risk mitigators are applied to DIDOs, if at all. Specifying a Reference

Architecture and cross-referencing its components to a set of existing standards establishes the following:

- An actuarial framework for assessing risks associated with existing products
- Metrics for evaluating, comparing, and selecting existing products
- A roadmap for future standard implementation, enhancement, and development

1) Market capitalization of Bitcoin from April 2013 to July 28, 2021(in billion U.S. dollars), Statista, Accessed: 29 July 2021, https://www.statista.com/statistics/377382/bitcoin-market-capitalization/

2) D. Palmer, “Market Cap Hits All-Time High,” 23 August 2017. [Online]. Available: https://www.coindesk.com/150-billion-total-cryptocurrency-market-cap-hits-new-time-high/. [Accessed 20 November 2017].

3) Understanding Gartner's Hype Cycles, 30 May 2003, Alexander Linden, Jackie Fenn, https://www.bus.umich.edu/KresgePublic/Journals/Gartner/research/115200/115274/115274.html

4) Matt Williams, Total Cryptocurrency Market cap back at $2 trillion, Bitcoin price may breakout, Business2Community, 22 March 2022, Accessed: 7 June 2022, https://www.business2community.com/crypto-news/crypto-market-cap-recovers-to-2-trillion-02460846

5) Olivia B. Waxman, Time, 24 October 2019, Accessed: 29 July 2021, https://time.com/5707876/1929-wall-street-crash/

From:
https://omgwiki.org/dido/ - **DIDO Wiki**

Permanent link:
**https://omgwiki.org/dido/doku.php?id=dido:public:ra:1.1_intro:1_problem&rev=1654634042**

Last update: **2022/06/07 16:34**