# MIS 104

# INTRODUCTION TO INFORMATION SYSTEMS

# ANALYSIS OF EXISTING INFORMATION SYSTEM AND SUGGESTIONS PROJECT

## GROUP MEMBERS

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# DISTRIBUTION OF ROLES

Every members prepared questions about existing information system's components. In the below, these components written in first lines. After, group members made some suggestions for existing system but some member(s) did not to this part. It written too.

Also, extra contributing members' contributions are explained in the second or third lines.

### MEHMET ZAHİD CURA / 17030411018

- System and network infrastructure
- He did not make a suggestion for suggestions part.

### KADİR BAŞYİĞİT / 17030411030

- Data storage
- He had scheduled a meeting for plannig project's steps.

### ARİF ESEN / 17030411054

- User-provided help options
- System maintenance and support
- He gathered and checked all questions,answers and suggestions. He prepared this project file.

### HAMZA YAVUZ / 17030411056

- Interfaces
- He found a company and authorized person for interview.

### ABDÜSSAMED KILIÇ / 17030411059

- System documentation

### YUSUF ABO / 17030441011

- Data access

### SUHEYB FARAH GINDHE / 18030441007

- System architecture

## INTRODUCTORY INFORMATIONS

### ABOUT FIRM

SER-DAL Energy was founded in 2000. SER-DAL Energy, which started to work as a project company, is operating in the field of application too. This firm continues to be solution partner with companies which operating in the field of electrical applications.

Also the company provides services such as Electric internal installation, Weak current, Fire Detection and Notification system, CCTV and Security Systems, Sound System, Electric Telecom Infrastructure, Transformer, Power Transmission Line, Generator facilities.

In this company, there are 24 staff. These are 4 engineers and 20 technical personnel working in the field of project, exploration and construction.

This company use Zirve Software company's products and our group analyzed one of them programs. Program which is analyzed is Zirve Ticari Software.They use this program in the accounting department.

### ABOUT SOFTWARE

Users can keep the pre-accounting records of their company, users can keep their customers' incoming and outgoing order, Users can keep the pre-accounting records of their company, users can keep their customers' incoming and outgoing order.

Users can do a lot of process in this software such as invoice,retail sale,waybill,waybill stock operations,order,stock,banking ,checking notes,daybook,transfer operations,foreign currency transactions,barcode,serial no - detail tracking,address Label.

Users can get reports or general reports designed for each module. All modules are integrated with each other.

Also, users can follow up your e-Transformation processes in an integrated way.

**ABOUT AUTHORIZED PERSON**

Person who is authorized in the SER-DAL Energy's data processing unit is the Sadık Emektar. He was working in this company since 2014. His responsibilities are data exchange, data storage, maintenance and control to servers,social media management, provider new products. He answered our group's questions and he told some informations about company.

## THE CONTRIBUTION AND VALUE OF THE INFORMATION SYSTEM

- Users do not have to deal with documentation process because of software's storage opportunities. This is organizational contribution for employees.
- The system has improved communication between employees. This is organizational contribution for firm.
- Through to the system, the data were entered into the system faster. It can leave a good impression for their customers'.
- Regular data retention is ensured.This is technical contribution for employees because, if their data is not regular, they can get into difficulty.
- Zirve Ticari Software provide to control of company's financial structure easier. This is economical contribution for managers because they can control easily.
- Through to the system, processing time increased and workload of employees is decreased. This is social contribution for employees because, if their workload is decreased, they can save the time.

## THE EFFECTS OF INFORMATION SYSTEM ON EMPLOYEES AND MANAGERS

- Every employees and managers can reach all informations through the same interface on the software. Advantage of this, ensure to transparency.
- Zirve Ticari Software is valuable for employees because employees can use easily and this software provide comfort to users.

- Zirve Ticari Software provide a lot of process options to users. This is big advantage for users because users do not have to use any other software.

- Software company give quick feedback about users' fault, this can be increase employees' work motivations because if their system is not working, they cannot work efficiently.

## INFORMATIONS ABOUT QUESTION-ANSWER PART

In this project, 8 components of Zirve Ticari Software was analyzed by group members. These components are:

- Interfaces
- Data access
- Data storage
- System architecture
- System and network infrastructure
- System documentation
- User-provided help options
- System maintenance and support.

Also, In this project, informations gathered through interview technique. Group members shared components of software, and every members prepared some questions about their own topic.

After, group members asked their questions to people who is responsible for data processing unit in the company.

The questions asked by the members of the group and answered by the authorized persons are presented below. That questions was divided by separately for better understanding, prevent to intrication and looking better apparentness in the paper.

# QUESTIONS AND ANSWERS

**INTERFACES:**

1) Is there only one user interface in Zirve Software or all users access the program from the same interface?
- Everyone provide access from one interface.

2) Does each user have their own password and user name, or is everyone using the same password and user name?
- Each user has their own name and password. Every users can access all informations and every process in the program with their own password and user name.

3) How often does the user interface change?
- The program's interface has never changed.

4) Can the interface be customized or can users add some properties?
- Interface cannot customized by users.

**DATA ACCESS:**

1) How are data access provided and what kind of problems do you encounter with data access?
- Data access is provided locally. The only problem is that there is no access to data outside the office. This way for security is more convenient for our system and data security.

2) How is data access security ensured?

- Security is provided by making the necessary port settings and permissions to close the remote connections.

3) Can software company access firm's data?

- They can access firm's data partly but they have not authorize to access all data because of data security.

4) If software company have a authorized for access firm's data, how and when they access firm's data?

- Software company want to our firm's employees to opening our system for support and when we need support, we open our system. Software company can access by notifying the other party of random information in the system.

5) Are there any critical data available only to authorized senior authorities?

- Our system is open to all office workers. There is no any data access restriction.

**DATA STORAGE :**

1) What type of data storage do you use ? DAS / NAS / SAN?

- We use DAS data storage unit.

2) What are the data storage devices you use? HDD/SSD/D -SKET/RAM/CD/USB/ROM?

- We use HDD disks for data storage. We use Usb memories for data transport processes. We use CDs when we want to share digital data manually.

3) What do you do if you need to increase the amount of data to be stored?

- If the device that we need to increase disk capacity is a server computer, employees do this with HDDs. If it is a portable computer, employees do this with external disks.

4) What is the total amount of data collected so far?
- Total data size is "1" terabyte.

5) What can you tell about your data backup and update?
- Backup is done on a program basis. Program data files are stored as documents in the Zirve Software. The SQL database services used for data backup are stopped. The data files copy to an external unit, the SQL database services are activated.

**SYSTEM ARCHITECTURE:**

1) Which  type of system architecture do you use in the program?
- Waterfall model is used in the program.

2) Which transport protocols are used?
- TCP / IP protocol is being used in Zirve Ticari Software.

3) Is the program an open source based system?
- No. Zirve Ticari Software is the closed source based system.

**SYSTEM AND NETWORK INFRASTRUCTURE:**

1) Which program(s) do you use for the system infrastructure?
- Our firms use Excel.

2) How do you provide data entry to the system?
- New data entry process is made on the previously created template.

3) How many staff are required to repair and process the system?
- One person is enough to repair and process current system.

4) What is the most critical position in the system and network infrastructure?
- The most critical position the data center of the wireless local network(server data center.)

5) Is the firm's network infrastructure sufficient for better running?
- Since the data is constantly increasing, the system can slow down in places and the infrastructure is not enough.

**SYSTEM DOCUMENTATION:**

1) Which software or applications have you used to help with electronic filing?
- Our firm are applications used in WinRAR, 7zip like these. These programs provide efficiency and space savings in electronic filing because these programs are compression programs.

2) How does your documentation process work?
- There are some critical steps for certification. These steps are respectively; meeting the criterias,eliminating of deficiencies,make an application, doing system integration, evaluating and cover the fee. After the again evaluating, you completed certification process.

3) Describe a time when you made a mistake in your duties. How did you rectify it?
- Investigating the errors made in the missions and investigating the reasons for making mistakes were questioned. (for example lack of attention, motivation, spiritual reasons, lack of knowledge, etc.). Repeating minimizes the possibility of errors.

4) What precautions have you taken to protect your system from cyber attacks?
- To protect our system against cyber attacks, the firewall meets our basic needs. We protect our system against cyber attacks by closing our local system to remote connections.

5) What are the importance of system documentation for your company?
- System documentation has a critical effects on data organization and availability because our firm need documentations and our customers want to see their documents. So, we must storage and protect that.

6) How often do you update your documentation system?
- Documentation system updated in once a year.

**USER-PROVIDED HELP OPTIONS:**

1) What kind of help options does the program offer to the users in the help menu? What are these help options? (What are subtitles?)
- Software shows some important steps for process options in the help menu. If users need help, users call the customer center of software company or users can send to e-mail for getting help services.

2) Are these help options provided by the program effective in troubleshooting the users?
- Users are satisfied about software company's help services because they care to their customers and their feedbacks are quick.

3) If users need to help, and if they do not have Access to internet in that time, what do software company for this issue?
- Users can call to call center, users can fix the problem with advices which is given by autorized person's on the phone. If they cannot to do this, customer service need to internet because they use remote desktop help service. They can fix to customers' probems with that ways but they do not have in-place services.

4) Is there any platform in internet (website or applications) for sharing comments, suggestions or complaints ?

- Yes, Zirve Software Company has a website for that issues. Every user can share and read something related to system. This website is: http://www.zirveyazilim.net/forum/

**SYSTEM MAINTENANCE AND SUPPORT :**

1) How often are maintenance and support updates coming?

- The system updates comes every two months.  Also, system maintenance is also done along with the at the same update packet.

2) Are users satisfied with the maintenance and support updates provided by the software company? These updates are enough for employees and managers ?

- System updates are made by taking into account the requests of the users. Also, the users are satisfied for maintenance and support updates.

3) When it comes to a problem, what is the time period for the software company to provide response time and support and Is the support service to enough to solve system's problems?

- They provide a good support service and their support service meets user's expectations in the ratio of 90 percent. System support service's time depend on the software firm's workload. Usually, maintenance time is changes to 1 to 5 hours.

4) In what ways do support providers provide support service?

- The help service is usually provided by telephone, remote desktop or e-mail.

5) How do backup, server and security services works and what's the users' comments about that?

- System backup; e-Mail accounts, user files, system server data are backed up in weekly periods. An automatic backup is not available. User's computers and systems are backed

up at noon and close to quitting time. System backups provide a positive return on the system to restore negative interventions such as deleting e-mails, deleting files, etc. Users are 70% satisfied about backup, although not entirely, of backing up. Daily Backups will increase the satisfaction rate.

6) What is the informations about the exist of services such as fault logging, monitoring periodic maintenance periods, online service tracking?

- There is no fully centralized automation in Zirve Ticari Software. So, it is ensured that the system failures are communicated to the relevant authority through the personnel information notes. The fault tracing and the result of the fault are followed by the personnel who wrote the note. Therefore, an online service tracking is not available for the fault tracing.

o Is there a need for business reengineering? If so what kind of restructure is proposed?
  - They do not need reengineering but they can add some process in the existing system. Reengineering can be expensive for managers and software company can fix users' complained.

o Users are more complained for which part of existing system?
  - They complained for storage part because storage is take a long time in office hours.

o Should information systems' processes be redesigned? What processes should be designed?
  - Existing imformation system need some redesigned. Users complained about some process of existing system and in this part, these are explained by specify.

## SUGGESTIONS FOR IMPROVE EXISTING INFORMATION SYSTEM

- Users complained "There is no automatically data backup system " Software company can create a new data backup system and it can be automatically. So, users can use to software more efficiently.

- Data backup process occur within the office hours and internet system is slowdown during the backup process.  So, backup process should occur out of the office hours for better internet access.

- Online  fault tracking system can be added in the system because employees have to follow all fault operation.

- Using the SAN system, they can reach high speed and can be used by the whole network.

- The storage capacity can also be increased by using the NAS system.

- Data storage's quickness can increased by using SSD.

- Users expressed that they are not satisfied with the network infrastructure. With the renewal of network infrastructure, system slowdown can be prevented and efficiency increases.

- Users can be access their data in outside of office with using the cloud system. This can prevent data loss in the systems which software is installed.

- A different interfaces can be design for employees who is work different unit of company. For example, managers can use different interface and accounting employees can use different interface.

- Every users should be able to design their own interface to their own's delight. For example colours, shape of option dialogs etc.

- Software company should send a questionnaire which their satisfaction is asked to users. So, they can learn customers' suggestions, complaint and requirements easily and quickly.

- In order to find the document and documentation contents quickly and easily, the toolbar in the program itself can be improved.

- Access to all data by anyone using the program can be dangerous for data security. Therefore, according to the hierarchical structure in the company, data access may be restricted.

- Users can be trained in social engineering. Because users are in the most critical position about the threat of infiltration into the system. Users may be asked to renew passwords periodically.

# SCREENSHOTS FROM EXISTING INFORMATION SYSTEM

**NOTE:** There is no English version of Zirve Ticari Software. For that reason, pictures gathered in Turkish version.
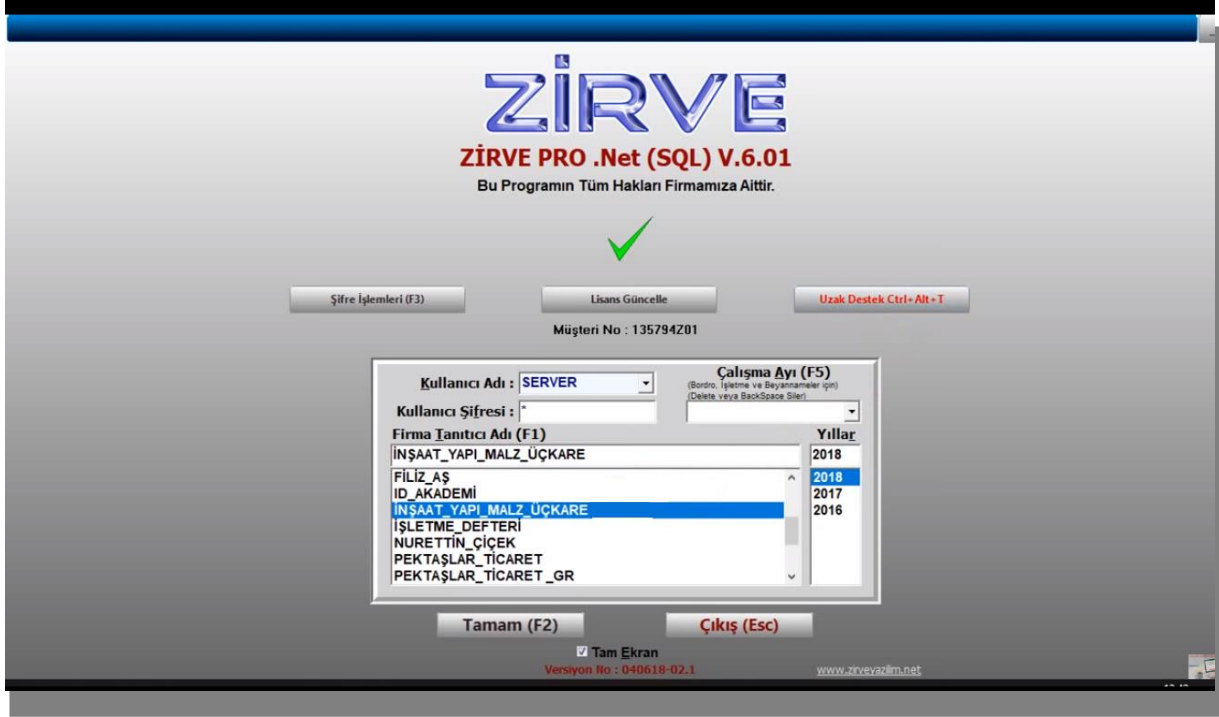
Firma Tanıtıcı Adı : İNŞAAT_YAPI_MALZ_ÜÇKARE - Çalışma Yılı : 2019 - Kullanıcı : SERVER

20 Duyurular   _   X

Ticari İşlemler          Muhaseba İşlemleri          Üretim İşlemleri

| | |
|---|---|
| Genel Muhasebe | KDV - 1 Beyannamesi |
| Bordro - Personel | KDV - 2 Beyannamesi |
| İşletme Defteri | Muhtasar Beyanname |
| Müşavir Stok | Geçici Vergi Bynm. (Gelir) |
| Demirbaşlar | Geçici Vergi Bynm. (Kurum) |
| Serbest Meslek Makbuzu | Gelir Vergisi Beyannamesi |
| Kira Entegrasyonu | Basit Usul Gelir Vergisi |
| Müşteri Cari Takibi | Kesin Mizan Beyannamesi |
| e - Beyanname (Paket) | Kurumlar Vergisi Beyannamesi |
| Ofis Otomasyonu | Ba - Formu    Bs - Formu |
| Mevzuat (GİB)    TÜİK Formu | Damga Vergisi Beyannamesi |
| Ayarlar | Entegrasyon İşlemleri |

Kapat (Esc)

Program Kısayol Tuşları

www.zirveyazilim.net          zirve forum sayfası

■ Hızlı Menü Aktif (Ctrl+M)

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Z Çek Senet --- Çalışma Yılı : 2018 --- Kullanıcı : Server - Firma Tanıtıcı Adı : ADA_NALBUR - 21.06.2018 - 14:38:45 - Müş.No : 135794 - Ver.No : 040618-02.1          ↔   —   □   X

| Çek / Senet Girişi (F4) | Çek / Senet Çıkışı (F7) | Durum Değiştirme (F11) | Kapat (Esc) |
|---|---|---|---|
| Bordro Bul | Bordro İncele | Bordro Düzelt | Bordro Sil (Ctrl+Del) |

| __.__.____ | | Hepsi ▼ | | | | Filtrele | | |

| Bordro Tarihi | Bordro No | Bordro Türü | Tip | Cari Unvanı | Banka Adı | Banka Şubesi | Hesap No | Dvz.Cinsi | Tutar (TL) | Tutar (Dvz) | /g. K |
|---|---|---|---|---|---|---|---|---|---|---|---|
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Cari Unvanı [      ]   □ Borçlu   __.__.____   Liste Şekli [Vadeye Göre ▼]   Banka Adı [      ]   Çek / Senet Bul

| | | | Hepsi ▼ | __.__.____ | Hepsi ▼ | | | C/S Filtrele | C/S Durum Değiştirme |

| Bordro No | Portföy No | Çek/Senet No | Tip | Durum | Vade | Tür | Para Br. | Brd.Dvz | Dvz.Tutarı | Tutar (TL) | Uyg.Kur | D? | Cari Adı |
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(Çek/Senet tarihçesini görebilmek için mouse ile tıklayın veya space (boşluk) tuşuna basınız)

| Tarih | Portföy No | Durum | Bordro No | Bordro Türü | Çek/Senet Türü | Cari Adı | Kasa Adı | Banka Adı | Tahsilatı Yapan |
|---|---|---|---|---|---|---|---|---|---|
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| Çek / Senet Yazdır (F12) | Bordro Yaz (Alt+Y) | Raporlar (F5) |
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