

# The Applicability of Miles and Snow's Strategy Typology in a Developing Economy: the case of Ghana

Sadik Jibreal<sup>1\*</sup> Ali Özcan<sup>2</sup>

<sup>1,2</sup> Faculty of Economics, Administrative and Social Sciences, Istanbul Nişantaşı University, Türkiye

\* E-mail of the corresponding author: [jibreal.sadik@gmail.com](mailto:jibreal.sadik@gmail.com)

## Abstract

Firm level strategies have widely been considered to be among the main drivers of organizational performance and survival means for sustainable competitive advantage. The literature on strategic management has an extensive number of publications on strategy typologies. Among them, the Miles and Snow orientations stand out. The lack of focus on its relevance in developing economies, such as Ghana's, is concerning, considering the abundance of study on the topic in advanced countries, which has yielded conflicting conclusions. With this research, we want to fill gaps in our understanding of the strategy's potential use and its impact on the performance of insurance firms in Ghana. 250 participants participated in the study, which used a quantitative research approach. The results revealed a general positive and significant relation between strategic orientations and firm performance with prospector being the best performing strategy. Analyzers and defenders however, did not have any significant effect on performance. It was concluded that Miles and Snow strategy typology is present in Ghana and that managers should carefully adopt the best strategy for sustainable competitive advantage.

**Keywords:** Miles and Snow strategy typology, developing economy, performance, Ghana insurance industry

**DOI:** 10.7176/EJBM/17-1-08

**Publication date:** January 30th 2025

## 1. Introduction

The prevalence of intense competition for market shares as well as sustaining competitive advantage in a competitive environment have forced organizations for that matter executives to adopt diverse strategies to compete within a specific market. This phenomena has made strategy a crucial tool for survival (Tanwar, 2013). The insurance industry in Ghana is not an exception to this global phenomenon. Firms struggle daily to compete for the limited insurance market with lower rate of penetration (NIC, 2022). Within this framework, choosing the best strategic approach will clearly define the direction to which firms must follow to outperform their rivals in the market. Numerous works have been done and studied on notable strategies such as (Kim & Lim, 1988) Miles and Snow (1978) typology, the "growth strategies" of (Ansoff, 1965), Mintzberg's typology (1973), Porter's strategies (Porter, 1980, 1985), strategic orientation suggested by Market orientation (Narver & Slater, 1990). Among these strategic orientations mentioned, Miles et al. (1978) typology has received tremendous research on it by virtue of its feature of recognizing the predictive role of business owners and organizational culture relationship among others (Ofori-amanfo et al., 2024).

Even though numerous researches have been published on Miles and Snow typology, less attention has been given to its applicability in developing economies such as Ghana. It is against this background that this research is conducted to test the applicability of Miles and Snow strategic orientation with the framework of insurance companies in Ghana as well as finding out its effect on firm performance. The above arguments suggest to us that the outcome of this work will not only add up to the pile of knowledge with the strategic management literature but also will also help improve the knowledge of managers in their strategic choices in responding to environmental pressure. The objectives of this paper will be fulfilled by reviewing previous academic works on the subject and accordingly formulate hypotheses for empirical testing and conclusions.

## 2. Literature Review

### 2.1 Strategic Orientations

The turbulent nature of the competitive environment has made strategy an essential element for survival, as strategy basically informs firms about the direction and how to achieve those directions (Tanwar, 2013). There has been an abundance of study on the topic of strategic orientation in management literature during the last

quarter of a century (Alani et al., 2019). Businesses rely on strategic orientation to help them make informed decisions. It shows them how to utilize their resources effectively in the market, giving them a competitive advantage over their competitors. Strategic orientation has been defined as “the strategic directions implemented by a firm to establish the appropriate behaviors for the firm's sustained superior performance” (Narver & Slater, 1990). A company's strategic orientation stipulates the company's policy of building the right practices in ensuring and maintaining outstanding performance in the market environment (Gatignon & Xuereb, 1997). A firm's adaptation to its external environment and competition is viewed by Mintzberg (1973) as strategic orientation. In this view, the organization's strategic orientation serves as the company's overarching strategic goal. In order to get the desired results, the business must ascertain the organization's strategic direction. Companies may ensure their success by adhering to a set of principles known as strategic orientation, which guides their strategic operations and behaviours (Eko Purwanto et al., 2022).

## 2.2 Mile and Snow Strategic Orientation

As competitive environment changes companies are forced to calve out strategies to compete in the market for sustainable competitive advantages. The field of strategic management literature has seen a proliferation of strategy typologies within the last half-century. A considerable amount of literature has been devoted to notable strategy typologies, including those proposed by Miles and Snow (1978), (Ansoff (1965), Mintzberg (1973), Porter (1980, 1985), and Market orientation (Narver & Slater, 1990). The Mile and Snow typology has been the subject of a great deal of study and is widely considered to be the best studied of the several typologies of strategic orientations (Ingram et al., 2016). This typology is based on the ways in which senior management decides the long-term goals and strategies of a company. Organizational strategies, structures, and process variables are all part of Miles and Snow's framework, which emphasizes the significance of coordinating internal operations with strategy. Miles and snow typology being the most widely studied typology comes as a no surprise as it's the only strategy that recognizes the role played by the owner of businesses in terms of decisions and business culture (Ofori-amanfo et al., 2024). Miles and Snow (1978) strategic orientation is developed on the premises that organizations are faced with three distinct problems: the entrepreneurial problem, the technical problem, and the administrative problem. The entrepreneurial difficulty is deciding what to sell and which customers to sell it to. This is known as the target market. Building a mechanism to execute management's answer to the entrepreneurial conundrum is the technical problem. Simplifying and stabilizing the processes that successfully handle the problems that the company has in its entrepreneurial and engineering phases is the primary administrative concern. In view of these issues, Miles and Snow suggested four paradigms that organizations use to approach the three identified difficulties: prospectors, analysers, defenders, and reactors (Shortell & Zajac, 1990).

**Defenders** are organizations which devote primary attention to improving the efficiency of the existing operations. They concentrate much on the growth of new product by considering its qualities and pricing rather than searching for new market opportunities (Alani et al., 2019)

**Prospectors** are characterized as organizations which almost continually search for market opportunities and which regularly experiment with potential responses to emerging environmental trends. Thus, these organizations are the pioneers of changes in the market of which their rivals are force to respond. They place high priority on R&D together with innovation and take risks (Alani et al., 2019).

**Analysers** often classified as the hybrid strategy within the context of mile and snow typology. They blend between prospectors and defenders. By doing so, they take fewer risks on seeking new market opportunities than prospectors and also lesser efficiency on growth of product as compared to defenders. They monitor the rivals in an unstable market for ideas to compete. (Ingram et al., 2016)

**Reactors** in most cases, the link between reactors' strategies and structures is not consistent. Because of this, they do not adhere to a rigid plan. This is what they do when their surroundings demand it of them. This indicates that they are compelled to make certain changes due to external pressures (Ofori-amanfo et al., 2024)

## 2.3 Theoretical Framework and Hypotheses

### 2.3.1 Strategic Orientation and Firm Performance

There have several arguments on the fact that three strategic orientations namely prospectors, defenders and analyzers have the tendencies of influencing organizational performance when they are properly implemented. The reason for these assertion is the fact that reactors lack a clear-cut strategy and for that matter being

outperformed by the others as stated by Mile and Snow (Ingram et al., 2016). Snow & Hrebiniak (1980) analysed the connections between strategy, distinctive competency, and organizational performance in four specific industries: plastics, semiconductors, automotive, and air transportation. Their findings suggest that the management of the enterprises acknowledged the existence of the four strategy categories outlined by Miles and Snow (1978) in their respective industries. Furthermore, the research reveals the following: 1) defenders, prospectors, and analysers demonstrated proficiency in both general and financial management; 2) defenders and prospectors possess unique competencies that differ from each other, while analyzers specific abilities are less evident; 3) reactors do not exhibit a consistent pattern of distinctive competence; and 4) although the evidence is only suggestive, defenders, prospectors, and analyzers perform better than reactors in competitive industries, but not in highly regulated industries as their financial effectiveness could not be underestimated.

Among the earliest research on this subject was the work of Smith et al. (1989) in 47 electronic manufacturing organizations to examine the relationship between Miles and Snow's typology, organizational size, and organizational performance. In general, there supports for prospectors and analyzers on performance with no evidence for reactors and defenders. Ingram et al. (2016) in their research on the applicability of Mile and Snow typology and organizational Performance of transitional economy of Poland revealed prospectors and analyzers slightly performing better than reactors and defenders. They did acknowledge the effectiveness of reactors on organizational performance despite the fact that it was outperformed.

Avci et al. (2011) conducted a study on the tourism sector in Turkey on the relationship between strategic orientations and performance. Their resulted show that prospectors had a greater impact on firm performance as compared to defenders, whereas analysers had almost similar performance to prospectors. They concluded that positive relationship does exist between the strategies and performance, however, factors such as macro environment, organizational size and specifics could influence the outcome. It is evident in the literature that Miles and Snow's typologies have been tested in several studies in the advanced economies, however, its applicability in developing economies has seen little attention coupled with certain structural challenges such as measurement scales and differences in management practices.

This issue traces back to the work of (Punnett & Shenkar (1994) who conscientized on the difficulties in implementing these strategy typologies in developing economies by virtue of differences in organizational culture, management styles, politics etc. As an example, (Jusoh & Parnell (2008) found themselves confronted with a number of significant obstacles when they attempted to use factor analysis in order to determine these four strategic orientations. Furthermore, their work revealed that return on investment (ROI) and sale growth varied depending on the strategic orientations as companies in Malaysia put greater priority on financial success. These varying results present us the opportunity in trying to fill the gap in literature as well as adding our quota to the existing literature. In this context, the following hypotheses are formulated;

### *Hypotheses*

**H1:** There is positive and significant relationship between strategic orientations and firm performance.

**H1a:** There is positive and significant relationship between prospector strategy and firm performance

**H1b:** There is positive and significant relationship between analyzer strategy and firm performance.

**H1c:** There is positive and significant relationship between defender strategy and firm performance

**H1d:** There is positive and significant relationship between reactor strategy and firm performance

## **3. Methodology**

### *3.1 Designing and Testing of Research Scale*

The first part of the questionnaire consisted of strategic orientations dimensions which were made of up of 35 items. 9, 8, 12, and 6 statements were related to analyzers, reactors, prospectors and defenders respectively. The second section which was Firm performance items were made up of 9 statements. The questionnaire instruments were adopted from the work of Avci et al. (2011). All items were measured on a 5-point Likert scale with 1 = strongly disagree, and 5 measuring strongly agree. In order to ensure the clarity as well as examining the consistencies of the scale items, a pilot study was conducted by the researcher with 20 participants consisting of 20 managers of insurance companies in Ghana. Cronbach's alpha reliability method was used to determine the internal consistencies of the items. Strategic orientations internal consistencies were 0.89 while firm performance obtained 0.83 which were all beyond the acceptable level of 0.7 (field 2018). Consequently, it was concluded

that the measurement variables were reliable for the main survey.

### 3.2 Sample

This study utilized purposive sampling under a non-probability sampling technique to select the sample from the population which consisted of 665 top-level managers of all registered insurance companies in Ghana (NIC, 2023). A total of 250 sample size was arrived by employing Taro Yamane (1967) sample size method of  $n = \frac{N}{1 + N(e)^2}$

$$= \frac{665}{1 + 665(0.05)^2}$$

$$= \frac{665}{2.6625} = 249.76$$

$$n = 250.$$

Data was collected between the period of June 2024 to October 2024. The researchers administered questionnaire by face to face and online, by mailing it to the managers of the companies. 250 surveys were collected from the insurance companies with 100% response rate.

### 3.3 Data Analysis

Different statistical analyses were conducted after collection of data to help in examining the objective of the research. SPSS 23 for windows was used to carry out the analysis. By using SPSS, final reliability test was conducted after processing raw data into SPSS software. Strategic orientations were internally consisted with Cronbach's alpha value of 0.91, while firm performance scale obtained 0.77. Normality test was also conducted to determine whether the data was normally distributed. Finally multiple linear regression was used to examine the effects of the independent variables (strategic orientations) on the dependent variable (firm performance) by loading all the independent variables into the regression model using the force - entry approach. In order to check the issue of multicollinearity, the variance inflation factor (VIF) values were analyzed as well.

## 4. Result

The regression results from table 2 revealed that strategic orientation has significant relationship with firm performance as the p- value is less than 0.005, and therefore H1 is accepted.

Table 1. Normality Analysis

Scale	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Analizer	3.91	0.61	1.89	5.00	-1.00	1.40
Defender	3.83	0.57	2.00	5.00	-0.43	0.11
Reactor	3.87	0.56	2.50	5.00	-0.43	-0.34
Propector	3.99	0.53	1.92	5.00	-1.68	4.08
Firm Performance	4.18	0.46	2.44	5.00	-1.14	2.13

Before testing the hypotheses of the study, it was examined whether the data were normally distributed. While the p-values obtained as a result of the Kolmogorov-Smirnov test indicated that all scales were distributed outside the normal distribution ( $p < .001$ ), the fact that the skewness and kurtosis values of the data generally did not go outside the range of -2 to +2 indicated a normal distribution. In the light of these findings, considering that the sample of the study consisted of a large sample of 250 participants, it was accepted that all of the data were normally distributed (Kim, 2013). Accordingly, it is appropriate to analyze the hypotheses of the study with parametric tests.

Table 2. Regression Table on the Predictive Role of Miles and Snow's Strategic Orientations on Firm Performance

Variable	B	Standard Error	Beta ( $\beta$ )	t	p	VIF
Constant	1.883	0.201		9.345	<.001	
Analyzer	-0.040	0.058	-.053	-0.698	.486	2.210
Defender	0.070	0.056	.088	1.244	.215	1.883
Reactor	0.188	0.054	.228	3.480	<.001	1.624
Prospector	0.364	0.070	.418	5.213	<.001	2.435
$R = .595$		$R^2 = .354$		$Adj. R^2 = .343$		$F(4, 245) = 33.550, p < .001$

H1 (a-b-c-d): There is a significant and positive relationship between analyzer, defender, reactor, and prospector strategies and firm performance.

Multiple linear regression analysis was applied to test whether Miles and Snow's strategic orientations (analyzers, defenders, reactors, prospectors) have a determinant effect on firm performance. The multiple linear regression model was constructed using the forced-entry method in which all independent variables were entered into the model at the same time. The model was found to fit the data:  $F(4, 245) = 33.550, p < .001$ . The model was found to explain 34.3% of the observed variance in firm performance. As a result, it was found that firm performance increased significantly as the score on the Reactors scale ( $\beta = .23, p < .001$ ) and the score on the Prospectors scale increased ( $\beta = .42, p < .001$ ). Analyzers ( $p = .486$ ) and Defenders ( $p = .215$ ) orientations did not significantly affect firm performance.

The fact that none of the VIF values is greater than 10 and the values are generally close to 1 indicates that there is no multicollinearity problem in the data. According to the multiple linear regression model, a 1-point increase in the average score on the Reactors scale predicts a 0.188 point higher average score on the Firm Performance scale. A 1-point increase in the average score on the prospector scale predicts an average score of 0.364 points higher than the Reactors Strategic orientation scale. It is found that the Reactors score alone can explain 3.2% of the variance in the Firm Performance score, while the Prospectors score alone can explain 7.2% of the variance in the Firm Performance score. Accordingly, it can be concluded that the effect of prospectors strategic orientation on Firm Performance is the greatest. As a result of the analysis, Hypotheses H1b and H1c are rejected, while H1, H1a and H1d are accepted.

## Discussion

This research was carried out with the principal objective of establishing the predictive role of Miles and Snow (1978) business level typology on firm performance as well as testing its applicability in developing economies like Ghana. The Summary of results in table 3 suggested that, Miles and Snow do exist in Ghana, and for that matter has positive effects on firm performance in general as p-value from table 3 was less than 0.005 as in addition to contributing 34.3% to firm performance.

As shown in table 3, the prospectors' influence on company performance was the most significant among the distinct strategic orientations. This data backs up the claims made by several studies that, when placed within the framework of Miles and Snow theory, indicated that prospectors were the most effective strategic orientations (Avci et al., 2011; Ingram et al., 2016).

Surprisingly, reactors exhibited a positive and substantial correlation with company performance, contrary to what was predicted by many studies like Smith et al. (1989), by the fact that reactors lacked a clear-cut strategy. While prospectors and analyzers outperformed reactors, our results on reactors are somewhat corroborated by the work study of (Ingram et al., 2016). The authors of the research thoroughly acknowledged the financial efficacy of reactors. Given the intense competition and constant external pressures, it is reasonable to assume that many insurance companies respond in a reactive manner.

Despite the central idea put forth by Miles and Snow (1978) that, when properly implemented, the three orientations-prospector, analyzer, and defender-would lead to a positive effect on organizational performance, the data showed that analyzer and defender did not have any positive and significant relationship with firm performance. We were unable to find any evidence to back up this claim. Possible explanations include the following: a) analysers are generally sluggish when it comes to responding to competition; they tend to

deliberate over decisions, wait for others to take action before assessing the current situation, and are risk-averse when it comes to seeking out new market opportunities (Alani et al., 2019). It is unexpected that the premise of analysers having a substantial relationship with performance was denied, but the hybrid reality of succeeding a little of both prospectors and defenders gives them the opportunity to perform well in the market. b) defenders also prioritize operational efficiency above seeking out business prospects. Taking the time to provide additional service to consumers may have an impact on their performance.

Another outstanding findings of this study is that fact that Miles and Snow (1978) typology is applicable in developing economies since firms have been identified to both understand and implement them in their pursuit of competitive advantage (Ofori-amanfo et al., 2024). This puts an end to the worries voiced by Punnett & Shenkar (1994) and allows us to draw the conclusion that emerging economies share Mile and Snow's strategic orientations.

## Conclusion

The fundamental objective of this study was to determine how Mile and Snow's (1978) strategic orientations correlated with the performance of insurance firms in Ghana. Conclusions drawn by the authors are as follows. A favourable and statistically significant correlation between the strategy typologies and overall business performance was found. Prospector and reactor strategic orientations positively and significantly affected firm performance with prospector strategy being the greatest performing strategy.

Defenders and analyzers however, did not impact firm performance positively. Since Punnett & Shenkar (1994) expressed concern about the challenges of adopting these strategies in emerging nations, it is equally significant to note that the research aimed to determine their applicability in these contexts. Miles and Snow's strategy typologies are applicable and prevalent in emerging economies like Ghana's since globalization has changed aspects including the macroeconomic environment, corporate culture, and governmental interferences. While this is encouraging, it doesn't change the reality that defender and analyzer strategies lacked the ability to foresee how insurance companies would respond. These contradictory findings when compared to other research highlight the need for further research with diverse populations from different economic sectors before drawing any broad conclusions.

The study's shortcomings also raise concerns as follows; since obtaining accounting data on performance proved to be difficult, most businesses, out of concern for confidentiality, came up with their own performance judgments. Similarly, several insurance businesses merged to satisfy the government's minimum capital requirements during the financial sector cleansing in Ghana (Obiri & Affum, 2020; NIC, 2021). The different results could be explained by the fact that certain corporations benefited more financially and in terms of scale from these mergers than others. Since these variables were not controlled for in the present research, it is suggested that they be included in future studies.

## References

- Alani, E., Kamarudin, S., Alrubaiee, L., & Tavakoli, R. (2019). A model of the relationship between strategic orientation and product innovation under the mediating effect of customer knowledge management. *Journal of International Studies*, 12(3), 232–242. <https://doi.org/10.14254/2071-8330.2019/12-3/19>
- Ansoff, H. . I. (1965). *H . Igor Ansoff; Corporate strategy : an analytic approach to business policy for growth and expansion ; 1965 ; 241 pages ; McGraw-Hill , 1965 ; RP Rumelt. 1965.*
- Avci, U., Madanoglu, M., & Okumus, F. (2011). Strategic orientation and performance of tourism firms: Evidence from a developing country. *Tourism Management*, 32(1), 147–157. <https://doi.org/10.1016/j.tourman.2010.01.017>
- Eko Purwanto, Muhadjir Anwar, & Ayundha Evanthi. (2022). The mediation role of organizational strategy orientation on the effect of environmental uncertainty on the performance of travel agency companies. *International Journal of Research in Business and Social Science (2147- 4478)*, 11(8), 50–58. <https://doi.org/10.20525/ijrbs.v11i8.2154>
- Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, 34(1), 77–90. <https://doi.org/10.2307/3152066>
- Ingram, T., Krašnicka, T., Wronka-Pośpiech, M., Głód, G., & Głód, W. (2016). Relationships between miles and snow strategic types and organizational performance in Polish production companies. *Journal of*

- Management and Business Administration. Central Europe*, 24(1), 17–45.  
<https://doi.org/10.7206/jmba.ce.2450-7814.162>
- Jusoh, R., & Parnell, J. A. (2008). Competitive strategy and performance measurement in the Malaysian context: An exploratory study. *Management Decision*, 46(1), 5–31. <https://doi.org/10.1108/00251740810846716>
- Kim, L., & Lim, Y. (1988). Environment, Generic Strategies, and Performance in a Rapidly Developing Country: A Taxonomic Approach. *Academy of Management Journal*, 31(4), 802–827.  
<https://doi.org/10.5465/256339>
- Kim, H.-Y. (2013). Statistical notes for clinical researchers: Assessing Normal Distribution (2) using skewness and Kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52. <https://doi.org/10.5395/rde.2013.38.1.52>
- Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (1978). Organizational strategy, structure, and process. *Academy of Management Review. Academy of Management*, 3(3), 546–562.  
<https://doi.org/10.5465/AMR.1978.4305755>
- Mintzberg. (n.d.). *Mintzberghm\_strategy\_making\_in\_three\_modes.pdf*. California Management Review (Winter, 1973). <https://doi.org/https://doi.org/10.2307/41164491>
- Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability Market Orientation and Performance: The Conceptual Model. *Journal of Marketing*, 54(October), 20–35.
- National Insurance Commission (NIC, 2022). *Insurance Industry Annual Report 2022*. Ghana
- Obiri, K. A., & Affum, F. (2020). Ghana s banking sector clean up: its repercussions on customer attitudes towards banking. *Pressacademia*, 7(4), 234–248. <https://doi.org/10.17261/pressacademia.2020.1336>
- Ofori-amanfo, J., Newman, F., Konlan, P., & Siaw, J. (2024). *SMEs ' E-Commerce Adoption and Customer Responsiveness : A Test of Miles and Snow ' s Typology*. 9(6), 145–162.
- Parnell, J. A., & Koseoglu, M. A. (2015). The Competitive Strategy-Performance Nexus: An Assessment of Turkey and the United States. *North, January*, 163–172.
- Porter M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York, NY: Free Press.
- Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Porter, M. E. (1980). *Competitive Strategy*. New York, NY: Free Press.
- Punnett, B. J., & Shenkar, O. (1994). International management research: toward a contingency approach. *Advances in international comparative management*, 9(1), 39-55.
- Shortell, S. M., & Zajac, E. J. (1990). Perceptual and Archival Measures of Miles and Snow ' s Strategic Types : A Comprehensive Assessment of Reliability and Validity Author ( s ): Stephen M . Shortell and Edward J . Zajac Source : The Academy of Management Journal , Vol . 33 , No . 4 ( Dec . , *Academy of Management Journal*, 33(4), 817–832.
- Smith, K. G., Guthrie, J. P., & Chen, M.-J. (1986). Miles and Snow's Typology of Strategy, Organizational Size and Organizational Performance. *Academy of Management Proceedings*, 1986(1), 45–49.  
<https://doi.org/10.5465/ambpp.1986.4978509>
- Snow, C. C., & Hrebiniak, L. G. (1980). *Strategy , Distinctive Competence , and Organizational Performance Author ( s ): Charles C . Snow and Lawrence G . Hrebiniak Published by : Sage Publications , Inc . on behalf of the Johnson Graduate School of Management , Cornell University Stable URL : . 25(2), 317–336*.
- Tanwar, R. (2013). Porter's Generic Competitive Strategies. *IOSR Journal of Business and Management*, 15(1), 11–17. <https://doi.org/10.9790/487x-1511117>
- Yamane, T. (1967). *Statistics; an Introductory. Analysis*. A Harper International Edition. New York University