Miglautsch
Marketing
Direct Marketing Innovation

Making the Business-to-Business Marketing Database Work

DATABASE MARKETING ON YOUR PC

Network or Notebook? Is it possible to do something with your PC system? Many find it hard to believe that their PC system can meet their needs. Miglautsch Marketing has a one million customer database running with 70 million transactions on a 486. And the 486 is not the optimal platform. Much better equipment is available today.
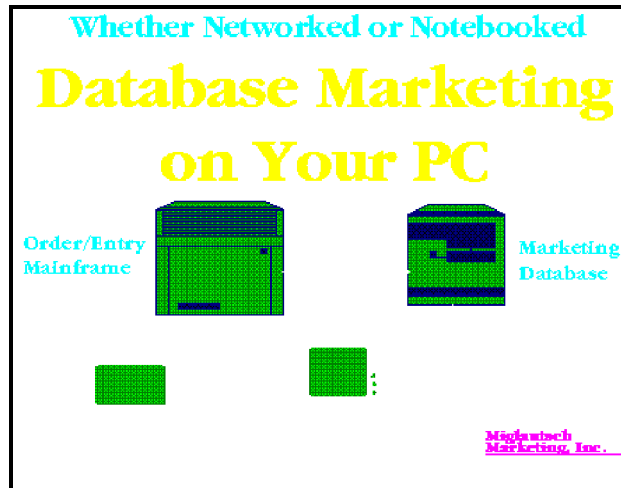
In fact, we have a single Pentium, and we are a beta for SCO to put the multiprocess Pentium together for AT&T, which is supposed to be the hottest of the Pentium line. So we are experimenting with higher power and faster machines. We can sort 70 million records in about four hours. The process is fully relational, end to end, without indexes. Our competition almost never is.

Often the question is, "Why build a Marketing database? And why do we need a separate system?" But the important pressing need is to ask the unasked question. The problem is that when marketing and MIS get together, they don't look at the situation from the same perspective. Marketing is trying to predict the future. Therefore they ask for twice as much data as they need. MIS looks at this and says, "You don't need half of that." They deliver half of it and marketing doesn't ask the one question they do in fact need.

GENERAL DESIGN PHILOSOPHY

OFF THE SHELF SOLUTIONS

As a general design philosophy we try to use as many **off-the-shelf solutions** as possible. This enables your firm to plug in new and different systems that will work better for your particular needs. Off-the-shelf programs are well documented and understandable, without much need for help from outside people. And they can be accessed by multiple users.

The world is going to connect with databases. No <u>one</u> vendor is going to be able to keep up with all the technologies that are constantly being introduced and updated.

Sometimes it's a little harder to link disparate products together. But this approach is actually much more powerful if one can get it working. What it also says is that one does not have to rely solely on the consultant. If someone were to leave or to be transferred, or if all of a firm's personnel went down in a plane crash, your firm could get help from Borland or Cognos, or whomever. These big companies are worldwide.

A SYSTEM

General Design Philosophy:

· Off-the-shelf solutions
· Accessible, understandable
· Multi-user system
· Require human intervention & thought

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A system **should and must be accessible and understandable**. We believe that no good database has only one user. <u>It must be multi-user</u>. Some are saying, "all good analysis comes from one good analyst." We don't buy that. At Miglautsch Marketing we maintain that the president should be able to know what's going on, and so should merchandising, circulation, field sales, sales management, and telemarketing.

For information to transform a company, it must be accessible, usable and understandable.

HUMAN THOUGHT AND INTERVENTION

Human thought and intervention are absolute necessities for the systems we build. The mission of some systems is to build a "black box" that will tell one the answers. But when it comes to predicting the future, machines are singularly

inept because they do not know how to prioritize the changes that are going to impact the model. Only a human being who can understand the model and any possible tradeoffs can go with hunches. That is a requirement of our system.

TOO MUCH DATA?

One of the problems of database implementation is too much data. In the past, data was hard to come by. Today, many companies are inundated with data. They believe they must put this data on a mainframe. If one does this with an order processing system, one has a mainframe that typically has to be recompiled when changes are made to file structures, etc.

Not surprisingly, many marketing people get frustrated by this. It is important to understand that system integrity must not be violated. Some will go out and buy a new mainframe with a new operating system like PIC operating system. They think this system will be able to be modified on the fly. "We have the case tools, we have the definitions, we're going to be able to modify it all day long. It's not going to be a problem." Wrong!

Databases, and even PC local applications, will have consequences if they are changed. And they are not always foreseeable. Complex systems have to be built taking that into account. And one doesn't want the telemarketers arriving at the office every morning wondering what new thing is going to be on the screen today.

Also, the mainframe is expensive. To save resources, off-load data from tapes. This is acceptable in transaction processing. One need not reference every order that's ever been placed. Some companies do, but for the most part operations order processing is: who is paying, to whom is it being shipped, what do they want, how many, how much, did it ship, did it bill, did they pay?

HIDDEN DATA

Another reason to build a Marketing system is that key data is often hidden in other systems. Part of the problem with the inflexibility is that people build work-arounds. One piece will be on this machine, another piece will be over there and another over there. These users don't know what those users are doing. In big companies there can be 200 versions of a spread sheet. One side will see it and think it's the current data, but it's not. They will think they are seeing the same equations, but they're not. Then they jump to erroneous conclusions.
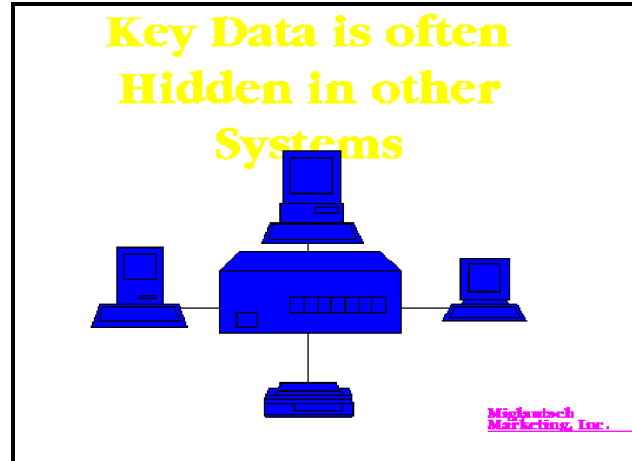
IMPORTANT DATA UNCOLLECTED

Another problem is data that's needed is not collected. Data flows through order entry. This is especially a problem with an outside service bureau. That's because you are going to put the orders in the mainframe and send them to an off site marketing database. Then you're going to get back reports or files or diskettes. Every now and then you'll look through it and try to make sense of it.

DATA AWARENESS

It is important for one to have an awareness of what data one possesses. If one does not know what data has been accumulated and what data has not, the complexity gets magnified. What we do with clients on site is this: we send the order processing to the order processing computer. We send the marketing information to the marketing computer. When telemarketing calls a site, it is noted immediately. And when field sales talks to a purchasing agent or an engineer, the telemarketer knows.

This sort of immediate update is very difficult for one to do with a remote site, not just because of the leased line involved, but more importantly, because you want a flexible repository and a dynamic environment. You need to be in control of your data.

MAINFRAME QUERIES

Another difficulty occurs when one queries the mainframe. When marketing is asking questions it can slow things down considerably. Some clients cannot run queries during their heavy business times. These periods can last for months. Some run queries every third weekend of the month, putting everything else on hold for that entire period of time.

QUERY TOOLS CAN BE DIFFICULT TO USE

Often query tools are hard to use. To access fields, instructions can go on for pages and pages. Once, a head of MIS said that because queries slowed down the mainframe so much, he was going to ask marketing to learn Cobalt and write programs instead of queries. That would mean that marketing would be programming the mainframe. After hearing this a second time, the gentleman turned white and said, "I see what you mean." He realized this could be a huge mistake.

Marketing people learning programs would mean they are not going to be thinking about their marketing. The less of that, the better. Marketing people should be looking for interesting insights into the data, not figuring out whether the code was right or not. If they are good at programming, they should be programers.

NOT ENOUGH DATA?

The only problem bigger than too much data is not enough data. This also becomes a problem when one has an outside system. This is where the system is tailored to your firm's needs, not just summarizations of piles of data.

ENVIRONMENTAL CONSIDERATIONS

Environmental Data Must Be Added

Let's say you have 100 customers in Manhattan, New York, and 100 customers in Dodgeville, Wisconsin. There are many more people and businesses in Manhattan than in Dodgeville. Therefore you are doing very well in Dodgeville, and it's probably a better market for you. You're not doing very well in Manhattan if you take into consideration the geography of the place.

Customers per ZIP not Enough

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One needs to know how many customers there are compared to what the environment is like around it. Let's say you have 100 customers in Dodgeville and 100 customers in Guam. **But you've never mailed to Guam!** You've always suppressed U.S. territories. It turns out the customers in Guam found you by accident. The customers in Dodgeville and Manhattan have been deluged over and over for decades. The point is - you must compare apples to apples.

These issues must be a part of one's analysis system or else the data won't make sense. The information one has will lead to incorrect conclusions.

ACCESS

When we started talking to clients, we thought that access was the primary issue. We thought that if we could get the data off the mainframe into a more flexible environment where marketing could query it, that would solve all the problems. It turned out that the query tools are not the answer. Not even close.

What marketing wants is usable data delivered into decision support applications. **Marketing wants answers, not access**. Of course, they have to have access to get answers, and if they don't get access, they might probably think that that's the answer. But the answer isn't access, it's answers. What this means is that you have to get the data, along with the extra information, together with the answer application. This graphs or charts it, or crunches through it like CHAID, or puts it on a map.

Marketing focuses on the future. This means that data is helpful only if it can help in making decisions. Marketing professionals fundamentally <u>don't know</u> what they are going to want to know from a marketing system. This causes interesting problems when MIS professionals, who are used to building procedural systems, try to specify the necessary
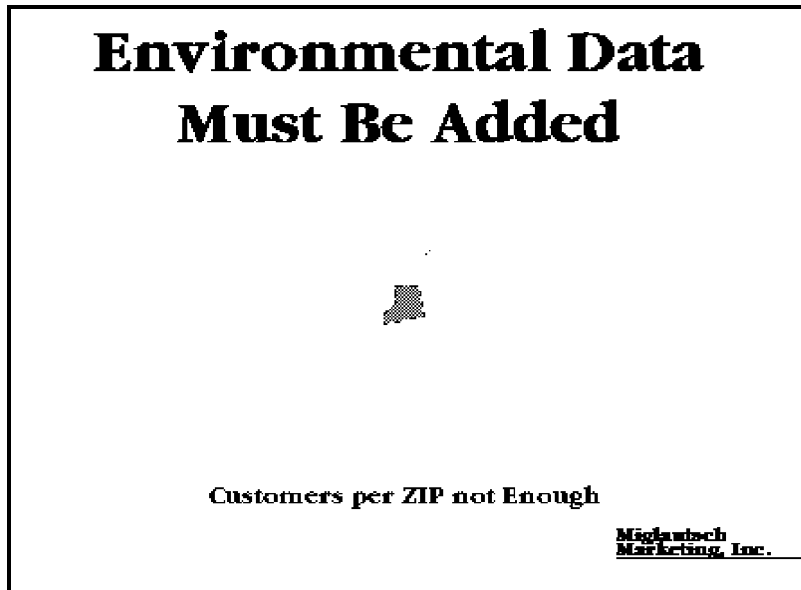
elements to build a decision support system.

Into this struggle steps the database marketing consultant. Marketing says they want access. They simply want to look into the data they know is there. Initially we tried to use access tools to satisfy this request. Slick "point & click" query tools were offered. They allowed unskilled users to build multiple joins, pull complex selects and send output to Lotus, etc. One would think marketing would be satisfied. But no.

There is a broad category of query tool which is designed to access a range of databases. The user needs only to learn one software package to look at Oracle, Sybase, Interbase, dBase and others. Unfortunately, power is often sacrificed in order to deliver this flexibility.

The bottom line is that marketing is not really interested in access (though that is precisely what they are asking for). They do not really want to take the time to understand the nuances of the file structures. Neither do they want to become adept at writing the innumerable macros necessary to proceduralize the data pulls to get data into a form for further analysis. **What marketing really wants is the ability to ask a simple question and get a complex answer out of a number of analysis tools ranging from statistical to graphic to mapping applications. Marketing wants answers.**

ANSWERS NOT ACCESS

As we have discussed, marketing deals with the future; therefore, the primary requirement of a marketing analysis or decision support system is the flexibility to ask and answer unanticipated questions. A system designed around a fixed number of variables and menu screens will be obsolete by the time it is created. In addition, we have also seen that simply retrieving data is not the solution. Marketing needs the data transformed and transported into reporting applications. It is this processing which yields the answers needed for decision support.

The Marketing system can be broken into three key components: the database, the questions, and the applications. It is crucial to understand that both ends of the system, the database and the applications are relatively constant. Only the questions change on a regular basis.
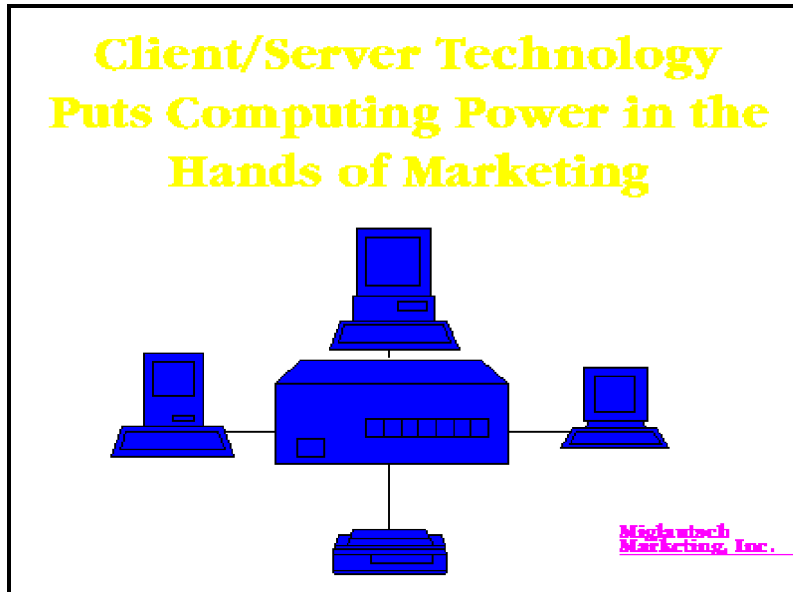
The database is founded on what is available from the main operations computer. We start with a customer master file. This contains customer number, name, address, original source, some sales history, and sometimes geo-demographic overlay data. Transactions are often split into order header and detail files. The header contains fields like order number, date, keycode, territory, etc. The detail file contains item number, description, price, cost, units, shipping charges, etc. Sometimes these two transaction files are combined. In addition, inventory master files can provide the product organization information linking part number with product types, groups, classes, and divisions.

Finally, there is usually a promotion file which contains keycode information like promotion date, cost, and description. There may also be important key organizational data allowing the grouping of keys into advertising type, campaign type, and offer type. These five files provide the building blocks. And since data doesn't appear out of thin air, until additional types of information (new fields) are added to the database, it remains constant in structure, growing only as more customers and orders are added.

The applications, on the other hand, require specialized types of data. Most tools require extensive definition files which *must match exactly the data coming in*. These definition files can be well over 100 pages of carefully structured information; one stray character can blow away the whole system. It is precisely this complexity which makes it difficult to get answers out of the database.

THE BEGINNING

We have learned to build systems by beginning with a sample of the data. This allows us to handcraft relatively quickly the various files into the structure mentioned above. No two systems are the same, but there are common threads. It is crucial to understand that there are only a handful of predictive variables within the database. Once these are identified and/or constructed, all further analysis will use the same ones repeatedly.

Assuming the initial examples are close to acceptable, new specifications are generated for both improving the application power and building a phase II database design. It is at this point, when the database is at about 90% of its final form, that it becomes possible to build the middleware. Middleware begins with development software. We use Paradox because it allows users to talk to the database (like a query tool) but allows developers to write programs which keep all the pieces straight.

ANSWERS ARE NOT ENOUGH!

After building your analysis system, one now finds all sorts of new variables which help business. We go back to the mainframe, which has the most current records and the big reel-to-reel tape drive, and try to pull names for an upcoming mailing. Suddenly you realize that the key variables that you discovered and predicted so precisely who would buy, do not even exist on the mainframe. An acceptable system cannot just perform dazzling analysis. It must allow the user to take action; it must allow one to select on the transaction and other key variables.

There are many mailing packages which allow one to predetermine counts for mailing, but, in general, they also require that one predetermine which variables are to be counted. This is a far cry from the flexibility above. There are also "black box" systems which tell who is best to mail, then pull the names themselves. Though these provide analysis capabilities, they seldom give breakthrough insight into who is buying what or how to expand business. The full ad hoc analysis must be carefully connected to the list selection capability.

Following the phase II system development, we finalize the database design and re-specify the application requirements. By now, we have a clear vision for what should be included and the most important predictive variables. This understanding allows implementation of the ListSelect application.

List selection is a very procedural process. It requires certain elements to be selectable (e.g. RFM scores, ZIP and/or customer type, etc.). These should be done with buttons wherever possible. There need to be safeguards, such as not allowing the inadvertent selection of bad debt names. Decoy names should be added without user intervention (or perhaps even their knowledge). The system must also check for accidental internal duplication. Finally, it must allow users to split and chop selected segments to enable testing and precise mailing quantities.

To allow for the ad hoc needs of marketing, a query style template can be included within the list selection system. This query option cannot be allowed to become the backbone of the ListSelect system. The ability to use any variable, even when buried within millions of transactions, will inevitably take some time. There must be a distinction drawn between variables to be used over and over on a production basis and those which will be needed only occasionally.

The list selection system is the most procedural part of the marketing database. It must combine real programming power with the specialized, unanticipated requests marketing can dream up. For that reason, it is best designed in conjunction with the marketing analysis system.

CLIENT/SERVER TECHNOLOGY

The power of client/server has clearly surpassed the needs of most marketing departments. This allows one to download and analyze all the data from the transaction computer, outside sources, and data gathered from customer questions.

Client/server will also free up data processing for enhancing the complex operations computer. This will continue to be important for getting merchandise out the door. With much of the marketing data off the mainframe, it will operate more efficiently allowing you a greater return on investment. This cost savings alone will more than justify moving to a marketing database.
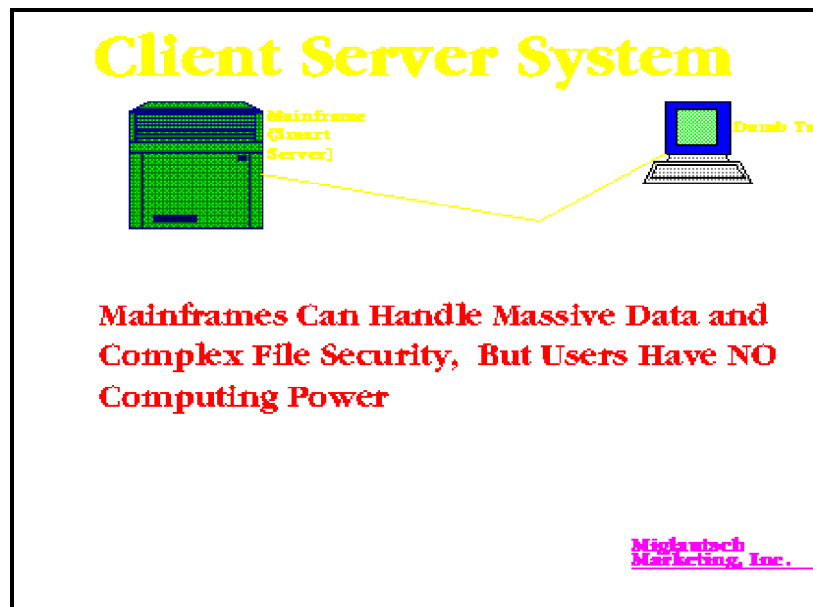
But most importantly, marketing will gain control over their own data processing environment. Dirty public databases, coupled with mailings and customer contacts will be more precisely targeted. This will allow your creative people to understand more clearly the needs of their customers.

THE USE OF THE MAINFRAME

Although mainframes can handle massive data and complex file security, users have no great computing power. This is because mainframes save processor resources by sending only a few characters to each user. One does not get very much
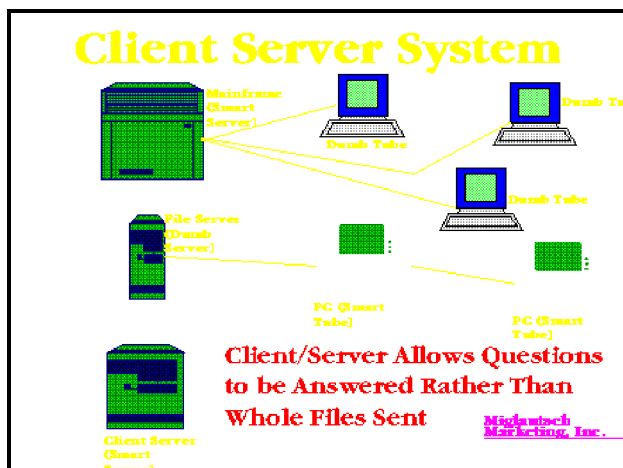
on-screen help, point and click. There is XWindows, but that takes an enormous amount of resources, and it gets to be expensive.

But the mainframe can handle many people talking to it at the same time. Users can be looking at different customers but each have a different record, and be looking at the same file. To overcome that character based environment, some would put data onto a file server such as Novell Network. "Let's drop it on Fox Pro, and we'll all share together." The problem is that these servers lack complex record level access security. So if three people plug in, and they want to look at a particular customer, what the file server does is send them a pack of 100 customers, fifty on each side. It sends them a glob of data and says, "Don't anybody look inside this glob." If the customers are far apart, this is fine. The trouble is that all the brains are out on the PC. Dumb tubes cannot be plugged in here.

For example, suppose you ask for all the customers in Texas. The "dumb server" will send down the whole file. The PC will evaluate which are in Texas and which are not. It's like UPS backing their truck up to your door and saying, "We're pretty busy today. Could you look through the truck and see if any of the packages in here belong to you?"

All the processing power is done on the PC. At Miglautsch Marketing, we have a dumb server and a smart tube. With a client/server, we take the smart server and the mainframe, which has some record locking security and some other things, and we plug the PC into it. When a question comes from a PC, just the answer will go back. So if I ask to see the customers from Texas, just the ones from Texas will go back, not all the customers.

Because PCS are so graphical, PCS graphically help users figure out how to ask the right question. In terms of our design philosophy of making things accessible and user friendly, this is an important point. PCS give one the tools to make it easy to understand, and to get questions answered. Users should not be spending their time learning SQL.
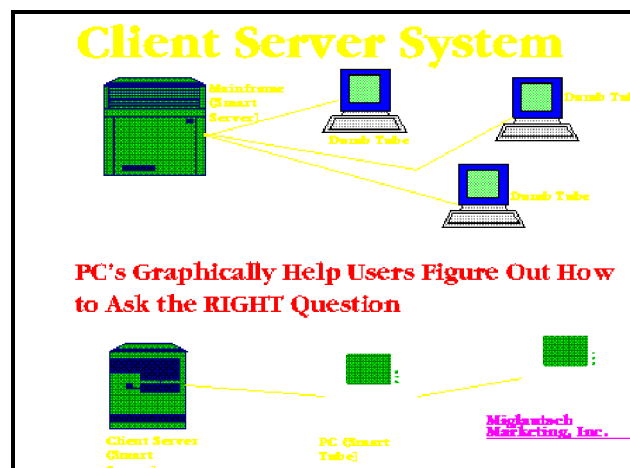
With TCP/IP, we have both systems working together. Software and data are both shared. Let's say Paradox is on the dumb server. When the PC wants to run it, it accesses the file, and it runs. The Paradox comes up. We've written a little program that asks if you want to pull lists - click on List button. To pull SIC - click on that button. After it's all prepared, it goes to the client/server, gets the answer, and sends it back to the user.
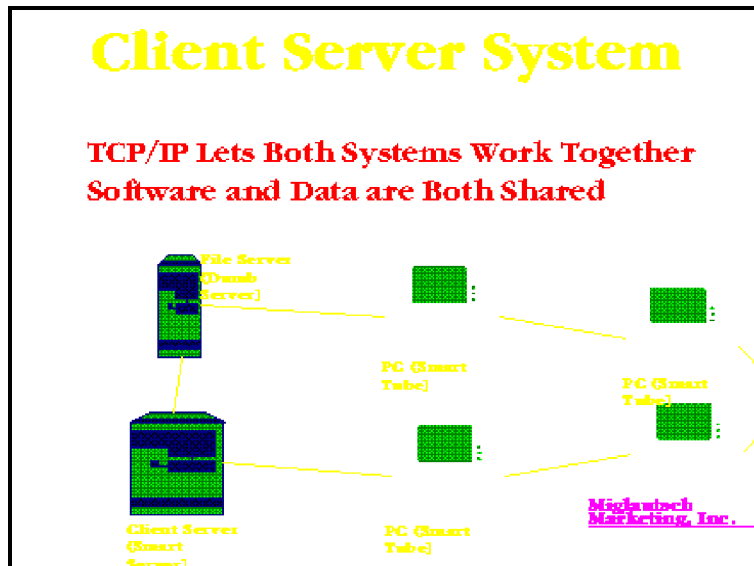
With the Borland Workgroup utilities we are able to send the question from PCS that don't have TCP/IP to another PC that does. This PC asks the question, gets the answer and sends the answer over to the PC.

The bottom line is more raw data with more hands-on access. Not only does the graphical support help in answering the question, but once one gets the data back, one has the graphical tools to make sense of it. It is not enough to have a mountain of data come back; the issue is what are their SICs, how many employees, are they growing, are they shrinking, what is their financial strength, etc.

You must be able to group data together and make it interesting. The fact is that we have the PC on the desk already, and the PC is linked to the database already. This lets us put the data into some very nice tools.

Not only does this allow the user to understand what is going on, it lets him share it with other people in the company. To reiterate, **it's not enough to have the answer. Somebody must take action**. Often this comes down to communication. The PC tools will put it into the graphical environment so that you can get your point across.

TREND ANALYSIS

Trend analysis is important in marketing because we are trying to predict the future. Trend analysis needs piles of historical data. Often these marketing data bases will have more gigabytes than the mainframe. Operations needs real time on line data. There are different needs and different file structures, so we redo the file structures when the data comes in off the mainframe so that it is just unbelievable.

HOW OUR
SYSTEM WORKS

We take order entry data from the mainframe. The marketing system is regularly updated with online mainframe connections. We ZOOM across your "weekly" - a summarization of all orders and new customers. Normally we pull a new copy of the customer file. Weekly, we do updates.
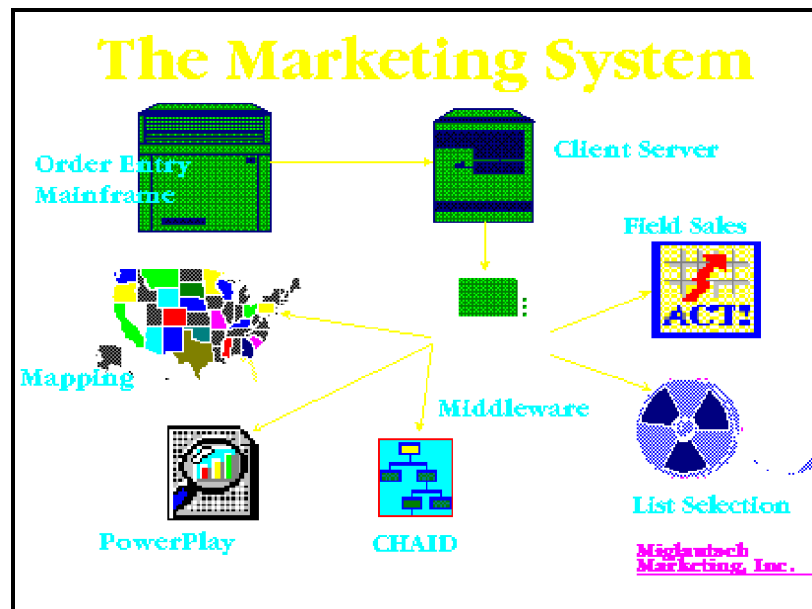

Middleware (Paradox for Windows) lets users get at the data without disturbing order entry. We can do queries without slowing things down. For the most part this is a one way operation, e.g. new keycodes getting updated to order entry to make sure they are valid. Other than those rather minimal things, at this point it's a one way path, which means the mainframe doesn't get slowed down at all.

We plug in several applications. Mapping is usually the first. It gives the most "human" look at the data. A salesman can look at a certain territory with which he is familiar. Perhaps he's driven it and knows something about it. If someone shows up who is off his usual route, he'll spot it.
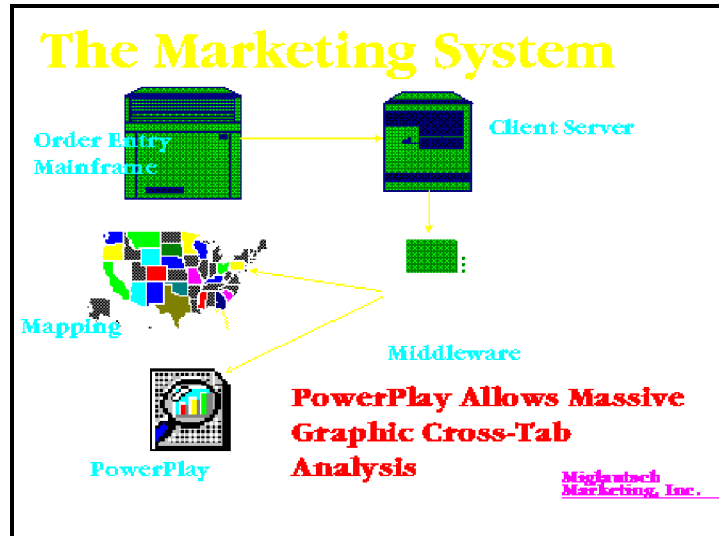
Another application is PowerPlay. This application allows massive graphic cross-tab analysis. We have had analysis systems of up to 500,000. Compare that to an SPSS; it handles only about 10,000 well. **PowerPlay is a very powerful tool that allows enormous flexibility in terms of how it looks at data.**
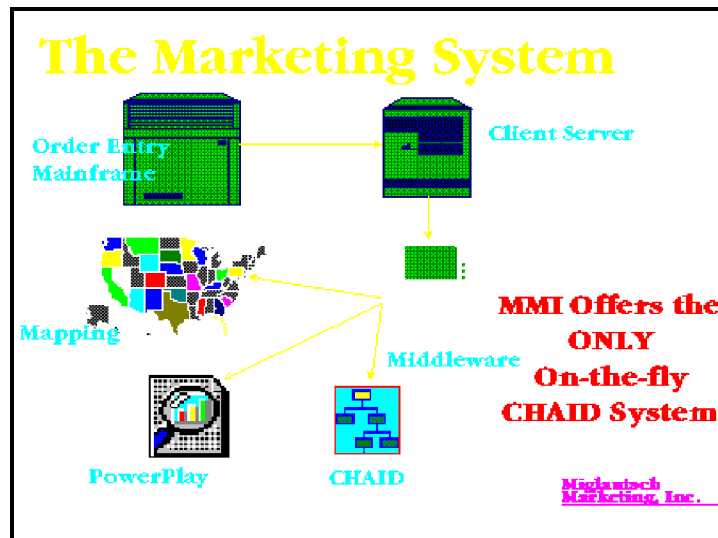
CHAID is a product created for direct marketing. It's akin to an artificial intelligence product. But unlike Neuralware, it is very easy to tell what's going on in it.

The current state of the industry has clients go out to a staff expert who takes some of your data and builds an equation for whomever is most likely or least likely to be retained. Then you put mail in the system. There are those who have one equation for everybody! With a magazine mailing house, this would be like having the same equation for those who subscribe to *Better Homes & Gardens*, *Sports Illustrated*, *Playboy* and *Teen Monthly*. This equation needs to be revalidated.

Instead of that, what we allow is that you click in *Sports Illustrated* as a magazine type and you get a CHAID equation for *Sports Illustrated* subscribers. One can compare the *SI* people who renew versus the people who live in Wisconsin and are over fifty. It lets you do anything you want.

Middleware connects the database with the application. It has to look like the query but not be one, because queries are too open ended. It has to look like a program, but not be one because programs aren't flexible. It's an in-between situation. And Paradox has some unique strengths in that area.

ANALYSIS

We have Four Pillars of Analysis: Promotion, Place, Product, and People. The theory is that there are overlapping circles between these four areas. When a company has a broad line of product, odd conclusions can be drawn. If all their products are selling - some better than others- and all their customers are buying - some more than others - this means that all the customers are buying all the products to a greater or lesser degree.

The Pillars of Analysis

People

Promotion

Product

Place

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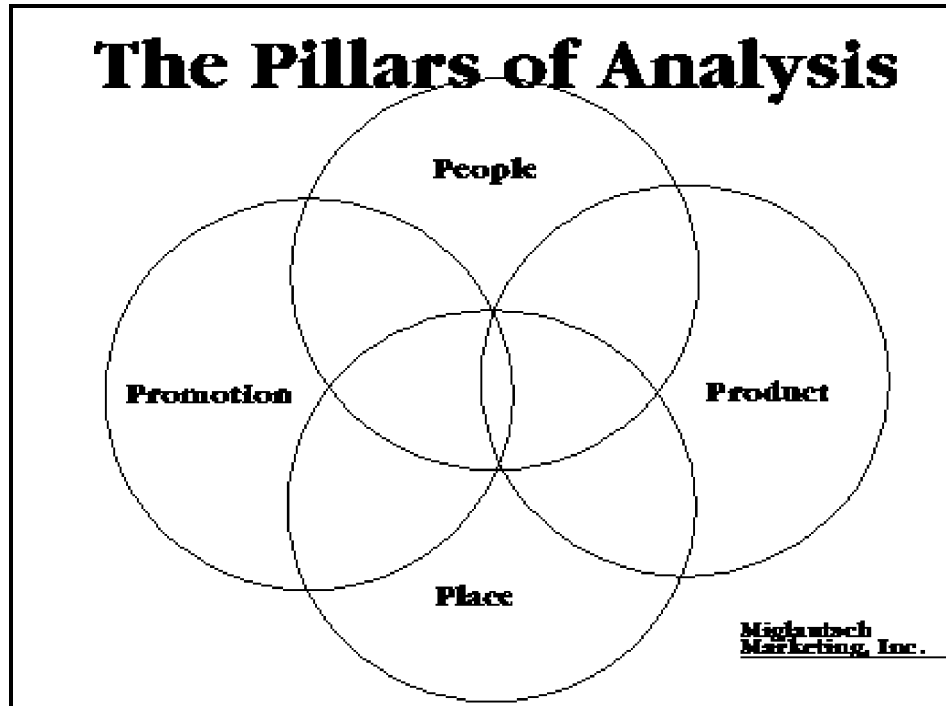
But one finds when building the systems that this is not necessarily the case. We can make this clear because our systems don't just print a product report or a sales report. **They integrate**. They tell you who is buying which product. Which product is selling to which SICs. Which products are selling on which promotions. Which products in which places.

This integration of data is where one starts to see what is really going on. What is funny is that clients find that a major product line may be selling to a very minor segment of their overall customer base.

We are sometimes asked, "Why should we put this thing in if we don't know if it will work?" That's another problem with spending a million dollars a year on a system. The real issue is that one doesn't know what one will get out of a system until it is built. And even then, one may not appreciate how to interpret it properly right away.

Until the system is built, the client doesn't know what he's getting for his money. That's why we use off-the-shelf tools and PC hardware. It's less expensive. There's no sense putting in a tremendously expensive mainframe and making it go lightning fast if it's not going to help the bottom line.

Therefore we build small systems and try to have a disproportionate amount of money spent on the consulting rather than on the hardware and software.

After the system gets going and one can see its worth, the client can put it on a HP9000 or bigger, or perhaps an NCR 3600. One can always get more hardware. But one must have it conceptually built and tested. It takes a year to do that. Speed isn't important at this point. One needs insight and complexity of analysis.

As stated before, access is not enough. Users want answers, but it turns out answers aren't enough either. It's not enough to be able to put out beautiful charts and graphs. One must be able to take action. And for that we are linking up CHAID with ListSelect. When there is a complex equation, instead of scoring the file, which is the industry standard way to do things, what we are doing is selecting the file based on our statistical analysis.

Our ListSelect system allows split testing and many different ways of segmentation. That then drives the analysis. It gives more isolated variables on which to test. So the marketing system is not just an analysis box; it drives over to a ListSelect which has point and click. It's high speed, meaning that we tested it on a 100,000 customer sample and were able to pull 3 panels of about 25,000 names in four minutes.
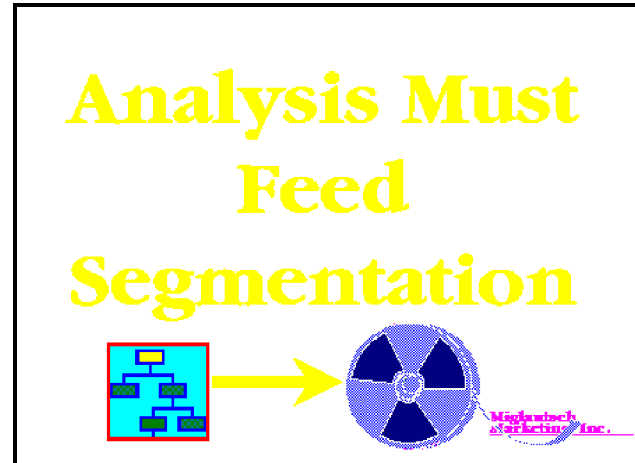
The system also has full tracking. It automatically generates a file of whom was mailed what. And we are working on integrating CHAID directly into ListSelect. This will allow one to tell it, "I want the best names." It goes and gets them. Since Miglautsch Marketing is the first to build on-line CHAID support, we will be the first to build a CHAID/ListSelect interface.

Besides that we are working on optional interfaces. We are going to put a direct supporting link into ACT2 so that field sales will have updated information on a regular basis and we can update our system on a regular basis. We are also being asked to develop telemarketing interface so that we can send marketing information back to the client/server and still process orders. Also, we are working on out bound telemarketing support.

When you think about alternative solutions you must have access to your data. It has to build answers. And you must be able to take action. You must have ListSelect and Act Interface complex enough so that it supports the complex answers you can build.

HOW WE BUILD A SYSTEM

At MMI, we start with a **database audit**. Sometimes clients want to have big meetings and talk about specifications for

the system. We tell them that we can't really spec the system until we see their data because the specifications look great, but we don't actually know what's in there. We don't know if it's full of junk, or all one value, or if it's all blank.

Audit - Prototype

· **General Observations & Recommendations**
· **Database Design Observations**
· **On-Site Demonstration**
· **Action Plan**
· **Hardware & Software Specifications**
· **Formal Quotation**

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We've found that though marketing may think there's data in there, they don't really know. Though MIS has all the data, they don't look at it very often. Neither group understands what we are capable of with our decision support systems. The result is a disastrous series of meetings after which we have this huge spec. We get the data, and we find we can't build it because the necessary pieces don't exist. It descends into, "Why don't you take your best shot." So that is what we do. We're really building a demo system and showing the potential for data. That's our real objective.

We take the order entry mainframe data on tape, put it in the client/server at our site, (usually 10,000 to 50,000 customers and their transactions) and add promotion and inventory information.

We handcraft the application demonstrations around the "Four Ps," Mapping, PowerPlay and CHAID. Our goal is to work with the data and present a picture of what the system will look like. We do Mapping, PowerPlay, Paperless Reporting, and CHAID.

CHAID shows the actual gains possible with the marketing system. CHAID will show you that if you mail 10% of your file, you might get 30% of your business. This is tremendously good for telemarketing. Or it might show that if you cut out 30% of your mailing you lose only 5% of your sales, and you save 30% of your mailing budget. So if you're mailing a big catalog it can be very cost effective.

Then we do a ListSelect demo to show you the ease and power of a complete solution. After this we give a formal quotation.

Preliminary Database Applications Development

Client Server @ MMI

Hand Crafted Application (the 4 'P's) with Client Approval

Mapping

We Work With You to Tune Each Application

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The next step is building the applications with client review. This is so that we are sure the applications will do what the client wants. In the audit we build it as we think it should be built. Now we do it the way the client wants, and we try to make it beautiful and perfect - although it's never perfect.

Next we take a larger amount of the test data. We build many more marketing fields for speed and ease of use on the server. We work the client to tune each application.

The data is often significantly changed because we have to categorize. PowerPlay likes continuous variables, CHAID likes categorical variables, Mapping can support only a limited number of records, so we have to squeeze it down.

When we finish that and it's approved, we install the CHAID, PowerPlay and Mapping applications on site. This enables the client to work with the data we have created and are handcrafting. Once that is approved, we go to the Middleware phase. What we are really doing now is automating the process.

Now that the applications have been approved Middleware is built. Applications are linked to the client/server with client input. Now we can ask ad hoc questions and pour them into the PowerPlay structures, the Mapping structures, or the CHAID that have been approved.
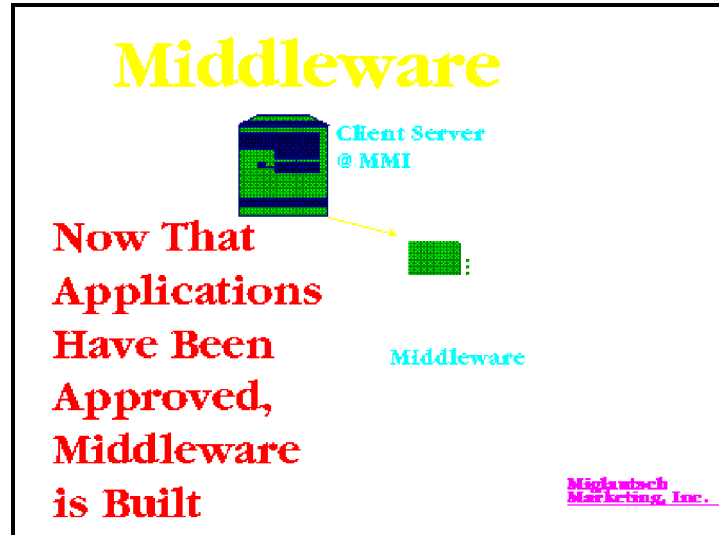
Once we understand the preliminary variables we can build a ListSelect system. Many companies will build a list selection without understanding which variables matter in list performance. The analysis must be built first. It will tell one what to put in the ListSelect.

At this point we start developing additional applications. After that, we install the middleware. This can be a fairly powerful PC. It can also be linked to the LAN/Server. It is possible to put even 1,000,000 customers on a demo system. This yields wonderful analysis and everything can be tested.

The Load phase sometimes takes the longest. Final database load is the most intense project task, often taking weeks of processor time. It depends on how much data you have. Many things can stop you (such as a month's abbreviation being spelled with a zero instead of an "O"), new tapes have to be made sometimes, and back-ups need to be made regularly.
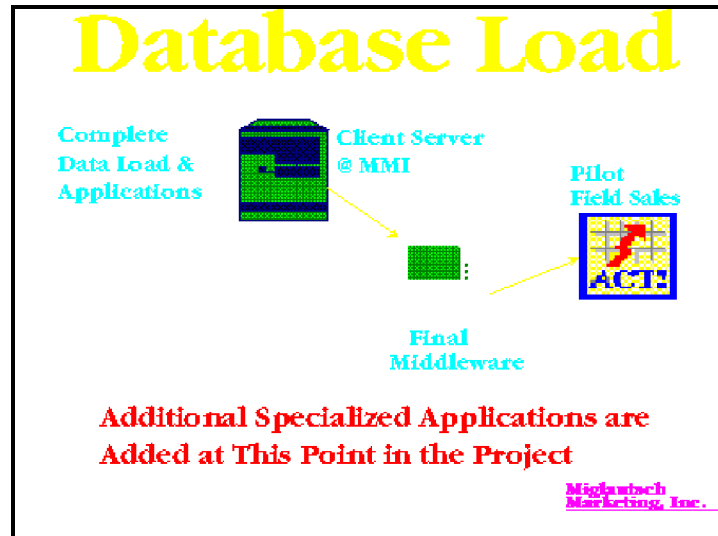
At this point there are sometimes minor changes that need to be made, but the system is pretty much settled. As the data increases we can see more about how the data is going to perform, so we tune the ListSelect for speed and user comfort.

Previously, we built the user interface to pilot it. Now we are building the links to start piloting the update. Typically this will not be completed as the database. This is a customized work that will extend beyond the training and completion of the database.

Lastly, we bring the system to the site and get final approval.

MARKETING CONSULTATION
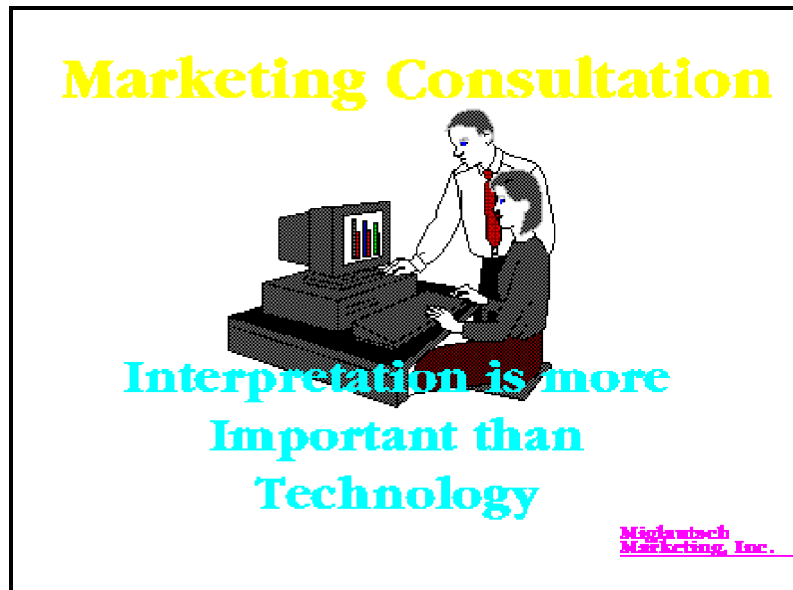
One very important point is that marketing consultation is provided. In fact, we insist that it goes together with the system. This is because interpretation is more important than technology. A data element can bring about two opposite conclusions. That is especially true with geodemographic penetration analysis. If a company has never done well with a certain type of firm, it can lead it to two different conclusions: 1) There are many firms of this type that we could call on but never have, 2) We shouldn't call on this type of firm because we already have and they are not responding to us. Much of this depends on an understanding of what is going on.

DATABASE ECONOMICS

Here's how to make money on a database: save money on the mainframe. The main reason people junk their mainframes or software is because of reporting. It's not because the system doesn't process orders; they almost always do. If one can get a system that supports the mainframe, one may be able to keep it longer. This gives a greater return on the investment. One may be able to offload data and free up some of the resources and not have to update it so soon. This will give a tremendous payback.

Many who spend a fortune on their mainframe are thinking they'll get a $30,000 marketing information system. The fact is that one can afford to spend money getting some of the functionality off of the mainframe and still save a lot of money.

Database Economics

(How to Make More MONEY)

· **Mainframe Investment**
· **MIS Ad Hoc Support**
· **Identify Customer Targets**
· **Sell More to Existing Customers**
· **Prospect More Efficiently**

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We also see savings in the MIS role. These systems cannot run without it. Marketing builds all these queries and fills whatever space they have with tons of queries. They forget what they were about and they need somebody to keep an eye on them.

It also saves money by identifying customer targets. It saves money in mailings, especially telemarketing. It lets one find the people who are most likely to buy and not just call randomly through the file. Also, helps increase sales to existing customers. This requires a ListSelect system.. It lets one sell more because it lets one identify customers who have bought item a ,b, and NOT c.

It also lets one prospect more efficiently. The key to this is to find who the good customers are. Our analysis system feeds the prospecting. That is how to make money. Our system is designed around those constraints.

IN REVIEW

A good direct marketing company must have the ability and experience to assist your company in building for the future through the use of the very latest technology and software applications. Computer expertise translates into powerful new insights for your marketing and sales departments. Through the use of the client's PCS, we have helped numerous firms reach new levels of growth and success.
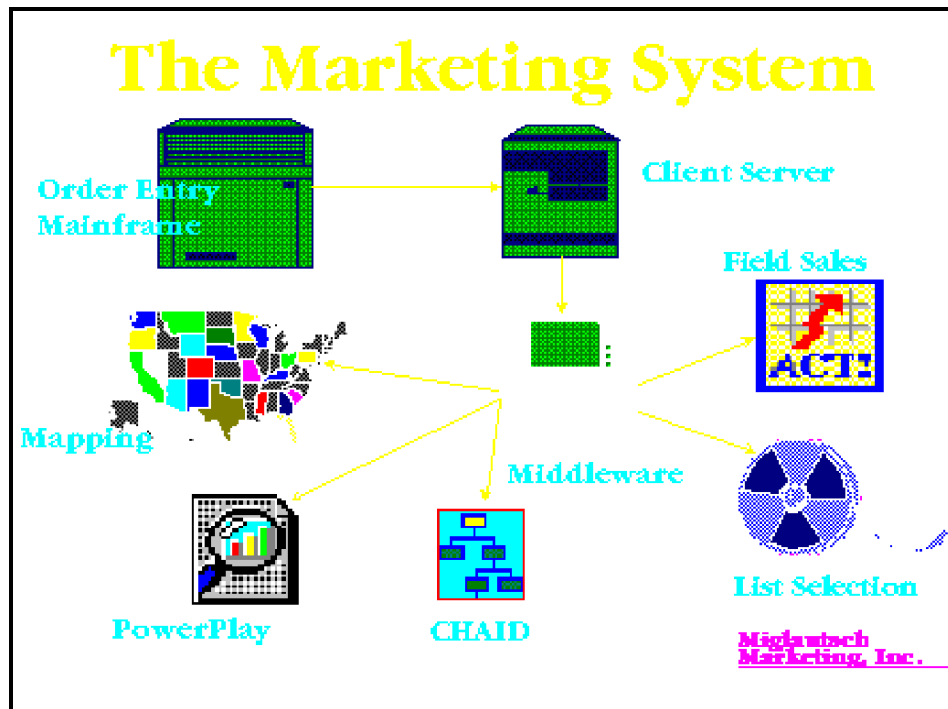
Here is our system: take the data from the mainframe and plug it into the client/server. The middleware transports it into applications. Middleware also supports ListSelect and other applications. The database basics are to get a marketing computer and get flexible. Get help from qualified, experienced consultants.