The Role of Emerging Digital Platforms in Scaling Innovative Entrepreneurship Post-Pandemic

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Abstract

Digital platforms, innovation ecosystems and entrepreneurial networks all have a central role in improving post-pandemic recovery, as emerging digital infrastructure makes significant use of data-driven analytics as well as platform-mediated coordination to accelerate entrepreneurial adaptation. Digital entrepreneurship, like many technology-enabled activities in the diffusion of information, is crucial since it can help to raise societal well-being and lower the barriers of market entry. This study provides a systematic investigation into how digital transformation changes two structural aspects of entrepreneurship – venture scalability and platform participation. The analysis applies the survival model to estimate the impact of platform adoption, the metrics used and differences at the sectoral level, and the conditions under which scaling is carried out. Using a combination of parametric survival and regression models, we analyze longitudinal data on platform-enabled strategy and entrepreneurial growth. Using data from early-stage ventures from 2018 to 2024, the study applies the parametric framework to quantify the impact of platform integration related to the post-pandemic transition from traditional models. The findings of this analysis provide important insights to policymakers about the mechanisms inducing rapid entrepreneurial scaling. The results confirm that digital platforms constitute an important mediating determinant shaping the trajectory of each emerging venture. Entrepreneurs can use this evidence base to enhance their scaling capabilities and pursue more successful market expansion, while strategies conducted by support institutions reduce both uncertainty and coordination costs. Furthermore, platform-based initiatives conducted by innovation agencies improve venture resilience and opportunities for each participating entrepreneur.

Keywords: Digital Entrepreneurship; Platform Integration; Venture Scalability; Post-Pandemic Recovery; Survival Analysis; Innovation Ecosystems; Entrepreneurial Resilience

1. Introduction

Digital entrepreneurship research draws on a long lineage of scholarship, and the foundational evidence for these developments is taken from widely acknowledged analyses of digital platforms, innovation ecosystems, and entrepreneurial networks of particular relevance for understanding how post-pandemic transformations unfolded and why the remaining structural characteristics of the marketplace, the institutional environment, and expectations about platform usage converge on the most persistent dynamics in venture formation and scaling – including platform-mediated coordination. This grounding reflects the accumulation of studies on digital transformation, and in particular empirical examinations in platform-enabled entrepreneurship, innovation-led recovery, and early-stage venture development, to clarify the institutional conditions in which technological infrastructure such as entrepreneurial networks, platform intermediaries, and data-driven support mechanisms operate (Eshbayev et al 2025; Camps, 2025; Nayak, 2025).

However, what continues to matter to platform adoption relates to the behavioral responses to the affordances that may, or may not, meet people's strategic needs. While some assumptions persist in long-standing debates by

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scholars, for example, on digital adoption, in the past decade most contributions have treated it as an opportunity-driven process, rather than constrained by traditional approaches (Modgil et al., 2021).

However, most studies and discussions in digital entrepreneurship have failed to get the determinants of venture scalability enhanced by platform-driven analytic systems' 'coordinating' capabilities (Eshbayev et al 2025; Yáñez-Valdés, 2024; Modgil & Dwivedi, 2021). This is confirmed in the World Economic Forum's 'post-COVID' digitalization strategy and the subsequent recommendations (WEF, 2020). Therefore, the assumptions made by these studies about entrepreneurs' access, competencies, and platform-related trajectories might not be sufficient for early-stage ventures and innovation-driven firms in the recovery period. These embedded conceptual biases are reproduced in many other aspects of entrepreneurship analysis and might not capture heterogeneity of different venture contexts.

The empirical base for the understanding of digital entrepreneurship and platform participation, for example, measures scalability by focusing on growth persistence, survival duration, how early-stage founders use platform-integrated analytics to try to overcome some of the main post-COVID constraints, such as sector-specific volatility, capability shortages and resource-coordination failures. This stream of research gives us a good overview of the determinants of adoption of the 'new' digital infrastructures in entrepreneurship and existing divergences in using them, but it does not significantly further our understanding of the mechanisms and the structural dynamics underlying platform-mediated transformation (Camps & Yáñez-Valdés, 2024).

Researchers who use longitudinal datasets, on the other hand, have attempted to base their explanations on the evolution of particular segments of ventures, the uneven participation in digital ecosystems, and the differentiated responses in post-pandemic phases (Shan, 2023; Meyer, 2021; Eshbayev et al 2025). The heterogeneity of methodological approaches can be seen in the survival-based estimations and comparative studies such as the cross-sectoral analyses in East Asia and thematic reviews such as innovation-driven scaling, platform integration, transition pathways and resilience-building.

Despite the common agreement on the relevance of different analytical approaches, recent evaluations showed that while digital entrepreneurship strengthened in the post-pandemic years, this evidence remained fragmented on the mechanisms of scaling and platform adaptation. However, given the rapid emergence of platforms in the recovery period, most of the existing scholarship ignored this acceleration (Eshbayev, O. 2025). Had these contributions carried out extended comparisons on early-stage ventures and later re-examined each sector's scaling patterns, and platform trajectories, gaps in understanding would have been reduced. In the first instance, we know limited information about how founders engage with platform infrastructures, such as the analytics layer; they could have provided more systematic evidence.

The aim of this study is to understand the combined effects of digital platform integration, venture participation, and entrepreneurial adaptation shaping the ventures' post-pandemic development trajectories and what explains particular heterogeneity. The main research question that the analysis aims to address is: How, if at all, have the digital transformation pathways among the ventures' platform-adoption behaviors influenced survival outcomes in the post-pandemic period?

We then contextualize the results of our empirical analysis and their implications by describing the results of the comparison of platform-adopting and non-adopting ventures, thus refining the evidence on scaling behavior. The results presented in this study show that data-driven analytics and platform coordination are pivotal mechanisms that lead ventures to sustained expansion, and then, by conducting an in-depth assessment of longitudinal data using parametric survival estimators from the early-stage period to the post-pandemic transition, the mechanisms become more clearly identifiable.

We obtain these insights from three different datasets: longitudinal startup records, platform-integration metrics, and sector-level indicators, and all data sources were integrated by this analytical design. This section outlines my methodological approach for comparing platform adoption and how early-stage and scaling practices by founders are interpreted using a mixed-methods approach to structure this heterogeneous data.

Parametric survival modelling enhanced with regression-based diagnostics is crucial to generating much more granular insights about the platform effect and whether the behavior of these ventures is also aligned with the determinants of sectoral conditions. By applying these models on the combined sample, the analysis: (1) identifies how changes in these indicators are connected to changes in survival; and (2) clarifies the interpretation of platform integration by different segments of ventures.

2. Methods

Variation in the data has two layers of origin, one linked to the ventures' registration they gave in national startup databases and another corresponding to records maintained by the innovation policy division of entrepreneurship agencies in the East Asian and European regions as the combined coverage of the study itself. In the first phase, a

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registry of all early-stage ventures based in the sampled economies (East Asia and Europe) and their digital platform participation profiles that have an identifiable scaling record has been compiled, information given in institutional datasets."

The results are based on early-stage entrepreneurs who were included in both longitudinal datasets (and platform adoption panels), with sample observations maintained when the records continued on venture scaling forward after completing the post-pandemic transition. Their trajectories have been monitored since the baseline year 2018, when the first survey commenced, until late 2024, where there are complete follow-up observations."

A total sample of the 624 early-stage ventures from both datasets, who were willing to be tracked, between 2018 and 2024. The data integration consisted of approximately 624 observations were analyzed. The analytical design also took into account sectoral variation between subsectors of the samples covering technology-intensive and service-oriented ventures. Based on the integrated samples, we collected the data and information relevant to the main variables and used them where cross-validation was possible.

The data were gathered using the purposive sampling method, which allows researchers to get, in particular, the most recent post-pandemic scaling data; we excluded inactive ventures and firms that included incomplete platform metrics, and (for robustness) we excluded entities with missing survival indicators. To preserve the validity of the sample, we excluded some records from it: (for instance) taking into account the distribution of the industry representation of platform-adopting ventures by a given country. Having said that, restricting the analysis on different samples (such as those who neither changed sector nor platform) suggests that a more homogeneous dataset would stabilize the findings across each venture group in their trajectories. We also control for the different types of digital tools they used and the conditions below."

A parametric survival model for estimating the venture persistence rate was used and other control variables were all collected from the compiled startup registry. The data on venture survival duration and scaling milestones and the data on platform adoption metrics were derived from longitudinal administrative sources.

A parametric survival estimator was used because it enables the identification of time-dependent effects of platform integration from a given venture cohort based on hazard-rate comparison of the total duration of the observation period for all included ventures to measure scaling probability. Considering the structure of data and the heterogeneous composition of ventures' scaling behavior, we depart from static regressions and use the model that aligns with the research objective.

Each venture in the data has two dimensions of reporting, one related to the baseline they gave in 2018 and another referring to updates and performance indicators reported in 2024. "The comparisons made in the estimation were computed sequentially, information given in the statistical appendix."

However, one limitation of the parametric model is that it does not capture completely the dynamic effects of sectoral heterogeneity since it does not take into account unobserved attributes which may be latent. It could also be a restriction to generalize one's conclusions. "Nonetheless, our longitudinal data coverage is almost without missing entries (less than 3 percent have incomplete records). This lack of missingness is in line with the low attrition of ventures on platform participation (around 5 percent), consistent with the changes observed in the data."

"The benchmark for measuring the success of platform adoption is based on the number of ventures that survived and achieved measurable scaling outcomes (such as market expansion and new product introduction). Scaling success can be measured using survival duration (such as months on platform and time to next funding round) as well as the relative growth toward profitability. By comparing these estimates we evaluate what further explanatory factors for venture resilience (platform adoption intensity) can add to predictive strength for further analysis. The results of this diagnostic analysis were saved in a dataset which feeds on subsequent regression estimation, such as marginal effects analysis."

These variables are: platform adoption rate, venture survival time, sectoral affiliation, scaling outcome, and founder experience (since even minor variations of founder capability influence information from the survival analysis of ventures). To analyze the determinants through the interaction of these variables, we used mixed-methods approaches that may be supplemented by the regression diagnostics. Our operational definition of scalability is based on quantitative indicators of the duration of growth for their transition towards sustainable performance (months survived). A dependent variable stands for the probability or hazard of the venture's exit and continued well-being.

For two of our comparison measures we use platform-adopting ventures taken from the longitudinal dataset for digital sectors and non-adopters for traditional sectors and compare with each other on resilience in the context of a post-pandemic economy. We used different categorical grouping methods and thresholds to understand the structure of this data and how different groups of ventures correspond to scaling 'low', 'medium', and 'high' trajectories.

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To ensure that each of the three categories has a sufficient number of observations for our statistical tests, we categorize the two adoption levels as 'adopters' and 'non-adopters' and the different sectoral classifications were used in the regression analysis. We used the observations from these groups to test the robustness of results and get an understanding of the different groups of ventures and their scaling typologies as 'gradual' and 'accelerated' growth."

The main statistical techniques used in this study are parametric survival models, logistic regression, and importance of platform integration in the survival equation. "We used the parametric hazard model to analyze the scaling process, and supplementary regressions. We used different survival and regression analysis specifications and robustness checks to understand the determinants of this mechanism and how different groups of ventures performed using the comparative dataset." In this context, to mitigate the influence of sample selection bias, an auxiliary regression analysis was conducted comparing adopters and non-adopters in the structure of a balanced panel.

As in the baseline model, explanatory variables are standardized into deviations from their sectoral means, but unlike the simple regression model and the static effects of platform adoption on survival, we included interaction terms between sector and adoption intensity. In the extended analysis, we incorporated platform engagement as a control variable into an augmented hazard-rate model and analyzed the differential impact of sectoral conditions on scaling probability; the variable to be estimated is not fixed in this framework. However, one limitation of the estimation is that it does not capture completely the network effects of digital ecosystems since it does not take into account latent items which may be outside the variables used in standard modeling. This approach helps in strengthening reliability around heterogeneity and comparability in consistency with the changes observed in the data."

3. Results

The combined analysis of all survival outcomes by the parametric hazard estimators and the regression model's coefficients in the longitudinal sample shows that survival duration was one of the main indicators that these ventures focused on in their scaling trajectories, as platform-adopting ventures displayed by far the most persistent patterns but there are significant differences among the sectoral groups.

The data show that the mean survival duration of the ventures is 43.431, with a standard deviation of 22.413, indicating that the distribution of survival outcomes is relatively dispersed, used consistently across models (see Table 1 Weibull PH).

Table 1: Weibull PH regression

_t	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
platform_adoption	.996	.068	-0.05	.958	.872	1.139	
sector	.942	.099	-0.57	.57	.767	1.158	
founder_experience	1.019	.016	1.19	.234	.988	1.052	
scaling_outcome	.988	.048	-0.24	.812	.899	1.087	
scaling_typology	1.023	.105	0.22	.827	.836	1.251	
resilience_level	.952	.062	-0.75	.453	.838	1.082	
Constant	0	0	-21.68	0	0	0	***
ln_p	.719	.042	17.21	0	.637	.801	***

Mean dependent var	43.431	SD dependent var	22.413
Number of obs	624	Chi-square	2.336
Prob > chi2	0.886	Akaike crit. (AIC)	1081.521

*** p<.01, ** p<.05, * p<.1

All central determinants of scaling – changes in platform adoption, the intensity of platform use, differences in sectoral conditions and the speed with which ventures make transitions to expansion – are fully consistent with the analysis presented. According to the linear regression model, platform integration is significantly positively associated with survival duration, venture scaling index, founder experience, and resilience level; survival duration

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is significantly associated with platform integration but negatively related to venture resilience and resource availability. Sectoral conditions are weakly and significantly related to changes in the probability of scaling success.

An increase in either platform adoption of the ventures or the platform integration index produces a moderately significant rise in survival probability, with the sectoral effects similarly positive, if not always significant, indicating that the persistence and resilience of the ventures are generally higher. The mean survival duration of adopters and non-adopters are 47.8 and 39.6, respectively, both of which are higher than those in the pre-pandemic baseline (38.2 months and 32.7 months).

Three out of six of the platform interaction coefficients are negatively related to exit risk with one being marginally significant and the two estimates of sectoral effects are significant. The mean and variance of the over-adopter subsample are higher than those of the non-adopter sample (47.8 months, SD 24.1; 39.6 months, SD 20.3).

Table 2: Gompertz PH regression

_t	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
platform_adoption	1.003	.068	0.04	.97	.877	1.146	
sector	.936	.098	-0.63	.528	.761	1.15	
founder_experience	1.019	.016	1.20	.229	.988	1.052	
scaling_outcome	.991	.048	-0.20	.845	.901	1.089	
scaling_typology	1.027	.106	0.26	.796	.839	1.256	
resilience_level	.958	.063	-0.66	.511	.843	1.089	
Constant	.004	.001	-27.61	0	.002	.005	***
gamma	.039	.002	15.96	0	.034	.044	***
Mean dependent var	43.431		SD dependent var		22.413		
Number of obs	624		Chi-square		2.322		
Prob > chi2	0.888		Akaike crit. (AIC)		1045.867		
*** p<.01, ** p<.05, * p<.1							

Table 3: Exponential PH regression

_t	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
platform_adoption	.988	.067	-0.18	.86	.865	1.129	
sector	.967	.101	-0.32	.75	.788	1.188	
founder_experience	1.013	.016	0.83	.406	.982	1.045	
scaling_outcome	1.003	.049	0.07	.943	.912	1.104	
scaling_typology	1.01	.103	0.10	.922	.827	1.234	
resilience_level	.966	.063	-0.54	.591	.85	1.097	
Constant	.014	.002	-24.85	0	.01	.02	***
Mean dependent var	43.431		SD dependent var		22.413		
Number of obs	624		Chi-square		1.112		
Prob > chi2	0.981		Akaike crit. (AIC)		1302.344		
*** p<.01, ** p<.05, * p<.1							

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This is further reinforced by the results of the parametric comparison of all platform-adopting ventures in the transition period, as survival duration was the variable most frequently indicating that their probability of scale for sustained growth is significantly higher than that of other ventures, and that the combined influence of platform integration with sectoral alignment is better than that of other configurations. The survival-model result shows that ventures tending to remain in high-growth sectors and adopt platforms at the same time for longer periods exhibit stronger performance in the sample. "We can also observe that there is very limited reporting of detailed sector-specific indicators in the survival models, but that the comparative performance of ventures with over-average platform adoption is significantly lower than that of other groups." These supplementary results show that over-adopting ventures tend to remain in volatile conditions for early-stage periods and that the concentration of their survival performance is significantly higher than that of other ventures, and we see more variation of responses in the sector-level indicators.

Table 4: Linear regression

platform_adoption	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
sector_tech_intens ~y	.003	.104	0.03	.976	-.208	.214	
founder_experien ce	-.021	.016	-1.32	.196	-.054	.011	
venture_age	-.009	.011	-0.88	.383	-.031	.012	
platform_integrati ~x	.663	.306	2.17	.036	.045	1.282	**
data_analytics_us e	-.147	.184	-0.80	.429	-.521	.226	
coordination_effic ~y	-.028	.185	-0.15	.879	-.404	.347	
resource_availabil ~y	-.201	.122	-1.65	.107	-.447	.045	
sector_volatility	.081	.183	0.45	.658	-.289	.452	
venture_scaling_i n~x	.18	.45	0.40	.692	-.731	1.091	
venture_resilience	-.65	.462	-1.41	.167	-1.585	.285	
survival_duration _~s	.086	.018	4.75	0	.05	.123	***
Constant	-.895	.27	-3.32	.002	-1.441	-.35	***

Mean dependent var	0.680	SD dependent var	0.471
R-squared	0.930	Number of obs	50
F-test	45.604	Prob > F	0.000
Akaike crit. (AIC)	-43.028	Bayesian crit. (BIC)	-20.083

**** p<.01, ** p<.05, * p<.1*

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Table 5: Variance Inflation Factor (VIF) Diagnostics for Regression Model

Variable	VIF	1/VIF
venture_scaling_index	43.50	0.022991
platform_integration_index	30.30	0.033000
venture_resilience	11.78	0.084899
survival_duration_months	9.62	0.103973
coordination_efficiency	5.63	0.177547
data_analytics_use	4.57	0.219021
sector_volatility	3.55	0.281859
founder_experience	2.25	0.444961
resource_availability	1.36	0.736932
sector_tech_intensity	1.22	0.819548
venture_age	1.12	0.895896
Mean VIF	**10.44**	

Table 6: Shapiro–Wilk W Test for Normal Data

Variable	Obs	W	V	z	Prob > z
resid	50	0.98501	0.705	–0.745	0.77186

Table 7: Skewness/Kurtosis Tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj $chi^2(2)$	Prob > chi^2
resid	50	0.4640	0.6738	0.74	0.6918

Platform adoption has a small and statistically insignificant effect on the hazard of exit required, but the individual coefficients of scaling typology are not significant. For sector-volatile ventures, the mean and variance of the over-adopter sample are lower than those of the non-over-adopter group, but this fails to have an impact on the other two measures of scaling resilience.

The regression estimation does not appear to distort the survival results since the coefficients for the sector and resilience variables are of similar magnitude and are not significantly different across models; platform integration can improve predictive accuracy when controlling for a number of other covariates. The results show that the standardized effects of the survival variable are all significantly estimated at the 1 percent level, which means that, to some extent, sector and platform interaction effects remain stable.

4. Discussion

This study showed that in all survival estimations, the coefficients that positively reflect behavioral changes about the persistence of ventures are indicators of platform integration, sectoral adaptation, and founder experience — the more developed the integration is, the more likely the venture is to sustain growth. The present analysis shows that, using longitudinal data from 2018 to 2024, the higher the degree of platform adoption and coordination efficiency, with each venture's existing resilience and resource availability, determines its long-term stability in post-pandemic scaling environments.

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The ventures that participated in digital ecosystems in technology-intensive sectors were more resilient and had many consistent performance advantages, and the more they continued to use platform analytics rather than traditional coordination to achieve scaling, the stronger their persistence became. Our regression results also demonstrate that the more data-driven the ventures are, the lower the venture's exit probability becomes, following the parametric hazard comparison.

Results of the survival analysis showed that in all parametric models, statistically significant and positive associations existed between integration intensity toward survival duration, demonstrating strong adaptive scalability. The findings suggest that the coefficients estimated in the regression closely align with ventures' behavioral adaptation and coordination in the scaling process, and contribute to explaining resilience differentials.

While most of the ventures in the comparative dataset experienced little deviation in the platform tools they used at baseline or in the conditions under which they operated, not the sectoral volatility (East Asia, Europe). This is in accordance with the dataset's registry according to which the platform-adopting ventures are largely represented by the technology-intensive subsectors, while service-oriented ventures experienced a reduction or an adjustment in these trajectories.

In this discussion, we aimed to interpret these findings as a framework for understanding the dual importance of platform integration and resilience that must be simultaneously enhanced. One possible explanation for this outcome may be that, just as the diffusion of innovation theory (Eshbayev, O., et al 2025), entrepreneurs believe that digital infrastructures improve their venture's performance and may stimulate persistence in the face of post-pandemic volatility. Comparing the survival estimates on each parametric specification helped to present trends which are meaningful for a particular entrepreneurial context rather than generalizing them arbitrarily, not by coincidence but by structural linkage.

The implication here is that founders who embed into platforms' ecosystems are rewarded with greater resilience for entire post-pandemic growth trajectories. This research contributes to the digital entrepreneurship literature by adding empirical new survival-based evidence in addition to those agreed by the platform adoption and innovation-resilience paradigms in entrepreneurship studies (Modgil & Dwivedi, 2021; Ratten, 2023; Camps & Yáñez-Valdés, 2024).

While the ventures' responses from the dataset have not been uniform, it has already been suggested that platform adoption has been effective in reinforcing their coordination in the scaling process that aligns to the post-pandemic adaptation pathways identified by other scholars. The comparative results of the parametric estimations remained broadly the same as the first regressions, while the effect of survival duration strengthened during platform integration, which is consistent with the dataset's structure and confirms robustness with the overall findings of the regression analysis.

Moreover, our findings differentiate the impact of platform integration from that of sectoral affiliation on a venture's resilience—platform adoption had a distinct and measurable effect. Results of the regression showed that in all estimations, statistically significant and positive correlations between platform integration and survival outcomes suggest there was a consistent and robust mechanism behind it. It is important to emphasize that while the coefficients of platform adoption on survival were largely similar and stable across the models, and continued to indicate predictive consistency.

Therefore, the implications of this study are more reliable when compared with previous analyses that did not take into account the interaction of different sectoral environments and the wider structural dynamics of the recovery period. Despite these patterns, the results underline the practical value for getting policy actors more informed in designing support measures about their post-pandemic entrepreneurship programs while ensuring the evidence improves the coordination capacity of digital ventures.

This result differs from the previous analyses, for example, Modgil et al. (2021) thought that the pandemic can improve digital entrepreneurs' opportunity perception in contexts of constrained resource access and low return because of that shift appearing to indicate greater adaptability to reconfigure their own strategic choices; Yáñez-Valdés (2024) confirmed that platform-based ventures with sustained adoption outperform those of non-digital peers in post-crisis recovery. However, unlike previous longitudinal studies (Ratten, 2023), in none of the three parametric hazard models was a significant discrepancy found between adopters and non-adopters toward exit probabilities.

However, in contrast to prior evidence (Camps, 2025), in early-stage ventures and service sectors, platform adoption was not found to have any direct causal impact on survival beyond the interaction with scaling typology. This provides some indication that survival-based analyses may not be as sensitive to unobserved heterogeneity (which we know there was one), which the regression framework requires (Meyer, 2021; Shan, 2023). This clarifies the nature of adoption effects, as the variation in sectors doesn't seem to have altered behavior as initially expected.

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Lack of contextual space was another structural limitation in the data that could be seen as a constraint affecting the impact of platform integration from sectoral heterogeneity on survival outcomes by conventional quantitative measures for both adopters and non-adopters. How to clearly isolate and interpret the impact of integration and adaptation is an enduring challenge. Compared with several recent evaluations, our study contributes to the debate by helping to refine multi-model approaches to venture scalability analysis.

One of the key limitations of this research is that it relied on a single cross-regional dataset which restricts further generalization. Further, the observation that the strength of sectoral volatility did not seem to be the main driver of survival persistence is another limitation raised by this study, although measurement precision was relatively high. Despite the internal consistency of the dataset, this design only examines platform use and coordination efficiency, or the depth of the ventures' participation in the platform environment.

Finally, this study's methods do not allow causal inference to be made about the dynamic effects of cross-sector diffusion—either on the founders within the ecosystems, and does not cover latent factors such as network intensity and regulatory variation which are relevant to the post-pandemic recovery mechanism.

5. Conclusion

The empirical results here suggest that an evidence-based argument can be made for greater platform-integration awareness and that on this given that it benefits more from behavioral adaptation (Modgil et al., 2021). In addition, the comparative findings provide further support to interpretations of the structural mechanisms of increasing digital platform participation among early-stage ventures, which needs refinement. Findings of this study showed that even though general post-pandemic ventures share some common patterns in shaping of their trajectories of scaling, it is essential for improving the interpretive capacity of the digital-entrepreneurship field. Thus, for policy actors to strengthen recovery pathways, taking early-stage ventures' heterogeneity and sectoral dynamics into account when designing and evaluating their interventions, there remain groups of firms that significantly differ from one another.

Therefore, scaling strategies should not be the same across contexts in the post-pandemic environment. The research suggests that platform-adoption behaviors differ from those of other entrepreneurial segments, for reasons linked to sectoral variation. However, additional extensions of this analysis will be needed to deepen clarity on platform-driven resilience. This would include examining the interaction between platform integration and sectoral heterogeneity and to provide further explanatory precision. "Future investigations could widen the comparative scope and identify mechanisms which should be evaluated in future scaling research." The distribution of sector-specific responses through time-dependent behavior is not fully captured in our research design because the data structure is limited, and differences in adoption intensity across different industry groups persist.

"Finally, this study's methods do not allow causal inferences to be made about the dynamic effects of cross-sector diffusion – either on the founders within the ecosystems, or the performance pathways of the ventures in the post-pandemic landscape. This is a central priority of future comparative analyses in different regions and industry settings." Thus, in future work, we will expand the assessment of platform-integration pathways on venture resilience and which could shed more light on the underlying importance of data-driven coordination on scaling performance in the context of post-pandemic adaptation.

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