

Pre-Feasibility Study
Establishing A Center for Creative Thinking &
Information Technology
Zarqa

April 2017

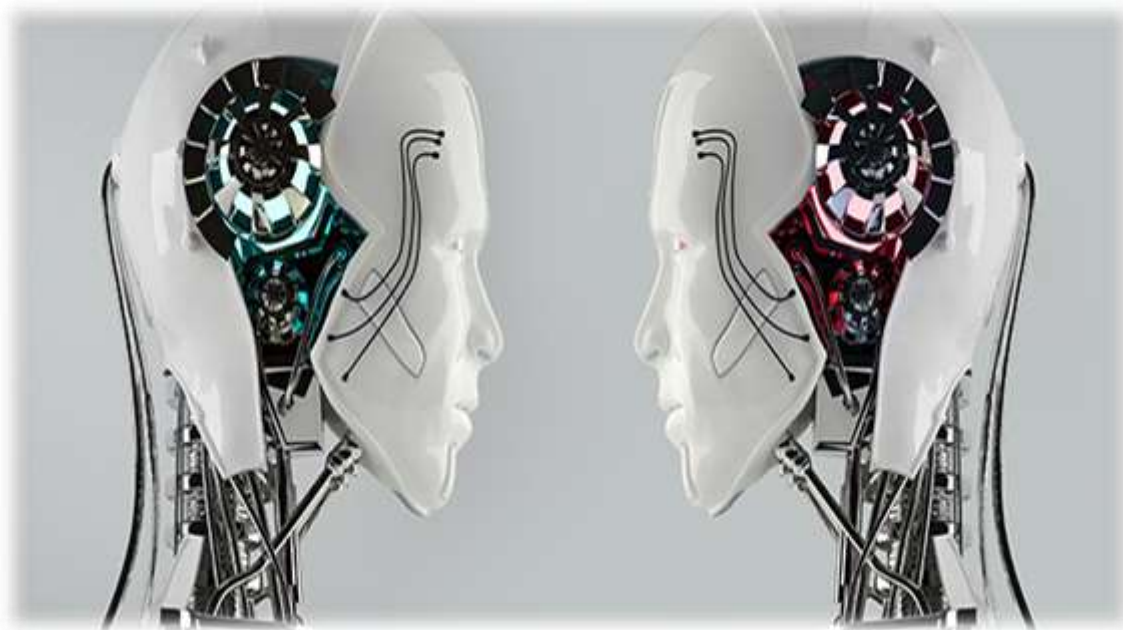
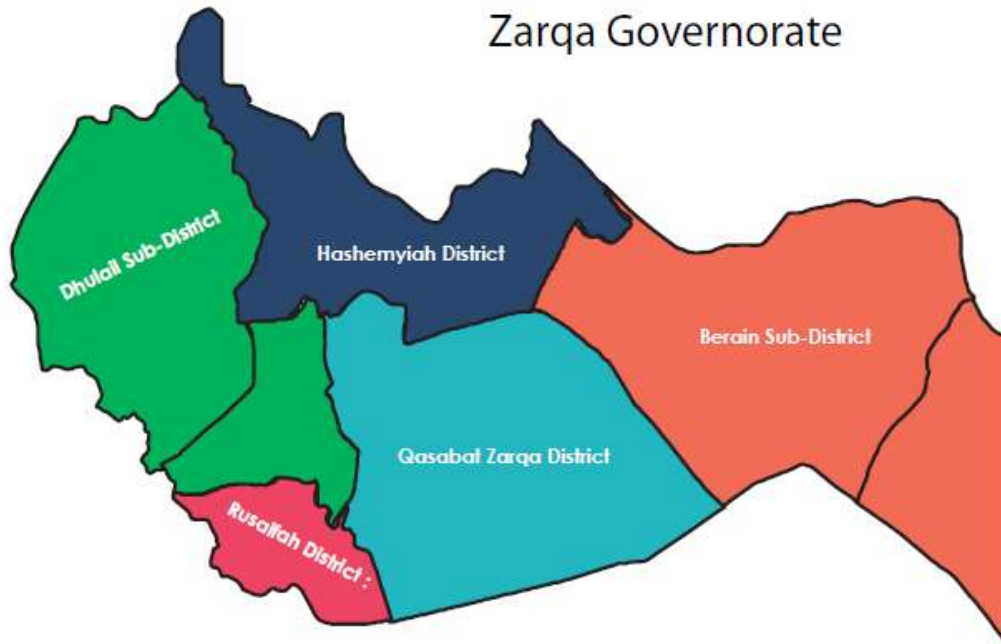


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1. Executive Summary

This study aims at determining the Pre-feasibility study to establish a Center for Creative Thinking & Information Technology in Zarqa Governorate. This center will raise students between (6-16 years), and then the university students and others by introducing the concepts of creative thinking and technology use and training them on using the robots and their applications thereof in this field. In addition, they will be educated on games programming and smart phone applications using easy and uncomplicated software's. The center will provide all training services and extra-curricular activities for the resident of the Governorate populations, as is no similar centers in Zarqa Governorate and there are still many opportunities to establish such centers.

Table 1: Initial Indicators of the Project

| | |
|---|---|
| Project Name | Establishing Center for Creative Thinking & Information Technology |
| Sector | Information (ICT) and communications. |
| Governorate | Zarqa |
| Region | Zarqa city |
| Products/Services | <ul style="list-style-type: none"> • Training the children and trainees on the creative thinking skills. • Teaching the programming and computer sciences using innovated ways and beyond the traditional style. • Training the children and university students on using, programming and then manufacturing of Robot. • Training on manufacturing 2D and 3D computer games using simple programming languages. • Training the students on developing the smart phone applications using simple software's. • Training the children on designing electronic websites using simple programming languages. |
| Project Description | The project serves the children from 6 to 16 years by using the best modern methods in educating the persons not familiar with the basics of computer sciences, engineering and modern technology means. The teaching methods and the theoretical and practical trainings shall be dependent upon teaching the software's of the above mentioned products and services without using the codes or complicated programming languages by the trainees to acquire the skills that qualify them to produce the mentioned services. |
| Target Market | All clients in Zarqa and the neighboring regions. |
| Investment Cost | Project's investment cost shall be 285 thousand JD. |
| The Average Return On Investment | The average rate of return on investment within ten years is around 28.7%. |

| | |
|---|---|
| Internal Rate Of Return | The Internal return rate of the project is around 31.3%. |
| Average Added Value Of The Project | The average project added value within ten years is around JD 240 thousand. |
| Risk Assessment | The Sensitivity Analysis indicates a low risk in case of 10% increase in investment cost, or 10% decrease in revenues, or 10% increase in operating costs. |
| The Project Justifications | <ul style="list-style-type: none"> • There are no similar centers that educate the innovation for the children. • The increased demand on similar service in Amman and the region. • Zarqa has a population density suitable for these projects, and the parents have the desire and the financial capability to educate their children the innovation methods. • New incentives granted to the investment in the sector of information technical within the Kingdom. • New incentives granted for the investment in the ICT information technology sector within the kingdom. |
| Partners/Stakeholders | <ul style="list-style-type: none"> • Ministry of Industry and Trade. • Ministry of Communication information and Technology. • Jordan Investment Commission. |

2. The Macroeconomic Environment

2.1 An Overview of the Hashemite Kingdom of Jordan

The Hashemite Kingdom of Jordan is a landlocked country surrounded by land except at its southern extremity at the port of Aqaba, where that area is the only sea exit area in Jordan. The Kingdom is bordered at its west side by Palestine and the Mediterranean Sea, at its south and east by the Kingdom of Saudi Arabia, at north east by Iraq and at north by Syria.

Figure 1: Map of the Hashemite Kingdom of Jordan



Jordan is marked by three climatic zones from west to east including the Jordan Valley, most of which lies below sea level and is considered subtropical, and upland areas to the east of the Jordan Valley, ranging in height from 100 to 1500 meters above sea level and this is one of the areas dominated by Mediterranean climate, and the desert areas stretching to the east of the highlands.

The total area of the Kingdom is approximately 89.3 thousand square kilometers, and the semi-desert conditions prevail in over 80% of this area where there are some wet lands settings like Azraq Basin.

The kingdom is divided administratively into twelve governorates distributed into three regions: the Northern Region (includes the governorates of Irbid, Mafraq, Jerash and Ajloun) while the Central Region (includes the governorates of the capital, Zarqa, Balqa, Madaba) and the Southern Region (includes the governorates of Karak, Tafila, Ma'an, Aqaba), and the major cities are Amman (the capital), Zarqa and Irbid.

2.2 Population

Based on the General Census of Population and Housing in 2015, the population in the kingdom amounted to about 9.5 million people with a population density of 107.3 inhabitants per km², where the Capital City knocked off other governorates by population amounting to about 4 million people and a population density of 538.8 inhabitants per km², mainly because Amman is the most attractive governorate for Jordanians and for those coming to Jordan from other countries, followed by Irbid Governorate with a population of 1.8 million people, and then Zarqa Governorate with a population of 1.4 million. Tafila Governorate which is considered to be the least populous governorate whose population is about 96 thousand people.

Table 2: Number of population and population density in the Kingdom for 2015

| Governorate | Population (people) | Area (Km ²) | Population density (people/ km ²) |
|-------------------------|---------------------|-------------------------|---|
| Central Region | | | |
| Capital | 4007526 | 7,579 | 528.8 |
| Zarqa | 1364878 | 4761 | 286.7 |
| Balqa | 491709 | 1120 | 439.0 |
| Madaba | 189192 | 940 | 201.3 |
| North Region | | | |
| Irbid | 1770158 | 1572 | 1126.1 |
| Mafraq | 549948 | 26551 | 20.7 |
| Jerash | 237059 | 410 | 578.2 |
| Ajloun | 176080 | 420 | 419.2 |
| Southern Region | | | |
| Karak | 316629 | 3495 | 90.6 |
| Tafeileh | 96291 | 2209 | 43.6 |
| Maan | 144082 | 32832 | 4.4 |
| Aqaba | 188160 | 6905 | 27.2 |
| Total of Kingdom | 9531712 | 88793.5 | 107.3 |

Source: Department of Statistics, Jordan General Population and Housing Census, 2015

On the other hand, the population growth rate has reached about 3% in 2010 and increased to 9% during the years 2013 and 2014 and then dropped a little during 2015 to reach about 8%, according to demographic surveys for the Department of Statistics. The reason for the high growth rates is attributed to the influx of large numbers of refugees from Syria to the Kingdom which resulted in a marked decline in per capita real GDP index by 5.4% to JD 1,197.4, based on the Statements of the Central Bank of Jordan.

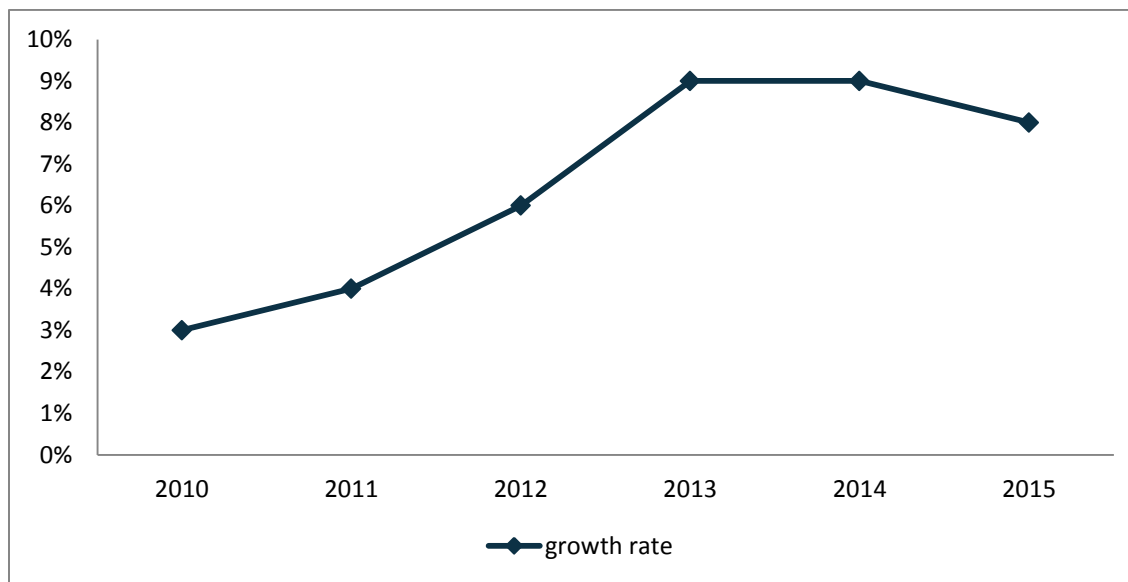
The unemployment rate among Jordanians also witnessed a rise by 1.1 percentage to reach to 13%, due to the structural imbalances that the labor market is suffering from and the acquisition of the low-paid foreign workers on a large number of new jobs in the economy, according to the Central Bank of Jordan.

Table 3: Number of population and population growth in the Kingdom, thousand

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-------------|--------|--------|--------|--------|--------|--------|
| population | 6698.0 | 6993.0 | 7427.0 | 8114.0 | 8804.0 | 9531.7 |
| growth rate | %3 | %4 | %6 | %9 | %9 | %8 |

Source: Department of Statistics

Figure 2: population growth rate in the Kingdom



2.3 Economic Indicators in the Kingdom ¹

Countries across the Middle East are still suffering from instability and closure or partial closure of borders; including the borders of important markets for the Kingdom's products. These factors led to a decline in the performance of many of the economic sectors, including the external sector, national exports, touristic income, and Foreign Direct Investment (FDI), and they contributed to a slowdown in the economic growth to about 2.4% in 2015, compared to 3.1% in 2014. The growth achieved in 2015 came from growth across several economic sectors, especially in the finance, insurance, and real estate services; the transport, storage, and communications services; the mining industry; the manufacturing industry; and the agriculture sector. These sectors contributed a combined 1.8 percentage points (or 75%) of the growth rate achieved during 2015, reflecting the diversity of the economic growth sources in the Kingdom.

Additionally, the general price level registered a decline in the prices of oil, commodities, and other related services in the global markets. Therefore, the general price level, measured by the relative change in the average consumer price index deflated by 0.9% in 2015, compared to the inflation of 2.9% in 2014.

The budget deficit, after aid, increased by 1.2% to a record 3.5% of GDP, compared with 2.3% in the previous year. In addition, the Balance of Payments' Current Account recorded a deficit of 8.9% of GDP, compared with 7.3% in 2014. At the end of 2015, the net public debt amounted to 22,847.5 million Jordanian Dinars (85.8% of the GDP), with an increase of 5.0% of the GDP. However, the total public debt reached 24,876.5 million Jordanian Dinars (93.4% of GDP). This increase resulted from financing both the general budget deficit and the guarantees for loans for the National Electricity Company and the Water Authority, as well as the slowdown of economic growth during 2015. The indebtedness of the National Electricity Company and the Water Authority recorded 6.7 billion Jordanian Dinars at the end of 2015.

On the monetary and banking front, most monetary indicators experienced positive development in performance in 2015, primarily in the Central Bank's foreign reserves, which maintained comfortable levels that amounted to about \$14.2 billion. The dollarisation rate decreased, which reflected positive demand for Jordanian Dinars in comparison to other major foreign currencies. With regards to the activities of licensed banks, the outstanding balance of credit increased by 9.5%, to reach 21,103.5 million Jordanian Dinars at the end of 2015. The total deposits registered with licensed banks increased by 7.7%, to reach 32,598.5 million Jordanian Dinars at the end of 2015. The increase in deposits came as a result of the high dinar deposits, which increased by 2,001.4 million Jordanian Dinars (8.3%), and higher foreign currency deposits, which increased by 336.1 million Jordanian Dinars (5.4%).

¹ The Central Bank of Jordan

Furthermore, many of the external sector indicators registered a drop in performance in 2015 due to the deepening instability in the region and almost full closure of the borders with Iraq and Syria. However, the drop in oil prices in the global markets contributed to the decline in the Kingdom's imports bill for energy, as it dropped by 40.6%, which in turn contributed to a decline in total imports and the trade deficit by 11.4% and 14.0%, respectively. Thus, the Current Account, excluding aid, declined to 11.9% of GDP, compared to 12.4% in 2014.

The Current Account deficit increased after aid, to reach 2,365.6 million Jordanian Dinars (8.9% of GDP) in 2015, compared with a deficit of 1,851.7 million Jordanian Dinars (7.3% of GDP) in 2014. This decline is due mainly to the decline in total exports by 6.6% and the decline in surplus in the services account by 27.7%, as touristic income decreased by 7.1%, and the decline in the surplus in the current transfers account decreased as a result of reduced foreign aid.

Capital and financial accounts resulted in a net inflow of 1,593.7 million Jordanian Dinars in 2015, compared to 909.0 million Jordanian Dinars in 2014; this was due to the Kingdom's higher net obligations towards the outside world. Foreign Direct Investment registered a net inflow of 909.4 million Jordanian Dinars, and the reserved investment registered an inflow of 918.4 million Jordanian Dinars due to the Kingdom issuing Eurobonds that are worth \$2.0 billion in the global markets. The withdrawal of bank loans on behalf of the Central Bank increased the use of funds from the International and Arab Monetary Funds by 543.3 million Jordanian Dinars. This led to the registration of a surplus in the overall Balance of Payments of 328.7 million Jordanian Dinars during 2015, compared to a surplus of 1,550.7 million Jordanian Dinars during 2014.

According to the Central Bank of Jordan, the increased international investment at the end of 2015 showed an increase in the external net liabilities of the Kingdom, which reached 24,357.5 million Jordanian Dinars, compared with 22,578.8 million Jordanian Dinars at the end of 2014. This was due to an increase in the external balance of assets and financial liabilities for all of the economic sectors in the Kingdom, which reached to 18,657.9 million Jordanian Dinars and 43,015.5 million Jordanian Dinars, respectively, during 2015.

Table 4: main economic indicators 2011 to 2015 in millions of dinars

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|----------|----------|----------|----------|----------|
| Population (millions) | 6.993 | 7.427 | 8.114 | 8.804 | 9.532 |
| Unemployment rate | 12.9 | 12.2 | 12.6 | 11.9 | 13.0 |
| Production and Prices | | | | | |
| GNP at current market prices | 20,288.8 | 21,690.0 | 23,611.2 | 25,141.2 | 26,289.6 |
| GDP at current market prices | 20,476.6 | 21,965.5 | 23,851.6 | 25,437.1 | 26,637.4 |
| The rate of growth in GDP at constant market prices (%) | 2.6 | 2.7 | 2.8 | 3.1 | 2.4 |
| The total national disposable income at current prices | 23,743.5 | 24,774.9 | 28,424.5 | 30,302.1 | 30,234.7 |
| The rate of growth in gross national disposable income at current prices (%) | 4.7 | -0.2 | 8.6 | 3.1 | -2.4 |

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|----------|----------|----------|----------|----------|
| Change in the index of consumer prices (%) | 4.2 | 4.5 | 4.8 | 2.9 | -0.9 |
| The change in the GDP deflator (%) | 6.4 | 4.5 | 5.6 | 3.4 | 2.3 |
| Money and Banking | | | | | |
| Exchange rate of the Jordanian dinar to the US dollar | 1.410 | 1.410 | 1.410 | 1.410 | 1.410 |
| Money supply (P2) | 24,118.9 | 24,945.2 | 27,363.4 | 29,240.4 | 31,605.5 |
| Net foreign assets of the banking system | 9,370.1 | 6,665.5 | 6,923.4 | 7,932.3 | 8,137.3 |
| Net domestic assets of the banking system | 14,748.8 | 18,279.7 | 20,440.0 | 21,308.1 | 23,468.2 |
| Net debt of the government | 6,701.4 | 9,461.3 | 10,494.8 | 10,473.9 | 11,386.4 |
| Private sector debts (Residents) | 14,925.0 | 15,953.6 | 17,222.5 | 17,852.8 | 18,704.5 |
| Other factors ⁽¹⁾ | -6,877.6 | -7,135.2 | -7,277.3 | -7,018.5 | -6,622.7 |
| Deposits in dinars at licensed banks | 19,119.1 | 17,711.1 | 21,003.0 | 24,013.1 | 26,014.5 |
| Foreign currency deposits at licensed banks | 5,258.8 | 7,258.6 | 6,590.2 | 6,247.9 | 6,584.0 |
| Rediscount rate (%) | 4.50 | 5.00 | 4.50 | 4.25 | 3.75 |
| Treasury bills interest rate for 6 months (%) | 3.232 | 3.788 | - | - | - |
| Public Finance | | | | | |
| Total revenue and foreign aid | 5,413.9 | 5,054.2 | 5,758.9 | 7,267.6 | 6,796.4 |
| Ratio to GDP (%) | 26.4 | 23.0 | 24.1 | 28.6 | 25.5 |
| Total spending | 6,796 | 6,878.2 | 7,077.1 | 7,851.1 | 7,722.9 |
| Ratio to GDP (%) | 33.2 | 31.3 | 29.7 | 30.9 | 29.0 |
| Overall deficit/savings (on an accrual basis) | -1,382.7 | -1,824.0 | -1,318.2 | -583.5 | -926.5 |
| Ratio to GDP (%) | -6.8 | -8.3 | -5.5 | -2.3 | -3.5 |
| Net outstanding balance of the domestic public debt | 8,915.0 | 11,648.0 | 11,863.0 | 12,525.0 | 13,457.0 |
| Ratio to GDP (%) | 43.5 | 53.0 | 49.7 | 49.2 | 50.5 |
| Outstanding external public debt ⁽²⁾ | 4,486.8 | 4,932.4 | 7,234.5 | 8,030.1 | 9,390.5 |
| Ratio to GDP (%) | 21.9 | 22.5 | 30.3 | 31.6 | 35.3 |
| Foreign Trade and Balance of Payments | | | | | |
| Current account | -2,098.8 | -3,344.9 | -2,487.7 | -1,851.7 | -2,365.6 |
| Ratio to GDP (%) | -10.2 | -15.2 | -10.4 | -7.3 | -8.9 |
| Trade balance (Deficit) | -6,261.7 | -7,486.6 | -8,270.1 | -8,495.6 | -7,249.3 |
| Ratio to GDP (%) | -30.6 | -34.1 | -34.7 | -33.4 | -27.2 |
| Commodity exports | 5,684.5 | 5,599.5 | 5,617.9 | 5,953.6 | 5,558.3 |
| Imports of goods (FOB) ⁽³⁾ | 11,946.2 | 13,086.1 | 13,888.0 | 14,449.2 | 12,807.6 |
| Balance of services (net) | 896.0 | 1,332.3 | 1,209.5 | 1,778.9 | 1,286.4 |
| Income account (net) | -187.8 | -275.5 | -240.4 | -295.9 | -347.8 |
| Current transfers (net) | 3,454.7 | 3,084.9 | 4,813.3 | 5,160.9 | 3,945.1 |
| Capital and financial account (net) | 2,298.9 | 3,808.9 | 1,811.1 | 908.9 | 1,593.7 |
| Direct foreign investment in Jordan (net) | 1,055.0 | 1,074.3 | 1,281.2 | 1,426.7 | 905.1 |

Source: Monthly Statistical Bulletin, Central Bank of Jordan

1. Includes the debts of public & financial institutions and other factors, as shown in the Monetary Survey Agenda.
2. This represents the total balance of drawn loans, minus total repayments.
3. Does not include imports of non-resident entities.

2.4 The Jordanian Investment Environment

Investment Law No. 30 for 2014

Investment Law no. 30 for 2014 is considered an appropriate legislative framework to attract foreign investments and stimulate local investments. It is considered a competitor to other investment laws in the region because it contains many advantages, incentives, and guarantees, and it offers a range of incentives and benefits in and outside the Development and Free Zones. The law includes a series of public provisions, such as foreign investment guarantees (depositing and withdrawal of capital, investment management, and transfers) and the inadmissibility of the disbarment of investment property. The law offers provisions to settle investment disputes, protection, and encouragement of mutual investment agreements between the Kingdom and other countries.

The following shows the major incentives granted by the law:

❖ **Incentives and Benefits outside the Development and Free Zones**

- The production inputs for the industrial and crafts sectors are exempted from customs duties.
- The return of the general sales tax on the production inputs for the industrial and crafts sectors within 30 days.
- Production inputs and fixed assets of the industrial and crafts sectors are exempted from customs duties and are granted a reduction in general sales tax to 0%.
- Returning to the sales tax on the services needed to practice economic activity within 30 days.
- The goods that are necessary for the economic activities of the following sectors are exempted from customs duties and are subject to 0% general sales tax:
 - Agriculture and livestock, hospitals and specialised medical centres, hotels and touristic facilities, touristic entertainment and recreation centres, call centres, scientific research centres and laboratories, art and media production, convention centres and exhibitions, transfers and/or distributions and/or extraction of water, gas and oil derivatives, air transport, maritime transport, and railways.

❖ **Incentives and Benefits inside the Development and Free Zones**

- 5% income tax on the income generated from economic activity within the Development Zone.
- 5% income tax on income generated from economic activity in the industrial sector.
- Tax exemptions that are granted in the Kingdom on goods and services exports.

- Reduction of sales tax to 0% on goods and services that are used by the establishment in order to exercise its activity inside the Development Zone.
- 7% sales tax on specific services provided by a registered company in the zone when these services are consumed in the zone.
- Exemptions from customs duties except for a specified number of goods.

❖ **The Reduction of Income Tax in the Least Developed Areas for Regulation No. 44 for 2016**

- The reduction of income tax in the least developed areas for Regulation No. 44 for 2016 was approved. It aims to create an attractive environment for investments that promote economic development through the reduction of income tax outside the Development Zones and in the least developed areas in the Kingdom. The regulation specified the areas that are considered least developed and identified the activities that are excluded from this reduction.
- Under the provisions of Articles 4 and 5 of this regulation, the areas that were categorised as least developed and enjoy the reduction in income tax are divided into four categories; each category enjoys a reduction in income tax on their activities for a period of 20 years.
- Category A includes the Northern Valley District, Deir Alla District, Shouneh Al-Janoubieh District, the Southern Valley District, Rweished District, the Northern Desert District, the North Western Desert District, Al-Azraq Province, Al-Jiza District except for the borders of the new Al-Jiza municipality, Al-Moakar District except for the borders of Al-Moakar municipality, and the Governorate of Aqaba except for the Aqaba Special Economic Zone. The reduction rate for this category is 100%.
- Category B includes the Governorates of Maan, Tafileh, Karak, and Ajloun. The reduction rate for this category is 80%.
- Category C includes the Governorates of Jarash, Mafraq, and Irbid except the borders of the Greater Irbid Municipality. The reduction rate for this category is 60%.
- Category D includes the Governorates of Madaba, Balqa, Amman except for the Greater Amman Municipality, and Zarqa except for the borders of Zarqa Municipality and Russaifeh Municipality. The reduction rate for this category is 40%.

❖ **Trade and Free Trade Agreements**

The most important agreements are:

- Jordan joining the World Trade Organisation in 2000, which led to the opening of the markets of 150 countries for Jordanian exports in goods and services, and provided new opportunities of access to other countries within a clear and transparent environment of laws, regulations, and procedures.
- A series of regional trade agreements, such as the Jordan Partnership Agreement with the European Union, Agadir Agreement, Free Trade Arab Agreement, the free trade agreement between Jordan and the European Free Trade Association, and the adoption of the Euro-

Mediterranean simplification of the rules of the Origin System, which includes the decision to simplify the rules of the origins of Jordanian products between Jordan and the European Union came into effect on July 19, 2016, and will remain in effect until December 31, 2026.

- A series of bilateral trade agreements with many countries, such as the free trade agreement between Jordan and the United States of America, the Qualified Industrial Zones Agreement, the free trade agreement between Jordan and Singapore, the free trade agreement with Turkey, the free trade agreement with Canada, and many other agreements.
- Jordan has signed more than 35 agreements with Arab and foreign countries in order to prevent double taxation between Jordan and these countries, thus protecting investors' rights.
- The Agreement of Promotion and Protection of Investments and the Movement of Capital between the Arab Countries was signed in 2000 with 11 Arab countries who are members of the Arab Economic Unity Council, in order to establish an appropriate environment for investments and economic cooperation between investors in the Arab countries, thus pushing and stimulating investment activities by providing encouragement and mutual protection for Arab investments.

Human Development Report for 2015

The Human Development Report that was issued by the United Nations Development Program in 2015 showed that Jordan fell 3 points to number 80. Please note that Jordan's place on the Human Development Report index value has improved slightly.

Global Competitiveness Report

The Kingdom's rank has improved by one point in the Global Competitiveness Report for the year 2016/2017, at 63 out of 138 countries compared to 64 out of 140 countries in the 2015/2016 report. It is considered an insignificant improvement, especially because of the reduction in the number of countries participating in this year's report. Amongst the Arab countries, Jordan was ranked after the United Arab Emirates, Qatar, the Kingdom of Saudi Arabia, Kuwait, and Bahrain, who were ranked 16, 18, 29, 34, and 39, respectively.

Doing Business Report

In the Doing Business Report that was issued by the World Bank Group, Jordan is still ranked 118, up one rank from the 2016 report, because of the variation in the performance of the different sub-indicators. Jordan ranked ninth among the Arab countries; the United Arab Emirates was ranked first among the Arab countries at 26, followed by Bahrain at 63 and Oman at 66.

2.5 The Economic Environment in the short and medium term

Risks analysis implemented by BMI indicates that the Jordan's political and economic risks in the short and medium term are less than the overall average of the world and the Middle East. The state's risks and the operational risk are estimated to be within the acceptable levels. The international institutions' forecasts point out that the economic and foreign trade indicators are expected to achieve acceptable rates of growth with the exception of the continued increase in internal and external indebtedness.

Table 5: Assessment of short and long-term risks

| | Long term | | Short term | | Operational risks | State risks |
|-------------------------|-------------|-------------|-------------|-------------|-------------------|-------------|
| | political | Economic | political | economic | | |
| Jordan | 63.1 | 39.2 | 66.6 | 46.2 | 58.7 | 55.4 |
| Turkey | 60.2 | 49.4 | 58.4 | 56.9 | 55.9 | 56.1 |
| Egypt | 53.3 | 45 | 52.4 | 48.7 | 42.9 | 47.5 |
| Lebanon | 45.8 | 54 | 55.4 | 53.5 | 44.2 | 49.5 |
| West Bank and Gaza | 33.1 | 38.1 | 32.2 | 36.5 | 32.5 | 34.3 |
| Syria | 22.9 | 24.4 | 22.4 | 23.6 | 29.3 | 26.1 |
| Regional average | 49.4 | 46.9 | 51.2 | 48.7 | 46.6 | 48.3 |
| global average | 64.1 | 50.7 | 61.3 | 51.9 | 49.8 | 54.6 |

Source: the economy and state risks, IHS, 15/09/2016

Table 6: The most important key economic indicators 2016-2020

| Indicator | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------|-------|-------|-------|-------|
| The growth rate of GDP | 2.6 | 2.7 | 2.8 | 3.2 | 3.1 |
| GDP (in USD billions) | 39.6 | 42.1 | 44.8 | 47.8 | 50.9 |
| Population (In millions) | 9.8 | 10.1 | 10.4 | 10.7 | 11.0 |
| Consumer Price Index (% change) | -0.7 | 1.8 | 3.3 | 4 | 3.2 |
| Exports (in USD billions) | 7.3 | 7.6 | 8.2 | 8.8 | 9.6 |
| Imports (in USD billions) | 18.3 | 19.2 | 20.1 | 21.3 | 22.8 |
| Foreign direct investment, the net value (in USD billions) | 1.5 | 1.5 | 1.6 | 1.6 | 1.7 |
| Foreign direct investment, the net value (% of GDP) | 3.7 | 3.7 | 3.6 | 3.4 | 3.3 |
| Foreign exchange reserves (in USD billions) | 13.9 | 14.9 | 15.7 | 16.8 | 17.7 |
| Total external debt (in USD billions) | 24.4 | 27.8 | 30.7 | 33.7 | 36 |
| Total external debt (% of GDP) | 61.6 | 66 | 68.6 | 70.4 | 70.6 |
| Total external debt (% of foreign currency earnings) | 127.3 | 138.3 | 143.6 | 147.5 | 147.8 |

Source: the economy and state risks, IHS, 15/09/2016

3. Market Study

3.1 Project Description

This center will raise students between (6-16 years), and then the university students and others by introducing the concepts of creative thinking and technology use and training them on using the robots and their applications thereof in this field. In addition, they will be educated on games programming and smart phone applications using easy and uncomplicated software's.

The center will provide all training services and extra-curricular activities for the resident of the Governorate populations, as is no similar centers in Zarqa Governorate and there are still many opportunities to establish such centers. The project serves the children from 6 to 16 years by using the best modern methods in educating the persons not familiar with the basics of computer sciences, engineering and modern technology means. The teaching methods and the theoretical and practical trainings shall be dependent upon teaching the software's of the above mentioned products and services without using the codes or complicated programing languages by the trainees to acquire the skills that qualify them to produce the following services:

- Training the children and trainees on the creative thinking skills.
- Teaching the programming and computer sciences using innovated ways and beyond the traditional style.
- Training the children and university students on using, programming and then manufacturing of Robot.
- Training on manufacturing 2D and 3D computer games using simple programming languages.
- Training the students on developing the smart phone applications using simple software's.
- Training the children on designing electronic websites using simple programming languages.

3.2 Expected Services Description

The project's expected services include the following:

- Training on the courses of robots, engineering and relevant sciences inside the center for the first and second levels.
- Training on the courses of robots, engineering and relevant sciences at schools for the first and second levels.
- Training on robotics and engineering programs for university students.
- Services of assisting the students on programming the smart phone applications and games.

- Assisting the civil society organizations (CSOs), international institutions and local companies to train their staff and beneficiaries in innovative ways.
- Prepare the participants for the local and international extra-curricular activities and competitions.

The following table summarizes the important services:

Table 7: Description of Most Important Programs & Services of the Project

| Program | Program Description |
|---|---|
| 1st Level | <p>The first level consists of some courses (programs) for the youngest age groups (6-9) years:</p> <ol style="list-style-type: none"> 1. First course: introduction to robotics, for those who are 6 years old and above (6⁺). 2. Second course: introduction to uses of engineering and sciences on the robot, 6⁺. 3. Third course: introduction to Electronics, Circuits and Electric Devices, 8⁺. 4. Fourth course: introduction to Mechanics and Machineries, 9⁺. |
| 2nd Level | <p>The second level consists of some courses for the older age group (10-16) years:</p> <ol style="list-style-type: none"> 1. First course: Electronics, given to those who are 10⁺ years old and have never taken the course. 2. Second course: introduction to Machineries and Renewal Energy, 10⁺. 3. Third course: introduction to the design and programming of 3G Robotics, 10⁺. 4. Fourth course: 3G Robotics programming for adults, 12⁺. 5. Fifth course: advanced program in the third generation, 12⁺. 6. Sixth course: Robot C, which is a powerful C-based robotics programming language for writing and debugging programs. This program teaches text-base programming related to engineering challenges for LEGO MINDSTORMS platforms, 14⁺. 7. Seventh course: programming and electronics using Arduino Micro-Controllers, 15⁺. 8. Eighth course: programming and electrics using Arduino Micro-Controller in a simplified way for young children, 10⁺. |
| Mobile Applications & Game Programming | <ol style="list-style-type: none"> 1. First course: designing the games on Xbox 360 devices and Microsoft windows using, Kodu Gaming, 8⁺. 2. Second course: introduction to programming of smart phone applications using Arduino, 12⁺. 3. Third course: Learn to Mod: MineCraft 4. Children will learn the java programming through blocks, to modify their fauorite game "MineCraft" through what is called "moding in MineCraft". Thus, programming and testing their work on the actual game and a simulator, 11⁺. |
| University Students | <ol style="list-style-type: none"> 1. First course: Internet of Things (IoT) and Smart Homes by using practical projects and applications. 2. Second course: Robot programming using Micro Controller Arduino to |

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| | <p>design a digital system.</p> <ol style="list-style-type: none"> 3. Third course: mobile applications innovator. 4. Robot C, the course combines C language programming and robotics. |
| Society organizations (local and International) and Companies' Employees | <ol style="list-style-type: none"> 1. First course: Team building using the robot. 2. Second course: Internet of Things and Smart Systems. 3. Third course: Innovative problem solving using the method of design thinking (Stanford University Model). 4. Woman in innovation. |
| Course/Program Timeline | The period of each course is 14 weeks in an amount of 1.5 hours/once time per week during the ordinary semester and 10 weeks in an amount of 2.0 hours/twice times per week during the summer holiday. |
| Extra-Curricular Activities | <ol style="list-style-type: none"> 1. Activities for school students beyond the official school hours: introduction lecture about Robotics. 2. Field trips: receiving the school students during the official school hours and presenting presentations about Robotics. 3. Training on robot competitions for trainees of the center and the schools. 4. Trainers training: directed schools and universities. |

3.3 Demand Analysis

The field survey showed that there are no similar centers in the governorate, because most of the existing centers are cultural centers, which are concerned with giving strengthening lessons; especially for students of the secondary schools. This type of the centers is completely beyond the field of work of the proposed center; therefore, it is difficult to estimate the volume of demand on the project services. However, there are some indicators that can be used such as the number of students at schools, universities, and community colleges. The following table shows the number of the students in Zarqa Governorate.

Table 8: Students Number in Zarqa Governorate:

| Academic Stage | No. of Students |
|---|-----------------|
| School students | 270,253 |
| University students (bachelor's Degree) | 27,957 |
| Students of community colleges | 1,770 |
| Total | 307,949 |

Source: Department of Statistics / Ministry of Education, Annual Report 2015

By adapting a population annual growth rate of (2.82%), the total number of the students of schools, universities and colleges reaches 344,183 students in 2018 (the expected date to begin the project). This is a large number for the expected students who will use the services of the center. In addition, with assuming conservative ratio of 10% only, the expected market volume reaches to 34,418 trainees.

Competitors' Profiles (Indirect)

The idea of the proposed center is new to Zarqa Governorate, but it is limitedly founded in Amman. Therefore, we can say that there is no competition for the proposed project in Zarqa Governorate; however, the study team collected all information about the indirect competitors in Amman with purpose of benefiting, as much as possible, from the information about them during building the marketing strategy. The following tables show the information on the similar centers in Amman that render the project's targeted services.

| | |
|----------------------------|--|
| Center Name | Eureka Tech Academy |
| Location | Jordan, Amman, Al Rabyah |
| General Description | Eureka is a scientific program specialized in the education of innovation and engineering. In order to develop the innovative capabilities of children in the areas of technology and engineering, so they can transform ideas to useful products and services. |
| Rendered Services | <p>The program consists of two sub-programs according to the following categories:</p> <ol style="list-style-type: none"> 1. Little innovators (6-10 years old), 6 levels as follows: <ul style="list-style-type: none"> • 1st level: Robotics Wedo 1. • 2nd level: Robotics Wedo 2. • 3rd level: Mechanic engineering. • 4th level: Advanced mechanic engineering. • 5th level: Pneumatics. • 6th level: Renewable energy. 2. Bright innovators (11-16 years), 10 levels as follows: <ul style="list-style-type: none"> • 1st level: Robots. • 2nd level: Electric engineering. • 3rd level: Electronics. • 4th level: Control systems (Advanced Electronics). • 5th level: Advanced robotics. • 6th level: Renewable energy. • 7th level: Games programming • 8th level: Mobile; application programming. • 9th level: Innovation and entrepreneurship. • 10th level: Graduation projects and business plan. |
| Program Timeline | The period of each level shall be three (3) months in an amount of 2 hours/week. |
| Prices | 240 JD for each level. Deduction of 10% shall be granted to the Teachers Association and Jordan Engineers Association. |

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|----------------------------|--|
| Center Name | Jubilee Center for Excellence in Education (JCEE) |
| Location | Jordan, Amman, King Hussein Foundation. |
| General Description | <p>Consultancy, scientific educational foundation affiliates to the Jubilee Institute / Kind Hussein Foundation, which is concerned with rendering services of research, development, training, studies and consultancies for all government and private scientific, educational and academic institutions in Jordan and various areas of Arab World. This institution concentrates on the development of teachers and providing the awareness programs for schools, centers and institutions that are concerned with the talent, excellence and creativity. Further, the center prepares the programs and curricula of the talented and outstanding students.</p> <p>JCEE has been established in 1998 to encourage using the information technology and means of interactive education and to develop creative curricula and training curricula for the students, teachers and the administrative authorities in the educational institutions.</p> <p>JCEE's specialized centers have trained thousands of teachers and students in fields of using information technology in the education and robotics, electronics, mathematics, sciences and the other subjects concerned with the talented and outstanding students.</p> |
| Rendered Services | <ol style="list-style-type: none"> 1. Training: the center presents, through its employees, more than 30 training courses for the teachers and those interested in the fields of sciences, mathematics, technology, engineering and mechanics, tests, intelligence, talent, excellence and creativity; including: <ul style="list-style-type: none"> • Great Exploration in Math and Science (GEMS) several levels. • National Educational Center for Robotics – several levels. • Course of design and technology– several levels. • Courses of tests and IQ test. • Courses of simple electronics. • Courses of successful intelligence. • Courses of mechanisms of innovation, creativity and TRIZ system. • Various courses on field of education and rehabilitation of teachers of the talented students. • Courses in the field of the programs for the talented students. • Courses in the field of educational drama. 2. Research, development and consultations: Through the work team and in cooperation with the specialists, the center renders its consultancy services in the following fields: |

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| Program Description | <ul style="list-style-type: none"> • Preparing and managing the educational robotics labs at schools. • Preparing and managing the design and technology labs. • Preparing and managing GEMS Program. • Preparing and managing simple electronics programs. • Preparing and managing the education stations (science gardens). • Providing consultations in the field of establishing the programs of the talented people in the ordinary schools and schools of the talented. • Conducting the studies and researches related to talent, excellence and creativity. • Providing the scientific and educational consultations. • Conducting the intelligence and diagnostic tests. • Developing the admission tests for schools and centers of the talented students. • Analyzing, studying and writing reports related to the tests' results. <p>3. Activities, competitions and events: the centers organizes many events, activities and scientific competitions on an annual basis including:</p> <ul style="list-style-type: none"> • Robotics national competition. • Arab Open Robotics Championship. • F1 in Schools. • Competition of mathematics and chess. • Scientific excellence club for innovation and creativity. • Summer scientific club. • Educational meeting. • Educational and cultural activities and events. |
| Program Timeline | Each level is for 5 months, 4 class periods per month, each class period is for 3 hours. |
| Prices | 75 JD for each month. |

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|----------------------------|---|
| Center Name | International Robotics Academy (IRA) |
| Location | Jordan, Amman / King Abdullah Street |
| General Description | <p>International Robotics Academy (IRA) presents wide variety of programs that include the courses, workshops and inclusive training for schools and engineers to motivate them to utilize the technology used in the robotics; namely, “STEM/STEAM” Science, Technology, Engineering and Math, to develop their skills and to guide them in the right direction.</p> <p>IRA's programs are managed by a team of professional engineers, who enjoy wide experience in teaching the modern sciences. The academy is a partner with the specialized Australian Institute in robotics for children</p> |

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| | and adolescents (domabotics). |
| Rendered Services | IRA presents its courses for the children (6-16 years old) within 30 levels. These courses include the following: <ul style="list-style-type: none"> • Robotics. • Electronics. • Animation and Digital Gaming. |
| Program Timeline | Each level is held for 5 class periods / once time per week / for a period of one hour and half. |
| Prices | 100 JD for each level. |

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| Center Name | Robotics club – Children’s Museum. |
| Location | Jordan, Amman, King Hussein Gardens |
| General Description | The Museum organizes a robotics club that aims to encouraging and developing the capabilities of the children and their interest in the sciences, mathematics and technology. |
| Rendered Services | Provided workshops: <ul style="list-style-type: none"> • Workshop of "We Do 1", age 4-6 years old. • Workshop of "Robotics 1", age 7-9 years old. • Workshop of "We Do 2", age 4-6 years old. • Workshop of "Robotics 2", age 7-9 years old. • Workshop of Electronics 1, age 7-9 years old. • Workshop of Electronics 2, age 7-9 years old. |
| Program Timeline | The club is held every Saturday for a period of three or four months. |
| Prices | 110 JD for each workshop. |

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|----------------------------|--|
| Center Name | Zaha Cultural Center – Automated Robotics Team |
| Location | Jordan, Amman – Khalda |
| General Description | In cooperation with the Center of Excellence in Education / King Hussein Foundation, Zaha Cultural Center has established "Zaha" team to program and design the Robots, this project started in 2006, and s included the following set of procedures: <ul style="list-style-type: none"> • The Robotics Team has been formed from the outstanding students in the field of mathematics and intellectual thinking from various schools of the kingdom. The number of the children benefiting from this project since its start reached around 120 children. • A training program has been approved for the students of the age group; 11 – 15 years old to design and program a Robot that renders services to the community in all fields. • The objectives of this projects have been determined as follows: <ul style="list-style-type: none"> - Spreading and establishing the robotics culture in the |

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| Rendered Services | <p>community.</p> <ul style="list-style-type: none"> - Developing a model approach to educate the subjects of robotics, and such approach shall support the curricula of science, mathematics and technology at schools. - Enhancing Students' confidence when they apply their ideas. - Developing the students' efficiencies scientifically to create a qualified environment to lead the technological renaissance. - Attracting and training the interested students in the science and technology and discovering and taking care of the talented. - Opening future professional prospects for the students and qualifying them as scientists, engineers who are capable to benefit from the technology. |
| Program Timeline | Presented courses: <ul style="list-style-type: none"> • Robotics, 6-9 years old. • Robotics for children. • Math and Chess, age 10-15 years. • After Schools Science, age 6-9 years. • Electronics, 8-13 years. • Cool tools. |
| Prices | The period of each course is 3 months / once class period per week. |
| Prices | Symbolic prices for the courses inclusive two courses for each children against fees in an amount of 11 JD. |

It should be noted that Nuqul Group – in cooperation with the Ministry of Municipal Affairs and Jubilee Center for Excellence in Education (JCEE) – launched the "Educational Robotics" Lab in Al-Kourah District. The lab established in the urban village in the municipality of Deir Abi Said is deemed the first-fruit of the projects that enhance the educational process emanating from the community responsibility program for Nuqul Group in the district.

The lab, which is equipped with the latest educational robotics and the supportive educational tools, provides for the school students in Al-Kourah District a secure and professional area for the effective participation under supervision of the Ministry of Education in Al-Kourah District, experts team of Jubilee Center for Excellence in Education (JCEE). The capacity of the Educational Robotics Center allows hosting 25 students at the same time. In addition, 33 teachers and supervisors from the staff of Directorate of Education, Education resources Center and nine schools in the district have been trained on skills of the robotics by the JCEE experts.

The teachers in the district accompany their students to the lab, whereby they supervise their learning of principles of robotics sciences. The students apply what they have learnt to innovate practical projects that can participate in "First Lego" Educational competition and to compete on the awards thereof.

3.4 Marketing Strategy

Targeted Market

The project targets all male and female students in Zarqa Governorate:

- School students.
- University students.
- Medium university colleges students.
- Private schools.
- Civil Society Organizations (local and International) operating within the governorate).

Expected services and outcomes

The expect project services include the following:

- Training services on the courses of the robotics, engineering and related sciences in the center for the first and second levels (four courses / one program for first level and eight programs for the second level).
- Training services on the courses of the robotics, engineering and related sciences at the schools for the first and second levels.
- Training services on programs of robotics and engineering programs for university students.
- Assisting the students to program the smart phone games and applications.
- Assisting the Civil Society Organizations (local and International) and the companies to train their staff and beneficiaries in innovative ways.
- Local and international extra-curricular activities and competitions.

3.5 Expected Prices

The prices have been proposed in a very careful way to be suitable for the incomes of the governorate residents and to encourage them to purchase such services, because the project is new and leading in its idea at the level of the Governorate. The project pricing strategy includes the following:

Table 9: Expected prices for services rendered by the hospital:

| Statement | Average price (JD) |
|--|--------------------|
| Price of the course / program from the 1 st level in the center | 90 |
| Price of the course / program from the 1 st level at the school | 60 |
| Price of the course / program from the 2 nd level in the center | 120 |

| Statement | Average price (JD) |
|--|--------------------|
| Price of the course / program from the 2 nd level at the school | 70 |
| Price of the course / program for university students and civil society organization | 150 |
| Price of the course/program for applications of the smart phone and game programming | 120 |

Promotion

The promotion strategy of the project includes the following:

- Choosing attractive name that expresses working nature of the center and naming the courses by attractive names that express their objectives.
- Designing Interactive and Dynamic Web-Site and using the social media means. In addition, it is recommended to make a special Mobile App for the center.
- Design Brochures for the center and the services rendered by it.
- Announcements in the local newspapers and other media at the beginning of the project.
- Billboards at schools.
- Holding opening ceremony and inviting all concerned persons to attend it.
- Concentration on the administrative and training staff to show the high level of quality and the specific and modern services that are exclusively rendered by the center in Zarqa.
- Maintaining the excellent image by delivering all promised quality services at appropriate prices for all trainee groups. Thus will be positively reflected by increasing prospective customers coming via supportive trainees (word of mouth).
- Giving price discounts and payment facilities for the private schools, universities students and civil society organizations. The center can enter into partnerships with the civil society organizations in joint initiatives and projects.

Sales

The sales strategy of the project includes the following:

- Direct sales for the students and parents.
- Direct sales for the private schools.
- Direct sale for students of universities and medium university colleges.
- Contracting with the local and international associations and organizations; especially, in case of desire to include the orphan students and/or refugees' children.

Services

The strategy of rendering the project services includes the following:

- Experienced and capable trainers.
- Concentration on the quality of the delivered services.

- Continual maintenance of all equipment.
- Keeping the proper appearance of the employees.
- Keeping good and proper treatments of trainers.
- Delivering new and innovative services and developing new programs and initiatives continuously.
- Creditability in dealing with the clients.
- Participation in the local and international competitions; such as, "National Robotics Competition, Arab Open Robotics Championship, First Lego Learning, World Robots Olympiad and Robotics for Good, and encouraging the trainees, especially the outstanding ones, to participate in the same. The most important positive impacts expected as a result of participation in the local and international robot competitions are shown as follows:
 - Encouraging the students to link the sciences and engineering with the technology and mathematics.
 - Training the students on designing and programming of robotics.
 - Training the students on the collective and team-work.
 - Developing the problem solving and decision making skills.
 - Training the students on the presentation skills and scientific research.
 - Giving the students to face the challenges and competition, so they will gain more experience and knowledge.
 - Training the students on how to benefit from the available resources and utilizing the same for their service.
 - Providing the sciences for the students in stimulating and encouraging methods to learn in atmosphere of suspense and enjoyment.
 - Discovering, developing and following up on the capabilities and skills of the outstanding students.
 - The students participate in dialogues and discussions with the technology manufacturers and international companies.

3.6 Expected Market Share

The following table shows the volume of demand on the center services and its expected marketing share for the first 10 years of the projects' life cycle:

Table 10: volume of demand on the center services and its expected marketing share

| Statement | 1 st year | 2 nd year | 3 rd year | 4 th year | 5 th year | 6 th year | 7 th year | 8 th year | 9 th year | 10 th year |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Number of students at schools, universities and colleges (one | 344.2 | 353.9 | 363.9 | 374.1 | 384.7 | 395.5 | 406.7 | 418.2 | 429.9 | 442.1 |

| | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| thousand students). | | | | | | | | | | |
| Expected market volume (one thousand trainees) | 34.4 | 35.4 | 36.4 | 37.4 | 38.5 | 39.6 | 40.7 | 41.8 | 43 | 44.2 |
| Number of students benefiting from the center services (one thousand trainees) | 1.3 | 1.95 | 2.54 | 2.92 | 3.35 | 3.86 | 4.43 | 5.1 | 5.1 | 5.1 |
| Market share (%) as a percentage out of all students. | 0.38% | 0.55% | 0.70% | 0.78% | 0.87% | 0.97% | 1.09% | 1.22% | 1.19% | 1.15% |
| Market share (%) as a percentage out market volume (no. of potential) | 3.80% | 5.50% | 7.00% | 7.80% | 8.70% | 9.70% | 10.90% | 12.20% | 11.90% | 11.50% |

4. Technical Study

4.1 The Designed Capacity

The project was designed to accommodate for the maximum possible number of the trainees from various training programs and courses at the same time. Thereupon, the center consists of two floors with an area of 250 m² each. The first floor contains a training hall on the life skills using the robot that can contain up to 20 persons and another hall equipped for the professional diploma programs; such as, graphic design and networks as deemed suitable by the center administration, as well as the meetings halls and rooms for trainers and employees of marketing, accounting and management. The second floor has been designed to include the three main halls for training on the robots with all programs and courses thereof. The capacity of each hall is 14 persons and each of them uses his own toolkit and laptop / iPad according to requirements of the training program. The halls have been designed in a way that allows for the setup according to the requirements of each program easily. In addition, the second floor contains offices of the center's director, secretary, innovation officer and small store for the most traded purchases.

These details have been concluded based upon the field survey findings and market volume analysis mentioned above. In general, the possibility of future expansion of the center has been considered, and an area has been leased, which is sufficient for opening of new training halls when needed.

4.2 Required Fixed Assets

The following table shows the total cost of the fixed assets that reached to 195,000 JD, as the center will rent the building and will not purchase lands, because it should be located in the most active commercial places; such as the city center or "Az-zarqa Al-jadeeda" and the cost of the land in such a is very high; therefore, the lease is deemed the best practical option.

Table 11: Total cost of center's fixed assets

| Item | Unit | Price (JD) | Value (JD) |
|--|------|------------|----------------|
| Amendments to the building and decorations | 500 | 50 | 25,000 |
| Robotics Toolkits | 100 | 300 | 30,000 |
| Computer/iPad | 100 | 300 | 30,000 |
| Furniture | - | - | 50,000 |
| Information Technology | - | - | 35,000 |
| Transport means | 1 | - | 25,000 |
| Total | | | 195,000 |

* The figures are estimated from the market study.

4.3 Required Human Resources

The following table shows the required human resources for the project. The required number of employees is around 11 employees with total salaries of 71,400 JD (Administrative: 38,400 JD and operational: 33,000 JD) in addition to the contracting with the trainers from outside the center and the university's students (postgraduate students) at the peak times and in the seasons.

Table 12: required human resources for the project and their associated costs:

| Item | Employee No. | Salary | Total Salary | Administrative | Operational |
|------------------------------------|--------------|--------|---------------|----------------|---------------|
| Director General / Center Director | 1 | 1,500 | 18,000 | 18,000 | - |
| Secretary | 1 | 300 | 3,600 | 3,600 | - |
| Chief innovation officer | 1 | 1,000 | 12,000 | - | 12,000 |
| Marketing employee | 2 | 400 | 9,600 | 9,600 | - |
| Robotic trainer | 3 | 500 | 18,000 | - | 18,000 |
| Accountant | 1 | 300 | 3,600 | 3,600 | - |
| Administrative | 1 | 300 | 3,600 | 3,600 | - |
| Office boy | 1 | 250 | 3,000 | - | 3,000 |
| Total | 11 | | 71,400 | 38,400 | 33,000 |

The following table shows the general job description of the required jobs by the project:

Table 13: General job description of the jobs required in the project

| Job Title | Job description |
|---|---|
| Director General (owner or his representative) | <p>The Director general performs the following tasks:</p> <ul style="list-style-type: none"> • Instructing the administrative staff and trainers. • Setting the vision and mission and developing the strategy of the center, and publishing the same on all social media means with the employees, trainees, parents and others. • Files of the VIP clients and concluding the big deals. • Determining the prices of the center services and signing the contracts (partnerships). • Following up and coordinating the work in all center's facilities. • Evaluating the success of the employees in achieving the determined targets for them (their performance). |
| Chief innovation officer (CIO) | <p>The CIO performs the following tasks:</p> <ul style="list-style-type: none"> • Developing the innovation plans based upon researching for new products. |

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| | <ul style="list-style-type: none"> • Evaluating the targeted markets and the current trends for the extent of accommodating the rapid technological developments in area in the Centre's field of work. • Understanding the recent techniques, information technology, new manufacturing technologies and forms of robotics training. This includes working with the universities and centers of research and communicating with the manufacturers of the robotics training toolkits occasionally. • Coordinating and following up the local and international competitions. • Taking care of and encouraging the creative students and nominating them to participate in the local and international competitions by coordination with the supervisor/trainer and their parents. |
| <p>Robotics officer</p> | <p>The Robotics Trainer performs the following tasks:</p> <ul style="list-style-type: none"> • Training the center's students on the robotics courses, the applications thereof and the mechanism of using the same as well as creating and programing the models. • Training on the life skills using the robot. • Training on the specialized professional diplomas; such as the Networks, diplomas. • In relation to the employed trainers, it is preferred that the trainer has a certificate in the electricity, mechanical, mechatronics or computer engineering. • The most experienced trainer shall be appointed, as the center operations officer, who should – in addition to his job as trainer – develop and review the methods of work procedures at the center, participate in the effective management and optimal management of the resources, help to set forth the standards to determine the effectiveness and efficiency of the work, follow up the work progress and training courses inside and outside the center. |
| <p>Marketing employee</p> | <p>The Marketing employee performs the following tasks:</p> <ul style="list-style-type: none"> • Determining the available opportunities to attract new trainees' students and determining the priorities of attracting and registering them. • Submitting offers and negotiating on the fees and prices as per the policy of the center to sign new contracts. • Performing the market surveys and researches. • Highlighting the needs of parents and clients and defending them. • Developing and executing the expansion plans and increasing of sales. |

| | |
|--------------------------------|---|
| | <ul style="list-style-type: none"> • Documenting all contact data and addresses of the clients. • Representing the center/company in the meetings related to his/her work. |
| Accountant | <p>Accountant performs the following tasks:</p> <ul style="list-style-type: none"> • Participating in the preparation of the estimated budget of the center in cooperation with the director general and the concerned employees. • Follow up, review, and approve the administration and the organizational systems of his unit which includes the procedures and rules, regulations, organizational and functional structure, tasks, functions, job descriptions cards, and authority matrix. • Monitoring the policies and procedures of the financial plan and ensuring that it is in conformity with the laws and regulations. • Preparing the estimated budget that includes the salaries, allowances, operating expenses, maintenance and operations program, projects under execution and new projects. |
| Administrative employee | <p>The Administrative employee performs the following tasks:</p> <ul style="list-style-type: none"> • Performing the procedures and policies that ensure the attendance and departure of the employees, releasing the financial dues according to the same and recording the leaves taken by them. • Preparing the payrolls of the center’s employees and the reports on the worked hours and work discipline. • Preparing and updating a database for all vacant jobs in the center to attract the employees who have the suitable qualifications for the needed jobs. • Receiving, archiving and sorting the employment applications submitted to the center and choosing the applications that meet the work needs, at discretion of the Director General. • Recording the new trainees and following their roles in cooperation with the accountant and trainers team. |
| Secretary | <p>The Secretary performs the following tasks:</p> <ul style="list-style-type: none"> • Scheduling the Director General program. • Assist in all aspects of coordination between the departments and units of the center. • Scheduling and coordinating the meetings, interviews and other similar activities. • Sending and receiving the mail and parcels, preparing the correspondences and keeping and updating the Director General files. |

4.4 Required Licenses

The following table shows the needed licenses by various authorities to execute the project:

Table 14: Licenses required for the project:

| Statement | Analysis |
|----------------------|--|
| Company registration | <ul style="list-style-type: none"> The Ministry of Industry and Trade (MoIT). Jordan Investment Commission (IIC). |
| Start up | <ul style="list-style-type: none"> IIC, Ministry of Information & Communications Technology (MoICT), Zarqa Municipality, Social Security, Department of Income and Sales Tax. |

4.5 Project Timetable

The following table shows the period needed for project execution which reaches 9 months; as follows:

| Stage | 1 st Year (Month) | | | | | | | | |
|---|------------------------------|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Complete Studies | | | | | | | | | |
| Leasing the building and conduct decorations amendment | | | | | | | | | |
| Purchasing devices and equipment and equipping the training halls | | | | | | | | | |
| Finalize the employment and prepare for the opening | | | | | | | | | |
| Total period | 9 months | | | | | | | | |

5. Financial Study

5.1 Financial Assumptions

The following table illustrates the financial assumptions of the project.

Table 15: The Financial Assumptions of the Project

| Item | Assumption |
|-----------------------------|---|
| Inflation Rate | 3% |
| Financing Structure | 100% of the investment is the capital |
| Working Capital | 6 months of costs |
| Pre-Operating Expenses | 3% of total investment |
| Tax Rate | 5% of net profit |
| Outsourcing trainers | 15% of revenues |
| Water, fuel and electricity | 10 % of revenues |
| Annual Salaries Increase | 3% |
| Employees incentives | 1% of revenues |
| Assets Depreciation Rate | 4%-20% of the asset value |
| Total Annual Depreciation | 22 thousand |
| Maintenance | 1% of revenues |
| Rentals | 20 thousand annually with 10% increase after the fifth year |
| Other operating expenses | 2% of revenues |
| Accounts Receivable | One month of costs |
| Inventory | 3% of revenues |
| Accrued expenses | 16.8% of operating costs |

5.2 Investment Cost

The project's Investment cost is estimated at JD 285 thousand distributed among fixed assets of JD 195 thousand, and pre-operating expenses and working capital in total of JD 89 thousand. The following table shows the project's investment cost.

Table 16: the project's investment cost

| Item | Value (in thousand JD) |
|------------------------|------------------------|
| Fixed assets | 195 |
| Pre-operating expenses | 8 |
| Working capital | 81 |
| Total | 285 |

5.3 Financing

The project will be financed with the shareholders by 100% with the total value of the project which is estimated at JD 285 thousand, as there is no need for loans. The following table shows the financing structure for financing the project.

Table 17: Project financing schedule

| Item | Value (in thousand JD) | % |
|--------------|------------------------|-------------|
| Equity | 285 | 75% |
| Loan | - | 25% |
| Total | 285 | 100% |

5.4 Revenues

The following table shows the total revenues of the project, where it is noted that the revenues in the first year amounts to about JD 118 thousand, and increased to reach up to JD 568 thousand in the tenth year.

Table 18: The Expected Revenues

| Statement | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Revenues – First Level | | | | | | | | | | |
| Number of courses within the center | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Number of times studied | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Average number of students in the course | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Total number of trainee's students per year | 447 | 214 | 186 | 141 | 132 | 152 | 175 | 201 | 201 | 201 |
| Average price of course | 90 | 93 | 95 | 98 | 101 | 104 | 107 | 111 | 114 | 117 |
| Revenue from the first level within the center | 40,196 | 19,849 | 17,765 | 13,895 | 13,402 | 15,875 | 18,804 | 22,273 | 22,941 | 23,629 |
| Number of schools participating in the center | 1 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Number of courses in schools | 4 | 12 | 16 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| Number of students participating in the course | 75 | 85 | 95 | 100 | 125 | 125 | 125 | 125 | 125 | 125 |
| Total number of participants in all courses | 299 | 488 | 631 | 757 | 886 | 1,019 | 1,172 | 1,347 | 1,347 | 1,347 |
| Average price of course | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 |
| Revenues of the first Level in schools | 17,945 | 30,128 | 40,182 | 49,624 | 59,831 | 70,869 | 83,945 | 99,432 | 102,415 | 105,488 |
| Total revenues from first level | 58,141 | 49,976 | 57,947 | 63,518 | 73,233 | 86,744 | 102,748 | 121,705 | 125,356 | 129,117 |
| Revenues – Second Level | | | | | | | | | | |
| Number of courses within the center | 4 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 |
| Number of times studied | 4 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Average number of students in the course | 10 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Total number of trainee's students per year | 160 | 241 | 209 | 212 | 265 | 304 | 350 | 402 | 402 | 402 |
| Average price of course | 120 | 124 | 127 | 131 | 135 | 139 | 143 | 148 | 152 | 157 |
| Revenue from the second level within the center | 19,141 | 29,773 | 26,647 | 27,789 | 35,739 | 42,333 | 50,143 | 59,394 | 61,176 | 63,011 |
| Number of schools participating in the center | 1 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Number of courses in schools | 4 | 20 | 32 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| Number of students participating in the course | 90 | 85 | 95 | 100 | 125 | 125 | 125 | 125 | 125 | 125 |
| Total number of participants in all courses | 299 | 813 | 1,263 | 1,514 | 1,772 | 2,038 | 2,343 | 2,695 | 2,695 | 2,695 |
| Average price of course | 70 | 72 | 74 | 76 | 79 | 81 | 84 | 86 | 89 | 91 |
| Revenues of the second Level in schools | 20,936 | 58,581 | 93,758 | 115,789 | 139,605 | 165,362 | 195,871 | 232,009 | 238,969 | 246,138 |
| Total revenues from second level | 40,077 | 88,354 | 120,405 | 143,578 | 175,343 | 207,694 | 246,014 | 291,403 | 300,145 | 309,150 |

| Statement | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Revenues from training of university students, civil society organizations and companies | | | | | | | | | | |
| Number of courses | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Number of times studied | 1 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Average number of students in the course | 8 | 12 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Total number of trainees per year | 48 | 138 | 186 | 212 | 198 | 228 | 262 | 302 | 302 | 302 |
| Average price of course | 150 | 155 | 159 | 164 | 169 | 174 | 179 | 184 | 190 | 196 |
| Revenues from training of universities students, civil society organizations and companies | 7,178 | 21,266 | 29,608 | 34,737 | 33,505 | 39,687 | 47,009 | 55,682 | 57,353 | 59,073 |
| Other revenues such as specialized diploma training for example networks diploma as well as life skills using Android | 5,025 | 12,760 | 17,765 | 20,842 | 20,103 | 23,812 | 28,205 | 33,409 | 34,412 | 35,444 |
| Total revenues from training of universities students, civil society organizations and companies | 12,202 | 34,026 | 47,373 | 55,579 | 53,608 | 63,499 | 75,214 | 89,091 | 91,764 | 94,517 |
| Revenue from training in mobile application and games programming | | | | | | | | | | |
| Number of courses | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Number of times studied | 2 | 4 | 4 | 6 | 8 | 8 | 8 | 8 | 8 | 8 |
| Average number of students in the course | 8 | 10 | 12 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Total number of trainees per year | 48 | 57 | 60 | 79 | 99 | 114 | 131 | 151 | 151 | 151 |
| Average price of course | 120 | 124 | 127 | 131 | 135 | 139 | 143 | 148 | 152 | 157 |
| Revenue from training in mobile application and games programming | 5,742 | 7,089 | 7,613 | 10,421 | 13,402 | 15,875 | 18,804 | 22,273 | 22,941 | 23,629 |
| Total revenue from training in mobile application and games programming | 5,742 | 7,089 | 7,613 | 10,421 | 13,402 | 15,875 | 18,804 | 22,273 | 22,941 | 23,629 |
| Revenues | | | | | | | | | | |
| Total revenues from first level | 58,141 | 49,976 | 57,947 | 63,518 | 73,233 | 86,744 | 102,748 | 121,705 | 125,356 | 129,117 |
| Total revenues from second level | 40,077 | 88,354 | 120,405 | 143,578 | 175,343 | 207,694 | 246,014 | 291,403 | 300,145 | 309,150 |
| Total revenues from training of universities students, civil society organizations and companies | 12,202 | 34,026 | 47,373 | 55,579 | 53,608 | 63,499 | 75,214 | 89,091 | 91,764 | 94,517 |

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| Statement | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total revenues from training in mobile application and games programming | 5,742 | 7,089 | 7,613 | 10,421 | 13,402 | 15,875 | 18,804 | 22,273 | 22,941 | 23,629 |
| Other revenues (from local and international extracurricular competitions and activities) | 2,323 | 3,589 | 4,667 | 5,462 | 6,312 | 7,476 | 8,856 | 10,489 | 10,804 | 11,128 |
| Total Revenues –Thousand JD | 118.49 | 183.03 | 238.00 | 278.56 | 321.90 | 381.29 | 451.64 | 534.96 | 551.01 | 567.54 |

5.5 The Projected Costs

Operating Costs

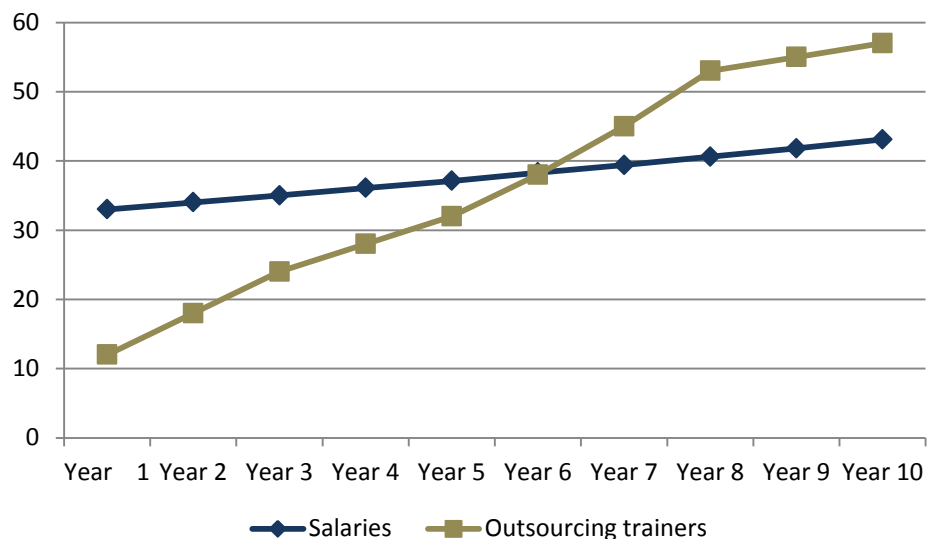
The following table shows the project's operating costs for the upcoming ten years. The cost of outsourcing trainers for the center in the first year amounted to JD 12 thousand which increase to reach JD 57 thousand in year 10. Moreover, the salaries cost amount to JD 33 thousand in Year 1 which increases to JD 43 thousand in year 10.

The following table shows the project expected operating costs for ten years.

Table 19: Operating Costs

| Operating Costs (in thousand JD) | | | | | | | | | | |
|----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Salaries | 33 | 34 | 35 | 36.1 | 37.1 | 38.3 | 39.4 | 40.6 | 41.8 | 43.1 |
| Staff Benefits | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 11 |
| Outsourcing trainers | 12 | 18 | 24 | 28 | 32 | 38 | 45 | 53 | 55 | 57 |
| Water, fuel and electricity | 11.8 | 12.2 | 12.6 | 12.9 | 13.3 | 13.7 | 14.1 | 14.6 | 15.0 | 15.5 |
| Depreciation | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Maintenance | 1.0 | 1.8 | 2.4 | 2.8 | 3.2 | 3.8 | 4.5 | 5.3 | 5.5 | 5.7 |
| Other | 2.0 | 3.7 | 4.8 | 5.6 | 6.4 | 7.6 | 9.0 | 10.7 | 11.0 | 11.4 |
| Rentals | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 |
| Total | 109 | 120 | 129 | 136 | 143 | 155 | 166 | 178 | 182 | 187 |

Figure 3: Projected Operating Costs of the Project



Administrative Expenses

The following table shows the projected administrative expenses of the project. Employees' salaries reach JD 27 thousand in the first year and increase to JD 35 thousand in the tenth year. The marketing expenses are about JD 12 thousand in the first year and increase to reach JD 16 thousand in the tenth year.

Table 20: General and Administrative Expenses

| General and Administrative Expenses (in thousand JD) | | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Salaries | 26.9 | 27.7 | 28.5 | 29.4 | 30.3 | 31.2 | 32.1 | 33.1 | 34.1 | 35.1 |
| Staff Benefits | 6.7 | 6.9 | 7.1 | 7.3 | 7.6 | 7.8 | 8.0 | 8.3 | 8.5 | 8.8 |
| Staff Incentives | 1.2 | 1.8 | 2.4 | 2.8 | 3.2 | 3.8 | 4.5 | 5.3 | 5.5 | 5.7 |
| Stationery | 1.8 | 2.7 | 3.6 | 4.2 | 4.8 | 5.7 | 6.8 | 8.0 | 8.3 | 8.5 |
| Professional Fees | 2.0 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 |
| Marketing Expenses | 11.8 | 12.2 | 12.6 | 12.9 | 13.3 | 13.7 | 14.1 | 14.6 | 15.0 | 15.5 |
| Other Expenses | 3.0 | 3.2 | 3.3 | 3.5 | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.7 |
| Total | 53.4 | 56.6 | 59.6 | 62.4 | 65.2 | 68.6 | 72.2 | 76.3 | 78.7 | 81.2 |

5.6 Projected Financial Statements

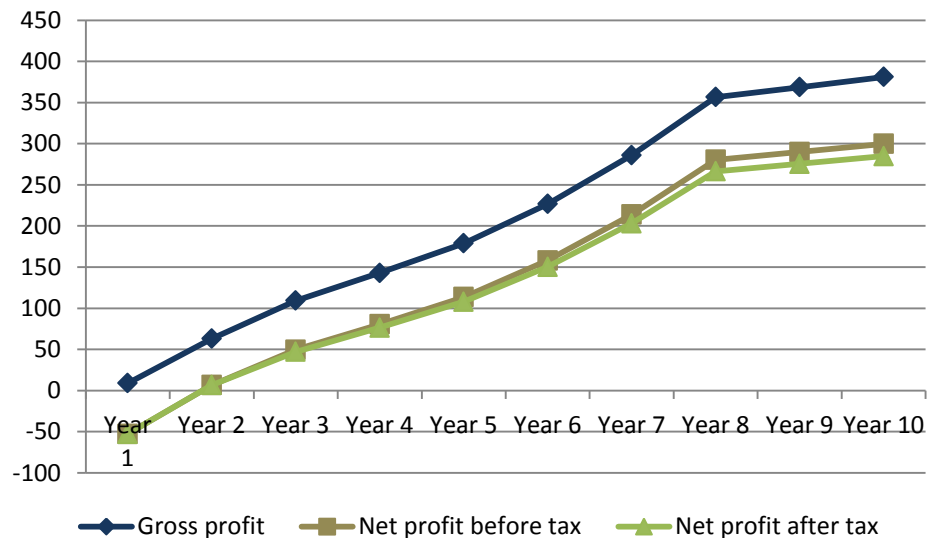
Income Statement

The following table shows the projected income statement of the project. It indicates that gross profit will increase from JD 9 thousand in the first year to JD 381 thousand in the tenth year. Also the net profit before tax will increase from JD 6.5 thousand in the second year to JD 300 thousand in the tenth year. And the net profit after tax will increase from JD 6.5 thousand in the first year to JD 285 thousand in the tenth year.

Table 21: The Projected Income Statement

| Income Statement (in thousand JD) | | | | | | | | | | |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Revenues | 118.5 | 183.0 | 238.0 | 278.6 | 321.9 | 381.3 | 451.6 | 535.0 | 551.0 | 567.5 |
| Operating costs | 109.4 | 120.0 | 128.8 | 135.7 | 143.1 | 154.6 | 165.6 | 178.3 | 182.4 | 186.6 |
| Gross profit | 9.0 | 63.0 | 109.2 | 142.8 | 178.8 | 226.7 | 286.0 | 356.6 | 368.6 | 381.0 |
| Administrative expenses | 53.4 | 56.6 | 59.6 | 62.4 | 65.2 | 68.6 | 72.2 | 76.3 | 78.7 | 81.2 |
| Net profit | (44.4) | 6.5 | 49.6 | 80.5 | 113.6 | 158.1 | 213.8 | 280.4 | 289.9 | 299.8 |
| financial expenses | - | - | - | - | - | - | - | - | - | - |
| Pre-operating cost amortization | 8.3 | - | - | - | - | - | - | - | - | - |
| Net profit before tax | (52.7) | 6.5 | 49.6 | 80.5 | 113.6 | 158.1 | 213.8 | 280.4 | 289.9 | 299.8 |
| Tax | - | - | 2.5 | 4.0 | 5.7 | 7.9 | 10.7 | 14.0 | 14.5 | 15.0 |
| Net profit after tax | (52.7) | 6.5 | 47.1 | 76.4 | 107.9 | 150.2 | 203.1 | 266.3 | 275.4 | 284.8 |

Figure 4: Projected Income Statement



Projected Balance Sheet

The following table shows the projected balance sheet of the project during the first ten years. It indicates that total assets will increase from JD 285 thousand in the year of incorporation to JD 693 thousand in the tenth year.

Table 22: Projected Balance Sheet

| Projected Balance Sheet (in thousand JD) | | | | | | | | | | | |
|--|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Assets | | | | | | | | | | | |
| Cash | 81 | 62 | 84 | 114 | 155 | 170 | 231 | 307 | 400 | 503 | 608 |
| Receivables | | 10 | 15 | 20 | 23 | 27 | 32 | 38 | 45 | 46 | 47 |
| Inventory | | 4 | 5 | 7 | 8 | 10 | 11 | 14 | 16 | 17 | 17 |
| Other assets | - | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 6 | 6 |
| Total Current Assets | 81 | 77 | 107 | 144 | 189 | 209 | 278 | 362 | 466 | 571 | 678 |
| Fixed Assets | 195 | 195 | 195 | 195 | 195 | 230 | 230 | 230 | 230 | 230 | 230 |
| Cumulative Depreciation | - | 22 | 43 | 65 | 86 | 108 | 129 | 151 | 172 | 194 | 215 |
| Pre-operating expenses | 8 | | | | | | | | | | |
| Net Fixed Assets | 203 | 174 | 152 | 131 | 109 | 123 | 101 | 80 | 58 | 37 | 15 |
| Total Assets | 285 | 250 | 259 | 274 | 298 | 332 | 379 | 442 | 524 | 607 | 693 |
| Shareholders Equity and Liabilities | | | | | | | | | | | |
| Accrued Expenses and Payables | | 18 | 20 | 22 | 23 | 24 | 26 | 28 | 30 | 31 | 31 |
| Long Term Loans | - | - | - | - | - | - | - | - | - | - | - |
| Total Liabilities | | 18 | 20 | 22 | 23 | 24 | 26 | 28 | 30 | 31 | 31 |
| Shareholders Contributions | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 |
| Retained Earnings | | (53) | (46) | (32) | (9) | 23 | 68 | 129 | 209 | 292 | 377 |
| Shareholders' Equity | 285 | 232 | 239 | 253 | 276 | 308 | 353 | 414 | 494 | 576 | 662 |
| Shareholders Equity and Liabilities | 285 | 250 | 259 | 274 | 298 | 332 | 379 | 442 | 524 | 607 | 693 |

Cash Flow Statement

The following table shows the projected cash flow statement of the project during the first ten years. It indicates that the cash flow from operating will increase from JD 22 thousand in the second year to JD 305 thousand in the tenth year; while the Cash at the ending period will increase from JD 81 thousand in the year of incorporation to JD 473 thousand in the tenth year.

Table 23: The Expected Cash Flows Statement

| Cash Flow Statement (in thousand JD) | | | | | | | | | | | |
|--------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Operation Activities | | | | | | | | | | | |
| Net Profit | - | (53) | 6 | 47 | 76 | 108 | 150 | 203 | 266 | 275 | 285 |
| Depreciation | - | 30 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Change In Working Capital | - | 4 | (6) | (5) | (4) | (4) | (5) | (7) | (8) | (1) | (1) |
| Cash Flow From Operation | - | (19) | 22 | 63 | 94 | 125 | 166 | 218 | 280 | 296 | 305 |
| Investing Activities | | | | | | | | | | | |
| Fixed Assets | (203) | - | - | - | - | (35) | - | - | - | - | - |
| Cash From Investing Activities | (203) | - | - | - | - | (35) | - | - | - | - | - |
| Financing Activities | | | | | | | | | | | |
| Capital (Equity) | 285 | - | - | - | - | - | - | - | - | - | - |
| Loan | - | - | - | - | - | - | - | - | - | - | - |
| Dividends | - | - | - | (33) | (54) | (76) | (105) | (142) | (186) | (193) | (199) |
| Cash Flow From Financing Activities | 285 | - | - | (33) | (54) | (76) | (105) | (142) | (186) | (193) | (199) |
| Net Cash Flow | 81 | (19) | 22 | 30 | 41 | 15 | 61 | 76 | 93 | 103 | 106 |
| Cash At The Beginning Period | 0 | 81 | 62 | 84 | 114 | 155 | 170 | 231 | 307 | 400 | 503 |
| Cash At The Ending Period | 81 | 62 | 84 | 114 | 155 | 170 | 231 | 307 | 400 | 503 | 608 |

5.7 Financial, Economic and Social Analysis

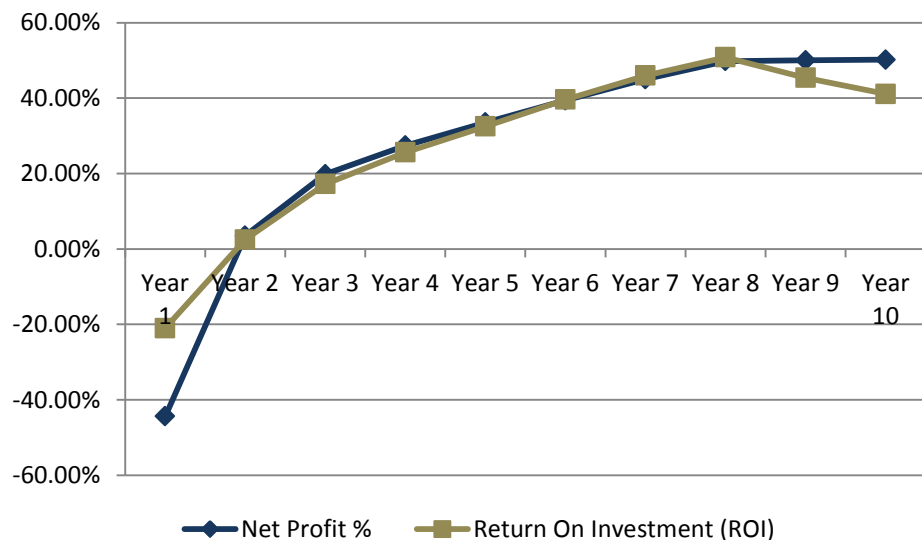
Financial Analysis

The following table shows the financial analysis of the project. It indicates that the net profit ratio will increase from 3.5% in the second year to 50.2% in the tenth year, and the return on investment will increase from 2.5% in the second year to 41.1% in the tenth year.

Table 24: Financial Analysis

| Financial Analysis (In Thousand JD) | | | | | | | | | | |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Assets | 250 | 259 | 274 | 298 | 332 | 379 | 442 | 524 | 607 | 693 |
| Revenues | 118 | 183 | 238 | 279 | 322 | 381 | 452 | 535 | 551 | 568 |
| Profits | (53) | 6 | 47 | 76 | 108 | 150 | 203 | 266 | 275 | 285 |
| Capital (Equity) | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 | 285 |
| Net Profit % | -44.4% | 3.5% | 19.8% | 27.4% | 33.5% | 39.4% | 45.0% | 49.8% | 50.0% | 50.2% |
| Return On Investment (ROI) | -21.0% | 2.5% | 17.2% | 25.6% | 32.5% | 39.6% | 46.0% | 50.8% | 45.4% | 41.1% |
| Return On Capital (ROC) | -18.5% | 2.3% | 16.5% | 26.8% | 37.9% | 52.8% | 71.3% | 93.5% | 96.7% | 100.0% |
| Net Profit On Revenues | -44.4% | 3.5% | 19.8% | 27.4% | 33.5% | 39.4% | 45.0% | 49.8% | 50.0% | 50.2% |
| Assets Turnover (Time) | 0.47 | 0.71 | 0.87 | 0.93 | 0.97 | 1.01 | 1.02 | 1.02 | 0.91 | 0.82 |

Figure 5: The Financial Analysis



Economic Analysis

The following table shows the economic analysis of the project during the first ten years, we conclude that:

- The Internal rate of return is 30.7%. It exceeded seven times the return on assets, which means the economic feasibility of the project
- The present value of the project reached about JD 831 thousand. It exceeds the net present value with JD 546 thousand, which means the economic feasibility of the project.
- The profitability index of the project reached 2.92 times, which means that the expected value of the project will increase by triple the investment value, which proves that the project is feasible.
- The project payback period is 5 years.

Table 25: the Economic Analysis

| Economic Analysis (in Thousand JD) | | | | | | | | | | | |
|---|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Net cash flow from operating and investing activities | (285) | (19) | 22 | 63 | 94 | 125 | 166 | 218 | 280 | 296 | 305 |
| terminal value | - | - | - | - | - | - | - | - | - | - | 662 |
| Net Cash flow | (285) | (19) | 22 | 63 | 94 | 125 | 166 | 218 | 280 | 296 | 967 |
| Internal Rate of Return (IRR) | 30.7% | | | | | | | | | | |
| present Value | 831 | | | | | | | | | | |
| Net present value | 546 | | | | | | | | | | |
| Profitability Index (Time) | 2.92 | | | | | | | | | | |
| Payback period (Year) | 5.00 | | | | | | | | | | |

Social Analysis

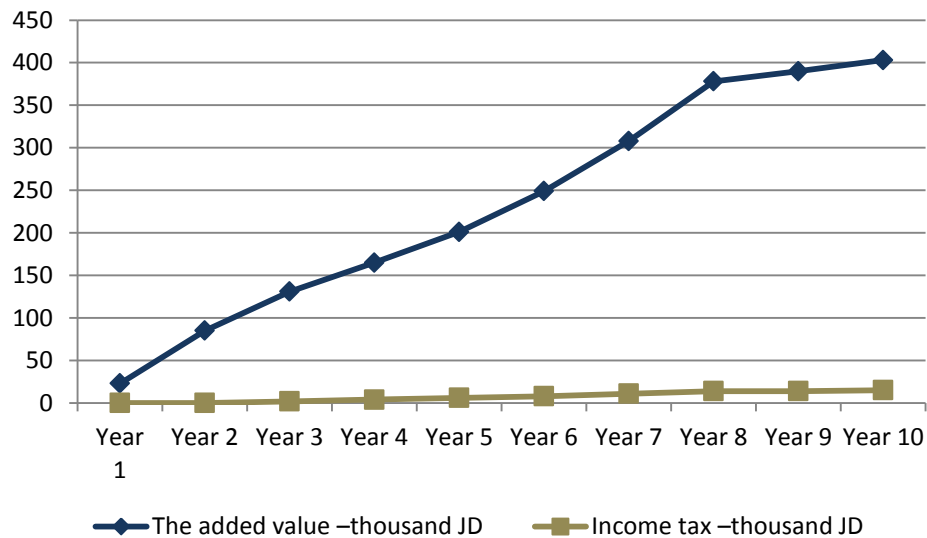
The following table shows the social analysis of the project. It is noticed that the number of staff required for the project will increase from 11 employees in the first year to 17 employees in the tenth year. All employees in the project are Jordanian.

The added value of the project will also increase from JD 23 thousand in the first year to JD 403 thousand in the tenth year. The income tax will also increase from JD 2 thousand in the second year to reach JD 15 thousand in the tenth year.

Table 26: the Social Analysis of the Project

| Social Analysis | | | | | | | | | | |
|--------------------------------------|--------|--------|--------|-------|--------|--------|--------|--------|--------|---------|
| Statement | Year 1 | Year 2 | Year 3 | Year4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| Number of Employees | 11 | 12 | 12 | 13 | 13 | 14 | 15 | 15 | 16 | 17 |
| Jordanian employees | 11 | 12 | 12 | 13 | 13 | 14 | 15 | 15 | 16 | 17 |
| The added value –thousand JD | 23 | 85 | 131 | 165 | 201 | 249 | 308 | 378 | 390 | 403 |
| Income tax –thousand JD | - | - | 2 | 4 | 6 | 8 | 11 | 14 | 14 | 15 |
| sales tax value –thousand JD | - | - | - | - | - | - | - | - | - | - |
| Exports value / imports substitution | - | - | - | - | - | - | - | - | - | - |

Figure 6: The Social Analysis



6. Risk and Sensitivity Analysis

6.1 Risk Analysis

The following table shows the risk matrix analysis that may face the project.

Table 27: Project Risk Matrix

| Risks | Type of Risks | Risk Assessment |
|------------------------|---|---|
| Financial Risks | <ul style="list-style-type: none"> ▪ Credit Risk Credit risk represents the risk of the company's financial loss as a result of the customer's default of the contractual obligation or that of the party dealing with the company through a financial instrument. These risks are mainly caused by trade receivables and others. ▪ Liquidity Risk Liquidity risk is the risk resulting from the company's inability to meet its financial obligations at time. The company's liquidity management is to ensure as much as possible that the company always maintain enough liquidity to meet its obligations as they become due and payable in normal and emergency conditions without incurring unacceptable losses or risks that affect the company's reputation. ▪ risk of currency fluctuation Currency risk is the risk of the fluctuation of the value of financial instrument, due to fluctuations in foreign currency exchange rates. | <ul style="list-style-type: none"> ▪ The financial risks that may face the company are low, because the company payment method is cash ▪ There is no risk of currency exchange, because the company sales and purchases by local currency ▪ There is no risk of inflation because the company's pricing is based on a periodic basis |

| Risks | Type of Risks | Risk Assessment |
|---|--|---|
| | <ul style="list-style-type: none"> ▪ inflation risk It is the risk associated with the possibility that the inflation or the rise in the cost of living might lead to the decrease the real value of the investment. | |
| <p>Business risk (sector risk)</p> | <ul style="list-style-type: none"> ▪ Strategic Risk It is the risk resulting from taking bad decisions by the company's management, or implementing the decisions in a wrong way, or not taking the decisions at the right time; which leads to losses or causes loss of alternative opportunities. ▪ Legal and Regulatory Risks These risks are reflected as a result of non-compliance with laws, guidelines and instructions governing the work. Legal risks are caused by the company's break of the laws governing the work in the state in which the company operates. While regulatory risks arise from the company's violation of laws and standards issued by the regulatory authorities. ▪ Reputation Risk Reputation risk arises from influential negative public views which result in great losses of customers or money. It includes the actions of the company's management or its employees which project a negative image of the company, its performance | <ul style="list-style-type: none"> ▪ The risks are considered moderate before the company's establishment, because of getting the approval of the official authorities such as municipality and tourism ▪ Reputational risk is very high, as the company deals with very sensitive issues such as entertainment activities, food and beverage ▪ Market risk in the short term will be low because of the low competition from other companies in the governorate |

| Risks | Type of Risks | Risk Assessment |
|--------------------------------|---|--|
| | <p>and its relationships with customers and other stakeholders. Reputation risk also results from circulating rumors about the company and its activities.</p> <ul style="list-style-type: none"> ▪ Competition Risk Competition risk results from domestic and external competitors and reduces sales and profits. | |
| <p>Operational Risk</p> | <p>Operational risk involves losses resulting from the failure of internal operations, human resources and systems. It includes:</p> <ul style="list-style-type: none"> ▪ IT Risks They are losses arising from downtime or systems failure due to the infrastructure, information technology, or the lack of systems, and any failure or malfunction in the systems. They include: the crash of computer systems, breakdowns in communication systems, programming errors, computer viruses and opportunities losses due to breakdown. ▪ Human Resources Risk Losses caused by employees or related to them (intentionally or unintentionally). It also includes acts that are intended as methods of cheating, abusing property or circumvent the law, regulations or company policy by | <ul style="list-style-type: none"> ▪ Operational risks are very low, for the company will contract with specialized technical bodies to develop the required information systems, in order to manage operations ▪ Competitive salaries will be paid ▪ Information security plan will be put in place to safely keep the company information |

| Risks | Type of Risks | Risk Assessment |
|-------------------|--|--|
| | officials or employees, as well as losses arising from the relationship with the customer, shareholders, regulators and any third party. | |
| State Risk | State Risk includes politicians' interference, civil unrest, wars, financial and monetary policies and high level of debts. | <ul style="list-style-type: none"> ▪ State Risk is considered to be low, due to security and political stability; international reports indicate that State Risk is low both in medium and long terms |

6.2 Sensitivity Analysis

First: Increase of Investment Cost By 10%

The following table shows the results of the sensitivity analysis when investment cost increases by 10%.

Table 28: Investment Increase by 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | 30.7% | 29.0% | 1.6% |
| The Present Value at a discount rate of 13% (in Thousand JD) | 830.6 | 839.0 | -8.4 |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 545.9 | 525.8 | 20.1 |
| Profitability Index (Time) | 2.9 | 2.7 | 0.2 |
| Payback period (Year) | 5.0 | 5.2 | -0.2 |
| The Net Profit Ratio – an average of 5 years | 27.4% | 27.4% | 0.0% |
| Return on Investment - an average of 5 years | 28.0% | 26.3% | 1.6% |
| Return on Capital – an average of 5 years | 47.9% | 43.6% | 4.4% |
| Net Profit On Revenues - an average of 5 years | 27.4% | 27.4% | 0.0% |
| Assets Turnover (Time) – an average of 5 years | 0.9 | 0.8 | 0.1 |
| The added value - an average of 5 years (in thousand JD) | 233.4 | 233.4 | 0.0 |
| income tax - an average of 5 (in thousand JD) | 7.4 | 7.4 | 0.0 |
| sales tax - an average of 5 years (in thousand JD) | 0.0 | 0.0 | 0.0 |

The above analysis refers to the feasibility of investment in the project, in light of the high cost of the total investment of the project, which increased by 10%. It is noted that:

- The internal rate of return reaches 29%, which is considered high for investment purposes
- The new payback period is 5.2 years, and it is reasonable for recovery purposes
- The return on capital is 43.6%, which is suitable for investment purposes

Second: Reducing Revenues by 10%

The following table shows the results of the sensitivity analysis when reducing revenues by 10%.

Table 29: Reducing Revenues 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | 30.7% | 25.1% | 5.6% |
| The Present Value at a discount rate of 13% (in Thousand JD) | 830.6 | 635.7 | 195.0 |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 545.9 | 350.9 | 195.0 |
| Profitability Index (Time) | 2.9 | 2.2 | 0.7 |
| Payback period (Year) | 5.0 | 6.1 | -1.1 |
| The Net Profit Ratio – an average of 5 years | 27.4% | 19.8% | 7.6% |
| Return on Investment - an average of 5 years | 28.0% | 24.1% | 3.8% |
| Return on Capital – an average of 5 years | 47.9% | 35.8% | 12.2% |
| Net Profit On Revenues - an average of 5 years | 27.4% | 19.8% | 7.6% |
| Assets Turnover (Time) – an average of 5 years | 0.9 | 0.9 | -0.1 |
| The added value - an average of 5 years (in thousand JD) | 233.4 | 197.1 | 36.3 |
| income tax - an average of 5 (in thousand JD) | 7.4 | 5.8 | 1.7 |
| sales tax - an average of 5 years (in thousand JD) | 0.0 | 0.0 | 0.0 |

The above analysis shows the low sensitivity of the project in case of reducing the revenues or demand by 10%. It indicates that:

- The internal rate of return is 25.1%, which is considered high for investment purposes
- The new payback period is 6.1 years, and it is reasonable for recovery purposes
- The return on capital reaches 35.8%, which is suitable for investment purposes

Third: Increasing the Operating Costs by 10%

The following table shows the results of the sensitivity analysis when increasing the operating costs by 10%.

Table 30: Increasing the Operating Costs by 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | 30.7% | 27.8% | 2.8% |
| The Present Value at a discount rate of 13% (in Thousand JD) | 830.6 | 739.2 | 91.4 |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 545.9 | 454.5 | 91.4 |
| Profitability Index (Time) | 2.9 | 2.6 | 0.3 |
| Payback period (Year) | 5.0 | 5.5 | -0.5 |
| The Net Profit Ratio – an average of 5 years | 27.4% | 22.8% | 4.7% |
| Return on Investment - an average of 5 years | 28.0% | 26.9% | 1.1% |
| Return on Capital – an average of 5 years | 47.9% | 42.9% | 5.1% |
| Net Profit On Revenues - an average of 5 years | 27.4% | 22.8% | 4.7% |
| Assets Turnover (Time) – an average of 5 years | 0.9 | 1.0 | -0.1 |
| The added value - an average of 5 years (in thousand JD) | 233.4 | 218.3 | 15.0 |
| income tax - an average of 5 (in thousand JD) | 7.4 | 6.8 | 0.6 |
| sales tax - an average of 5 years (in thousand JD) | 0.0 | 0.0 | 0.0 |

The above analysis shows the feasibility of the project in light of increasing the operating costs of the project by 10%. It indicates that:

- The internal rate of return is 27.8%, which is considered high for investment purposes
- The new payback period is 5.5 years, and it is reasonable for recovery purposes
- The return on capital is 42.9%, which is suitable for investment purposes