

Industry-specific Competitive Actions within the Turkish Mobile Telecommunications Network Operating Industry

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Abstract

In a bid to fill a crucial gap in the competitive dynamics literature brought about by the fact that extant competitive action literature is limited and insufficient in its coverage of industries and geographic regions, this study set out to map the variety of competitive actions specific to the mobile telecommunications network operating industry. In order to accomplish this, the study concerned itself with the case of the Turkish industry. It adopted a qualitative research methodology, specifically using the structured content analytic procedure in line with established methodological traditions of extant competitive dynamics research. Secondary data was retrieved from publicly available news sources, which were accessed through the LexisNexis database. Findings revealed a total of 112 competitive actions types specific to the industry. These actions upon further treatment, were found to be normally carried out within 8 domains of action and all of the action types isolated were of a nature that conformed to 26 sub-domains of actions all described in detail in the body of the study.

Keywords: Competition, Competitive actions, Competitive dynamics, Competitive Strategy, Strategic Management, Business Strategy, Management, Strategy

1. Introduction

Although the idea of creative destruction was first implied by Karl Marx in his work 'The Communist Manifesto' and later expanded upon in his subsequent works Grundrisse and Das Kapital; the term was however developed, introduced and popularized by Joseph Schumpeter through his work titled 'Capitalism, Socialism and Democracy' (Nokelainen, 2010). While Marx's implied idea of creative destruction emanated as a result of his criticisms of the capitalist economic system citing the intermittent destruction of value as one of the detrimental aspects of free market economies, and insinuating that the phenomenon would eventually lead to the demise of the capitalist system; Schumpeter although sharing the same view, however approached creative destruction from an economic performance perspective (Nokelainen, 2010).

According to Turgay and Emeagwali (2012), his work implied that the innovative activities of entrepreneurs were the disruptive forces which made economic growth possible in free market economies, thus making creative destruction a central concept upon which his economic theories were built. Schumpeter's economic theories were later to become the holy grail of the Austrian School of Economics – a school of thought widely cited and highly regarded among authors within the competitive dynamics research sub-stream of the field of strategic management. Although the theoretical underpinning of the Austrian School of Economics has been in existence for a very long time (Jacobson, 1992), the competitive dynamics research stream has been in existence for a little over twenty decades (MacMillan, McCaffery & Van Wijk, 1985; Oliva, Day & MacMillan, 1988; Smith & Grimm, 1991; Smith, Grimm, Gannon & Chen, 1991; Chen & MacMillan, 1992; Chen et al., 1992; Smith et al., 1992). Based on the principles of the Austrian school of economics (Schumpeter, 1934, 1950), competitive dynamics holds that unlike other theories of competition, markets hardly ever attain a state of equilibrium due to the fact that firms engage in series of competitive interactions aimed at the creation and destruction of 'temporary' competitive advantages uniquely termed the process of 'creative destruction' (Schumpeter, 1950 p. 84).

This process of creative destruction culminates in an intense competitive rivalry among firms in which there is a constant state of attacking and responding to the attacks of competitors through a series of novel, general or market specific competitive actions in their quest to attain, enhance or protect their competitive advantages or positions in relation to their competitors (Ferrier et al; 1991)

According to Turgay and Emeagwali (2012), the difficulty of attaining equilibrium in highly competitive industries may stem from the fact that in the process of creative destruction (inherent in such industries) competitive advantage is continuously eroded. This means no one firm can maintain or continue enjoying the advantages bestowed on it by virtue of a successful competitive action taken or position attained in the past; without this action, receiving a measurable response or the firm's position challenged by other players operating within the same market. As competitors respond to and challenge a leading firm's actions and market position, they eventually erode such advantages and a new market leader emerges, but its leadership is also short lived as it too soon faces attacks from other lesser performing competitors and the cycle of instability continues. Competitive dynamics researchers note that as this cycle of instability continues, the market environment, process and structure unlike in stable markets; becomes dynamic and in a state of continuous change (Barnett & Sorenson, 2002; Nokelainen, 2008; von Mises, 1949; Barnett & Hansen, 1996)

Thus from a competitive dynamics perspective in line with the Austrian School of Economics; the dynamics of action and response based competitive interactions forms the fundamental core of the field of strategic management (Smith et al. 1991; MacMillan, 1992; Baum & Korn, 1996; Ferrier et al, 1999).

Taking this belief a step further and synchronizing it with the earlier postulation of Mintzberg (1978 p.34) which defines strategy as a "pattern in a stream of decisions" taken by firms over time; Ferrier (2001) implied that a firm's strategy is comprised of the sequence of all of its competitive actions within a time period. Nokelainen, (2010) summarized the competitive dynamics perception of firm strategy as an unfolding phenomena which can be completely described only after a careful observation of the sequence or pattern of all of its competitive actions over time.

Therefore, since the success or failure of firms within any given industry is dependent on its strategy; it follows that from a competitive dynamics perspective the success or failure of firms is dependent on whether or not firms carry out competitive actions as well as the characteristics or nature of the competitive actions they carry out. (Nokelainen, 2010; Ferrier et al, 1992)

The realization of the above fact spurred interest in competition research, but this time at the action level (Nokelainen, 2010), and as more and more studies were carried out, an increasing number of researchers stressed the importance of more research into competitive action. For instance Chen and MacMillan, (2002 p.541) stated that "If scholars are ever to understand the complexity of competitive rivalry it is important to move the level of analysis down to the basic building block of competition – the competitive action – response dyad." Ferrier et al (1999) also lent credence to this fact when they implied that to acquire accurate understanding of the competitive process between rival firms within or across industries, it is important to examine competitive interactions and activities, especially the dynamics of competitive action-response exchange.

1.1 Problem Statement

Despite the importance of, and need for research into competitive interaction among firms within and across industries, researchers are quick to stress that this is by no means an easy feat (Nokelainen, 2010). This is because competitive interactions are complex in nature and involves competing firms which exchange strategic actions and responses with the resulting outcomes dependent on the action of one firm in relation to the response it will get from another rival firm and in relation to what it will do in response to the rival firm's response and the chain goes on and on (Barnett & Hansen, 1996 p.139).

However bracing the challenge irrespective of its difficult nature; the field of competitive dynamics research has over the last twenty years engaged in in-depth studies of competitive interactions among firms as well as their impact on firm performance among others, contributing knowledge of invaluable measure, to the broader strategic management field of study.

Despite the achievements of the competitive dynamics research stream, the nascent nature of the stream means that there are still a lot of unexplored areas, shortcomings and gaps that need to be filled. Key among these areas is two that are of direct concern to this research work. They include:

1. The lack of adequate industry-specific examination of competitive actions.
2. The lack of studies from a diverse geographical perspective of competitive actions, and thus competitive behavior.

More information on these gaps in the competitive dynamics literature is provided in the following subsection.

1.1.1 Lack of Adequate Industry Specific Research

A review of existing literature reveals that the bulk of extant literature on competitive dynamics has focused only on a handful of industries. These includes the US software industry (Young et al, 1996), the US internet enterprise industry (Kotha, Rindova & Rothanel, 2001); the US retail industry (Boyd & Bresser, 2004); the US pharmaceutical industry (Offstein & Gnywali, 2005a, 2005b); and the US domestic airline industry (Smith et al, 1991; Chen et al, 1992; Chen & MacMillan, 1992; Miller & Chen, 1994; Chen & Miller, 1994; Chen & Hambrick, 1995; Miller & Chen, 1996a, 1996b; Hambrick et al, 1996; and Chen et al, 2002)

Besides these 5 major industries which previous literature has predominantly focused on, other existing studies had chosen to carry out studies across multiple industries, all in a bid to arrive at generalize-able action types applicable to all industries studied. These studies include the works of Ferrier (2001) who studied selected US firms taken from sixteen different US industries listed on Fortune 500, the work of Ferrier et al (1991), in which they studied the competitive response patterns of US firms drawn from multiple industries and the challenges they faced from their Japanese rivals and Oliva et al (1998); which also examined US firms from multiple industries.

From the above review it is obvious that previous research had focused specifically on only five distinct industries; while other researches engaged in studies of competitive interactions across several industries. The later groups' findings however are general in nature and not explicitly representative of the industries examined on an individual basis. In fact the importance of conducting industry-specific studies is stressed in previous literature, for instance Chen and Miller (2012, P.72) posited that industry-specific studies is one of the most important areas which existing literature has paid little attention to, noting its potential to lend support to the competitive dynamics sub streams: competitive action repertoires and mapping unique industry specific competitive rivalry patterns. In light of the realization of the importance of the industry-specific study of competitive actions and the earlier highlighted existence of studies in only 5 distinct industries, one of the aims of this study is to contribute to the competitive dynamics literature by examining the competitive interaction of firms within the telecommunications sector and in the mobile telecommunications network providing industry to be more specific.

1.1.2 Lack of Studies from a Diverse Geographic Perspective on Competitive Interaction

Also, an examination of previous literature shows that almost all industries that were investigated, were geographically based in the United States (Nokelainen, 2010). For instance, the U.S software industry, the U.S pharmaceutical industry and the U.S domestic airline industry among others (Nokelainen, 2010). In order to further enrich literature and provide a diverse perspective on competitive interaction at the action-response level, Chen and Miller, (2012 p.73) notes that it is important to undertake studies of the competitive behavior among firms in industries at diverse "city, national and regional levels".

Thus this research work, intends to contribute to the literature on competitive interactions and hence competitive dynamics, by examining the nature of competitive interactions among firms in the mobile telecommunications network operating industry, from the unique perspective of Turkey an emerging economy belonging to the CIVETS group of emerging markets formally recognized by the Economist Intelligence Unit in 2009.

1.1.3 Implications of the Lack of Adequate Industry Specific Research

Since it is difficult to apply findings from one particular industry to other industries due to the inherent differences in industry characteristics; the current focus on five industries is not only insufficient, but is also not helpful in understanding the phenomena within other dissimilar industries. The multi-industry studies are also not helpful in the categorical mapping or the description of the phenomena within specific individual industries, thus if the current status quo persists, there will be a lingering deficiency in competitive dynamics literature which will eventually impede the development and maturity of this research stream; hence the need for more industry specific research.

There will be implications for practitioners also, as access to industry specific classification of competitive interaction, action types, response speed and etc, will be unavailable except for those industries which have been studied.

1.1.4 Implications of the Lack of Studies from a Diverse Geographic Perspective

Secondly, the implication of the concentration of literature on only firms and industries located in the USA is that, the literature is deprived of multiple perspectives, and increases the impracticality of generalizing findings as industries have been known to exhibit different characteristics across national and regional lines. There is thus no way of finding out if Young et al's (1996) findings in their study of the US software industry can be generalized and applicable to the software industries of other developed countries or those of the emerging and developing economies of the world. Hence there is a strong need to seek other geographic perspectives to facilitate a holistic understanding of this phenomenon as well as enable comparative studies between similar industries in different geographic locations, which in turn activates the development of best practices significant to competitive interaction dynamics.

All in all, a summary of the current literature reveals that according to Smith et al (1991 p.60), "the means by which firms build competitive advantage have remained largely hidden and unexplored." This is due to the two major gaps in literature earlier discussed as well as a lot of others waiting to be explored in this nascent field of competitive dynamics (Nokelainen, 2010).

1.2 Research Questions

In light of the above discussions, this research work –a first in a series of studies initiated by the first author as part of his doctoral dissertation, and aimed towards a complete mapping of the competitive dynamics of the mobile telecommunications network operating industry, intends to contribute to literature through the study of competitive interaction within the Turkish mobile telecommunications network operating industry by posing the following research questions:

Research question 1: What are the varieties of competitive actions (action types) peculiar to firms within the Turkish mobile telecommunications network operating industry?

Research question 2: What are the most predominant action types frequently used among competitors within the Turkish mobile telecommunication network operating industry?

2. Methodology

In their independent comparison of qualitative and quantitative research methodologies, Johnson & Christensen (2008 P. 34) and Lichtman, (2006 P. 7-8) noted that qualitative research methodology is usually the most appropriate choice when the intention of the researcher is to explore, discover, construct or understand and interpret social interactions through the use of clear research questions; as well as when study focus is on small groups whose constituents are not randomly selected. They further stated that where subjectivity is expected and when human behavior is perceived to be dynamic, situational, social and personal, the qualitative methodology is the most suitable (Johnson & Christensen 2008 P. 34; Lichtman, 2006 P. 7-8). Since the intent of carrying out this study is to discover, construct and understand the different types of competitive actions specific to the mobile telecommunications network operating industry, and the frequency with which they occur, it accurately fits the description of a study for which the qualitative methodology is the most appropriate approach.

Also in deciding the appropriate qualitative research design to employ, this study conforms to the competitive dynamics research tradition by adopting the 'content analysis' research design first used by Smith et al (1991) in the very first industrial scale research on competitive responses. Nokelainen (2010) referred to this research design as the 'dominant design' in competitive dynamics research. The content analytic process involves studying secondary data usually obtained through secondary data sources. The same process was applied to this study in an attempt to completely map all of the competitive actions within the Turkish mobile telecommunications network operating industry independent of any pre-determined typology or coding scheme. This is necessary in order to avoid bias in identifying action types which are unique and specific to a particular industry.

The sample group studied in this research consisted of three Turkish mobile network operators: Turkcell A.S, Vodafone Turkey and Avea A.S. Together these three companies account for the majority of the entire mobile network operating industry market share at the time of conducting this research.

The robustness of this sample group makes it easy to draw accurate conclusions for the industry under study.

In line with traditional competitive dynamics research practice, publicly available news was the main source of data for this study. In previous studies, singular industry publications such as the Automobile Monthly or the Aviation Daily were the preferred source of data for analysis for those interested in mapping competitive action types within the automobile and aviation industries respectively (Chen & MacMillan, 1992). However, in other studies such as Ferrier et al (1999) authoritative local or global newspapers retrieved from reliable syndication sources were preferred. Thus in line with the competitive dynamics research tradition, publicly available news was the source from which the study data was mined, and using an identical approach used by Ferrier et al (1999), authoritative local newspapers such as Hurriyet Daily, Turkish Zaman were papers accessed. The data retrieval process was also similar to that used by Nokelainen (2010) and entailed the use of the LexisNexis database- an online news aggregating service popular with strategic management researchers in general (previously used by Reuer, 2001, Sorenson, 2000; Zahra, Ireland & Hitt, 2000; and Nokelainen, 2010).

In retrieving the relevant news items, a keyword search- a process peculiar to the content analytical process. However, while other researchers use very specific keywords in ways that tend to limit the possible search engine output, the search methodology used in this study is identical to that used by Nokelainen (2010) which entails the use of broader keywords in order to ensure that all possible competitive action items are included. For this study only the individual names of the three companies within the sample group under study were used as keywords, while the search duration was restricted to all news items related to each of the companies between 2002-2012.

3. Analysis & Findings

As stated in the methodology of this work, the keyword search for Turkcell A.S, Vodafone TR and Avea A.S in local Turkish newspapers accessed through the LexisNexis database service yielded a total of 1,067 raw news items. This news items contained at least the name of one of the companies of interest to this study in the headline, and care was taken to ensure that news items were not mined in multiples. Thus each news item contained at least the name of one of the companies of interest not two of them in the same headline. Out of the 1,067 raw news items mined, news items interpreted to contain competitive actions (both performed and intended) were a mere 112. 78 of these raw news items contained performed actions while 34 contained intended actions. The procedure used in the determination and identification of the state (performed or intended) of these action type was adopted from Nokelainen, (2010) who illustrated the procedure thus:

“Actions having been performed: Company X has introduced product Y to the market this morning; Actions intended but not yet performed: Company X will introduce product Y to the market later this year.”

3.1 Raw Data Analysis

The table- below gives a general description of the nature of the raw news item generated from the key word search.

Table 1. Tabular representation of secondary data (news items) retrieved for analysis

	Turkcell		Vodafone TR		Avea		Total
	No.	%	No.	%	No.	%	
Company-Specific Raw News	666	62.4	204	19.1	197	18.4	1,067
Number of Raw News Containing Performed Competitive Actions	51	65.4	15	19.2	12	15.4	78
Number of Raw News Containing Intended Competitive Actions	22	64.7	7	20.5	5	14.7	34
Total Performed and Intended Competitive Actions	73	65.2	22	19.6	17	15.2	112

Overview of Secondary Data Collected for Analysis.

Since the raw news items were obtained through a keyword search using the names of the three largest Turkish mobile telecommunications providing companies as keywords, it is thus a necessity while describing the raw data attributes to understand the distribution of the entire news items retrieved according to keyword. Figure 1 below provides a clear distribution showing that news items pertaining to the key word ‘Turkcell A.S’ accounted for about 62% of the entire raw data collected, while Vodafone accounted for 19% of the entire news items retrieved, a mere one percent more than Avea A.S.

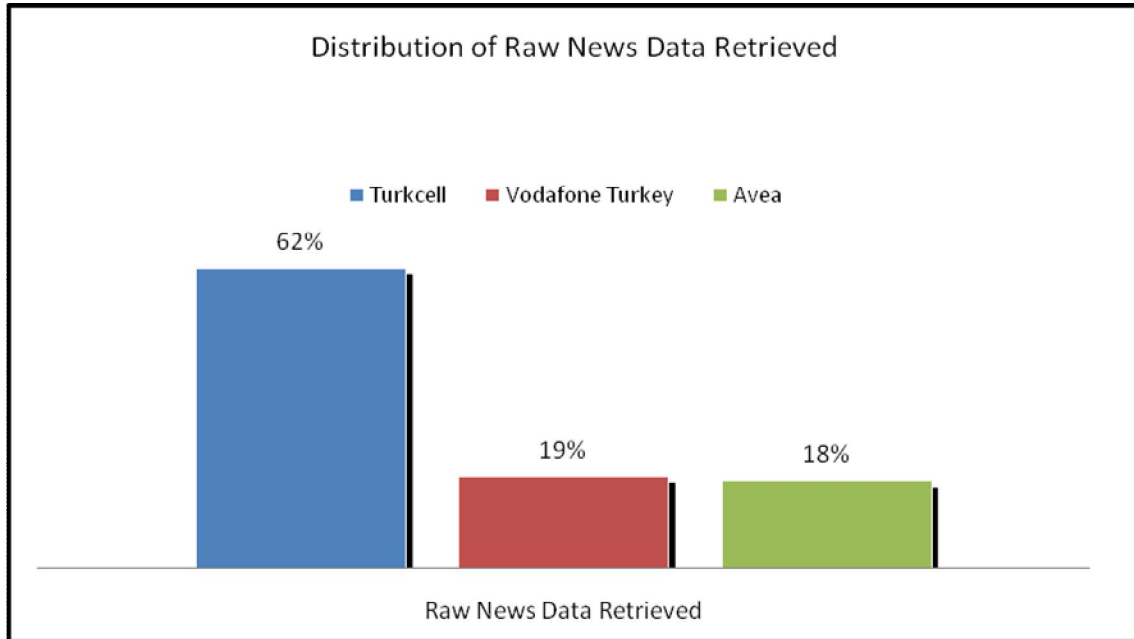


Figure 1. The Trend of Economic Development Description for the above figure.

3.2 Competitive Actions Isolated

As mentioned earlier in this section, only 112 of the news items obtained contained any form of competitive action be it intended or performed. This represented 10% of the entire raw news items collected, thus over 90% of raw data did not contain any form of competitive actions. Of the total actions containing raw news however, about 70% of them contained performed competitive actions while the rest contained intended competitive actions as shown in Figure 2 while the distribution of intended and performed actions is shown in Figure 3.

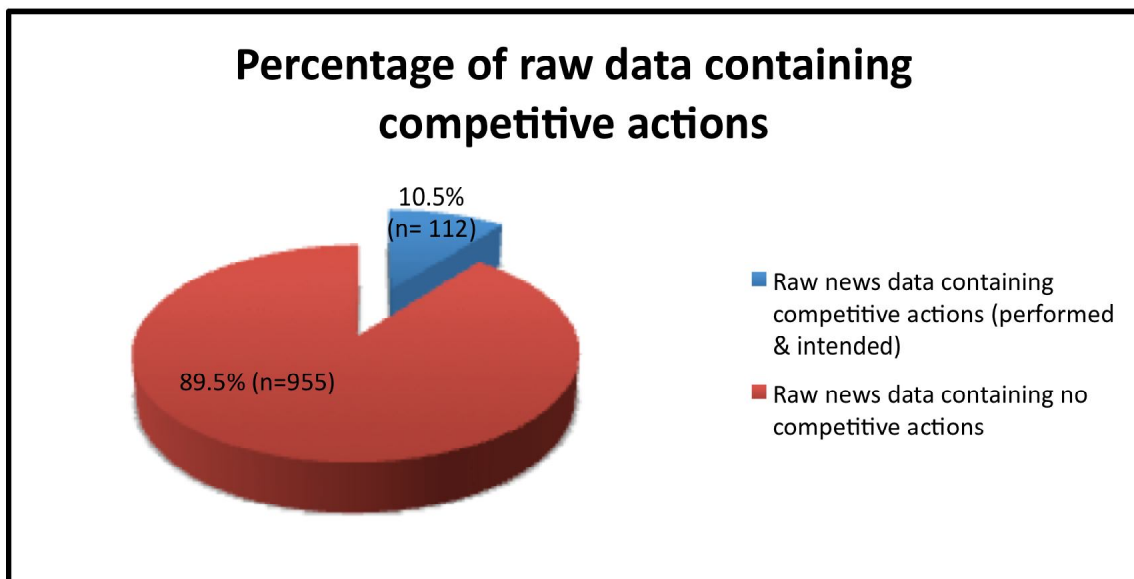


Figure 2. Percentage of Raw Data Containing Competitive Actions.

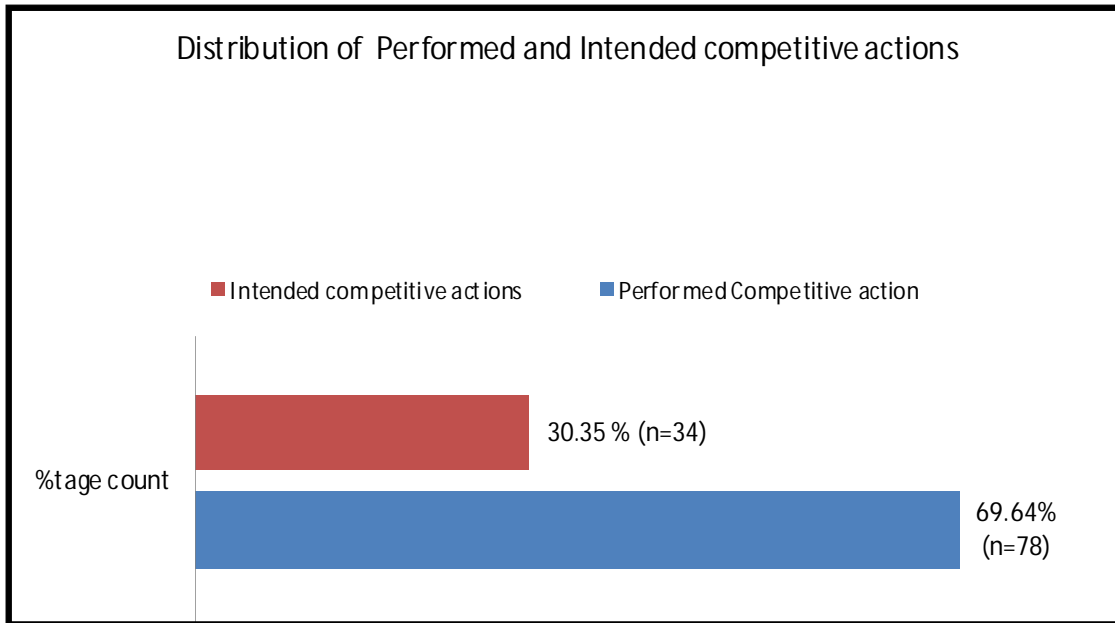


Figure 3. The Frequency Distribution of Performed and Intended Competitive Actions

Observing the representation of all three firms under study in the categories of performed, intended and overall competitive actions isolated from the raw data set, it can be seen in Figure 4, that Turkcell had very high visibility in the industry accounting for 65.4% of all performed actions, 64.7% of all intended competitive actions and 65% of all performed and intended competitive action types. Turkcell is followed in visibility by Vodafone which recorded 19.2%, 20.5% and 19.6% visibility while Avea accounts for the remainder of all three categories of actions mentioned. This result is not surprising as elsewhere, Nokelainen, (2010) had mentioned that bigger firms always attracted more coverage by media organizations, while smaller firms attracted lesser coverage. If this is to hold true, then the distribution of competitive actions in the data retrieved for Turkcell, Vodafone and Avea, is a mirror confirmation of the validity and reliability of the collection process. Also, while this may hold other consequences for further research with regard to interpreting the results as well as generalizing findings, it is a trend that will be continually observed in similar studies in competitive dynamics in the years to come.

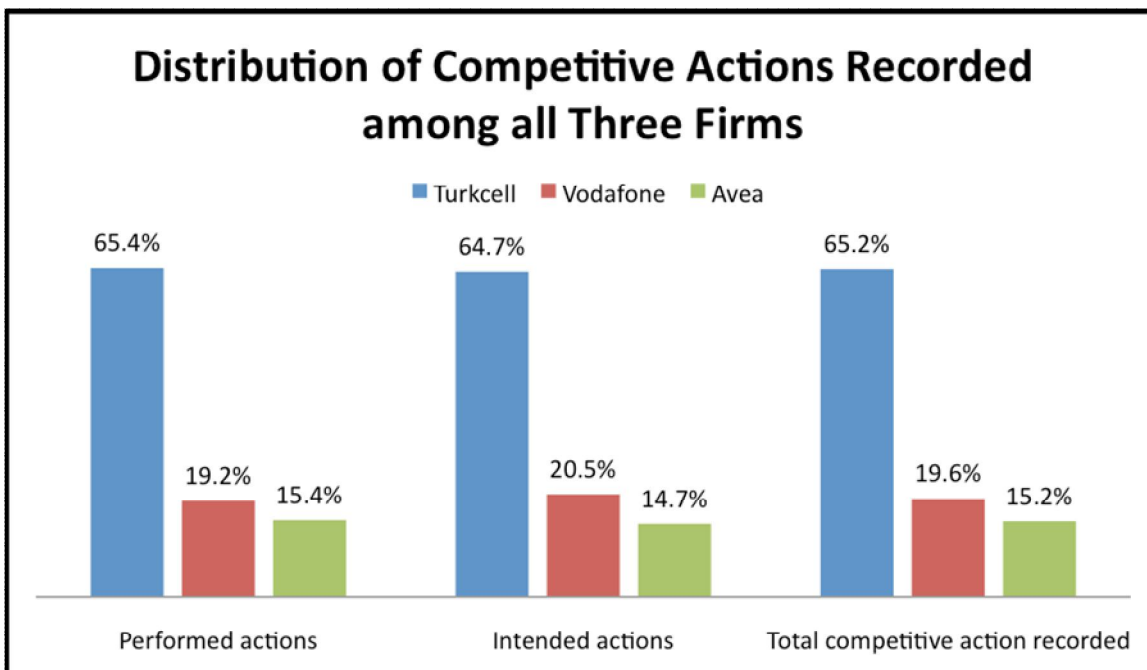


Figure 4. The Company-based Distribution of Competitive Actions Observed

3.2.1 The Mobile Telecommunications Network Operating Industry Specific Actions

It will be recalled that during an earlier analysis on the conceptual aspects of competitive actions as well as response (Nokolainen, 2010), it was observed that various schools of thoughts were of the opinion that intended actions even though they have not been performed yet, are possible actions firms consider using. Thus to provide answers to research question one, Table 1 below is a combined listing of both performed and intended action types recorded for all three companies. In line with competitive dynamics research tradition (Ferrier et al 1999, Nokelainen, 2010), these combined actions recorded for the three largest Turkish mobile telecommunications service providing operators who control over 90% of the industry are representative of the competitive action types peculiar to the industry.

Table 1. Industry-specific Actions in the Turkish Mobile Telecommunications Network Operating Industry

Number	Specific Action Carried Out (TcP)*
1	Convene dispute resolving shareholder's meeting
2	Sue a rival mobile service providing firm
3	Introduce cloud services for SMEs
4	Sign international loan deals (2- #20,
5	Lower mobile telephony rates
6	Launch new card-based payment system
7	Defend competitive activities
8	Introduce faster internet service
9	Introduce system for calculating client- mobile usage
10	Increase infrastructural investment
11	Launch new smart phone
12	Expand into Europe
13	Launch a mobile diet application
14	Open new call centers
15	Invest in 3G technology/infrastructure
16	Appoint a new chairman
17	Launch portable mobile battery chargers
18	Revamp sales centers
19	Launch 3G network
20	Sign loan deals
21	Offer special packages to SMEs
22	Offer 3G iPhones to customers
23	Open new technology center
24	Sue Iranian government over licensing
25	Pick up 3G license
26	Launch new palm phone
27	Increase school campaigns
28	Choose Zenulta's program
29	Bid for control of foreign telecom company
30	Collaborate with a hardware company to expand wireless infrastructure
31	Offer secure mobile signatures to all customers
32	Introduce blackberry pearl services
33	Collaborative action to integrate Sim cards in laptops
34	Sign partnership deal to offer cheaper flight on partner airline
35	Appoint a new CEO
36	Sign a deal to supply local content to MTV
37	Sign distribution deal for warner bros media production
38	Pull out from Egypt tender
39	Sign deal to distribute EMI media products

40	Approve new board of directors
41	Participate in bid for Egypt's telecom company
42	Postpone annual general meeting
43	Increase investment in a credit company
44	Sue foreign government
45	Appeal to foreign government to save investment
46	Deny knowledge of being barred from Iranian mobile contract
47	Sign loan deal
48	Pioneer technology for speeding up mobile data transfer and internet connection
49	Sign deal to enable roaming in open seas
50	Set up new company to provide long distance call services
51	Sign foreign loan deal
Number	Specific Action Intended (TcI)*
52	Interested in acquiring Bulgaria's Vivacom
53	Seek ways to enter Libya and Somalia
54	Plan to hold dispute resolution general assembly
55	Collaborate with university to open enterprise factory
56	Plan to introduce cheaper smart phone to boost web use
57	Plan to introduce mobile card in collaboration with yapikredi
58	Plan to expand into financial services with mobile wallet
59	Consider buying stake in Zain
60	May acquire assets in nearby markets to grow
61	Subsidiary plans to make new investments
62	Preparing to launch a tender for 3G mobile phone licenses
63	Plans to sell iPhones from September 26th
64	THY and Turkcell to collaborate on a campaign to raise quality of services offered.
65	Plan to buy major stake in Belarusian company
66	May enter the Belarusian market
67	May buy phone company in Eastern Europe
68	Signals further acquisitions
69	Plans to bid for majority stake in Syriatel
70	Files application to take over companies in Iraq and Kuwait
71	Interested in purchasing Greece's TM Hellas mobile company
72	Show intention to subsidize handsets, if its rivals do
73	Still interested in investing in Iran, but must convince banks
Number	Specific Action Carried Out (VfP)*
74	Cuts sales target on weak European market
75	Acquires local company
76	Launches technical aid package in Turkey
77	Launches woman act in technology
78	Unveils touchscreen shop windows
79	Offers cellphones for 1TL
80	Cooperates with Pegasus airlines
81	Launches Spiga in Turkey
82	Acquires Borusan Telecom
83	Launches 'farmer's club'
84	Launches foundation in Turkey
85	Cooperates with Arcelik
86	Vodafone completes purchase of Telsim

87	Unveils new organizational structure
88	Vodafone makes payment for Purchase of Telsim
Number	Specific Action Intended (VfI)*
89	Intends to buy out Koc.net
90	Plans to introduce 3G technology in 81 cities
91	Intends to form partnership with T-Mobile
92	Plans to replace its CEO
93	Plans to acquire KKTC Telsim
94	Offers to buy Oksijen (Oxygen) Technologies
95	Plans to offer high class services
Number	Specific Action Carried Out (AvP)*
96	Opens 14 branches in Kahramanmaraş & Gaziantep
97	Invites Anatolian SMEs to its technology center
98	Opens a new support center for enterprises
99	Opened a new 60m Lira R&D Centre in Istanbul
100	Partners with IDU (an Istanbul ferry operator)
101	Starts joint campaign with THY to offer Fly Miles and call minutes to customers.
102	In collaboration with a foundation hands out cash prizes to young entrepreneurs.
103	Launches 3G technology
104	Provides Mobile TV service
105	Opens call center in Erzincan
106	Cuts prices
107	Signs deal with Ericson to extend its radio and main network.
Number	Specific Action Intended (AvI)*
108	Plans to invest 60m Lira in R&D
109	No intentions to offer IPO before 2009
110	Plans to invest \$200m in infrastructure in 2007
111	Plans to offer IPO in two years
112	Plans to Invest \$300million in the current year

A table listing all competitive actions discovered within the Turkish mobile telecommunications network providing industry. *(TcP, VfP and AvP= Performed actions carried out by Turkcell A.S, Vodafone Turkey and Avea A.S respectively. While TcI, VfI and AvI= Intended actions carried out by Turkcell A.S, Vodafone Turkey and Avea A.S respectively)

The 112 competitive action types listed in the table above is by its nature peculiar to the mobile service providing industry and differ from competitive action types isolated in previous literature. As stated earlier on previous studies on competitive dynamics, have focused their attention on a select number of industries of which the Aviation and Automobile industries saw the highest concentration of studies. These were also carried out almost exclusively in the developed nations of the world. Thus leaving literature with a gapping gap in dire need of empirical evidence from other industries as well as from other geographic regions as well especially one from the rising BRICS or CIVETS emerging economies of the world. Thus the 112 action types isolated from this study serves not only as an answer to the major research question of this research article, but more importantly serves to contribute to bridging the gap in literature.

However, presenting the actions by themselves provides one with very minimal information about their nature as well as their role in the competitive interaction among firms in the mobile telecommunications service providing industry, thus in the next table, the industry specific action types presented above are reintroduced, but this time alongside the domain and sub-domains within which each performed or intended action falls. This not only gives the isolated competitive actions more clarity but also continues the competitive dynamics tradition.

The categorization of the isolated industry specific action types into domains and later on sub-domains was inspired by previous researchers but most importantly by the work of Offstein and Gnyawali (2005), whose domain categorization principle is adopted and utilized here. A domain shows the managerial or functional department or class to which each action type falls while sub-domains give the reader an idea of the exact action a competitive action represents. For instance, while 'Marketing' is a functional domain and may appear to mean a lot of different actions; the sub-domain 'New product introduction' on the other hand clarifies the exact action it is within the marketing domain.

Thus the table below presents a more detailed version of the Industry specific actions recorded and the domains and sub-domains of each action.

Table 2. Domains and Sub-domains of Industry-Specific Actions Isolated

Number	Specific Action Carried Out (TcP)	Action Domain	Action Sub-domain
1	Convene dispute resolving shareholder's meeting	Corporate	(Governance)
2	Sue a rival mobile service providing firm	Legal	(Legal action)
3	Introduce new services (for SMEs)	Marketing	(New product)
4	Sign international loan deals	Financial	(Take credit facility)
5	Lower mobile telephony rates (cut prices)	Marketing	(Price-cut)
6	Launch new card-based payment system	Marketing	(New product)
7	Defend competitive activities (at competition court)	Legal	(Legal defense)
8	Introduce faster internet service	Marketing	(New product)
9	Introduce system for calculating client- mobile usage	Technology	(Novel technology adoption)
10	Increase infrastructural investment	Financial	(Investment action)
11	Launch new smart phone	Marketing	(New product)
12	Expand into Europe	Corporate	(Regional expansion)
13	Launch a mobile diet application	Marketing	(New product)
14	Open new call centers	Corporate	(National expansion)
15	Invest in 3G technology/infrastructure	Financial	(Investment action)
16	Appoint a new chairman	Corporate	(governance)
17	Launch portable mobile battery chargers	Marketing	(New product)
18	Revamp sales centers	Marketing	(place/distribution network)
19	Launch 3G network	Marketing	(New product)
20	Sign loan deals	Financial	(Take credit facility)
21	Offer special packages to SMEs	Marketing	(Promotion)
22	Offer 3G I-Phones to customers	Marketing	(New product)
23	Open new technology center	R&D	(R&D expansion)
24	Sue Iranian government over licensing	Legal	(Legal action)
25	Pick up 3G license	Regulatory Agency Approval	(Obtain service license)
26	Launch new palm phone	Marketing	(New product)
27	Increase school campaigns	Marketing	(Promotion)
28	Choose Zenulta's program	Technology	(Novel technology adoption)
29	Bid for control of foreign telecom company	Legal	(Lobbying)
30	Collaborate with a hardware company to expand wireless infrastructure	Corporate	(Alliance)
31	Offer secure mobile signatures to all customers	Marketing	(New product)
32	Introduce blackberry pearl services	Marketing	(New product)
33	Collaborative action to integrate Sim cards in laptops	Corporate	(Alliance)
34	Sign partnership deal to offer cheaper flight on partner airline	Corporate	(Alliance)
35	Appoint a new CEO	Management/Human resources	(Strategic recruitment action)
36	Sign a deal to supply local content to MTV	Corporate	(Alliance)
37	Sign distribution deal for warner bros media production	Corporate	(Alliance)
38	Pull out from Egypt tender	Legal	(Lobbying)
39	Sign deal to distribute EMI media products	Corporate	(Alliance)
40	Approve new board of directors	Corporate	(governance)

41	Participate in bid for Egypt's telecom company	Legal	(Lobbying)
42	Postpone annual general meeting	Corporate	(Governance)
43	Increase investment in a credit company	Financial	(Investment action)
44	Sue foreign government	Legal	(Legal action)
45	Appeal to foreign government to save investment	Legal	(Lobbying)
46	Deny knowledge of being barred from Iranian mobile contract	Marketing	(Public Relations)
47	Sign loan deal	Financial	(Take credit facility)
48	Pioneer technology for speeding up mobile data transfer and internet connection	Technology	(Develop novel technology)
49	Sign deal to enable roaming in open seas	Corporate Marketing	Alliance New Product
50	Set up new company to provide long distance call services	Corporate	(Vertical integration)
51	Sign foreign loan deal	Financial	Obtain credit facility
Number	Specific Action Intended (TcI)		
52	Interested in acquiring Bulgaria's Vivacom	Corporate	(Intra-industry acquisition-horizontal integration)
53	Seek ways to enter Libya and Somalia	Corporate	(Regional expansion)
54	Plan to hold dispute resolution general assembly	Corporate	(governance)
55	Collaborate with university to open enterprise factory	Corporate	(alliance)
56	Plan to introduce cheaper smart phone to boost web use	Marketing	(New product)
57	Plan to introduce mobile card in collaboration with yapikredi	Corporate Marketing	Alliance New Product
58	Plan to expand into financial services with mobile wallet	Corporate	(product segment diversification)
59	Consider buying stake in Zain	Corporate	(Intra-industry acquisition-horizontal integration)
60	May acquire assets in nearby markets to grow	Corporate	(Intra-industry acquisition-horizontal integration)
61	Subsidiary plans to make new investments	Financial	Investment actions
62	Preparing to launch a tender for 3G mobile phone licenses	Legal	(Lobbying)
63	Plans to sell iPhones from September 26 th	Marketing	(New product)
64	THY and Turkcell to collaborate on a campaign to raise quality of services offered.	Corporate	(alliance)
65	Plan to buy major stake in Belarusian company	Corporate	(Intra-industry acquisition-horizontal integration)
66	May enter the Belarusian market	Corporate	(Regional expansion)
67	May buy phone company in Eastern Europe	Corporate	(vertical integration)
68	Signals further acquisitions	Corporate	vertical & horizontal integration
69	Plans to bid for majority stake in Syriatel	Legal	(Lobbying)
70	Files application to take over companies in Iraq and Kuwait	Legal	(Lobbying)
71	Interested in purchasing Greece's TM Hellas mobile company	Corporate	(Intra-industry acquisition-horizontal integration)
72	Show intention to subsidize handsets, if its rivals do	Marketing	(Price-cut)
73	Still interested in investing in Iran, but must convince banks	Corporate	(regional expansion)
Number	Specific Action Carried Out (VfP)		
74	Cuts sales target on weak European market	Marketing	(Public Relations)
75	Acquires local company	Corporate	(Intra-industry acquisition-horizontal integration)
76	Launches technical aid package in Turkey	Marketing	(New product)
77	Launches woman act in technology	Marketing	(Public relations)
78	Unveils touchscreen shop windows	Technology	Novel technology adoption
79	Offers cellphones for 1TL	Marketing	(New product)
80	Cooperates with Pegasus airlines	Corporate	(alliance)

81	Launches Spiga in Turkey	Marketing	(New product)
82	Acquires Borusan Telecom	Corporate	(Intra-industry acquisition-horizontal integration)
83	Launches 'farmer's club'	Marketing	(New product)
84	Launches foundation in Turkey	Corporate	(social responsibility)
85	Cooperates with Arcelik	Corporate	(alliance)
86	Vodafone completes purchase of Telsim	Corporate	(Intra-industry acquisition-horizontal integration)
87	Unveils new organizational structure	Corporate	(organizational restructuring)
88	Vodafone makes payment for Purchase of Telsim	Corporate	(Intra-industry acquisition-horizontal integration)
Number	Specific Action Intended (VfI)		
89	Intends to buy out Koc.net	Corporate	(vertical integration)
90	Plans to introduce 3G technology in 81 cities	Marketing	(New product)
91	Intends to form partnership with T-Mobile	Corporate	(Alliance)
92	Plans to replace its CEO	Management /Human resources	Strategic recruitment action
93	Plans to acquire KKTC Telsim	Corporate	(Intra-industry acquisition-horizontal integration)
94	Offers to buy Oksijen (Oxygen) Technologies	Corporate	(Vertical integration)
95	Plans to offer high class services	Marketing	(Product improvement)
Number	Specific Action Carried Out (AvP)		
96	Opens 14 branches in Kahramanmaraş& Gaziantep	Corporate	(National expansion)
97	Invites Anatolian SMEs to its technology center	Marketing	(Public relations)
98	Opens a new support center for enterprises	Marketing	(New product)
99	Opened a new 60m Lira R&D Centre in Istanbul	R&D Financial	R&D Expansion Investment
100	Partners with IDU (an Istanbul ferry operator)	Corporate	(Alliance)
101	Starts joint campaign with THY to offer Fly Miles and call minutes to customers.	Corporate Marketing	Alliance Promotion
102	In collaboration with a foundation hands out cash prizes to young entrepreneurs.	Corporate)	Alliance Social responsibility
103	Launches 3G technology	Marketing	(New product)
104	Provides Mobile TV service	Marketing	(New product)
105	Opens call center in Erzincan	Corporate	(national expansion)
106	Cuts prices	Marketing	(price-cut)
107	Signs deal with Ericson to extend its radio and main network.	Corporate	(Alliance)
Number	Specific Action Intended (AvI)		
108	Plans to invest 60m Lira in R&D	R&D Financial	R&D Expansion Investment
109	No intentions to offer IPO before 2009	Financial	(Go public)
110	Plans to invest \$200m in infrastructure in 2007	Financial	(Investment action)
111	Plans to offer IPO in two years	Financial	(Go public)
112	Plans to Invest \$300million in the current year	Financial	(Investment action)

A table listing all domains and sub-domains of actions discovered within the Turkish mobile telecommunications network providing industry.

3.2.2 Domains of the Industry Specific Actions

While the table above may appear overwhelming, the contents have been qualitatively crunched down and reduced to present the most significant information and to glean the most important information the various domains and sub-domains offer insight into. Both domains and sub-domains of action will be studied, described and interpreted qualitatively in the following pages, in this section we would look at the industry specific domains of action from an industry wide perspective and then from a company based perspective.

Table 3. Domains of the Industry Specific Actions Isolated

Industry Specific Action Domains (n=119)

	Frequency	Percent	Valid Percent	Cumulative Percent
Corporate	49	41.2	41.2	41.2
Legal	11	9.2	9.2	50.4
Marketing	35	29.4	29.4	79.8
Financial	14	11.8	11.8	91.6
Valid Technology	4	3.4	3.4	95.0
RegulatoryAgencyApproval	1	.8	.8	95.8
Management	2	1.7	1.7	97.5
R&D	3	2.5	2.5	100.0
Total	119	100.0	100.0	

A table listing all domains of competitive actions discovered within the Turkish mobile telecommunications network providing industry.

The table above shows that of the total 112 industry specific action types isolated for the mobile telecommunications service providing industry 8 distinct domains of action were isolated. These domains include Corporate, Legal, Marketing, Financial, Technology, Regulatory Agency Approval, Management and R&D. In Fig 5 below, the frequency distribution for these action domains are clear. The chart shows that among all the industry specific action types isolated, actions within the Corporate domain were more frequent albeit, prominent and followed in order by Marketing, Financial, Legal, Technology, R&D, Management and Regulatory Agency Approval.

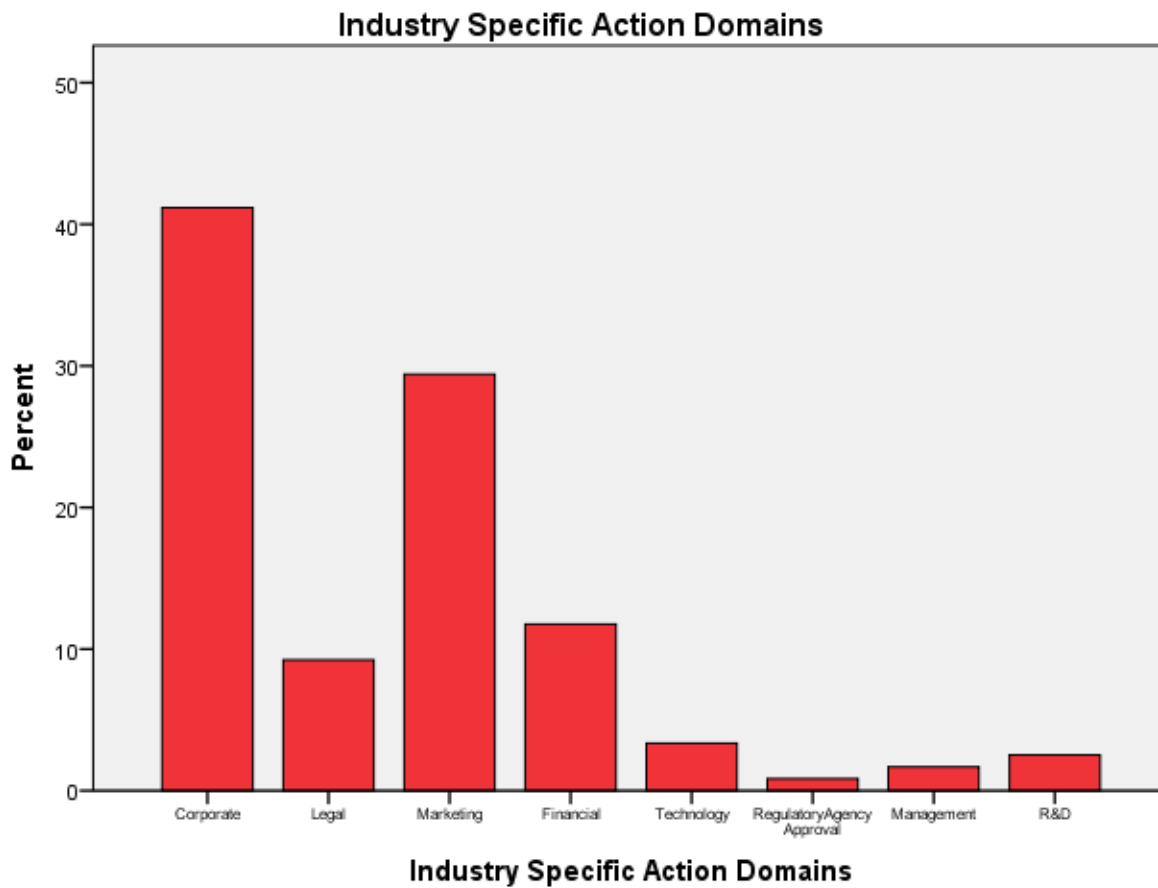


Figure 5. Graphical Representation of the Domains of Action Isolated

3.2.3 Sub-domains of the Industry Specific Actions

As mentioned earlier the sub-domains of actions gives clarity to the mature of actions within a domain of action and that said, in the following table, reviewing the Industry-specific action isolated long with its attendant domain of action, 26 distinct sub-domain categories were isolated while 119 sub-domain occurrences were recorded for the 112 industry specific action types. The extra 7 sub-domains occurrences recorded were as a result of the dual nature of some actions. This is in line with trends in competitive dynamics research. Offsteing and Gnyawali (2005) note that an action may be valid for representation in more than one sub-domain. Below is the frequency distribution for the Industry-Specific sub-domains for each of the 112 industry specific action types isolated for the industry.

Table 4. Sub-domains of the Industry Specific Actions Isolated

Industry Specific Sub-domain of Action		Frequency	Percent	Valid Percent	Cumulative Percent
	Corporate governance	5	4.2	4.2	4.2
	Regional Expansion	4	3.4	3.4	7.6
	National Expansion	3	2.5	2.5	10.1
	Corporate Alliance	17	14.3	14.3	24.4
	Vertical Integration	5	4.2	4.2	28.6
	Horizontal Integration	11	9.2	9.2	37.8
	Product Segment	1	.8	.8	38.7
	Corporate Social Responsibility	2	1.7	1.7	40.3
	Organizational Restructuring	1	.8	.8	41.2
	Legal Action	3	2.5	2.5	43.7
	Legal Defense	1	.8	.8	44.5
	Lobbying	7	5.9	5.9	50.4
Valid	New Product Introduction	23	19.3	19.3	69.7
	Distribution	1	.8	.8	70.6
	Promotion	3	2.5	2.5	73.1
	Public Relations	4	3.4	3.4	76.5
	Price Cut	3	2.5	2.5	79.0
	Product Improvement	1	.8	.8	79.8
	Take Credit Facility	4	3.4	3.4	83.2
	Investment Action	8	6.7	6.7	89.9
	Go Public -IPOs	2	1.7	1.7	91.6
	New Technology Adoption	3	2.5	2.5	94.1
	New Technology Innovation	1	.8	.8	95.0
	Obtain Service Licence	1	.8	.8	95.8
	Strategic Managerial Recruitment	2	1.7	1.7	97.5
	R&D Expansion	3	2.5	2.5	100.0
Total	119	100.0	100.0		

A table listing all sub-domains of competitive actions discovered within the Turkish mobile telecommunications network providing industry

In the figure below the distribution of industry specific sub-domains of actions for the isolated competitive action types for the industry as a whole can be clearly seen.

It can be seen that within the Turkish mobile telecommunications service providing industry, new product introductions were the most frequent, visible and prominent sub-domain of action. In other words, industry specific action types falling within the new product introductions sub-domain category are some of the action types most commonly and frequently used in the

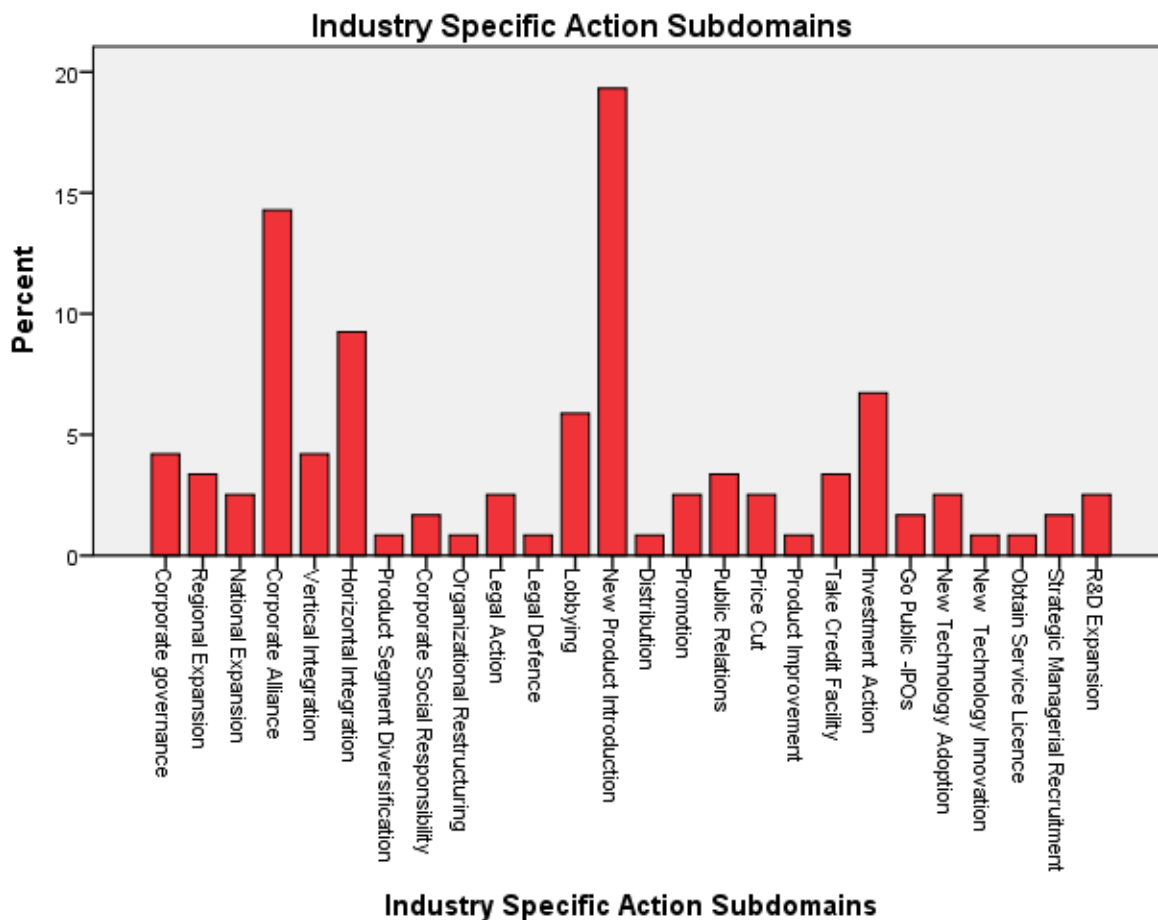


Figure 6. Sub-domains of the Industry Specific Actions Isolated.

3.2.4 Intra-domains Distribution of Actions Domains

In trying to understand the industry specific action types unique to the Turkish mobile telecommunications service providing industry, the analysis progressed from the specific industry types initially isolated in this thesis, to making more sense of the action types through the use of domain and sub-domains. However, more insight into the distribution of sub-domains within the domains themselves will not only shed more light on how sub-domains pair up with domains, but how their occurrence is distributed within a domain. Knowledge of which, for instance may enable accurate prediction of the action sub-domain likely to be carried out once the domain is known. The table below describes the occurrence of sub-domains of action for the domain ‘corporate’.

Table 5: Corporate Actions

	Frequency	Percent	Valid Percent	Cumulative Percent
Corporate governance	5	10.2	10.2	10.2
Regional Expansion	4	8.2	8.2	18.4
National Expansion	3	6.1	6.1	24.5
Corporate Alliance	17	34.7	34.7	59.2
Vertical Integration	5	10.2	10.2	69.4
Horizontal Integration	11	22.4	22.4	91.8
Valid Product Segment Diversification	1	2.0	2.0	93.9
Corporate Social Responsibility	2	4.1	4.1	98.0
Organizational Restructuring	1	2.0	2.0	100.0
Total	49	100.0	100.0	

A table listing all sub-domains of competitive actions, which constitute ‘Corporate Actions’, isolated within the Turkish mobile telecommunications network providing industry

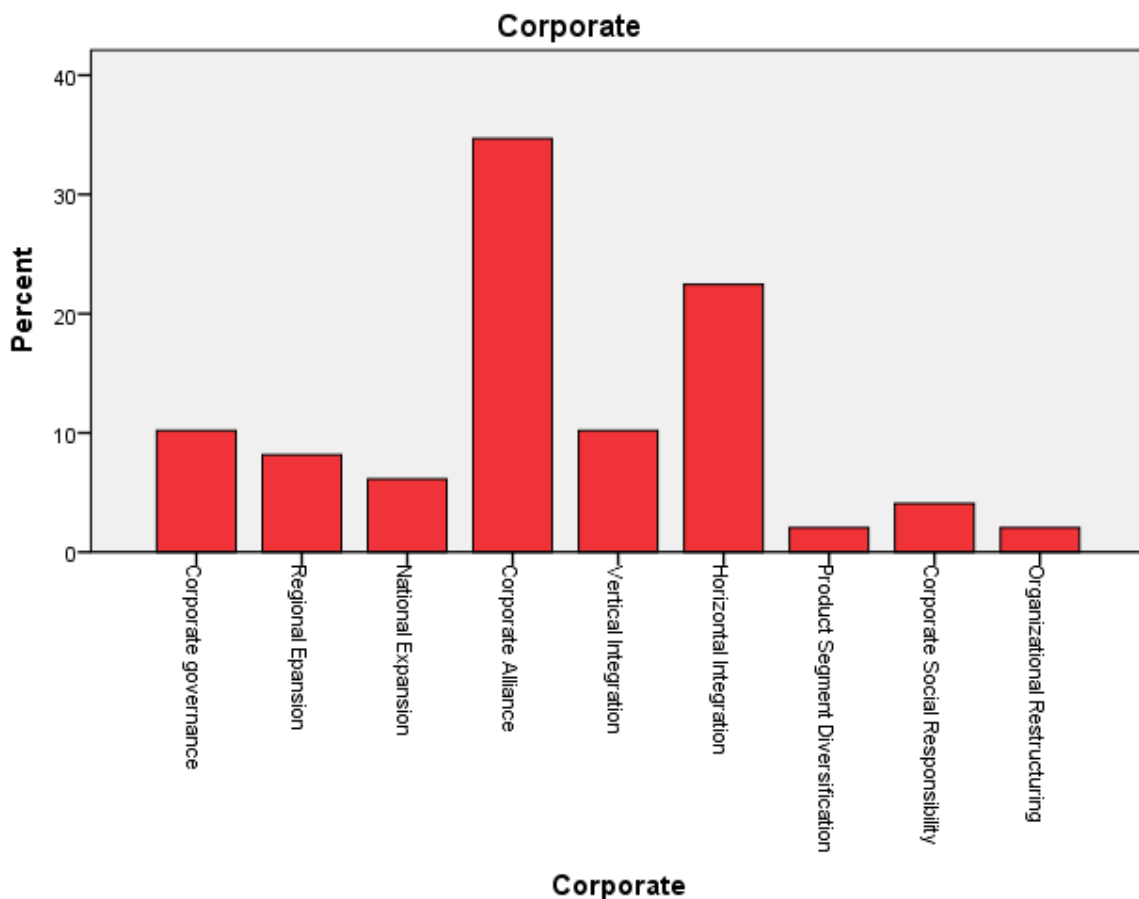


Figure 7. Frequency of Corporate Action Sub-domains Isolated.

From the figure above, it can be observed that for the corporate action domain, on an industry wide level, the most prominent sub-domain of action likely to occur is ‘corporate alliance’, followed closely by horizontal integration, vertical integration and corporate governance.

ii) Financial Actions

As in the corporate domain, an understanding of the intra-domain dynamics of the financial domain can not only help the reader or academic understand the distribution of sub-domain within this domain in the Turkish mobile telecommunications service providing industry, but can also serve predictive purposes to different stakeholder.

Table 6: Financial Actions

Financial Actions		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Take Credit Facility	4	28.6	28.6	28.6
	Investment Action	8	57.1	57.1	85.7
	Go Public-IPOs	2	14.3	14.3	100.0
	Total	14	100.0	100.0	

A table listing all sub-domains of competitive actions, which constitute ‘Financial Actions’, isolated within the Turkish mobile telecommunications network providing industry

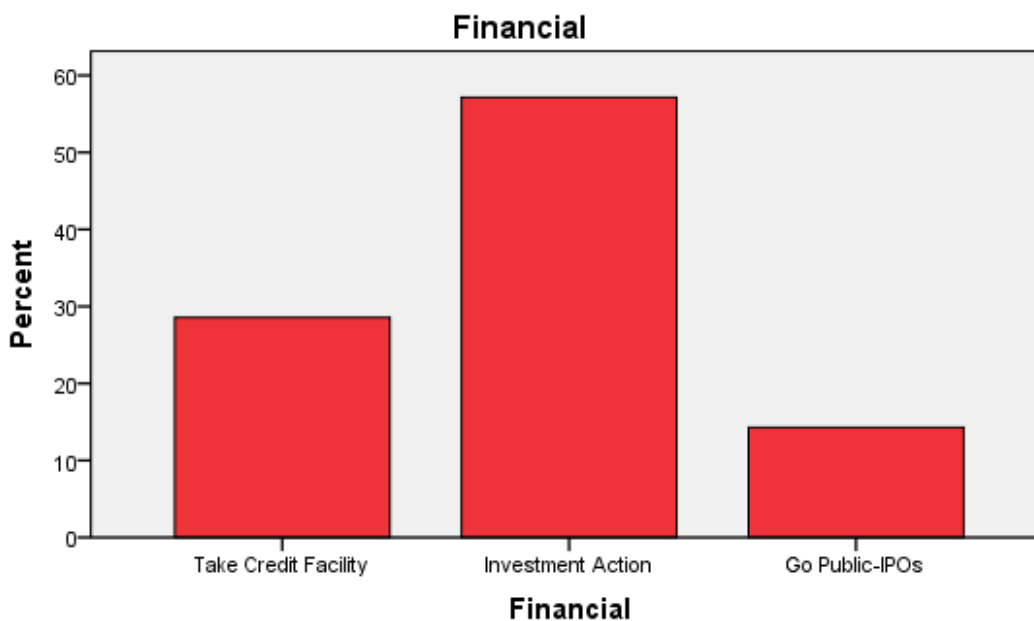


Figure 8. Frequency of Financial Action Sub-domains Isolated.

The figure above clearly shows that ‘investment action’ is the most predominant sub-domain of action within the financial domain of action. This is closely followed by loan and credit facilitation.

iii) Legal Actions

Legal action, defense and lobbying are the three sub-domains of action which make up the Legal domain of action, The table and chart below shows that the most frequent actions players in the Turkish mobile telecommunications service providing industry take is geared towards lobbying different stakeholders while the next most prominent action is taking legal action against rivals, governments or individuals. This is clearly depicted in table 7 and figure 9 below.

Table 7: Legal Actions

Legal Actions		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Legal Action	3	27.3	27.3	27.3
	Legal Defence	1	9.1	9.1	36.4
	Lobbying	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

A table listing all sub-domains of competitive actions, which constitute ‘Legal Actions’, isolated within the Turkish mobile telecommunications network providing industry

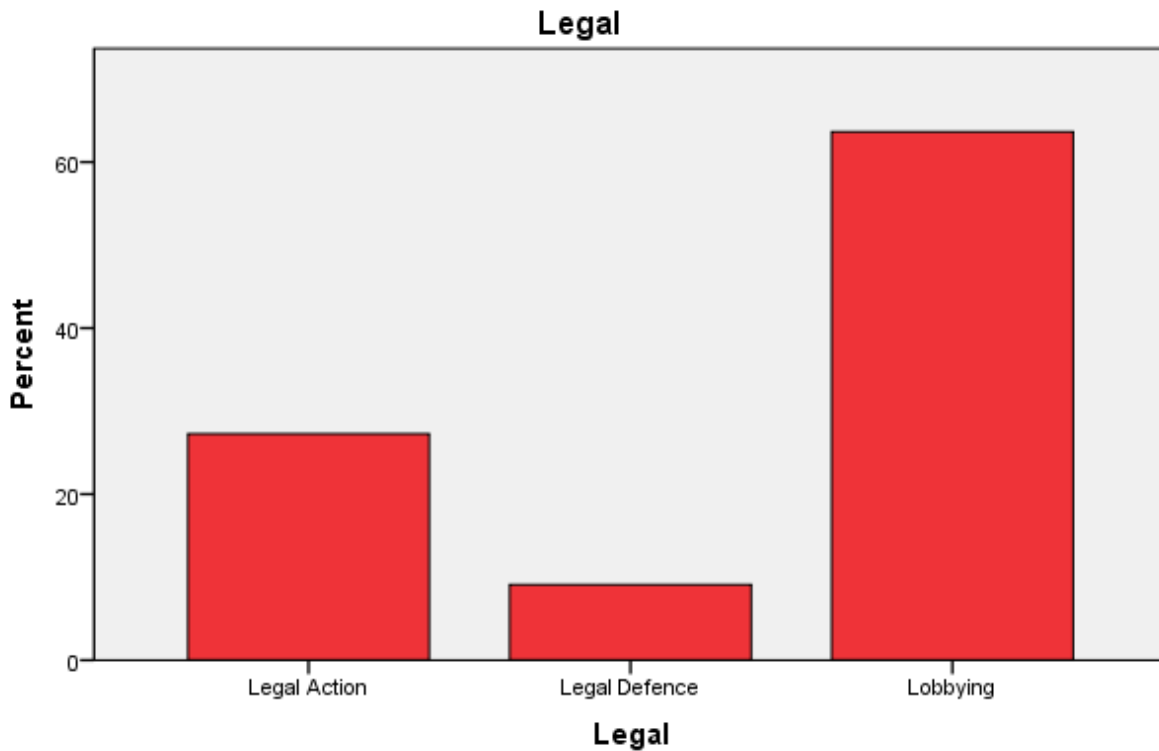


Figure 9. Frequency of Legal Action Sub-domains Isolated.

iv) Marketing Actions

In the competitive interaction process within the Turkish mobile telecommunication industry among all sub-domains within the marketing domain of action, New product introduction accounts for above 65% of all such actions followed in the distance by Public relations which accounted for a little above 11% of all actions within the Marketing action domain. Table 8 and Figure 10 are visual representations of these facts.

Table 8: Marketing Actions

	Frequency	Percent	Valid Percent	Cumulative Percent
New Product Introduction	23	65.7	65.7	65.7
Distribution	1	2.9	2.9	68.6
Promotion	3	8.6	8.6	77.1
Valid Public Relation	4	11.4	11.4	88.6
Price-Cut	3	8.6	8.6	97.1
Product Improvement	1	2.9	2.9	100.0
Total	35	100.0	100.0	

A table listing all sub-domains of competitive actions, which constitute ‘Marketing Actions’, isolated within the Turkish mobile telecommunications network providing industry

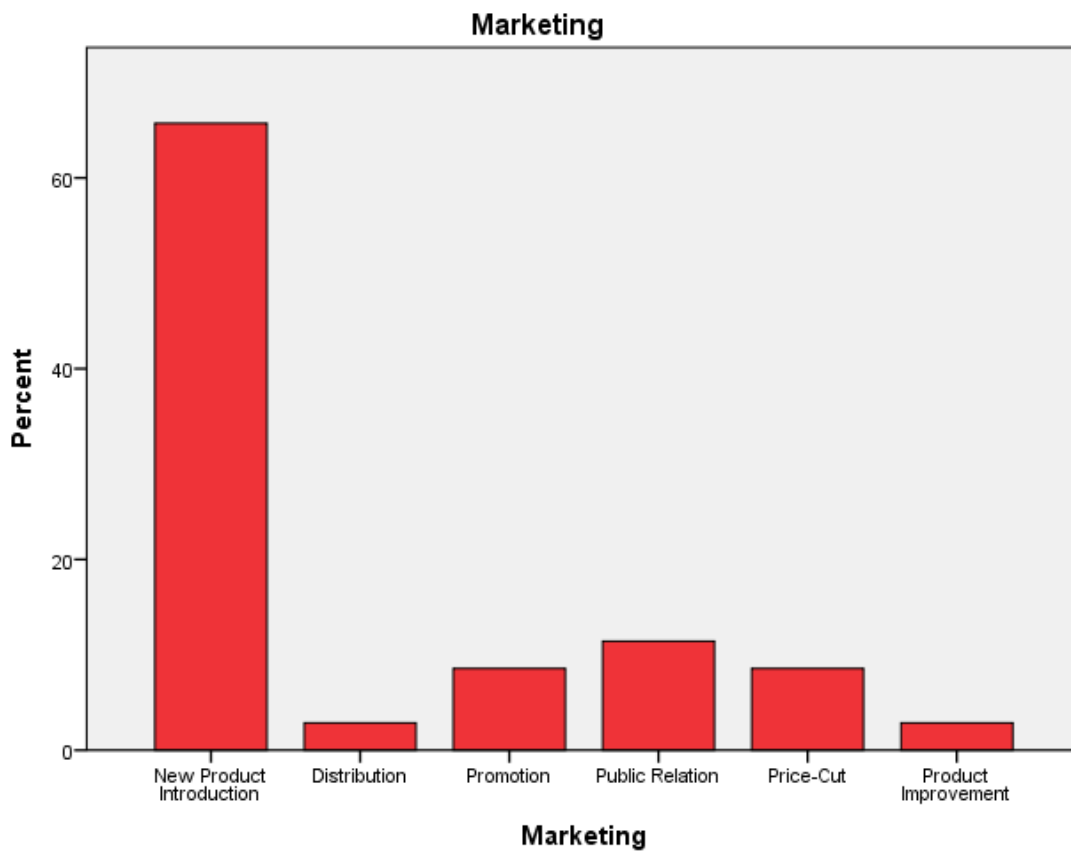


Figure 10. Frequency of Marketing Action Sub-domains Isolated.

v) Technology

The Mobile telecommunications service providing industry and others of its nature are driven by dynamic technological innovations and skills which may be fundamental to the success or demise of a firm. Understanding the pattern of competition on the technology front in any industry is pivotal to the growth and expansion of that industry. In the table below New technology adoption is shown to be the most frequent action sub-domain within the financial domain.

Table 9: Technological Actions

	Frequency	Percent	Valid Percent	Cumulative Percent
New Technology Adoption	3	75.0	75.0	75.0
Valid New Technology Innovation	1	25.0	25.0	100.0
Total	4	100.0	100.0	

A table listing all sub-domains of competitive actions, which constitute ‘Technological Actions’, isolated within the Turkish mobile telecommunications network providing industry.

4. Summary of Findings

This study provides insight into the competitive dynamics of the Turkish Mobile Telecommunications Operating industry in light of the research questions posed earlier. With regard to the first research question which sought to understand the variety of competitive actions within the industry, findings from this study were able to isolate 112 competitive actions specific to the industry. These action types were then further classified into 8 functional domains and 26 sub-domains. With regard to the second research question which sought to understand the predominant action types within the industry, findings showed that of all the competitive actions isolated during the analysis, competitive action types which fall within the corporate action domain were the predominant action types within the industry accounting for about (41%) of all action types recorded.

Actions belonging to the Marketing domain were the second most predominant actions accounting for (29%) of all action types isolated, while Financial actions were the third most predominant action domain accounting for 11% of all action types isolated.

With regard to the sub-domains of action, New product introductions was the most predominant action sub-domain witnessed, accounting for 19.3% of all action types closely followed by Corporate alliance actions which accounted for 14.3%, and Horizontal integration actions which accounted for 9.2% of all action types recorded.

Also to provide a more cellular perspective of the predominant type of competitive action type carried out within each action domain, the study presented the intra-domains of competitive actions. In other words to gain insight into the action types likely to be carried out at each functional unit of organizations within the industry, the research delved even deeper within the 8 core action domains isolated in the study to analyze the frequency within which each action sub-domain within each domain occurred. Due to the fact that Corporate, Financial, Legal, Marketing and Technology sub-domains of actions represented over 90% of all individual action types isolated, the study focused on highlighting the predominant action sub-domain within each of the 5 domains. Within the Corporate action domain, it was discovered that Corporate alliance actions were the most predominant actions, while Horizontal integration were the second most frequent action accounting for 34.7% and 22.4% of all corporate actions respectively. Of the Financial action domain, companies were more likely to carry out Investment actions followed by Credit facility acquisition both of which accounted for 57.1% and 28.6% of all financial actions carried out. Companies were also more likely to engage in Lobbying activities followed by taking legal action when it comes to the Legal domain of action both occurring 63.6% and 27.3% of the time respectively. New product introduction accounted for 65% of all marketing actions, while Public relation actions accounted for 11.4%. Within the Technology domain of action, New technology adoption accounted for 75% of all technology related actions taken.

5. Conclusion

Having set out to contribute to filling one of the most prominent gaps in the competitive dynamics literature, this study embarked on a mission to map the variety of competitive actions specific to the mobile telecommunications network providing industry, taking evidence from the Turkish industry. Adapting a qualitative research methodology, the study used content analytic procedures to study secondary data retrieved from publicly available news sources accessed through the LexisNexis database. Findings isolated 112 competitive actions specific to the industry. It was then discovered, that these actions were carried out within 8 key functional domains, which were of a nature that conformed to 26 sub-domains of action. The study further discovered that of all action types carried out within the industry, actions within the corporate domain were the most predominant. These findings not only contribute significantly to the competitive dynamics literature, they also have implications for practice as managers in the mobile telecommunications network operating industry are henceforth equipped with the necessary information with which to shape their competitive interaction strategies within the industry. However to effectively understand the competitive dynamics of this industry, further studies have to be carried out, especially with regard to understanding the speed with which competitive actions are responded to among competitors, the key resources necessary to initiate or respond to any of the actions identified in this study, factors affecting the observed distribution of action types among organizations within the industry and comparative studies to observe key geographic differences and similarities within the industry.

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