

Concurrences

REVUE DES DROITS DE LA CONCURRENCE | COMPETITION LAW REVIEW

Trends in Big Tech's acquisition strategies: Age, size, industries, and outcomes of target companies

Law & Economics | Concurrences N° 12-2025

www.concurrences.com

David Bottan*

dbottan@eonic.com

Associate

Eonic Partners, Brussels

Axel Gautier

agautier@uliege.be

Professor of Economics

HEC Liège, University of Liège

ABSTRACT

Dans cet article, nous analysons, sur la base de données détaillées, comment les stratégies d'acquisition d'Alphabet, Amazon, Apple, Meta et Microsoft (AAAMM) ont évolué entre 2015 et 2025. Nous fournissons des informations sur l'âge, la taille et le secteur d'activité des entreprises acquises et montrons que l'acquisition de petites entreprises par AAAMM devient de moins en moins fréquent. Nous montrons aussi que le secteur des logiciels reste le principal domaine d'acquisition. Toutefois, nous observons un intérêt croissant pour l'intelligence artificielle et les technologies de l'information ces dernières années, avec une baisse correspondante des acquisitions dans le mobile et l'internet. Nous montrons également que la plupart des produits issus d'acquisitions en IA sont abandonnés, ce qui suggère que ces opérations sont souvent motivées par l'acquisition de technologies et de talents plutôt que par la poursuite des produits existants.

In this paper, we use detailed data to analyse how the acquisition strategies of Alphabet, Amazon, Apple, Meta, and Microsoft (AAAMM) evolved between 2015 and 2025. We provide information on the age, size, and industry of acquired companies, showing that the acquisition of small targets has become less frequent. We find that software is consistently the main sector for acquisitions, but we observe a growing focus on artificial intelligence and information technology in recent years, with a corresponding drop in mobile and internet-related acquisitions. We also show that most acquired AI products are discontinued, suggesting these deals are often motivated by technology and talent acquisition rather than product continuation.

I. Introduction

1. Major tech conglomerates Alphabet, Amazon, Apple, Meta, and Microsoft (collectively, “AAAMM”) have been copiously acquiring companies for multiple decades, from small startups to billion-dollar deals. The economic literature has extensively studied those acquisitions, driven by their large number and by the antitrust concerns that they raised. Scholars have focused on identifying the sectors in which the acquisitions took place (Argentesi et al., 2021; Gautier and Lamesch, 2021; Zhe Jin et al., 2023), their consequences on the markets (Argentesi et al., 2021; Gugler et al., 2025), the outcomes on product development (Gautier and Lamesch, 2021; Gautier and Maitry, 2024; Botta and Gautier, 2025) and the implications for innovation (Fons-Rosen et al., 2021; de Barys and Gautier, 2024; Gugler et al., 2025).

2. This article contributes to the literature on AAAMM acquisitions by providing an overview of how their strategies have evolved over the years. To do so, we explore three aspects: first, we track the share of startups among AAAMM acquisitions; second, we track the distribution of acquisitions by industry; and third, we focus on artificial intelligence (AI) targets to analyse the outcomes of these acquisitions in terms of product (dis) continuation.

3. Our analysis is based on microdata extracted from the business information platform Crunchbase regarding 347 AAAMM acquisitions that took place between 2015 and July 2025. This dataset includes the variables needed to shed light on the three above-mentioned aspects, including target companies' foundation dates, acquisition dates, and number of employees, as well as a set of keywords describing the industries in which each of them operates.

4. We first provide detailed information on the size and age of target companies at the date of acquisition. Then, we propose a definition of startup (i.e. a company aged 3 years or less employing at most 50 people) and track the share of AAAMM acquisitions targeting startups. AAAMM's appetite for smaller targets seems to have decreased over the years: startups represented 32% of AAAMM acquisitions between 2015 and 2019, against 8% between 2020 and 2025.¹ We also note that the number of AAAMM acquisitions has dropped sharply in recent years, confirming a trend that we highlighted in previous research based on a dataset covering the 2015–2023 period (Botta and Gautier, 2025).

5. In a further step, we investigate the distribution of such acquisitions across industries over the years. By doing this, we have sought to test the hypothesis according to which AAAMM picks the targets of its acquisitions also based on the expected areas of future development for the tech market. If this hypothesis is correct, we will observe—for example—a surge in acquisitions of companies related to virtual reality and the development of the “metaverse” around 2020 and an acceleration of the pace at which companies specialising in AI and machine learning (ML) are acquired in more recent years. Such a pattern would be consistent with a number of theories, including that tech incumbents use acquisitions to do away with their innovation effort by rolling up innovative startups instead (Caffarra et al., 2020), but also with alternative theories that acquisitions may be an efficient way to acquire and transfer technologies (Cabral, 2021), or to recruit competent teams of engineers and developers in fast-evolving sectors (Varian, 2021). This, however, does not eliminate competitive concerns, as the acquisition of technologies or talents may be a way for the acquirer to foreclose the market (Bar-Isaac et al., 2024). We find that the industry in which AAAMM acquires more often is, by far, software: over the analysed period, 48% of the acquired companies were active in that field, with the proportion remaining roughly stable over time. We also identify that AAAMM tends to acquire mainly

* *The opinions expressed in this article are solely those of the author and are not intended to reflect the views of Econic Partners.*

1 Seventy-seven out of 237 AAAMM acquisitions targeted startups between 2019 and 2019, against nine out of 110 between 2020 and 2025.

companies active in “hot industries” of the market for technology services: for example, in 2015, 46% of AAAMM acquisitions’ targets were active in the mobile or app industries, while in 2024, 30% of the acquired companies were active in the AI industry.² This confirms that AAAMM uses acquisitions to develop its new technologies.

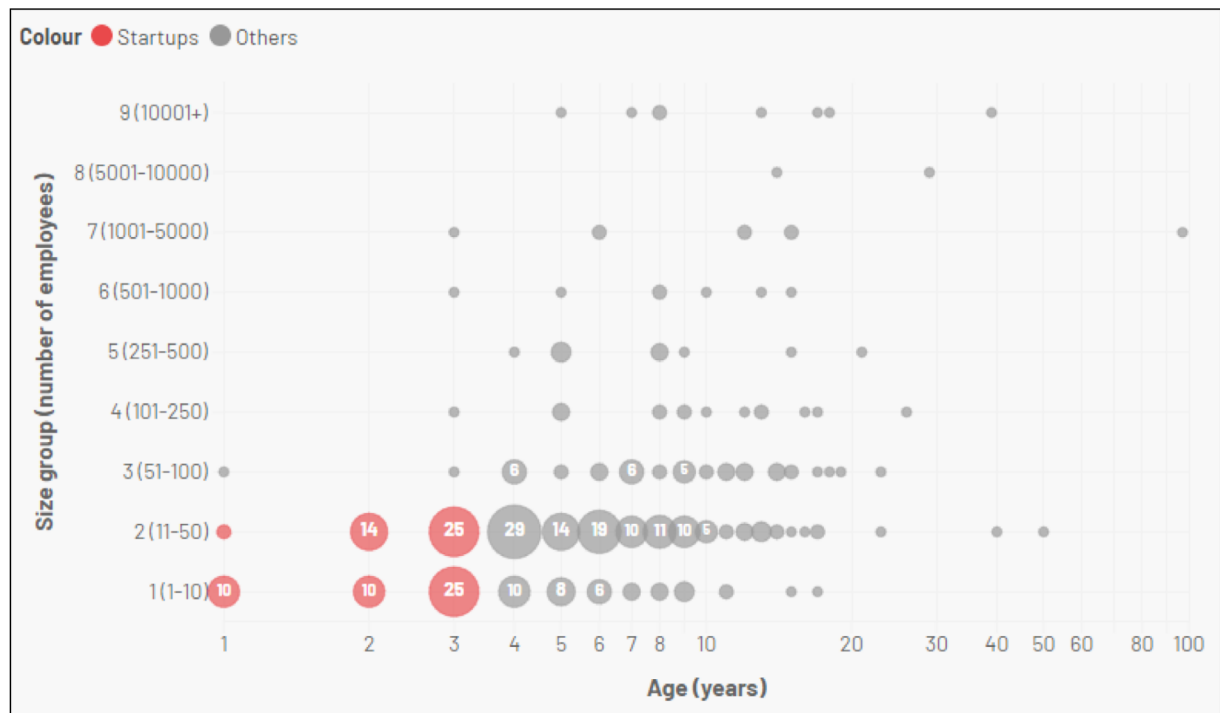
6. Finally, we analyse the outcome of these acquisitions with a focus on AI targets. We find that the discontinuation rate for these targets is significantly higher than for AAAMM acquisitions in general. Indeed, out of 56 AI acquisitions carried out by AAAMM between 2015 and 2021, 46 products (i.e. 82%) have been discontinued, either silently or after an official announcement by the acquiring company. For reference, the same analysis performed on a cross-industry sample of AAAMM acquisitions made over the same period showed that around 61% of the acquired products ended up discontinued (Bottan and Gautier, 2025). A plausible explanation for this difference might be that AI acquisitions are driven (relative to other AAAMM acquisitions) more by the underlying technology than by the products that they develop or seek to develop.

II. AAAMM acquisitions: Data and descriptive statistics

7. We have analysed data covering a period of roughly 10 years (from January 2015 to July 2025) and consisting of the list of acquisitions made by AAAMM and recorded by the business information platform Crunchbase.³ For each of the 347 companies acquired over such a period, we have collected data on their situation at the time of acquisition. First of all, we present the distribution of these companies’ ages and sizes, which we will use to identify startups in the next step.

8. Figure 1 plots the age and number of employees of each company acquired by AAAMM at the time of acquisition. It shows that acquisitions of small and young companies are numerous and constitute the majority of the deals. Indeed, in our sample, the median age is five and more than two thirds of the acquired companies had 50 employees or fewer when they were acquired.

Figure 1: Number of AAAMM acquisitions by age and size (2015–2025)⁴



Source: Authors’ elaboration of Crunchbase data.

Note: Twelve target companies for which the number of employees is not known are excluded from this figure.

* All charts in this article were created with Flourish. Data underlying Figure 1 are available at <https://public.flourish.studio/visualisation/25015669/>.

2 As explained in section III, this also includes machine learning.

3 We do not include in our dataset the acquisitions made by AAAMM’s subsidiaries.

9. Figure 1 also presents a tentative definition of startup for the purposes of this paper, i.e. a company aged 3 years or less and employing 50 people or fewer.⁴ The companies in our sample meeting these criteria (shown in red in the figure) are 86, i.e. roughly one company in four.

10. Further insight can be gained from the evolution of startup acquisitions. We have divided the analysed period into three roughly equivalent subperiods (2015–2017, 2018–2021, and 2022–2025) and checked the size of companies acquired by AAAMM in each. Results are presented in Figure 2 below, from which it emerges, at first glance, that the pace of all AAAMM acquisitions has significantly slowed down, as highlighted by previous research (Bottan and Gautier, 2025). This analysis shows that AAAMM startup acquisitions have slowed down more than AAAMM acquisitions in general.

11. While total acquisitions decreased from 153 in the first subperiod to 47 in the most recent years (-69%), acquisitions of startups decreased from 62 to 5 (-92%) over the same period. In other words, startups represented 41% of AAAMM acquisitions between 2015 and 2017, but only 11% of AAAMM acquisitions after 2021. Most impressively, yearly data show that more startups were acquired by AAAMM in 2015 alone (27) than between 2018 and 2025 (24). This decline in AAAMM's appetite

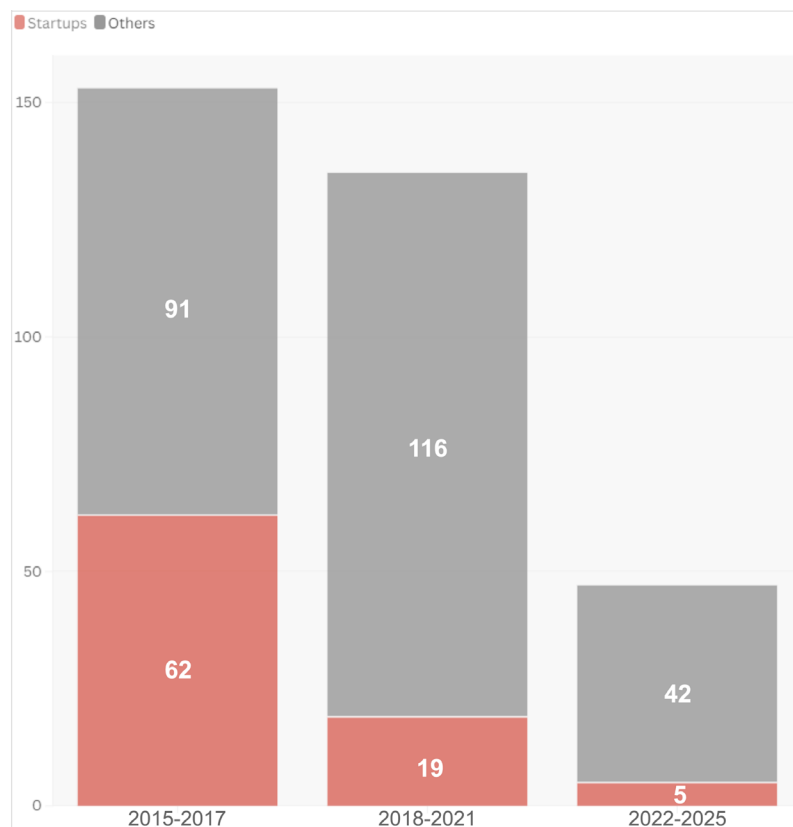
for startup acquisitions might have several explanations, including the decision of (some) AAAMM companies to pursue investments with a lower risk by acquiring more established companies, or a response to the growing antitrust concerns around the acquisition of nascent companies and products, which were less present in the first subperiod.⁵

III. Industries

12. For each analysed acquisition, Crunchbase records a list of keywords describing the industries in which the target is active. On average, each acquired company is associated with four keywords.⁶ In total, the dataset captures 264 industries, meaning that each industry recurs on average five times.

13. To present an overview of the industry in which AAAMM acquires the most and to analyse which of these industries gain and lose importance over time, we have identified the most frequent keywords. Table 1 shows the 20 keywords that occur more than 15 times in the dataset, with the top 10 words displayed in italics. It is worth noting that the top 10 keywords cover 76% of the analysed acquisitions, while the top 20 keywords cover 85%.

Figure 2: Number of AAAMM startup acquisitions by period (2015–2025)



Source: Authors' elaboration of Crunchbase data.

Note: Twelve target companies for which the number of employees is not known are excluded from this figure.

4 The reason for the first criterion is self-explanatory; the reason for the second one is to exclude from this sample companies that—despite their young age—are already established. By applying this double threshold, we focus on companies that are in the first stages of operations and exclude the ones that have already proven successful.

5 AAAMM might also be acquiring startups through its subsidiaries, which would escape this analysis because our dataset only includes companies directly acquired by AAAMM.

6 The 347 acquired companies are associated with a total of 1,415 keywords.

Table 1: Top 20 keywords by frequency of AAAMM acquisitions

Keyword	Occurrences	Keyword	Occurrences
Software	140	Video	22
Artificial Intelligence	67	Big Data	22
Machine Learning	53	SaaS	21
Information Technology	42	Cloud Computing	19
Mobile	39	Mobile Apps	17
Enterprise Software	35	Computer Vision	17
Apps	32	Consumer Electronics	17
Computer	31	Security	16
Analytics	27	Gaming	16
Internet	25	E-Commerce	16

Source: Authors' elaboration of Crunchbase data.

14. The table shows that, for the purposes of this article, the list of keywords as provided by Crunchbase requires some cleaning. For example, ML is a subset of AI; therefore, all acquired companies classified as ML should also be classified as AI.⁷ This adjustment is necessary because having the same industry recorded under different names might distort the results of the analysis.⁸ Moreover, as a matter of fact, most of the companies active in ML are also active in AI, which makes it redundant to consider both keywords in the analysis.⁹ The presence in the dataset of acquired companies classified as ML but not as AI would distort the results, absent a name-cleaning operation.¹⁰ For this reason, we have performed the following cleaning steps before proceeding with the analysis:

- “Software,” “Enterprise Software,” and “SaaS” are grouped as “Software (incl. Enterprise and SaaS)”;¹¹
- “Artificial Intelligence” and “Machine Learning” are grouped as “AI (incl. ML)”;
- “Apps” and “Mobile Apps” are grouped as “Apps (incl. Mobile)”.

7 While AI is a broader concept consisting of computers performing typically human tasks such as solving problems and making decisions, ML is a more specific concept referring to the capability of computers to gain knowledge from data autonomously, i.e. without having been specifically programmed to do so.

8 For example, if the same industry is recorded under different keywords, its weight will be understated in the results of the analysis.

9 Among the 71 target companies active in AI or machine learning, 49 of these (69%) have both keywords, 18 have only AI, and 4 only ML.

10 These observations might provide the misleading impression that there was a change in AAAMM's acquisition focus (e.g. from ML to AI), while such an ostensible change would only result from the different classification of similar acquisitions in the dataset.

11 “SaaS” stands for Software as a Service and refers to programs hosted by the provider and provided via the internet to users (who, therefore, do not install such software on their own devices). While “Enterprise Software” and “SaaS” are subsets of “Software” by definition, the relevance of this grouping choice is also confirmed by the overlaps between categories observed in the data: out of 71 acquired companies associated with either one or both keywords AI and ML, 49 (i.e. 69%) are associated with both.

As a result, the top 10 keywords presented in Table 1 are grouped into 8 industries and resized as follows.¹²

Table 2: Top 8 industries (i.e. keywords post-name cleaning) by frequency of AAAMM acquisitions

Keyword	Occurrences
Software (incl. Enterprise and SaaS)	168
AI (incl. ML)	71
Apps (incl. Mobile apps)	46
Information Technology	42
Mobile	39
Computer	31
Analytics	27
Internet	25

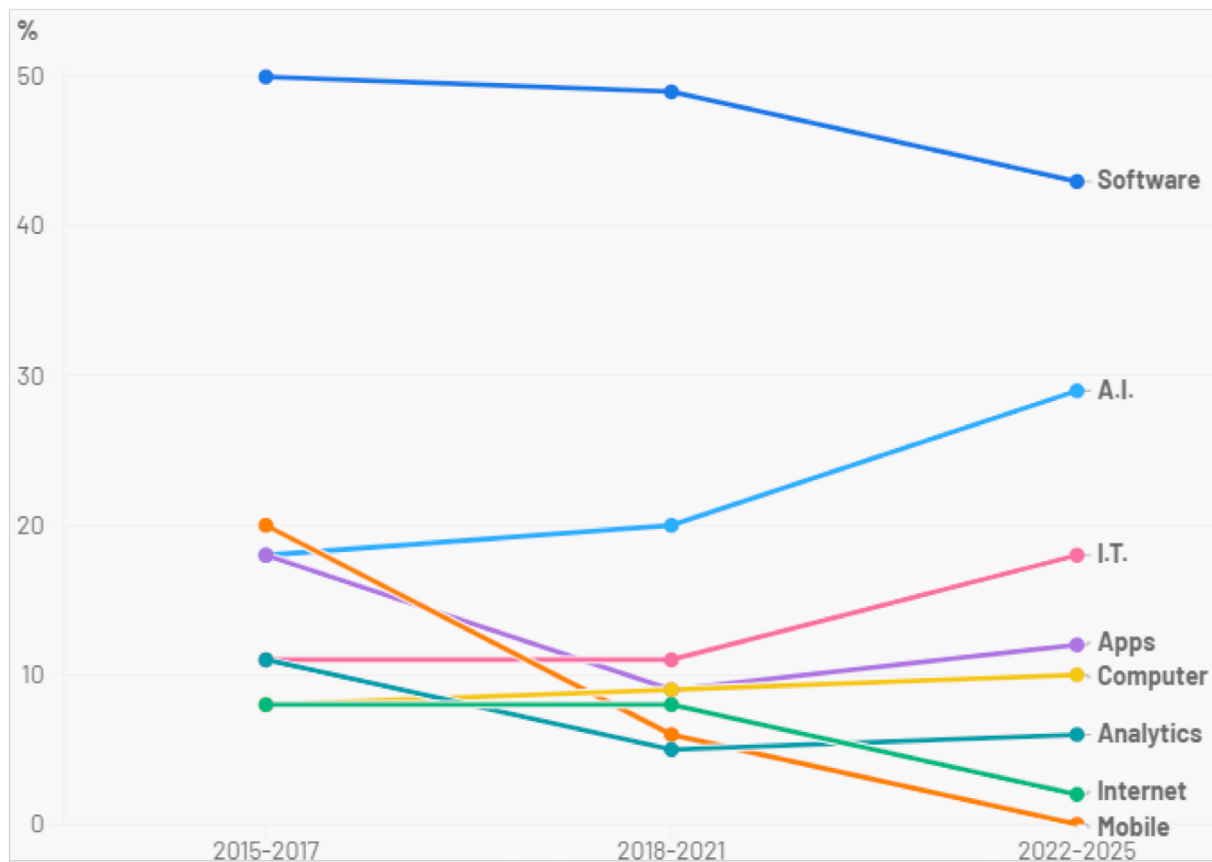
Source: Authors' elaboration of Crunchbase data.

15. The updated top 8 keywords (as a result of the grouping presented above) cover 78% of the analysed acquisitions.¹³ Once reorganised, the most recurring keywords describing AAAMM's target industries can be used to investigate changes in the focus of their acquisition strategies. Figure 3 below shows the evolution in the industry mix of AAAMM acquisitions through the three subperiods 2015–2017, 2018–2021, and 2022–2025.

12 For the avoidance of doubt, the sum of occurrences of ungrouped keywords (e.g. “Software,” “Enterprise Software,” and “SaaS”) in the first table does not necessarily match the occurrences in grouped keywords (e.g. “Software (incl. Enterprise and SaaS)”) in the second table due to the overlaps in keywords. For example, an acquired company associated with the keywords “Software” and “SaaS” will appear twice in the first column (one in each of the two relevant rows) but only once in the second table (in the row referring to the grouped keyword).

13 As a result of the grouping, the total number of industries in the dataset decreases from 264 to 260.

Figure 3: Percentage of acquisitions associated with each of the top keywords in each of the identified subperiods*



Source: Authors' elaboration of Crunchbase data.

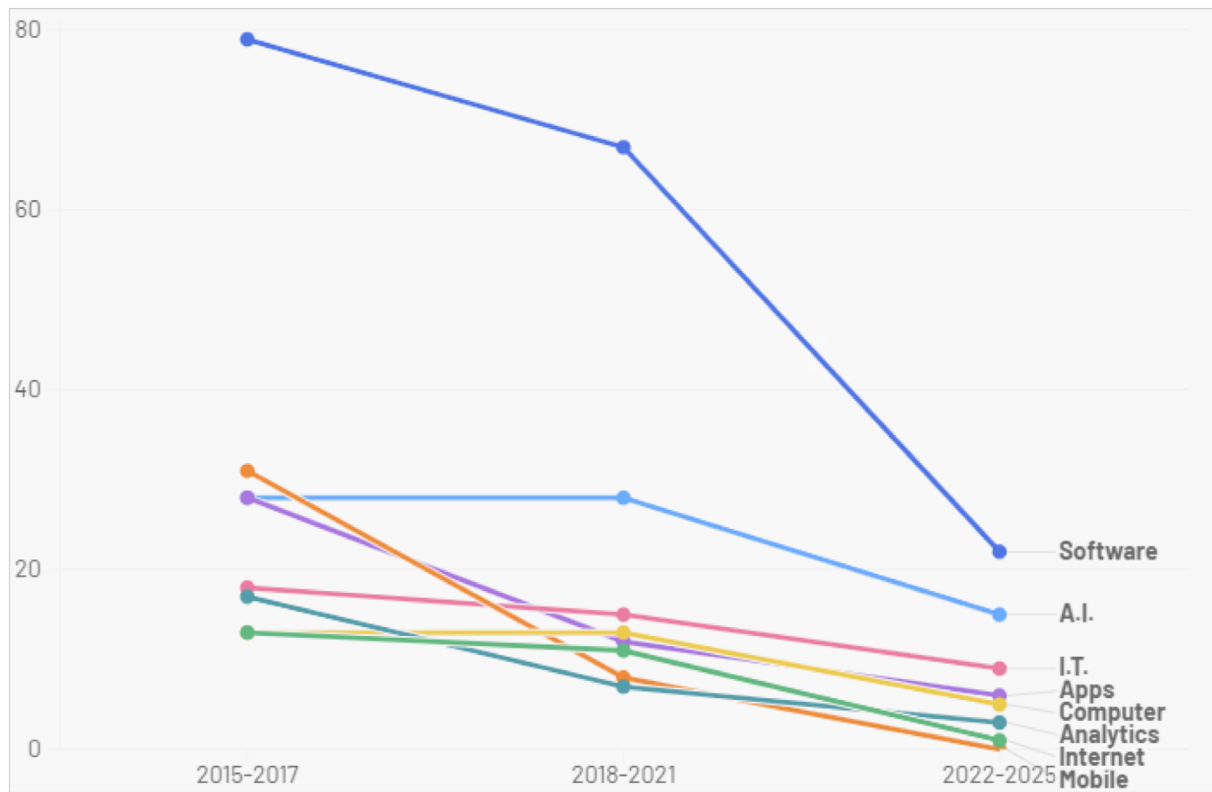
* Data underlying Figure 3 and visualisation tools are available at <https://public.flourish.studio/visualisation/24976131/>.

16. The results show that—apart from a few noticeable exceptions—the industry mix of AAAMM’s targets remained generally constant through the analysed period, with a high prevalence of software companies. The percentages of acquisitions associated with the keyword “Software” were 50% in the 2015–2017 subperiod, 49% between 2018 and 2021, and 43% in the last time segment (2022–2025).

17. Among the noticeable exceptions, we observe the surge of AI (from 18% in 2015–2017 to 29% in 2022–2025) and information technology (IT) (from 11% to 18% in the same periods). Simultaneously, mobile and the internet decline (from 20% to zero and from 8% to 2%, respectively, in the same timeframe).

18. Furthermore, when focusing on the absolute numbers of acquisitions (instead of percentages, as done in the previous paragraphs), we observe, as expected based on Figure 2 above, a steep decline in all industries.

Figure 4: Number of acquisitions associated with each of the top keywords in each of the identified subperiods**



Source: Authors' elaboration of Crunchbase data.

** Data underlying Figure 4 and visualisation tools are available at <http://public.flourish.studio/visualisation/24996845/>.

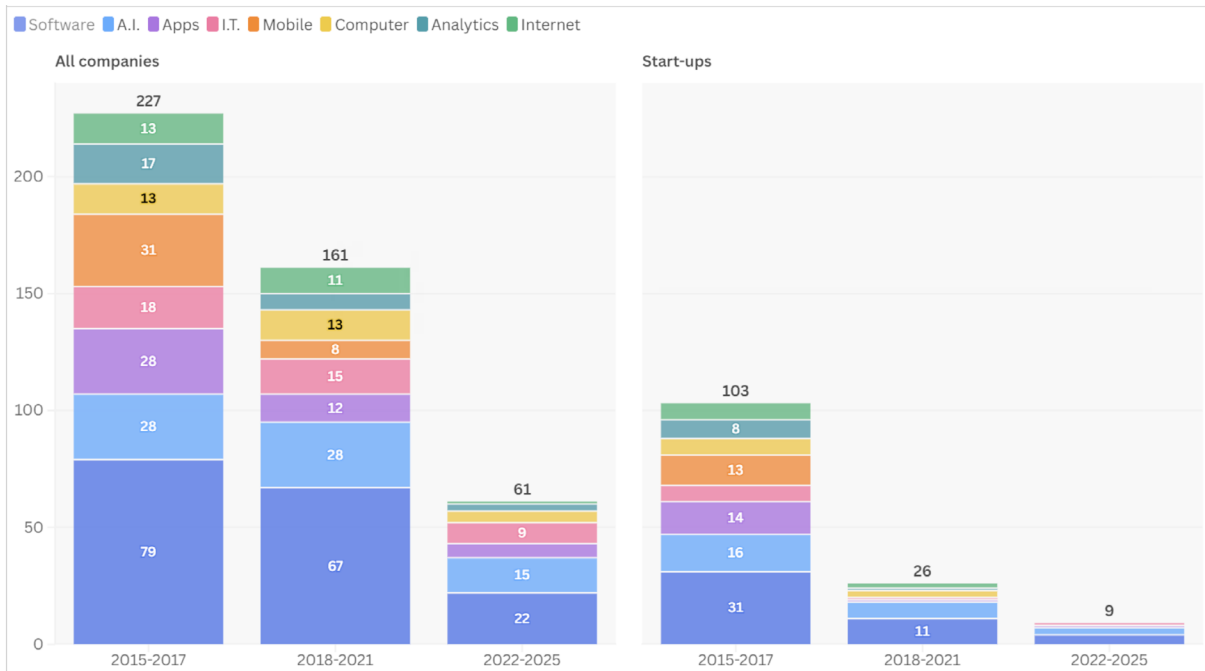
19. Figure 4 helps put the surge (in proportional terms) of AI and IT into perspective: these industries became the centre of AAAMM's acquisition strategy not through growth, but rather as a result of a faster decline in the acquisition of companies operating in other industries.

20. Bringing together the pieces of analysis developed in section II and in section III so far, we have checked whether the evolution of AAAMM's targets' industry

mix is different for startups. Our objective is to check if the industries in which smaller acquired firms are active are significantly different from the whole sample of acquisitions.

21. The comparison between the full sample and the startups is summarised in Figure 5 below.

Figure 5: Number of acquisitions and startup acquisitions associated with each of the top keywords in each of the identified subperiods***



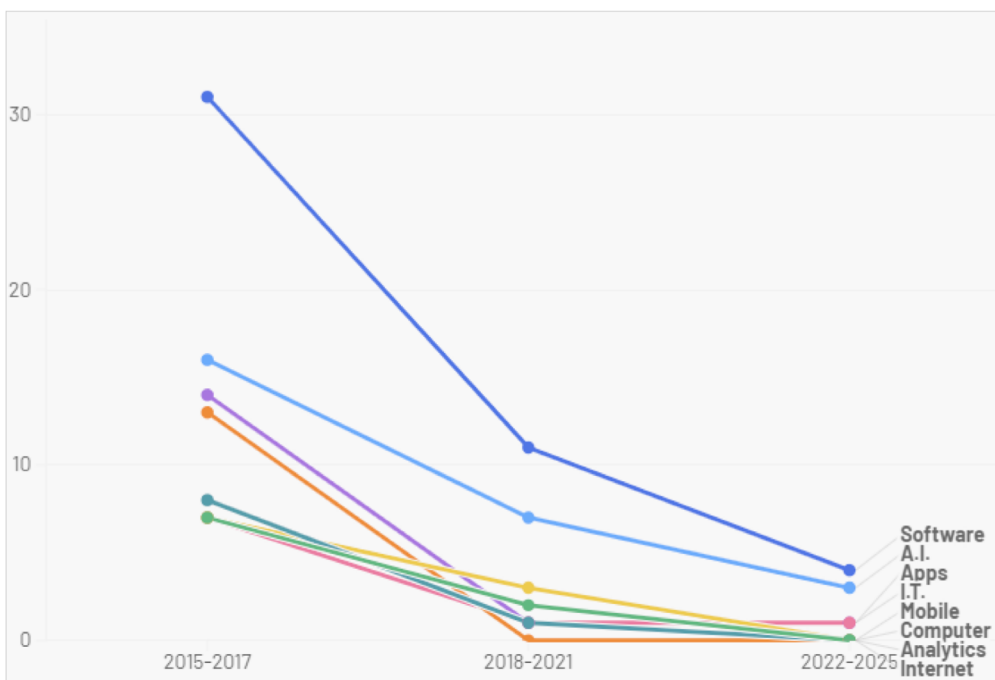
Source: Authors' elaboration of Crunchbase data.

*** Data underlying Figure 5 and visualisation tools are available at <https://public.flourish.studio/visualisation/25090371/>.

22. We notice that—among startups—only “Software” and “AI” maintain some relevance across all subperiods and are associated with, respectively, 80% and 60% of the startup acquisitions that took place between 2022 and 2025. In this case, the analysis of absolute numbers of startup acquisitions per industry (presented in Figure 6 below) shows that the decrease in software

and AI acquisitions is not slower. In short, AAAMM has drastically reduced (i) its acquisitions of startups across industries and (ii) its acquisition of non-startups in almost all industries. The only exceptions are non-startups in software, AI, and IT, for which the frequency of acquisitions declined more slowly.

Figure 6: Number of startup acquisitions associated with each of the top keywords in each of the identified subperiods****



Source: Authors' elaboration of Crunchbase data.

**** Data underlying Figure 6 and visualisation tools are available at <https://public.flourish.studio/visualisation/25092652/>.

IV. Outcome

23. As a final step, we add to our analysis data on the outcomes of these acquisitions, with a focus on AI. We consider four possible outcomes for each acquisition: continuation, integration, inactivity, and discontinuation. Similar to the definitions employed in similar literature (Gautier and Lamesch, 2021; Gautier and Maitry, 2024; Bottan and Gautier, 2025), we consider: (i) “continued” the products of acquired companies that are still available post-merger under the same brand and have a separate website; (ii) “integrated” the products of acquired companies that are still available post-merger, but whose websites have been moved to the domain of the acquiring company;¹⁴ (iii) “not active” the products that are no longer available, although the acquiring company has not announced their discontinuation; (iv) “announced discontinued” the products for which the acquiring company has announced the discontinuation.¹⁵

24. For this last piece of analysis, we rely on a subsample of 56 AI acquisitions identified through the keywords recorded by Crunchbase and cleaned as described above and limited to the period between 2015 and 2021. Indeed, we consider that it would be premature to analyse the continuation status of companies acquired less than four years ago.

25. We find that the discontinuation rate for these targets (82%, between not active companies and announced discontinuations) is significantly higher than for AAAMM acquisitions in general, as Table 3 below shows by comparing the results that we obtained when performing the same analysis on a cross-industry sample of companies acquired by AAAMM over the same period (61%; Bottan and Gautier, 2025).

Table 3: Continuation status of the (i) 56 AI companies and (ii) 327 cross-industry companies acquired by AAAMM between 2015 and 2021

	AI	Cross-industry
Continued	7 (13%)	61 (19%)
Integrated	3 (5%)	38 (12%)
Not active	41 (73%)	156 (48%)
Announced discontinued	5 (9%)	43 (13%)
NA	0	29 (9%)
Total	56	327

14 Embedding the acquired company’s website into the acquirer’s domain typically coincides with a rebranding operation, including the replacement of the target company’s brand with that of the acquirer. This is the case, for example, of Elemental Technologies, which became AWS Elemental after being acquired by Amazon in 2015 (cf. M. Rogoway, Portland’s Elemental Technologies changes its name – and logo, *The Oregonian/OregonLive*, 17 April 2017, https://www.oregonlive.com/silicon-forest/2017/04/portlands_elemental_technologi.html).

15 Bottan and Gautier (2025) provide some examples to illustrate this categorisation.

26. A plausible explanation for this difference might be that AI acquisitions are driven more by the underlying technology than by the products that they develop or seek to develop. Alternatively, given the relative recency of the field, it might be the case that AI companies simply face a higher risk of failing (both pre- and) post-acquisition.

V. Conclusion

27. This article provides new insights into the evolving acquisition strategies of Big Tech firms—Alphabet, Amazon, Apple, Meta, and Microsoft (AAAMM). Three key findings emerge. First, AAAMM’s appetite for startups has significantly declined over the past decade, both in absolute and relative terms. This shift may reflect a strategic pivot toward more mature targets or a response to increasing antitrust scrutiny. Second, while software remains the dominant industry, acquisitions have increasingly focused on emerging and strategic sectors such as artificial intelligence and information technology, at the expense of previously prominent areas like mobile and the internet. Third, the post-acquisition outcomes reveal a high rate of product discontinuation, particularly for AI-related targets. This suggests that such acquisitions are often motivated more by access to technology or talent than by the continuation of existing products.

28. Taken together, these trends indicate that AAAMM increasingly uses acquisitions as a tool to secure technological leadership in fast-moving sectors and effects on market diversity and innovation cannot be ruled out a priori. These findings raise important questions for competition authorities regarding the long-term implications of such strategies on innovation and market structure in the digital economy. ■

References

Argentesi, E., P. Buccirossi, E. Calvano, T. Duso, A. Marrazzo and S. Nava (2021), Merger Policy in Digital Markets: An *Ex Post* Assessment, *Journal of Competition Law & Economics*, Vol. 17, Issue 1, pp. 95–140

Bar-Isaac, H., J. P. Johnson and V. Nocke (2024), Acqui hiring for Monopsony Power, *Management Science*, Vol. 71, No. 4, pp. 3485–3496

Bottan, D., and A. Gautier (2025), Tech Giants and Startup Acquisitions: Insights From the Evolution of Acquired Products, *CPI Antitrust Chronicle*

Cabral, L. (2021), Merger policy in digital industries, *Information Economics and Policy*, Vol. 54, 100866

Caffarra, C., G. S. Crawford and T. Valletti (2020), “How Tech Rolls”: Potential Competition and “Reverse” Killer Acquisitions, *Antitrust Chronicle*, Vol. 2, pp. 13–18

de Barys, L. and Gautier, A. (2024), Big Tech Acquisitions and Innovation: An Empirical Assessment, *CESifo Working Paper* No. 11025

Fons-Rosen, C., P. Roldan-Blanco and T. Schmitz (2021), The effects of startup acquisitions on innovation and economic growth, *CEPR Press Discussion Paper* No. 17752

Gautier, A. and J. Lamesch (2021), Mergers in the digital economy, *Information Economics and Policy*, Vol. 54, 100890

Gautier, A. and R. Maitry (2024), Big Tech Acquisitions and Product Discontinuation, *Journal of Competition Law & Economics*, Vol. 20, Issue 3, pp. 246–263

Gugler, K., F. Szücs and U. Wohak (2025), Start-up acquisitions, venture capital and innovation: A comparative study of Google, Apple, Facebook, Amazon and Microsoft, *International Journal of Industrial Organization*, Vol. 99, 103148

Varian, H. R. (2021), Seven deadly sins of tech?, *Information Economics and Policy*, Vol. 54, 100893

Zhe Jin, G., M. Leccese and L. Wagman (2023), How Do Top Acquirers Compare in Technology Mergers? New Evidence from an S&P Taxonomy, *International Journal of Industrial Organization*, Vol. 89, 102891