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# Investment Opportunities Map

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Jordan Investment Board

## National Health Data Base Project

IT Sector

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<b>The Project at a Glance</b>	
Project Name	National Health Data Base
Service Capacity	70 Participants/year
Manpower	18
Total Investment Cost	US\$ 688,000
Initial Working Capital	US\$ 60,000
Internal Rate of Return (IRR)	25.7 %
Breakeven Point	58% of service capacity

# National Health Data Base Project

## 1. Introduction

### 1.1 Project Description

The availability of National Health Data Base (NHDB) is essential and very important to citizens, doctors, hospitals, clinics, health centers, insurance companies, researchers...etc.

At present, it is impossible to follow up a patient's health history, which is very important for diagnosing his situation. This project could cover all residents (Jordanian or non-Jordanian) and it could be named the National Health Index (NHI), based on the national health index number (NHIN). This index will be accessible to privileged health care providers like doctors, pharmacists, hospitals...etc through a secure internet access using a simple browser from anywhere in Jordan.

The project will provide the following services:

- Standard health records.
- Provide accident and emergency cases clear health information with minimal effort.
- Help doctors to diagnose the patient's case better and more accurately (prevents errors).
- Provide researchers and managements with statistics and printed reports.
- Special training programs for doctors, nurses and medical staff to be more effective.

### 1.2 Potential Clients:

- Hospitals (Doctors, nurses, medical staff ...etc).
- Ministry of Health
- Clinics and medical centers.
- Insurance companies

- Health funds in professional associations.
- Doctors.
- Pharmacists.

## 2. Market Aspects

### 2.1 Local Demand

The following entities are the expected clients of the project database:

- Public and private hospitals: 97
- Primary, secondary and tertiary health centers: 1254
- Professional associations: 10
- Insurance companies : 26
- Faculties of medicine at universities : 3

Table (1) provides some facts about Jordan's health sector in 2003.

**Table (1)**  
**Facts about Jordan's Health Sector**  
**(2004)**

	Hospitals	Doctors	Health Centers	Nurses	Pharmacies
Number	97	12,008	1278	9373	1616

Source: Ministry of Health.

### 2.2 Competition

There is currently no local or regional competition to this project. It will be the first project of its kind in the region.

## 2.3 Project Advantages

The project will have the following advantages:

- All hospitals and other concerned parties in Jordan will appreciate this project as it will help them improve their efficiency by enhancing their information system.
- Governments need such a project to help them prepare better plans for health care in their countries.
- The project has great potential in the regional markets.

## 2.4 Projected Sales Revenues

Software projects have the following special features which the investor should take into account:

- Software products have a universal market and can be implemented in different countries.
- Software products are subject to changes and modifications to cope with information technology changes and updates.
- Software applications maintenance fees after the warranty period are estimated at about 15 % of sales price.
- Manpower are not limited to the development of one certain product, they can work on other systems concurrently, and so additional income can be generated.

Revenues of the project will come from the annual fees paid by the entities using the database. The proposed annual fee is US\$ 10,000 per participant.

It is projected that the number of participants will reach 70 in the third year of operations. Table (2) shows the projected annual revenues.

**Table (2)**  
**Projected Annual Revenues**

<b>Year</b>	<b>1</b>	<b>2</b>	<b>3+</b>
<b>Participant</b>	<b>35</b>	<b>53</b>	<b>70</b>
<b>US\$</b>	350,000	525,000	700,000

### 3. Technical Aspects

#### 3.1 Project Location

The location of the project is proposed to be in Amman area due to the following factors:

- Amman province is a central location with respect to most hospitals, health centers, doctors ...etc. who will benefit from the services of this project.
- Availability of different facilities and services needed for the project.

#### 3.2 Manpower

**Table (4)**  
**Manpower Requirements**

<b>Job</b>	<b>Required No.</b>
General Manager	1
Administrative Clerk	2
Engineer	2
Software expert	7
Technician	4
Laborer	2
<b>Total</b>	<b>18</b>

The total annual salaries and wages of the above employees (including fringe benefits), in addition to overhead and administrative expenses are estimated at US\$ 271 thousand.

#### 3.3 Land & Buildings

The building area required for the project is about 500 m<sup>2</sup> of office type to be rented against an annual rent estimated at US\$ 30, 000.

### **3.4 Inputs and Consumables**

- Creating the National Health Index Number (NHIN) from the available master index of Jordanians based on the national number in the Civil Status and Passport Department.
- Building a security system to prevent data corruption.
- Stationery and other IT equipment consumables.

### **3.5 Technology**

The project will need hardware, software and networking items, most of which could be obtained from the local market.

## **4. Financial Aspects**

### **Basic Assumptions**

The financial analysis and indicators are based on the following assumptions:

1. Project operational life is 10 years.
2. Internal Rate of Return (IRR) is calculated at 100% equity ratio.
3. Income tax is calculated at 25% on net taxable income.
4. Net Present Value (NPV) is calculated at 12% discounted annual rate.
5. Initial working capital is based on the operating expenses needed for two months.
6. Operating expenses comprise raw materials, labor cost and overheads, utilities and other expenses.
7. Pre -operating expenses consist of studies fees, capital issue, licensing, training, trial operations and other similar expenses.

## 4.1 Project Investment Cost

**Table (4)**  
**Total Investment Cost**

<b>Item</b>	<b>US\$</b>
Equipment & Software	500,000
Transport means	25,000
<b>Sub- Total ( Fixed Assets )</b>	<b>525,000</b>
Contingency, 10%	53,000
Pre – Operating Expenses	50,000
Initial Working Capital	60,000
<b>Total Investment Cost</b>	<b>688,000</b>

## 4.2 Financial Indicators

- ROI = 24.7%
- IRR = 25.7 %
- NPV = 514 Thousand US\$
- BEP = 58 % of service capacity
- Payback Period = 4 Years.