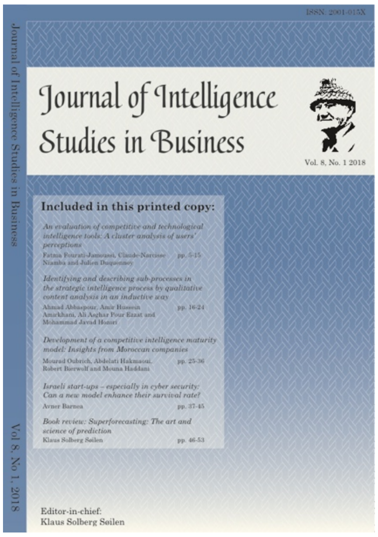
Journal of Intelligence Studies in Business



Journal of Intelligence Studies in Business

Publication details, including instructions for authors and subscription information: https://ojs.hh.se/index.php/JISIB/index

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To cite this article: Barnea, A. (2018) Israeli start-ups – especially in cyber security: Can a new model enhance their survival rate? *Journal of Intelligence Studies in Business*. 8 (1) 37-45.

Article URL: https://ojs.hh.se/index.php/JISIB/article/view/285

JISIB
Journal of Intelligence Studies in Business
Vol. 8, No. 1 (2018) pp. 37-45
Open Access: Freely available at: https://ojs.hh.se/

Israeli start-ups – especially in cyber security: Can a new model enhance their survival rate?

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Accepted 21 March 2018

ABSTRACT Start-up companies are the fastest growing business in Israel. However, half of them do not last through their fourth year. This paper looks into the issue of the power of Israeli start-ups to survive and to become successful companies. The challenge is to seek new directions, which will help this sector to change this disappointing course. The start-up sector has a significant contribution to the strength of the Israeli economy which leans on its intellectual resources. Based on my continuing consulting in implementing competitive intelligence to local Israeli start-ups and further research that I have done by following closely the added value of developing capabilities, which enable better understanding of the external environment, I have found that one of the main causes of the high percentage of failures of Israeli start-ups is the difficulties in comprehending the competitive landscape, which has a significant contribution to making them less competitive. By using a new model, the competitive review model, which considers the special attributes of start-ups, especially in cyber security, this kind of small company can be better prepared for intense competition. This is in addition to the Lean start-up model, which is not executed in this segment in Israel and faces serious resistance based mainly on opposition to unfamiliar input. Based on combining the new competitive review model with existing analytical models, a few local start-ups' executives have already matured by awareness about the value of sensing the external environment, which have the potential to change the course of at least some of the Israeli start-ups and increase the success rate for this sector.

KEYWORDS Adaptability, competition, competitive review model, competitive intelligence, four corners model, Israel, lean start-up, strategic planning, start-ups

1. INTRODUCTION

The growth of the Israeli economy is dependent much on its export, mainly high-technology industries and the ability to develop new technologies and applications that would be attractive in the global markets (Central Bureau of Statistics, 2014). Many firms are aware that one of the keys to success is intimate knowledge of the global markets (Bulley, Baku and Allan, 2014) by ongoing monitoring of the changes and it is not enough to offer advanced technological solutions (Prescott, 1999) and to prevent business failures as a result of intelligence downfalls in business (Tsitoura & Stephens, 2012).

Many corporations already understand that competitive intelligence (Blenkhorn, & Fleisher, 2005) can be of great help in reaching a competitive advantage and sustaining it (Global Intelligence Alliance, 2009, 2011). It is evident that companies with poor information about competitive landscapes were stuck being reactive (Le Bon, 2014). The use of competitive intelligence can be referred to also as integrated intelligence capabilities, which occur in many larger corporations (Bulger, 2016) and more professionals in corporations are using intelligence for their daily missions (McGonagle and Misner-Elias, 2016). It looks as though corporations that have CI practices do not use half of the information they collect for various reasons (Gilad and Fuld, 2016). The challenge is to adjust between the needs of executives and how their corporations collect and process intelligence. There are also those who believe (Hoppe, 2015) that in most organizations, intelligence is constructed informally. I do not share this view.

Large and medium-size Israeli companies are moving forward slowly and recent studies conducted indicate this direction (Barnea, 2006, Barnea, 2009). It seems that competitive intelligence as a discipline in Israel that is underdeveloped (Barnea, 2016) and it is focused more on fulfilling the immediate needs of the corporate decision-makers rather than on working closely with marketing and strategic planning. In a study titled "Why start-up companies failed to adopt competitive intelligence" (Barnea, 2006) the key conclusion was that the absence of competitive intelligence awareness was one of the main reasons why Israeli start-up companies failed in the global markets during the 1990s. The author has offered different ways to change the situation; one of the primary suggestions was to appoint a senior executive to take care of this issue, as monitoring the international markets was a critical factor for such companies. The author has recommended also to the investment ventures to encourage these ideas and to act to implement them. Most of these lessons have never been fulfilled.

Another study that has looked at CI in Israel, mainly from the aspects of using expert tools (Barnea, 2009), has revealed that "local firms were not prepared to invest in new CI tools that would enable CI professionals to perform better. As a result, most CI professionals have to continue using generic tools such as Office (Microsoft), which offers unsatisfactory solutions to their CI program needs". And also that "the high level CI solutions have not reached its potential target market due to a lack of support by senior executives."

In 2015, research on the use of open source intelligence (OSINT) by Israeli firms (Markovich, 2015) showed that there is intense use of these sources, but the added value to the corporate decision-making process was little. It overlooked the entire picture of CI in the Israeli business scene.

2. METHODOLOGY

Throughout my consulting in CI among Israeli start-ups, I have noticed that their sense of the competitive landscape is very low. The next step was to hold discussions with executives in these start-ups regarding the reasons behind this phenomenon and also watch the start-ups' business performance, mainly in their rate of success to their efforts to penetrate into the markets after their products were completed. As a result, I have proposed the competitive review model with support from other tools as will be described later.

After the implementation of the new model in these start-ups, I interviewed the relevant executives in these start-ups to receive feedback. So far, based on a small number of start-ups, it looks as if the decision-making process has been improved and makes these new business entities more competitive. I plan to expand this model to more Israeli start-ups and hope that in two years there will be more information regarding the added value of this model.

In building the methodology for this model, I used the grounded theory (Glazer & Strauss, 1967), which guides the scholar on matters of data collection and details rigorous procedures for data analysis. It is based on a systematic watch of certain activities and based upon these views, to build a theory which will improve the quality of these acts.

2.1 Limits of the research

This research is based on a few start-ups that have agreed to implement the model which will be presented later. It is obviously a limitation, but it looks that in the coming year, more start-ups will participate and this will enable further analysis to reach a better understanding of how much this new model is really helping start-ups to become more competitive.

2.2 The start- up industry in Israel

Over the last 15 years, Israel has built a strong reputation as one of the leading countries in the segment of start- ups. Dan Senor and Saul Singer's book "Start-up Nation: The Story of Israel's Economic Miracle" (Senor and Singer, 2009), has been translated into more than 30 languages, has strengthened the success story of Israel- a state that produces more start-up companies than large, peaceful, and stable nations such as Japan, China, India, Korea, Canada, and the United Kingdom.

The success of Israel's high-tech sector has attracted attention from larger corporations and each year around 10- 15 Israeli start- ups are acquired by global corporations for billions of dollars in total. A substantial number of foreign investors are investing directly in Israel's technology market through foreign venture capital funds (VCs), corporate VCs or as individuals ("angels"), as a result of the tremendous success of the growing Israeli technology market.

Contrary to the public perception, the Israeli Start-up Success Report 1999-2014 (IVC, 2016) uncovers that about 47% of Israeli start-ups stop operating (3985 start-ups out of 8489) within 3.5 years on average since their foundation. We do not see an intense theoretical effort dedicated to change that direction from the business studies point of view.

In the last three years, Israel has seen a very significant growth in the segment of new start-ups in cyber security. It looks as if these start-ups are facing the same illness as regular start-ups – lack of profound understanding of the competitive landscape, both competitors and customers. Perhaps adaptive start-up companies that are capable of change fast have better chances to last.

In 2016, the Israeli start-ups industry raised an all-time high of $4.8 billion, up to 11% from the $4.4 billion raised in 2015 (Solomon, 2017). The year 2015 was the most successful for Israeli high-tech capital raising activity – 708 deals accounted for an exceptional investment of $4.43 billion. The amount reflected a 30 percent increase from the previous record in 2014, when 690 deals attracted $3.42 billion. The average deal peaked with $6.3 million in 2015, compared with the previous year's $5 million average and a $4 million average deal in the past 10 years (IVC and KMPG, 2016).

However, a closer look at the start-up industry in Israel shows that the picture is not so pink. Although the Israeli start-up industry is very attractive for investors, the Israeli Startup Success Report 1999-2014 (IVC, 2016) shows that about 46% of the Israeli start-ups stop operating within 3.5 years on average since their foundation and 41% of venture-backed start-ups are shut down or are sold at a loss. Another study published in Israel shows similar rates of failure: the number of start-up companies which were terminated is high and in recent years (2005-2014), there are about 300 (on average) a year when about 700 new start-up companies have been initiated (Orpaz, 2017). Following the length of life of start-ups operating in Israel in 2005-2014 clarifies that there was no change from 10 years ago and 46% of companies lasted between 1 - 3 years, while 76% of these companies did not last more than six years (Orpaz, 2017). Similar findings have been reported already regarding the dot com era in Israel (Barnea, 2006). The amount of money lost in these failures in Israel is huge, reaching approximately $ 1 billion a year. It is relevant to mention that the tendency in Israel is often to hold companies alive as long as possible, relative to the U.S. or Europe and thus to give them more time to bleed. It is a component of the Israeli business culture - not to give up, and to try again, but it succeeds only in some cases.

Shutting off failed start-ups is usually hidden and is not reported through the business media, while great success stories like selling Waze, the world's largest community-based traffic and navigation application, to Google for $ 1 billion, was in the Israeli headlines for a long period. Another recent great success is selling the Israeli Mobileye, operating in development of vision technology for Advanced Driver Assistance Systems (ADAS) and autonomous driving, to Intel for $15 billion.

The difficulties of start-ups survival are known also in other countries: Shekhar Ghosh, a senior lecturer at Harvard Business School wrote, "Three out of four start-ups - Venture capital-backed start-ups do not return capital to investors" (Blank, 2013). The figures in the US are quite similar- about 60% of start-ups survived until the third year, and less than 35% matured and survived the sixth year (Barnea, 2014). Other sources of information indicate that 90% of start-ups fail (Patel, 2015).

2.3 Lessons from start-up companies

According to CB Insights research (Griffith, 2014), which follows worldwide tech markets, including start-ups, the main reason for failures of start-ups was a low demand for their products: almost 50% of start-ups did not survive for that reason. The second reason for failures was ending of the funds, and the third reason for closing the doors was losing the battle against competitors. However, it would be more refined to put together reasons 1 and 3, as they are interconnected, enable one to see that almost 60% of start-ups have lost the battle to survive for poor understanding of the essence of markets and competitors.

Looking at many start-up companies worldwide for a long-time shows the following (Blank, 2013):

1. Usually successful start-ups grow differently than ordinary companies, and they are quickly adjusting themselves to changes and to inputs from customers until they reach to their targets (if they get there!).

2. Only seldom, business plans survived as is after the first feedback from customers.

3. Most business plans of start-ups are not practical and preparing them in the conventional way can be a waste of time.

4. Too often, start-ups lack the knowledge and the experience acquired from monitoring competitors and the marketplace, so they are incline to repeat similar mistakes or ignore important lessons.

Contrary to existing companies, which are busy implementing business plans, successful start-ups tend to look for the right business plans. This great difference has an incredible impact on their chances to succeed (Blank, 2013).

Blank proposed (Blank, 2013), that start-ups will fulfill the approach of "Lean Start-up" that is taught in more than 30 business schools in universities in the US. The "Lean Start-up" methodology is based upon three principles:

1. Entrepreneurs have to drop a conventional business plan and offer a set of assumptions or wild guesses that can clarify how start-ups can bring value to customers.

2. To test their assumptions, start-ups have to go out to the field and to ask customers and potential partners about the new product, including characteristics, pricing, distribution and strategies how to reach to customers and based on this information to update their assumptions regarding the new product.

3. Further, "Lean Start- up" has to cut the length of the product development cycle by adjusting fast to the information gathered. Through this process it will enable creating a product that stands in the most advanced requirements.

This new model by Blank assumes that contrary to start-ups that launched in the dot com era, working in "silent motion" to avoid potential competitors learning about their plans and to find they are not relevant to the customers eventually led to their collapse.

As Blank proposes, it is desirable to act differently to increase success rates by exposing beta products at an early stage. Feedback gathered from customers and sometimes from competitors, is more significant than secrecy and therefore, delivers better results. Lowering failure rates of start-ups have major economic implications. As a result of the fierce competition in many industries, countless jobs are lost and successful start-ups have a great potential to increase the employment rates and so to compensate for the jobs that are lost in existing industries. So far, Israeli start-ups are not aware of the "Lean Start-up" approach.

One of the weaknesses of the "Lean Start-up" model is that it does not include the fundamental need to systematically monitor the external environment, especially competitors, and to learn continuously about potential threats and opportunities. Large-scale enterprises and leading business schools in North America, Europe and parts of Asia recognize that competitive intelligence has increasingly come of age as it steadily expands “into mainstream business practices" (Hawley & Marden, 2006). It happens also in Israeli business schools. There is a need within the start-up industry to adopt the competitive intelligence discipline and to implement it suitably with its specific needs.

2.4 The challenge of cyber security start-ups in Israel

In the last three years, Israel has seen a very significant growth in the segment of new start-ups in cyber security in Israel. Two years ago there were around 200 Israeli cyber start-ups, and we are seeing now around 450. This is very fast growth, especially as the support by the governmental funds is quite minimal. We already see first indicators that in 2017, launching new Israeli start-ups in cyber seem to be slowing. Most of the funds for these ventures as well as most start-ups in Israel are coming from outside Israel. In the last year, we are facing also a huge increase in Chinese interest funding and acquiring new Israeli technologies.

The Israeli cyber security start-ups' solutions are covering almost every relevant business segment including automotive, health, infrastructure, information systems, mobile applications, and enterprises. Cyber security expenses will keep on growing across all industries. Stricter regulation is brought in, while the threats and the concerns are increasing. According to the Grant Thornton report, (Grant Thornton, 2015) the leading accountancy and advisory organization, cyber-attacks cost global business about $315 billion over the past 12 months.

A doubt has been raised regarding the future of these start-ups in cyber (Orpaz, 2017). Is it possible to forecast who will survive and who will disappear? It is already known that the rate of Israeli start-ups that do not survive is quite high – around 50% after their fourth year. It is not known yet how the figures will look within the cyber segment of start-ups, as most of them are quite new.

Looking into the start-up industry in Israel uncovered that about 90% of these start-ups do not monitor systematically the external business landscape. It appears that start-ups in cyber in Israel are focused more on the quality and the innovation of the products they offer to their clients. Considerably less effort is put into the analytical issues such as what exactly their competitors are offering or intend to offer, what the clients are looking for and analyzing the gaps between "our" solutions vs. the competitors, possibly by applying the methodology of gap analysis (BusinessDictionary, 2017).

Israeli outsourcing information suppliers are providing their start-up clients with intelligence on their competitors. They are pretending to give insights; however, these information specialists are unable to give added value and quality intelligence as this needs intimate knowledge of each segment in such a level that only those who are doing this internally on a daily basis, can really deliver. The conclusion is that especially in the start-up industry, outsourcing inputs are incapable of providing proper intelligence and are caught in information rather than in intelligence.

The second point is that while considering the small size of most of the start-ups, they need to build up their own capability of intelligence and understand the competitive arena with adaption to their special characteristics. Unfortunately, an effort to build a small dedicated intelligence internal capability too often comes across with internal opposition claiming that the resources for such a move are limited.

3. COMPETITIVE REVIEW MODEL: THE THEORY

A new model, the Competitive Review Model, has been introduced lately in Israel, in order to challenge and support start-ups to become more competitive, that probably increase their survival success rate. So far, this model which I have developed and tested in the last year was implemented in a few start-ups in Israel. It is still in its first stage of implementation. It was also presented a few months ago in the quarterly meeting of the Israeli CI Forum (FIMAT) and received a warm welcome.

3.1 Basic assumptions

1. Start-ups are in critical need for dynamic monitoring of the competitive environment. Doing this must be an internal business procedure supported by the senior management.
2. Each start-up needs to designate a "CI care taker" (a partial job). The goal of this function is to make sure that the firm will be aware of external changes and new directions in its specific segment and to evaluate their possible impact on the firm.
3. Intelligence reports have to be prepared internally (OSINT, supported by outsourcing gathering) implementing the rule of sharing of information internally to avoid unnecessary silos. The outcome is completive review reports.

3.2 Competitive Review Model: the process

3.2.1 Aim

To present the senior management of the start-up with periodic assessments of the competitive environment to help decision-makers to better understand threats and opportunities and to consider formulating these insights into business strategy.

3.2.2 When

Assessments will be presented each quarter. An annual intelligence report will be presented towards at the end of the year. The annual report will outline the current year and will present also trends and potential moves for the next year. Only occurring of highly significant events will need an immediate special report.

3.2.3 The outline of the competitive review intelligence report

The outline of the concise competitive review report is as following:

A. *Executive summary* – what are the major changes in the last period that may effect "our" performance and business plan?

B. *Analysis of the competitive environment* – description of important changes that occurred during the period reviewed: notable successes and failures of competitors, new players, new technologies, important changes in regulation, significant mergers and acquisitions in your segment, vital innovation moves and major market trends and clients' expectations.

C. *Analysis of key players*: related to key competitors and strategic suppliers separately: key movements, current status of products / capabilities and plans for the future. This stage can be supported by competitive analysis template which divides the analysis into four categories: company highlights, market information, product information and SWOT information.

D. *Summary and conclusions* - how "our" start-up stands relative to the competitors / strategic customers and against the trends in the competition environment. It will include also defining what the opportunities are for "us".

3.2.4 Competitive Review Model: further recommendations

Based on the experience acquired already in Israel, there are further recommendations.

A. With regard to the examination of each key competitor and its future strategic moves, it is highly recommended to strengthen the analytical capability by using Porter's Four Corners Model (Porter, 1980; Gilead, 2009) as a complementary tool, which will provide with remarkable insights the future moves and the strategy of key competitors.

B. It is also suggested that competitive review intelligence reports are shared with the senior executives of the start-up and with key investors and further used as an agenda for strategic discussions.

C. Start-ups have also to implement rules for gathering information at exhibitions and professional conferences attended by their employees (Calof and Fox, 2003). Unfortunately, when this is not done systematically it causes losses of meaningful insights.

Drivers	**Capabilities**
What drives your competitor forward? What makes them tick? What values influence their actions?	What are their strengths? Where do they have a competitive advantage? What expertise or resources are the foundation of their strategy?
What assumptions do they make? How do they perceive their competitive environment? How do they perceive themselves?	What is their current strategy? Which markets and business models are most attractive to them? How do they plan to use their resources differently in the future?
Assumptions	**Strategy**

Figure 1 Four corners model.

The competitive review model, actually forced start-ups which use it to review systematically the competitive landscape. Its outcome is important not only to executives but also to the investors to be able to understand better the capabilities of start-ups to compete successfully and to be more knowledgeable in their discussions with the senior executive of "their" start-ups.

3.3 Adaptability and start-ups: adjusting organizational culture

Throughout the process of developing and executing the competitive review model I have noticed that the success of this model depends not only on its own merits but also on the ability of these companies to change. A major challenge of implementing this model in start-ups is also to learn how best to adopt new plans and to establish decisions that may improve their potential to succeed. The meaning is that they need to act on signals of change from the external environment and to be able to move forward rapidly. To do so, start-ups have to behave as "adaptive companies" (Reeves and Deimler, 2011) in order to gain competitive advantage. Adaptability as a new competitive capability in response to uncertainty (Garcia-Salmones and Yin, 2014) can be also a result of experimenting with customers in the early stage as already mentioned by Blank (Blank, 2013).

Adaptability is the organization´s capacity to change internally in response to external conditions (Denison and Mishra, 1995) which can change the classical strategic thinking, and force start-ups to operate as "adaptive companies" while they create more fluid structures, which can make the decision-making process faster and better.

4. CONCLUSIONS

Unfortunately, a high number of Israeli start-ups will not survive, and many of them will disappear within the first three to four years after their establishment as happens also in the start-up industry in other nations. Regarding the cyber start-ups, it is fairly reasonable to foresee a process of fast consolidation, which has already begun.

Contrary to what most founders and VC officials think and expect, I believe that those who will survive will be those who have the best understanding of the markets and the competition i.e. identify early indicators of opportunities and threats, and not those who just have better products. So, start-ups have to be superior "adaptive companies" and move fast to improve their dynamic monitoring and especially their intelligence of the markets and the competitive arena to support building a winning strategy. Thinking more about the future and the next move by competitors supported by systematic use of the competitive review model is essential.

In two years, it will be possible to look at the success rates of start-ups that have implemented the new competitive review model and to compare it with those who continue with their "traditional" direction.

5. A SHORT CASE STUDY

The managing director of the Israeli start-up (Hola, http://hola.org/), Ofer Vilenski, has admitted recently (Vilenski, 2017) that:

> "for four years, since 2013, we have developed a technology that will connect users to accelerate the Internet. However, when we went out with the product on the market, we discovered that it did not interest anyone. As a result, the start-up has created an organizational culture of quick attempts that focus on a particular direction only if two conditions were met: the basic assumptions of the product can be examined within two weeks and there is business potential in a direction that justifies the experiment. Otherwise, you have to kill the idea or change the focus. The start-up raised about $30 million, but most of the money was spent without any real progress."

Following this experience, the company started teaching its employees that it is okay to fail and to move on. Vilenski emphasized that:

> "most people are not used to changing direction at 90 degrees. It took a long time to convince them that an approach of rapid change is the way to achieve success, that they have to move quickly to change direction, to adapt to what is happening on the ground, and not to treat the ego."

Today Hola's employees prefer to find out why a certain product will not work, instead of getting stuck after three years of working on a product that is not required. Vilenski is confident that:

> "you cannot tell if something is good or bad, and you have to know how to accept it (even outside the world of work). Therefore, a management culture must be developed to ensure that product development is a rapid evolutionary process."

The Hola start-up reported (2017) a significant milestone: 117 million installations have so far been recorded for the company's product. The company's main product is a VPN service that allows you to bypass geographic or government restrictions for surfing the Internet.

The success story of the Hola start-up can be summarized by the following key success factors: ability to become an adoptive company, receiving early feedback from the customers about the new product, and to develop greater awareness of the activity by the competitors to observe how it is possible to create a competitive advantage.

6. REFERENCES

Barnea, A. (2006). "Why Start-up Companies Fail to Adopt CI", *Competitive Intelligence Magazine*, Vol. 9, No. 1, January/February.

Barnea, A. (2009). "Intelligence Solutions through the Use of Expert Tools". *Competitive Intelligence Magazine,* Vol. 12, No. 3, May – June, 2009.

Barnea, A. (2014). "Looking Outward: the Start-up Industry: A View from Israel", *Competitive Intelligence Magazin*e, Vol. 17, No. 2 April /June.

Barnea, A. (2016). "Study on Competitive intelligence in Israel: 2016 update", *Journal of Intelligence Studies in Business*, 6, (2) 5-16.

Blank, S. (2013). "Why lean start- up Changes Everything, *Harvard Business Review*, May.

Blenkhorn, D. L., & Fleisher, C. S. (2005). *Competitive intelligence and global business*.

Westport, CT: Praeger.

Business dictionary, 2017, definition of gap analysis, http://www.businessdictionary.com/definition/gap-analysis.html

Bulger, N. (2016). "The Evolving Role of Intelligence: Migrating from

Traditional Competitive Intelligence to Integrated Intelligence", *the International Journal of Intelligence, Security and Public Affairs*, 18:1, 57-84.

Bulley, C., Baku, K. and Allan, M. (2014). "Competitive Intelligence Information: A Key Business Success Factor", *Journal of Management and Sustainability*; Vol. 4, No. 2.

Calof, J., & Fox, B. (2003). "Trade Show Intelligence", *Competitive Intelligence M*agazine, Vol 6, No. 6, November - December.

Central Bureau of Statistics, State of Israel (2014). http://www.cbs.gov.il/www/hodaot2014n/16_14_170e.pdf

Denison, D. R., & Mishra, A. K. (1995). "Toward a theory of organizational culture and effectiveness". *Organization Science,* 6 (2).

Gilad, B. and Fuld, L. (2016). "Only Half of Companies Actually Use the Competitive Intelligence they Collect", *Harvard Business Review*, Jan. 26, https://hbr.org/2016/01/only-half-of-companies-actually-use-the-competitive-intelligence-they-collect

Gilad, Benjamin (2009). *Business War Games*. NJ, Career Press.

Global Intelligence Alliance (2009). "Competitive intelligence: A Global Study on Large Companies", http://www.globalintelligence.com/insights-analysis/white-papers/best-practices/

Global Intelligence Alliance (2011). "Market Intelligence in Global Organizations: Survey Findings in 2011", https://www.m-brain.com/wp-content/uploads/2015/04/10852.pdf

Grant Thornton, (2015). "Cyber attacks cost global business $300bn+", at https://www.grantthornton.global/en/insights/articles/cyber-attacks-cost-global-business-over-$300bn-a-year/

Garcia-Salmones, L., & Yin, J. (2014). "Developing Adaptability for New Competitive

Advantage", *Asian Journal of Management and Innovation*, June-December.

Griffith, E. (2014) "Why startups fail, according to their founders", *Fortun*e, Sep 25, at http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/

Hawley, M., & Marden, B. (2006). "FIM: A Business Information System for Intelligence", *International Journal of Intelligence and CounterIntelligence*, Vol. 19, No. 3.

Hoppe, M. (2015). "Intelligence as a discipline not just a practice", *Journal of Intelligence Studies in Business*, Vol. 5, No. 3, pp. 47-56.

IVC Research Center. (2016)."Israel Startup Success Report 1999-2014", at http://www.ivc-online.com/Research-Center/IVC-Publications/IVC-Surveys/Startup-Report

IVC Research Center & KPMG. (2013). "Summary of Israeli High-Tech Company Capital Raising 2012, IVC and KPMG Report", at http://www.ivc-online.com/Portals/0/RC/Survey/IVC_Q4-12_Survey_PR-Eng-Final.pdf

Le Bon, J. (2014). "Use your Sales Force's Competitive Intelligence Wisely", *From Data to Action*, Harvard Business Publishing, HBR. Org. Insight Center.

Markovich, A. (2015). "The Impact of Perceived Quality of Web Information Sources on the Use of Competitive Information by Decision-Makers and on Firm's Performance", *MA Dissertation,* The University of Haifa, School of Management, the Department of Information and Knowledge Management.

McGonagle, J. and Misner-Elias, M. (2016). "The Changing Landscape of Competitive Intelligence: The Critical Issues Investigated", *Salus Journal*, Issue 4 No. 1.

Orpaz, E. (2013), "The Brutal Survival Laws of the Start – Up Industry*", The Marker* (Hebrew), July 1st, at http://www.themarker.com/technation/1.2059828

Orpaz, E. (2017), "Come on – this is a start-up*", The Marker* (Hebrew), May 30, at https://www.themarker.com/technation/startup/1.4137625

Patel, N. (2015). "90% Of Startups Fail: Here's What You Need to Know About The 10%", *Forbes*, Jan. 16, https://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/#21d37bd66792

Porter, M. E. (1980). *Competitive Strategy*. New York: Free Press.

Prescott, J. (1999). "The Evolution of Competitive Intelligence, Designing a Process for Action", *APMP*, Spring.

Reeves, M., & Deimler, M. (2011). "Adaptability: The New Competitive Advantage", *Harvard Business Review*, July-August.

Senor, D., & Singer, S. (2009). *Start-up Nation: The Story of Israel's Economic Miracle*, Twelve, Hachette Book Group, NY.

Solomon, S. (2017). "Israel tech raised record $4.8b in 2016, up 11% from last year – report", *Times of Israel,* January 10, at http://www.timesofisrael.com/israel-tech-raised-record-4-8b-in-2016-up-11-from-last-year-report/

Tsitoura, N. & Stephens, D. (2012). "Development and evaluation of a framework to explain causes of competitive intelligence failures" *Information Research*, 17 (2), paper 521.

Vilenski, O. (2017). "We invested four years in a product that did not interest anyone", *Themarker* (in Hebrew), May 30, at http://www.themarker.com/technation/startup/1.4137788