Paul M. Diffenderfer | Samir El-Assal

Microsoft Dynamics NAV

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Microsoft Dynamics NAV

Jump Start to Optimization

2nd revised Edition

With 209 Illustrations

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preface to 2nd english edition

What was once simply Navision, became Navision Financials which became Navision Attain, then Microsoft Navision and is today called Microsoft Dynamics NAV. What is important to the loyal owner or user is that the ERP world behind the changing name is the same excellent quality they have come to trust. The newest version, Microsoft Dynamics NAV, is a continuation of this tradition of quality. This book is intended to serve companies and individuals using a wide range of versions within the Navision tradition. Therefore, the authors concentrate on the more essential deep features and concepts that remain largely unchanged despite the uneasy reality of shifting product names.

Following the adage, "Teach a boy to fish and he'll feed his family for a life time," the authors have developed examples that strengthen the reader's intuition, encouraging him or her to think deeply about the system so that they have the confidence and tools to strike out on their own and explore the endless opportunities for optimization made possible through Microsoft Dynamics NAV. Whether or not you master the coding techniques covered in this book, you will become a better judge of the quality of others' work. As you probably already know, the ERP system is the heart of your enterprise, and therefore, you should not trust just anyone to do open-heart surgery on it. This book will help you develop a vision for successfully administering an ERP implementation even if you do none of the programming and physical implementation yourself.

Readers are invited to contact the authors directly via email at: pdiffenderfer@yahoo.com, if more specific Microsoft Dynamics NAV assistance—not otherwise covered in this book—is needed. Likewise, mention must be made of the best source for Microsoft Dynamics NAV online help, www.mibuso.com. Thanks MIBUSO for getting us all—professionals as well as amateurs—out of the odd, technical quandary!

Special thanks to Jill L. Keehner for the intense editing she did to improve this book—the 2nd english edition of a book that has for too long straddled a precarious line of bilingual ambiguity.

Paul Diffenderfer and Samir El-Assal

February 2008, Frankfurt, Germany

preface to 1st english edition

In the last year and a half, worldwide interest in the ERP solution Microsoft Navision has more than doubled—and with good reason. Microsoft Navision already enjoyed a broad and solid utility when it was purchased by Microsoft in early 2002, and now with the leadership and resources of Microsoft this ERP solution has quickly and dramatically improved in new and promising areas. Microsoft Navision is truly a comprehensive solution to the complex business information management and analysis problems experienced by medium to small-sized firms. Whether you are operating a production or merchandising firm or a purely service-based establishment, Microsoft Navision has tools that can streamline and optimize your information infrastructure.

This is the third edition of the successful book "Microsoft Navision optimiert einsetzen." In this book the authors attempt to discuss some of these new technologies as well as continue to offer an introduction to Microsoft Navision's deeper structure and programming conventions, which by and large have remained a stable and unchanged basis for the recent software developments.

As ever, the reader is encouraged to test the examples while studying this book. It suggested that one make use also of the abundant reference resources included on the Microsoft Navision demonstration CD in PDF format as well as the software's extensive on-line help files. If you do not have a copy of this demonstration CD please contact your Microsoft Business Solutions Center or see www.mibuso.com and they will be able to supply this for you.

The purpose of this book is to help the reader overcome the danger of becoming overwhelmed by the size and complexity of the software and its resources. Therefore this book will be an aid in building a sense of the important themes, themes that will develop the right intuition in the reader and thus make her or him able to embark on successful self-instruction projects in the future. Mastering Microsoft Navision use and development can be the key to giving your company the quality and efficiency that will win you and your firm a profitable and effective future.

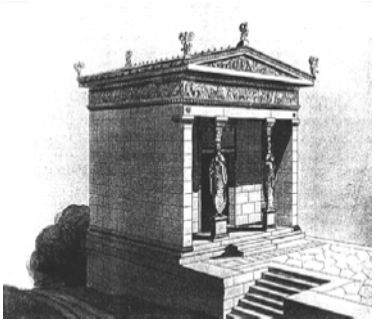
We wish to make a special note of thanks to a few individuals and organizations whose kind and expert help has been necessary to bring this book to the public.

Firstly Dr. Reinald Klockenbusch whose excellent guidance and trust have been the origin and prime mover in Vieweg Fachverlag's publication of the first and second edition of this book. Secondly a loud applause is due Sabine Thiele in her lightning fast and expert translation work done for both German editions.

We would like to thank the team at TONACO GmbH for patience and dedication to ever further optimisation of their Microsoft Navision ERP system. The examples in this book are larger taken from a real and tough day in the life of TONACO GmbH. Also we wish to thank B.I.Team Softwareberatung for providing demonstration software as well as high quality and professional support.

Paul Diffenderfer and Samir El-Assal

Washington DC, May 2005



to

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"Poet of a democratic religion"

table of contents

1 The ERP Philosophy

One of the most important decisions your company can make is how it will measure and manage its performance. Without good fortune and hard work—not to mention investment—realizing this goal is difficult regardless of the size of your operation. Fortunately you have purchased Microsoft Navision as well as the designer licenses needed to open and optimize its structure. Armed with Microsoft Navision's development tools such as the Application Builder, Table Designer, and Report Designer you now have a flexible and powerful state-of-the-art business information tool capable of managing and measuring your firm's performance. Next you need only the time and know-how to optimize it, that is to put it into use and adapt it to your firm's specific needs. With patience and a few key skills you can create the ultimate controlling, workflow optimization, and management system that will help make your firm the lean, mean and profit-making machine that you always envisioned.

At the outset of this book we will provide some background about Microsoft Navision as a tool which requires a brief discussion of the philosophy of Enterprise Resource Planning (ERP). Next we will look at some of the promises and dangers of ERP solutions. We discuss what strategies to take to avoid problems and what tools in Microsoft Navision are there to help you execute winning strategies, thus actualizing the promises of ERP.

1.1 Promises of an ERP system

First and foremost the ERP system is an information source. The information management must be quick, complete and correct. With these things in place, the ERP system promises you the ability to have every fact about your company's past, present and future plans and expectations—in detail and in summary—at your finger tips. Because ERP systems bring the information of various departments together you enjoy the benefit of having a real-time overview of the entire firm.

Interdepartmental Information fusion

As the ERP system connects the information of each department it can enforce a single standard throughout your entire firm. This

gives you a unique opportunity to 'rationalize' your company's operations and have your corporate culture and vision reflected in the practices of each department. For example, if one of your business goals is to have same-day shipping you can set up your ERP system so that each department has information about the customer's order even before it is their turn to work on it. This transparency of information allows each department to prepare for their part of the production process. It also facilitates communication between departments, making it easier to avoid or find solutions to problems before the product has reached their department. In this way departmental barriers can be broken down by giving everyone access to the same relevant information at the same time. This level of interdepartmental, information fusion can bring tremendous efficiency to your shipping, inventory, and customer order entry departments.

Standardization of Operations

The ERP system gives you the possibility of standardizing your business processes. For example, you can customize your ERP system to automatically print invoices at the moment the shipping department prints the packaging documents so there is never the question whether the customer received an invoice without the matching shipping documents. Another example is having the system automatically suggest only those ingredients which have a certain critical shelf life to be used in production thus enforcing the uniform quality of your products. This standardization of your processes and operations allows you to measure your firm's performance more accurately because you are receiving consistent information from your departments who are working in the same manner and with the same information.

Position training and optimization

With improved standardization of information and processes the firm can train new workers more quickly. The optimized ERP system not only suggests to workers the next step in their task and informs them when dangerous or tricky actions are being undertaken, but also educates them about working in an orderly manner. By tailoring the system you can guide individual workers within a specific workflow that optimizes the tasks and provides built-in clarity about the expectations of the job they are performing. In this way the whole firm can reach a higher level of performance and efficiency.

Planning tools

The ERP system promises to optimize your company's efficiency and some of the best tools designed towards this end are the planning tools. Imagine that in one table, for example, the buying department could see every product and every product's components in open orders as well as their availability in the in-

ventory. This information could save workers countless footsteps, not to mention endless back-and-forth questioning. The ERP system's interdepartmental connections optimize project management and task coordination. Efficiency and costs can be saved as it will no longer be necessary to shuffle paper between departments or make frequent trips to the refer to the archives.

An overview without losing the details

Another advantage of the ERP solution—which integrates firm-wide information—is that important aggregate variables (like *Total Sales* or *Total Freight Costs*) are directly linked to the specific details of which the aggregate variables are summations. For example, when looking at the *Liquidity Analysis* in the *General Ledger* matrix you can immediately drill down to individual unpaid invoices that make up the accounts payable and see exactly which are the most expensive purchases contributing to the accounts payable. Here you see that you do not have to sacrifice the everyday details to obtain a big picture of what's happening. This type of capability gives the CEO an eagle's-eye view without losing touch with the individual, everyday decisions being made throughout the firm.

Because of the interconnectedness of information the controller can cross-reference reports to check the consistency of the information recorded by each department. For example, the accounts payable reported in the *General Ledger* must be the same amount as the sum of open invoices reported by the buying department. If it is not the same, there could have been a manual booking into the *General Ledger Accounts Receivables*. Whereas, *General Ledger Accounts Receivables* should only contain system bookings. In this way you can see the inconsistencies that would have remained hidden if not for this integrated information infrastructure. Such things can easily be managed with a good ERP system.

Results of these advantages

Finally, all these promises—when actualized—should add up to the improved manageability and performance of your entire enterprise. With an optimized Microsoft Navision ERP system you should be able to do easily with a small team what a few years ago would have required an army of expensive managers.

1.2 The Potential Dangers of Implementing an ERP System

You must keep in mind however, that without the proper marriage between your firm and your ERP solution you may experience results that are quite opposite of the expected promises. It is no overnight task to have a detailed and systematically defined

understanding of how your firm operates day-to-day. You need to understand your business to the extent that you can then strictly structure it in a software environment.

The worst possible result—one that in practice occurs all too often—is that your new ERP system decreases your firm's efficiency, frustrates your workers and gives confusing or simply incorrect information. This is all on top of the fact that the software was an expensive investment. The reality is that an ERP system is extremely complex and sensitive. In the ERP/firm marriage much work is required to adapt the software so that it becomes a mirror image of your ideal business processes.

The more knowledge you have of your firm's daily operations and the capabilities of the software, the fewer comprises will have to made between your information processing work and your firm's general operation. While it is usually difficult to find both of these knowledge sets within the same person, it is the ideal to shoot for.

Data entry and care

As mentioned above, a common problem that ERP users run into is that the ERP system actually increases their workload and gives them false information. This failure occurs most frequently because ERP users do not have "clean" foundation information in the system. As a result, the system uses less than perfect information to produce false results that must be endlessly corrected. When this happens you will hear workers complain about having to continually "feed" this new and expensive tool—work that before was unnecessary. Sadly, this exact situation occurs in many firms. You MUST make an effort in the very beginning of your ERP installation to get your "stock" data nearly perfect. Your stock data constitutes the information that you use that rarely changes, such as chemical or product recipes or the address or bank account of a customer. If you utilize incorrect stock data you will, from day one, generate new and automatically false entries with each transaction that utilizes incorrect stock data.

Negative example

Let us consider an example that frequently occurs. Suppose there is a production firm that introduces Microsoft Navision as its first ERP system. Let us also suppose that the production manager of this firm has resisted the firm's innovation and has failed to embrace, understand and manage the ERP project. In particular, he has failed to invest the time needed to make 100% sure that basic information has been correctly and completely entered into Microsoft Navision. Let us further suppose that both false and in-

complete product recipes have been entered into the production module and that the ERP system uses these unapproved recipes in creating production orders. When these production orders are processed, the ERP system automatically eliminates false ingredients from the inventory and calculates false production costs along each step of the production process.

Although the production manager has always orchestrated the production without recommendations from an information system and feels no immediate pain from his poor management of the new system, his bad habits will be the source of problems for nearly the entire ERP system and all it users. This bad behavior in one causes bad business decisions to be made, creates false inventories and late shipments. Pretty soon, the entire firm has lost faith in the ERP solution. This chain of problems occurs because: the system will not calculate the correct material costs of production; the system inventory will be incorrect because the system will not be properly accounting for what is being used in the production process; the buying, shipping and the order entry departments will not be able to trust their tools which are dependent on correct inventory information, thus resulting in their inability to plan.

On top of all these problems, someone must spend several hours each week correcting the system inventory (if they want the ERP system to function at all) until the source of the problem—the false recipes in this example—is corrected. The advantage of having an information system which integrates data from each department can quickly become a disadvantage if one department fails to work cleanly.

Out-sourcing programming work

Another danger to be aware of is this: becoming overly-dependent on outsourced programming. Such relationships can become a vicious circle because the programmers frequently write solutions in a manner that make them inflexible in the long run. It is better for the long-term future of your firm to have someone in-house who can accurately fine-tune your system. With a little knowledge of the background development tools and capabilities, you will be able to determine the difficulty of your various development needs and judge the quality of the specialists you hire. Imagine that you need to insert the information of a second bank account so that it appears on your firm's invoice. Such tasks (adding information to reports, documents or masks) are frequently required and are not dangerous or difficult to perform. Therefore, it may not be reasonable to hire an ex-

pensive specialist when you could do the work yourself in minutes and get exactly the results you want.

Common-practice example

Let us consider the following example. You ask an outsourced programmer to set a default price group so that it is automatically given for each new customer. Imagine that this default price group should be: STANDARD_CUSTOMER. To accomplish this simple task they simply program the default code, STANDARD_CUSTOMER, into the customer table as a static and absolute text that permanently assigns this price group to new customers. The better way would have been for the programmer to create a new field, *Default Price Group*, in the price group table so that the user can—at any time—select a default price group. The first and inferior technique means that in the future, when you want to change the default, you will have to pay the programmer again to do with code what any user could have done themselves. An even worse outcome is when the option, STANDARD_CUSTOMER, is erased from the price group table list. In this case, an error will occur stopping the creation of new customers. The computer will try to assign the text, STANDARD_CUSTOMER, even though this option has been erased from the price group table. The following cryptic error message will appear when a user tries to create a new customer: "Customer price group code STANDARD_CUSTOMER does not exist." Now it is impossible to create new customers until a "specialist" comes to fix the "problem" unless someone in your company can interpret the error message.

Later we will discuss in detail how you can make these kinds of simple changes yourself and protect yourself from potential emergencies invented by specialists who may be building future work for themselves into your system.

Price flexibility versus chaos

An out-of-the-box ERP system like Microsoft Navision can be so flexible that if your firm is not careful, the plethora of options may foster chaos. Consider the following example: There is a standard price for each good in the product catalogue, however, this standard price applies to only the standard form and standard distribution of the good. Because of the tremendous complexity of distribution in today's firms, an ERP system like Microsoft Navision offers several, complex sales price methods. Below are some pricing options:

- Price is linked to an individual product/customer relationship

- Price is linked to a customer group
- Price is linked to a product group
- Price is determined by discounting the standard price based on information in a third table which contains information about invoice discount

This complexity goes on. If your firm fails to have a clear strategy, it becomes difficult to find out where and on what level false price information has entered into a calculation.

Reducing the complexity

The ERP system is there to give the firm choices, but too many choices will lead to poor decision-making. The ERP system's flexibility provides a variety of options for many types of firms, but in practice you should limit the standard functionality to neatly fit the operations of your firm. Therefore, although many possibilities exist in the software it is best to choose one strategy for performing a task and then block or hide (using the software development tools which we will discuss in detail later) the alternatives.

Adapting ERP to your firm, & not the reverse

One of the biggest dangers of any software is that the firm will adapt to the software instead of the software adapting to the firm. In practice, the former happens quite often. It is frequently the case that because of a minor function or lack of a minor function in the software, the firm must change its workflow to follow an inefficient alternative just to support the larger interests of the software's operation. Here is an actual example: To stop an order from being partially shipped before it is finished being entered into the system, the shipping department and the order department must work in shifts, which means that products can rarely be shipped in the same day. This absurdity occurs simply because the firm did not have the know-how and development tools to put a key into the software which distinguishes between "finished orders" and "orders not yet completely entered." This book and the development tools within Microsoft Navision will help you to avoid some of these absurd situations.

1.3 Strategies to Win the Promises and Avoid the Dangers

Attitude: Never assume there is no better way of doing something. The key to success in optimizing your ERP solution is committing to a plan of continual improvement and fine-tuning. With Microsoft Navision and its development tools you have the perfect ERP platform for adapting an expansion ERP solution to

achieve all the promises previously stated and avoid the dangers that follow.

Prerequisites

The following steps are critical for attaining the goals of a successful ERP solution:

- Define your business operations clearly and concretely, in a logical if/then style
- Define standard naming conventions and cataloguing conventions
- Gain control of the programmability of your software

An effective way to begin defining the structure of your business operations is to use a good graphic workflow design tool like Microsoft Visio. With Visio you can quickly create diagrams that guide you along your path of program development to achieve solutions that will be easy to implement when you begin adapting your Microsoft Navision software. This book will suggest concepts and examples of techniques that will help you to realize these workflow diagrams in the software.

Feedback from your workers

In addition to mapping your firm's activities and familiarizing yourself with some development techniques, you will need continual support and feedback from your workers who must use the ERP on daily basis. It is helpful to foster a firmwide understanding that improvements require time, testing, feedback and training—a long but profitable process. This is the road to creating a truly comfortable and efficient information infrastructure that reflects the best intelligence of your firm.

Einstein is supposed to have remarked, "Today's problems were yesterday's solutions." Many times what you have used to meet the needs of one user will indirectly create a problem for another. Due to the interconnectedness of a complex ERP software, it is always difficult to see how fixing a problem in one area will affect other seemingly distant functions in the software. This is why it is important to have a complete test version where you can check the effects of your new ideas (How to create a test version will be discussed in detail later). Everyone must work together to create the system that they will all be using together. As you move forward, have patience, because regardless of the promises of the ERP salesperson, no software can immediately—out-of-the-box—optimize your firm.

Continuous-improvement

Microsoft Navision is the winning ERP choice for small to mid-sized companies looking to avoid the dangers and achieve the promises of the ERP philosophy. This is largely due to years of real world testing and continual improvement of the base Microsoft Navision software. The software is supported by a large network of experienced specialists who have helped more than 15,000 firms with the installation and adaptation of the Microsoft Navision system. This is a history you can trust. However, it does not mean the software is perfect. As the needs of the business world change, so must the software. A tool as complex and powerful as an ERP system is like a living system—ever growing, changing and always offering new alternatives to outmoded practices.

Microsoft Navision has out-of-the-box features that put tremendously powerful and flexible information-gathering tools like *Flow Filters*—which eliminate the need of literally hundreds of special reports—at the user's fingertips.

Microsoft Navision's powerful and intuitive application and function development environments make adapting as well as creating new fields, table views, forms and reports easy. If you are familiar with Microsoft Access, working in the Microsoft Navision environment will not be difficult.

An important and powerful feature of Microsoft Navision is the ease with which you can create a fully operational copy or copies of your Microsoft Navision system. This is critical for testing Microsoft Navision functions or newly programmed applications or reports or tricky new techniques before integrating it into your firm's precious Microsoft Navision database. A copy can also be a stress-free environment in which to learn about the Microsoft Navision system without the fear of making a mistake.

Finally, with the help of this book, the extensive Microsoft Navision help files, documentation and the network of experienced specialists, you will have everything you need to optimize your installation of Microsoft Navision.

2 Architecture, Login and Test System Creation

In this chapter we will shed some light on the background of the Microsoft Navision system layout and show you how to locate, login and copy the Microsoft Navision database.

2.1 Login

In practice, most firms have one server, one Microsoft Navision database on that server and one company on that database. If you are using a single Microsoft Navision company, you can simply use the login window that appears automatically when Microsoft Navision is opened. You can forget about the background complexity of connecting to a specific server, database and Microsoft Navision company. The login window that automatically appears only connects the user to the most recently accessed Microsoft Navision database and company. This is not the environment that you want to work in as you learn to master the Microsoft Navision environment. Therefore, we **strongly** recommend that you create a second database and use it as a test copy of your Microsoft Navision database. For this reason it is best to cancel your automatic login window so that you learn how to establish these connections manually.

Manual Login

Logging in manually is more complex than the login you may be used to in other simpler software packages. The reason for this is that Microsoft Navision gives the user many options to choose from such as: whether to use a database located on the desktop client machine, use a database on a remote server and the choice of which Microsoft Navision company within each of these various databases to use. Here is a diagram to help you visualize the Server/Client and Database/Company architecture:

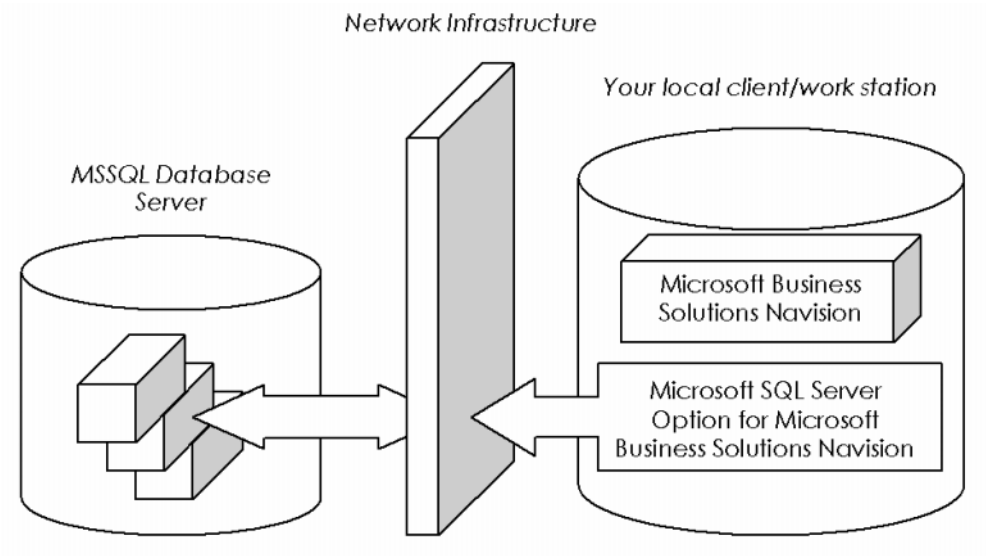

Figure 2.1 Server/Client & Database/Company architecture

There are four steps to complete when you manually log onto your desired Microsoft Navision company:

1. Whether to open Microsoft Navision's Client version **or** Microsoft Navision's Microsoft SQL Server version
2. Choose the server where your desired database and Microsoft Navision company exist (this step is only necessary if you have chosen to use the Microsoft Navision Microsoft SQL Server version in step 1)
3. Enter your username and password
4. Choose which company in the database you want to open

To work locally or via the network?

The first step is to choose whether you want to use a database that is contained within your client PC (located on your client local hard-drive) or a database located on a remote sever. Normally, you will use the server edition of Microsoft Navision if you have a central Microsoft Navision database that is used simultaneously by many workers. In this book we discuss the Client and MS SQL server editions of Microsoft Navision as they are

the most common types of Microsoft Navision installations. These versions of the software are located at:

- **Start > Programs > Microsoft Business Solutions-Microsoft Navision > Microsoft Business Solutions-Microsoft Navision** (for the client version)
- **Start > Programs > Microsoft Business Solutions > Microsoft Business Solutions-Microsoft Navision SQL server option** (for the MSSQL version)

Finding the right Microsoft Navision database

Next, a *Login* window will appear where you enter your *User ID* and *Password*.

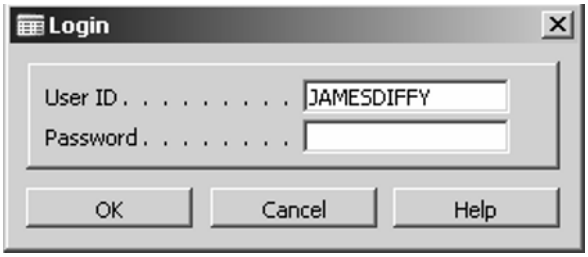

Figure 2.2 *Login* window

This *Login* window will automatically access the most recently used database and company which are recorded as ZUP-data in the client user information file. If you are using only one database and one company in that database, you may always use this login window and forget the background connection it automatically implies. However, we will be using at least two different databases in this book: your original "live" Microsoft Navision system and a test copy. Therefore, to choose the desired database, first cancel the automatic *Login* window (if one has automatically appeared) and go to:

- **File > Database > Open** (you may have to repeat this step twice)

Next, the following window will appear: (See Figure 2.3).

First, you must choose your *Server Name*. In the client version, [Client Only] will appear. This is fine if your desired database is located locally on the client hard drive. We recommend that the original installation of Microsoft Navision and your Microsoft SQL server be set up by your solution center as these are activities performed only once and may require the experience of a specialist. Next, you must enter your *User ID* and *Password* before the server will allow you to enter anything into the *Database*

Name field. Choose which database you want to use and click OK.

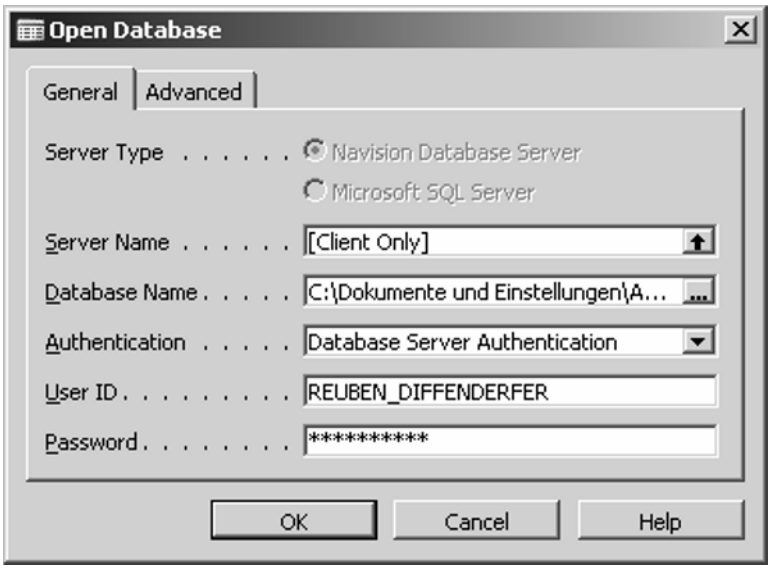

Figure 2.3 *Open Database* window

Next, enter your *User ID* and *Password* and then click on the *Database Name* field.

A help arrow will appear in the white space of this field. Find the database you want to use and click OK. Next, you must choose which company in the database you want to work with. Go to:

- **File > Company > Open**

2.2 Creating a Microsoft Navision Test Database

Now we will show you how to create a fully-operational copy of your Microsoft Navision system.

2.2.1 The Benefits of Having a Test Copy

Risk-minimization

You can attain the promise of adaptability and flexibility in your Microsoft Navision ERP system because it provides you with tools for copying and securing your firm's active system. As you begin creating the information infrastructure that will literally mirror your firm, you will have to do a lot of testing and proceed by trial and error. These necessary development steps are risky

to test in your active Microsoft Navision system. Therefore, in the next section we will show you how to create a test version of your company's Microsoft Navision ERP and eliminate all risks of trial and error development.

... in an identical environment

Although it may seem like an advanced topic, it will be of great use to know at an early stage how to make a complete and working test copy of your active Microsoft Navision ERP system. After you have created a test version you can try the concepts discussed in this book in a familiar and safe Microsoft Navision environment.

With a complete operational copy of your Microsoft Navision system you will enjoy many new conveniences. If you are going on a trip and want to take your company's Microsoft Navision with you, simply install it on your laptop. You can also use the following techniques to create a security backup. A Microsoft Navision backup system for testing, learning and exploring will be critical in achieving your ERP goals, but is sadly a option that many firms fail to take advantage of.

First test, then implement

It is a good practice to test all new applications, reports, forms and methods in a fully-functional test copy of your firm's Microsoft Navision system before copying and implementing them into your firm's active system. Likewise, all outsourced programmers who work on your Microsoft Navision system should do so in a test copy before implementing their work into your active system.

We recommend that you create a client-based version test copy of the Microsoft Navision system as opposed to creating a test version on your server. A client-based test system is preferable for the following reasons:

- A server-based copy may use precious server resources, causing too much network traffic which could decrease your network performance
- A server-based copy could be logged onto by accident and used without the worker noticing they are not in the company's "real" or active database
- It may be a security risk while the copy contains all the company's financial, customer, etc. information and may not have the security set up in exactly the way the company's active Microsoft Navision database is set up

2.2.2 Learning About Your Database

To help you visualize the following process, imagine that there are at least two layers to your Microsoft Navision system. There is the database itself which is like a shell within which you insert your company's specific information. The first step is to create this "shell" and secondly to insert your company's information into it. The "shell" must be big enough to hold your company's mass of information.

The first step in creating a copy of your company's information is to assemble information about the database you wish to copy. After you have logged on and opened your desired Microsoft Navision database, go to:

- **File > Database > Information**

Here you will see general information about your Microsoft Navision database.

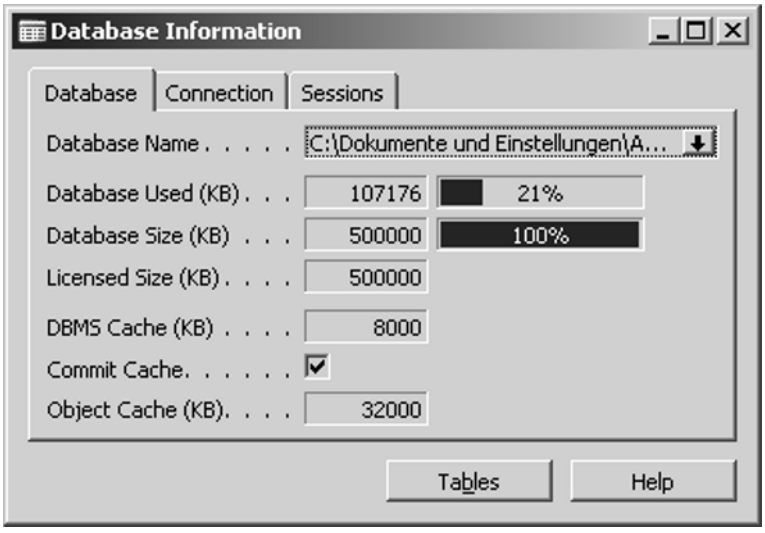

Figure 2.4 *Database Information* window

You will need to make a note concerning the size of the database you wish to copy which can be seen in the *Database Used (KB)* field. You need this information to determine how large to make your new database as well as to know how much disk space is needed for the database backup.

Kick out other users when backingup!!

Next, you must make sure that you alone are logged onto your desired database during the time you are creating a backup. You can do this by checking the second page of the Database Information window called *Sessions*.

Here you will find the *Current Sessions* field. The number '1' should appear in this field. If it does not, there are other users in the firm's Microsoft Navision database which could disrupt your backup process. To find out who is "disrupting" the backup, click on the *Current Sessions* field and then on the arrow that appears in it. A detailed list will appear with all the Microsoft Navision activity taking place on your server at that moment.

Make sure the users editing the data are logged off the system that you want to copy. If someone is working in the system while you are making a copy, you may lose the most current information, which means the copy will have errors in it. It is best to make your database backup in the evening when the network is not in use. To create the database backup you will need as much data storage space as the number of kilobytes indicated in the *Database Used (KB)* field. If you do not have enough storage space to work with both the database backup and the new database on your local or server storage disk (2.2 times the size of the database size indicated in the *Database Information* window), then you can create your database backup and save it to a compact disc (CD). After your new database is created, import the database backup into your database from your CD.

2.2.3 Creating the Backup Packet

Continue by going to:

- **Tools > Backup…**

The following window will appear:

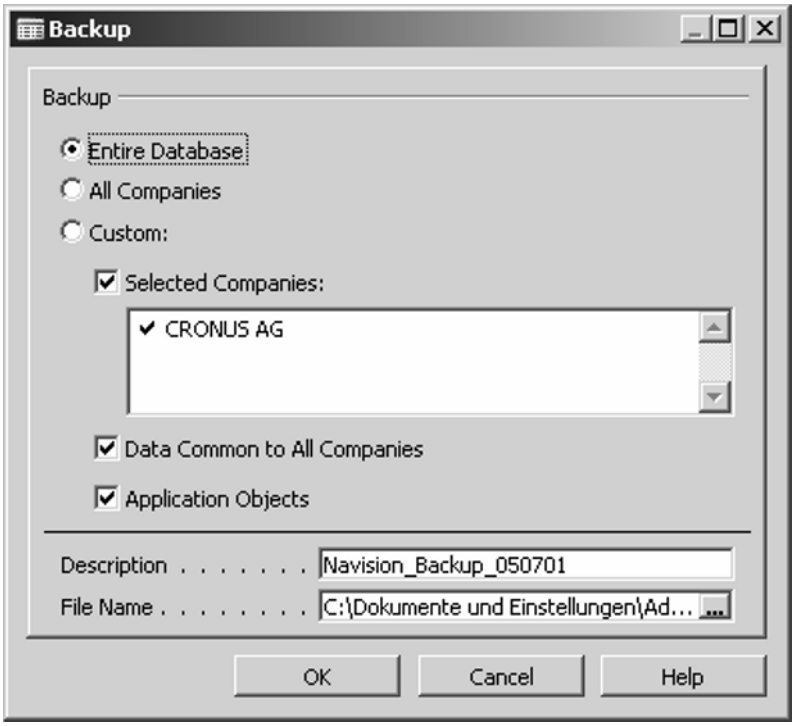

Figure 2.5 Database *Backup* window

Select the *Entire Database* box as well as the other options shown in Figure 2.6. This ensures that a complete copy is made. Fill in the *Description* field. We suggest that you choose a naming convention for the new database. That said, the same name should then be used for the *File Name* field and later in the new database name. The name you choose should begin with the date on which the database backup was created. This date should be written with the year first, then the month and lastly the day. Using this method ensures that all backups and databases will be sorted in chronological order on any file directory. The next part of your new database name should be: *Microsoft Navision*, then *Test* or *Backup*. Lastly, every word should be separated with an underscore (_).

It is recommended throughout the book that you avoid the inclusion of empty spaces in the names of all objects and data names. Following this rule will make it easier to organize your data in the long run. Likewise, it will be easier to use your in-

formation with other types of software which often have problems converting empty spaces.

After filling in the *Backup* window click OK and wait until the message appears that tells you your Microsoft Navision backup was successfully created. This could take some time depending on the size of your database.

Once you have created your database file you have a complete and compressed copy of your firm's entire Microsoft Navision system and information, current up to the moment it was created. Now you have a test version or security backup of your system. It is wise to make a database backup periodically and store it offsite—a step that could prove critical if something unforeseen were to happen to your firm or its information systems.

2.2.4 Creating a New Database "Shell" and Installing Your Backup

Let us continue creating the new test system. Completely close your network-based Microsoft Navision program and open the local version of Microsoft Navision located at:

- **Start > Programs > Microsoft Business Solutions-Microsoft Navision > Microsoft Business Solutions-Microsoft Navision**

Cancel any login window that comes up automatically, then go to:

- **File > Database > New**

The following window will appear:

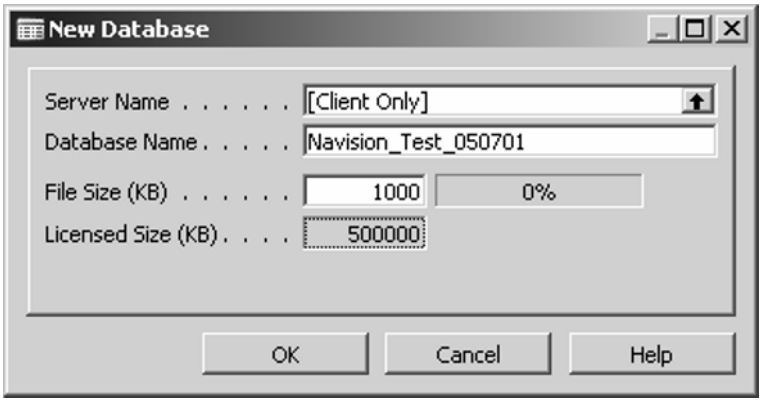

Figure 2.6 *New Database* window

Notice the value written in the field, *Licensed Size (KB)*. Microsoft Navision is designed so that everything the user does is lim-