



Reviews

© 1995 Copyright Positive Support Review, Inc. ALL RIGHTS RESERVED

Bi-Monthly Newsletter for Positive Support Review's Clients and Subscribers

Total compensation falls for Chief Information Officers

Recently released 1995 Compensation Survey reveals the recession's impact on the bottom line for CIO's

Total compensation for Chief Information

Officers in large business organizations fell by over seven percent between 1993 and 1994. After years of recession, PSR's compensation survey results indicate that CIO base compensation has declined significantly with a higher proportion of the CIO's total compensation package now tied to



Republicans look great but it still is a jungle out there and only time will tell

strict company performance requirements.

Base compensation for middle level and other top level positions in mid-sized and large organizations increased on average by about 3%, while total compensation remained relatively flat. In conjunction with this modest increase, the ranks of middle level managers has declined significantly. When comparing organizations responding to both the 1994 and 1995 compensation survey, middle level management positions in large companies have declined by almost 8%. This reduction is a reflection of the down-sizing/right-sizing of Information Services departments over the past year, indicating the recession was still in full force in Southern California during 1994.

The survey also revealed an overall 4% reduction in staff level positions. This reduction did not translate into significant increases for remaining personnel with salaries remaining relatively flat for "traditional" IS positions (such

(continued on page 2)

PSR finds an easy way to measure quality of EIS and DSS

Many EISs and DSSs imprison the data, failing to provide the answer to even the simplest business question

After years in development, many organizations

still find that it is close to impossible to get quick answers to simple business questions from their Executive Information Systems (EIS) and **Decision Support Sys**tems (DSS). We have found that basic concepts in the development of an **EIS/Decision Support** System are often overlooked or missed completely.

Take for example the case of a large financial services organization,

marketing a variety of different products in hundreds of different markets. After almost eighteen months in development, their information systems management was the proud parent of a database design, comprising data for several million customers, ready and waiting to answer those critical business questions. Yet to answer the simple question, "What is the profitability of the 'young affluent' customer segment?" Required the developers to write a SQL statement with 13 joins and took over twenty seven hours to process. Was the value of the information worth that effort? Especially when you take into account the fact it took over five days to get the answer to the question to the executives that needed the information. With that amount of time a retailer can miss a trend and lose a sale. Is that what happened to I. Magnin and the score of retailers that have closed their doors in the last several years. What is needed is a quicker and better way to meet the needs of any enterprise.

(continued on page 2)

March/ April 1995

Page 1

Contents

Total	
compensation	falls
for Chief	
Information	
Officers	1

PSR finds an easy way to measure quality of EIS and DSS 1 Forecast for the

National Information Systems Market 4



100% Recycled Paper

Total Compensation falls for Chief Information Officers

(continued from page 1)

as Computer Operators, and Applications and Systems Programmers/Analysts).

Client/Server technology implementations are definitely on the rise resulting in a shortage of qualified individuals with the skills sets necessary to design, implement and maintain LAN and WAN environments. PSR survey results support this observation. Positions involved in the design, implementation, support and maintenance of client/server environments, such as Network Specialists, received a whopping 11.3% average increase over last years base and total compensation ranges.

Some other interesting observations that were made include:

- ✓ New technical skills were most often hired into an organization rather than developed within it;
- ✓ Staffing for most support functions has decreased without a noticeable loss of quality;
- ✓ Focus on new areas has led to a loss of the best technical resources to the new technologies and the more highly skilled individuals leaving the organizations they had supported; and
- Retirement of top professionals has started to occur within many of the better and larger organizations. As a result some of these individuals have taken over CIO positions in smaller firms to supplement the retirement income that they have;
- Many data processing professionals continue to under invest in themselves. As firms have cut back on training and conference budgets many IS professionals have stopped learning -- a fatal flaw;
- ✓ Data processing activities are beginning to be recentralized after years of decentralization and distribution of the function. Costs have escalated to the point that many firms want to put it all in one place so that these costs can be better understood and controlled; and
- ✓ Most non data processing senior executives are no longer intimidated by the technology.

The 1995 Compensation Survey was conducted in the last quarter of 1994. The compensation survey was sent to a representative number of Southern California business in a variety of different industries. Responses were received from a total of 41 companies representing 12 industries. Salary information was collected on a total of 4,046 IS professionals in 36 different IS positions. Responses are categorized by size of company, concentrating on mid-sized (50MM-500MM in gross revenue) and large (over 500MM in gross revenue) companies.

PSR finds an easy way to measure quality of EIS and DSS

(continued from page 1)

Where the IS staffers failed was in the design of the Information Warehouse database model. Their DBA used the entityrelationship modeling techniques in developing the database model and was proud that the database was normalized to Fifth Normal Form. Many of us have learned how to use entity relationship modeling techniques. However, utilization of these techniques is like trying to repair a child's toy with scotch tape, it may look good but it will soon crumble when used.

Entity-relationship modeling is used to achieve high performance in an on-line transaction processing (OLTP) environment. A EIS and DSS requires an on-line analytical processing (OLAP) environment. In an OLAP environment many records are accessed for distinguishing trends within the data. Seldom is there a user requirement to update the data. An OLTP environment accesses individual records for the purpose of recording updates or changes, such as a specific customer deposit balance.

The key to development of an on-line analytical processing environment is call Dimension modeling. Dimension modeling is a technique that is subject-oriented as opposed to application-segmented. Dimension modeling is a database modeling methodology that incorporates two different types of tables, Subject tables and Dimension tables. A Subject table is a very large time oriented table that contains the "facts" of a given subject, such as customer or product. Surrounding this table are Dimension tables that contain the illustrative dimensions of the business that users will easily recognize, such as account type.

Don't panic, if your EIS or DSS is supported by an entityrelationship structured database, it can be converted into a Dimensional model. Since we already know that it is impractical to run extensive queries against a high-volume transactional database, rearrange the data into a Dimensional model when extracting the data from your OLTP database.

Before developing a Dimensional model, four business aspects must be identified:

- ✓ Subjects Basis of system
- ✔ Dimensions Range of Information
- Frequency Timing of Data
- ✓ Abridgment Level of Summarization

Subjects

As mentioned earlier, operational systems are application segmented (i.e. for a financial services organization, a mortgage or demand deposit accounting system), while EISs and DSSs are subject oriented. Subjects for the same financial services organization would be customer or product.

PSR Reviews - Vol. V No. 2 ISSN 1080-2975



Subject tables capture the relevant facts that relate to the subject. They contain counts and other numerical measurements routinely used to measure the organization's performance. Subject tables are traditionally very large (i.e. many row deeper) than Dimension tables. For example, in a financial institution, there are many more deposits than branches in the organization.

Dimensions

Dimensions are the relevant qualifications of the Subject within the business. This is one of the primary things that has to be understood in order to use this approach. It varies not only by industry but also by firm within that industry. They represent the natural dimensions of the business organizations and basically define the characteristics of the Subject. They are usually easily recognized by the user. As shown in the exhibit, the Dimension table for market consists of the organizational hierarchy. It may also be defined by demographics, through such concepts as the Claritas Prizm profiles.

Frequency

Within the Subject tables, the frequency of the data captured must be identified. This varies for most industries and firms based on the particular business needs versus the cost of capture, transmission and processing. For example, it is very expensive to capture sales by individual transaction in a retail store or deposits in a financial institution. Given the ancillary processing needs such as credit card and frequent purchasing programs this may be required. In the case of a retail organization this also is impacted by the time of year and the demands of the merchandising function within the organization. To do so would recreate the production system. Many firms feel it is more reasonable to capture sales (or deposits) by product each hour, or each day. Essentially, this is the level of summarization of data in the Subject table.

Abridgment

Abridgment refers to the level of summarization within the Subject table as it relates to the Dimension tables. Dimension tables are commonly shared by multiple Subject tables and may be hierarchical in nature, such as Company District, Region, Branch and Route in a distribution firm. It may be desirable to maintain a Customer Subject table down to the route level. However, it may be desirable to "abridge" or summarize the Product Subject table at the branch level.

Remember, OLTP and EISs and DSSs are difficult to implement together unless you have the right resources - people allocated to the effort. Although success of the business organization is not a certainty if Dimension modeling is employed when developing an EIS or DSS, failure is when employing traditional entity relationship modeling techniques do not meet the needs of business and the executives who pay for all of this wonderful technology.



PSR Reviews - Vol. V No. 1 ISSN 1080-2975

March/ April 1995 Page 3



Forecast for the National Information Systems Market

Times are good. Many are moving to new and better places. The question remains do you have to move to succeed?

by M. Victor Janulaitis Internet address janumv@ix.netcom.com

Things are moving along great right now. The "Contract with America" is starting to take shape and the economy is on a great upswing. As I fly across the country signs of recovery are everywhere. Even in Detroit, which has had several years of bad luck, it is difficult to get a good hotel room and rental car in the middle of the week. Planes are much fuller with people flying on full fares and few seats are left in first class as upgrades are used by seasoned travelers.

Washington and the Belt Way are now understanding what down-sizing will mean to the government and public sector organizations. There will be fewer opportunities to get Federal grants and budgets for the organizations that focus on the public market.

On the technology side a number of CIOs of large East Coast companies are out looking for new jobs. It seems that the wholesale replacement of executives that took place on the West Coast is now happening there. This only foreshadows the next move which is a significant dislocation of second and third level managers in many of those same organizations.

In Europe the market is softening and companies that had bet on the international market are now starting to lick their



Published by:

M. Victor Janulaitis

wounds. This is one of the driving forces in the cutbacks that are not being felt from Chicago to New York. Those organizations that kept in touch with the domestic market while expanding to Europe will not have to make as many cuts.

Another phenomenon that is occurring is cases where individuals who have not managed in that complex environment are not put into those roles. These individuals often do not have the experience and depth of understanding of the business necessary to make the right tactical much less strategic directions.

Key signs to watch for identifying those who are over their heads are:

⇒ <u>"Shooting from the hip"</u> -

They feel the need to make rapid decisions with a limited amount of information. The problem is that many of these individuals do not have the depth and breath of experience to make a good business guess versus a shot in the dark.

They tend to hire people with whom they have worked with before and do this to such an extreme that they have no out of the box thinking. They lock themselves into their own set of limited experiences of the past.

"Locked into a vendor" -

Every vendor has good references -- and bad ones if you look far enough. A long time ago, an executive at a restaurant chain had an interesting question he would ask -- " "How many hamburgers would he have to sell to pay for a wrong vendor choice?"

Difference is bad -

The business did run, and in many case, profitably with the approaches that are now being questioned. New executives need to see why something stopped working.

As a side note, I have found that the mean time to fire or quit for a **new** CIO now is 14 months.

As organizations look ahead they need to know that no matter how good things are today they will get worse. At the same time no matter how bad things are now they will get better. This is from someone that survived the George Bush recession, the Malibu fire storm, the Northridge quake and is now enjoying the benefits of a great economic recovery.

Vie

Location	Prospects Short Term	Prospects Long Term
Northeast	Excellent	Excellent
Mid-Atlantic	Good	Good
Southeast	Good	Good/Poor
South	Good/Excellent	Good
Midwest	Good	Good/Poor
Southwest	Good	Good
West	Good/Excellent	Excellent
acific Northwest	Good	Good
Best Location	West	West