



## Commitment to the Internet in Fruits and Vegetables Small and Medium-sized Enterprises in Iran

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**Abstract** – This study carried out on 76 Iranian SMEs of active fruits and vegetables managers for showing that, whether commitment to the Internet has effect on (1) mean of entrepreneurial orientation; and (2) export performance. A questionnaire was used to collect data from respondents. Data were analyzed using statistical treatment. The findings indicate that small and medium sized exporter enterprises have significant difference in Internet using compared to the non-exporter and small and medium-sized enterprises with high committed to the Internet have better mean of entrepreneurial orientation and export performance too.

**Keywords** – Entrepreneurial Orientation, Export, Internet, SMEs.

### I. INTRODUCTION

The Internet is regarded as one of the extensive forms of communicating and the one with the great business potential worldwide [1]. Obra, Cámara, and Meléndez (2002) describe the Internet as an international computing system that enables firms to exchange information internally and communicate externally with other organizations [3]. Internet use, as a strategic business tool, puts the information revolution within reach of Small and Medium-sized Enterprises (SMEs) and gives these kinds of enterprises more opportunities to compete in today's fast-changing markets [4,5]. Internet, just like any of the most important Information and Communication Technologies, ICTs, can be an agent of change and organizational innovation as well as a key element for company operations. The Internet is flexible technology with many useful applications for companies [5]. The Internet is a relatively new technology for many SMEs, and all the more so in developing countries [6-8,5]. The analytical studies agree that, the Internet can be a factor that helps the performance of SMEs [5]. There are large number of studies concerning the role of Internet in international marketing and business activities [8-10,11], but there are few studies that have purely explored the specific relationship between Entrepreneurial Orientation (EO), export and Internet [12,11].

Ibeh and Young (2001) suggest that exporting is an entrepreneurial act and can be defined as the process by which individuals either on their own or inside organizations pursue export market opportunities regardless to the resources that they currently control or environmental disincentives which they face [14]. Exporting has increasingly become an important activity for many SMEs in recent years as a way of sustaining and ensuring their growth, profitability and survival [14].

It is a stylized fact that, on average, exporting firms perform better than non-exporting firms; in particular they tend to be more productive, more capital intensive, more innovative, and more efficient [15,16,17,18].

EO have become a central concept in the domain of entrepreneurship that has received a substantial amount of theoretical and empirical attention [12,3,11]. EO is a significant factor for a firm's success [19], some researchers found that SMEs with high EO are more likely to enter export markets than low-EO SMEs [20].

Throughout this paper, the entrepreneurial activities, called EO and is denoted by 'EO'. According to Wiklund et al., (2005), most researchers agree that EO is a combination of three dimensions: innovativeness, proactiveness and risk-taking. But Lumpkin and Dess (1996) expanded the EO model by adding the dimensions of autonomy, and competitive aggressiveness. Thus an EO is characterized by five key dimensions: innovativeness, risk taking, pro-activeness, competitive aggressiveness and autonomy [23,9,3].

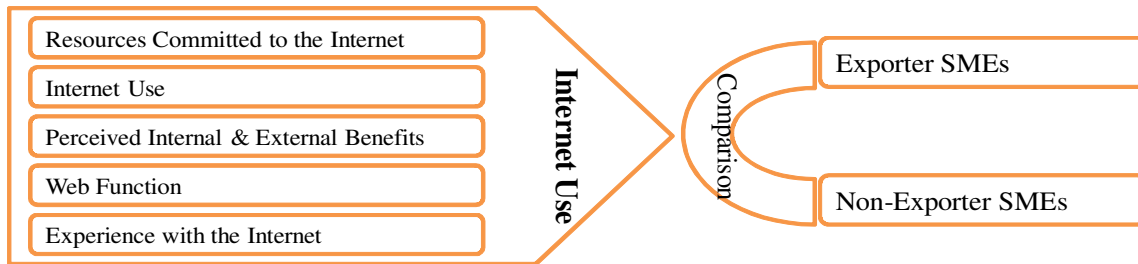
Falling trade barriers and innovations in Information and Communication Technology (ICT), particularly the widespread use of the Internet and e-commerce, have provided new opportunities for the internationalization of SMEs too [11]. Mostafa et al., (2006) show that firms with high EO are more committed to the Internet and have better export performance than firms with low EO [24]. So this paper investigated whether commitment to the Internet has effect on (1) mean of EO; and (2) export performance.

### II. MATERIALS AND METHODS

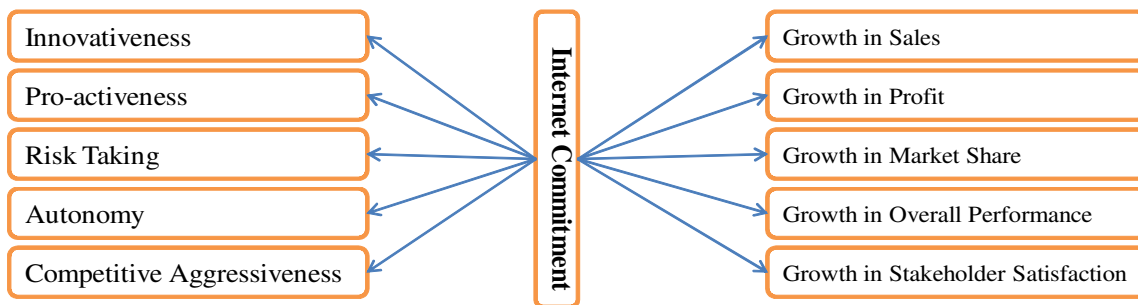
This study follows a quantitative research on 76 Iranian SMEs (44 exporters and 36 non-exporters) of active fruits and vegetables managers, in Tehran. Tehran province was studied; mainly because of the most recent formal national statistics published by Statistic Center of Iran (SCI) show that more than 27% of all SMEs in Iran are working in Tehran.

A questionnaire was used to collect data from respondents. Data were analyzed using statistical treatment using software package (SPSS). Based on the literature and exploratory interviews with SMEs [1], Internet commitment in SMEs is seen as having five dimensions; "resources committed to the Internet; Internet use; perceived internal and external benefits; Web function and experience with the Internet". We used a developed questionnaire about EO and Export performance, details of which is given in [25, 3, 11, 22, 26, 27, 28, 29]. A series of reliability and validity tests are conducted for the

measurement of the scales Cronbach's Alpha was done on pilot test th



We used export performance measure developed by Shoham (1996), Sousa (2004) Zou and stan (1998), Kabiri and Mokshapathy (2013) and Kabiri and Salehi (2013).



We used the questionnaire developed by Covin and Slevin (1989), Lumpkin and Dess (1996), Miller (1983), Kabiri and Mokshapathy (2013) and Kabiri and Salehi (2013) to measure the EO.

Fig.I. The Research Conceptual Framework

### III. FINDINGS

The respondents were questioned to scale by the list of five indicator of internet committed (resources committed to the Internet; Internet use; perceived internal and

external benefits; Web function and experience with the Internet) on a five-point scale. The descriptive statistics of responses to each indicator of Internet Commitment are shown in Table 1 for exporter SMEs and in Table 2 for non-exporter SMEs.

Table 1: Frequency of Internet Commitment in Exporter SMEs

Internet Commitment	Very Low		Low		Average		High		Very High		Mean	SD	Rank
	No	%	No	%	No	%	No	%	No	%			
Web Function	0	0	0	0	1	2.3	9	20.5	34	77.3	4.75	.488	1
Internet Use	0	0	0	0	1	2.3	9	20.5	34	77.3	4.75	.488	2
Experience with the Internet	0	0	0	0	2	4.5	8	18.2	34	77.3	4.73	.544	3
Resources Committed to the Internet	0	0	0	0	1	2.3	11	25	32	72.7	4.70	.509	4
Perceived Internal and External Benefits	0	0	0	0	1	2.3	11	25.5	32	72.7	4.70	.509	5

The calculated mean score for five indicators in exporter SMEs are from 4.75 to 3.70. Mean score for five indicators in Non-exporter SMEs are from 2.25 to 2.19.

Table 2: Frequency of Internet Commitment in Non-Exporter SMEs

Internet Commitment	Very Low		Low		Average		High		Very High		Mean	SD	Rank
	No	%	No	%	No	%	No	%	No	%			
Web Function	4	12.5	16	50.0	12	37.5	0	0	0	0	2.25	.672	1
Experience with the Internet	6	18.8	12	37.5	14	43.8	0	0	0	0	2.25	.762	2
Internet Use	6	18.8	12	37.5	14	43.8	0	0	0	0	2.25	.762	3
Resources Committed to the Internet	6	18.8	13	40.6	13	40.6	0	0	0	0	2.22	.751	4
Perceived Internal and External Benefits	7	21.9	12	37.5	13	40.6	0	0	0	0	2.19	.780	5

Independent-Samples t-test was used to ascertain whether mean of commitment to the Internet is different in exporter and non-exporter SMEs.

**Table 3: Descriptive Statistics**

Internet commitment	Type of SMEs	N	Mean	Std. Deviation	Std. Error Mean
<b>Resources committed to the Internet</b>	<b>Exporter</b>	44	4.70	.509	.077
	<b>Non-exporter</b>	32	2.22	.751	.133
<b>Internet Use</b>	<b>Exporter</b>	44	4.75	.488	.074
	<b>Non-exporter</b>	32	2.25	.762	.135
<b>Perceived Internal and External Benefits</b>	<b>Exporter</b>	44	4.70	.509	.077
	<b>Non-exporter</b>	32	2.19	.780	.138
<b>Web Function</b>	<b>Exporter</b>	44	4.75	.488	.074
	<b>Non-exporter</b>	32	2.25	.672	.119
<b>Experience with the Internet</b>	<b>Exporter</b>	44	4.73	.544	.082
	<b>Non-exporter</b>	32	2.25	.762	.135
<b>Internet</b>	<b>Exporter</b>	44	23.64	2.304	.347
	<b>Non-exporter</b>	32	11.16	3.163	.559

The results indicate that exporters and non exporters SMEs are largely different in means of using internet.

**Table 4: Independent Samples Test**

Internet commitment	T	Sig.
<b>Resources committed to the Internet</b>	7.574	.007
<b>Internet Use</b>	12.639	.001
<b>Perceived Internal and External Benefits</b>	9.141	.003
<b>Web Function</b>	5.628	.020
<b>Experience with the Internet</b>	8.276	.005
<b>Internet</b>	5.915	.017

Correlation analyses have been conducted to test the last hypotheses, whether relationships exist between use of Internet with EO and export performance indicators totally.

**Table 5: Coefficient Correlation Test**

	Entrepreneurial Orientation	Export Performance
<b>Interne use</b>	.827**	.679**

The results of this test indicate that use of Internet has an important and identifiable impact on EO and export performance.

#### IV. CONCLUSION

This study analyzed two hypotheses; the first part of the analysis refers to difference between exporter and non-exporter SMEs by means of commitment to the Internet and the second part of analysis focuses on affection of commitment to the Internet on mean of EO and export performance. Data analyses reveal that exporters and non exporters SMEs largely are different in means of using internet. This result is comparable to the study findings of Mostafa et al, (2006). Results also show that use of Internet has an important and identifiable impact on EO and export performance. This result is almost comparable to the study findings of Mostafa et al, (2006), Kabiri & Salehi (2013) and Kabiri & Mokshapathy (2013). Therefore, this finding stresses the importance of

commitment to the Internet in SMEs and this study provide new insights in small business research concerning the widely acknowledged value of use of the Internet. Overall, the adoption of difference between exporter and non-exporter SMEs by means of use of the Internet could be not only a challenge but also an appropriate opportunity focused response by SMEs facing fierce competition by other SMEs. Thus, it is imperative for SMEs to create a culture that encourages use of the Internet within their employees, processes as well as in their operations. This will go a long way to guarantee success in their export ventures and as a general conclusion we can say SMEs in Iran need immediate and adequate enhancement in use of the Internet for exporting.

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