Figure 5.4. Performance Measurement Dimension and Level of Managers' Satisfaction with the Sales Forecasting Process for Each Company

The following discussion provides additional support for the relationship between the two dimensions.

High Performance Measurement Dimension Stage and High Level of Managers' Satisfaction with the Sales Forecasting Process. The level of complexity for measuring performance of the sales forecast ranged per company; thus, the satisfaction levels of the managers varied as well. For the companies in which specified metrics for measuring the performance of the sales forecast was used, the participants were satisfied with the metrics used.

Participant 5:

The key ones would be percentage values and absolute values.

Participant 9:
I think, for me, the reward comes in if you get a forecast that you can really manage . . . That in itself would seem to be high satisfaction to me.

Participant 8:
. . . I guess because our system is so smooth, we're happy with all of the models, it's almost kind of a given. So it's not really hard to get rewards . . . What you do beyond that, gets a little reward.

Low Performance Measurement Dimension Stage and Low Level of Managers' Satisfaction with the Sales Forecasting Process. The companies in the midst of upgrading their sales forecasting process, which includes new systems, techniques, and new ways to measure the performance of the sales forecast, were currently not quite satisfied. The companies which did not measure performance of the sales forecast and did not use the sales forecast outside of calculating the managers' bonus, were not as satisfied with the sales forecasting process.

Participant 3:
My forecasting is never evaluated. It's done and then it's done. It's kind of a necessity for a bonus, but nobody ever, when the quarter's over, nobody ever looks and says "well, that targeting was pretty much right on," or "you know, we really misjudged this report."

Combined Constructs

Because the level of accuracy of the sales forecast was not a viable construct, the relationship that was proposed between the construct of performance measurement and the level of accuracy of the sales forecast was not supported. Support existed for the construct of performance measurement; however, no support existed for the level of accuracy of the sales forecast. Evidence suggested that the two constructs may actually be one. As the stage for performance measurement of each company was determined and the level of sales accuracy evaluated, the two constructs often intertwined.

The restaurant companies varied greatly on the construct of performance measurement of forecasting. They ranged from using percentage values and absolute values to not measuring performance at all. In addition, a level existed at which the construct of performance measurement and the construct of level of accuracy of sales forecast were used interchangeably or viewed as the same.

> **Participant 12:**
> No. We, we don't have a method to go back and check the
> accuracy of our forecast. It's computerized in a way that's gonna
> help us. Everybody might know individually how they did but
> nobody really gets graded on how well they forecast.

There was varied judgment in the effectiveness of the forecast.

> **Participant 12:**
> We don't. We just don't. We will cause we have the tools. It's
> gonna show what the forecast was without any alterations, what
> the general manager adjusted the forecast to, and what it came out
> to . . . So that you can see as a district manager if a store's outside
> of range . . . You don't have to give a report on something that's
> okay. I mean, you know, it's just an exception-based report . . . so,
> if you screw it up, it will show. A big mess…

Some used the sales forecast solely for the purpose of calculating the bonus in their reward system as a manager incentive, while other companies used the sales forecast in developing the business plan. Due to this data analysis, the construct of level of accuracy of the sales forecast was merged into the performance measurement construct.

New Construct

The current research began with six constructs (functional integration, approach, systems, performance measurement, level of accuracy of sales forecast, and level of managers' satisfaction with the sales forecasting process). Five of the constructs found support in the research findings (functional integration, approach, systems, performance measurement, and level of managers' satisfaction with the sales forecasting process) with four relationships supported. The qualitative research methodology is one of discovery (Marshall & Rossman, 1999). Strauss & Corbin (1990) believed that new ideas and new

concepts might emerge while using the grounded theory methodology. McCracken (1988) believed that the long interview was a method for developing new categories and examining new phenomena. While conducting the interviews and analyzing the transcripts, the possibility of a new construct emerged. This construct was training.

Training

Support for training emerged during the data analysis around the participants' thoughts on whether the sales forecasting process was clear and precise with set instructions.

Participant 11
…Probably not, again I'm speaking at store level . . . [probe question: At the corporate level?] . . . Oh, yes, we consider that a challenge. (laughter) . . .

Participant 5:
There is no formal book per say that outlines all the steps involved in the business planning and sales forecasting but through the collective experiences of the group involved we, along with some outlines, some guidelines of what we need and when in the process is, I would say the process works pretty well.

Participant 12
It's all in my head, but I got to the <region/division identified> last year and I saw a new way of estimating sales and I bring it up every once in a while; but many of the division offices will use customer counts, or last week's customer counts, and that's their forecast. Some will use a year ago versus this year, the last week, the percent change last week, why that percent changed from last year's sales to this week and some go into half hour customer counts and others don't. But the guy in <region/division identified> last year said "I do it like this." (laughter) You can't see this on tape, but I'm standing up pounding my belly. (laughter) "It's right in my gut," he says. (laughter)

Participant 12
…Five years ago, yes, when we weren't growing at 20% a year, but our growth plans cause us to have a need for literally a thousand managers each year. Because there are no instructions there's really no . . . We're left at the sophistication of each individual manager as to how good of a forecaster they really are.

So, to answer that, they don't have, I don't think, the kind of guidelines that they should have.

Participants also addressed whether support for sales forecasting existed through formal training. Some believed that their process was outlined well with clear instructions. Others felt that it was clear on the corporate level. When asked about adequate support through training, many believed that the training could be better. Others felt that after a manager performed the sales forecasting function once, he/she would have an understanding of the process and each subsequent time the forecast was conducted, the manager would get better. Many agreed that there was not a company sponsored training program or formal training.

Participant 11
…Probably not as much as there should be. We have a rather sophisticated computer system available, and we talked about this for one of our strategic issues. We don't have really trained people who are able to use the systems that are available. Part of it is because they are not a Windows-based system; they are a DOS based system. We developed it ourselves. We have a very "cracker-jack" MIS department, but we have a very small MIS department. As you can see, we don't have too much in the way of overhead anywhere that's not doing anything. We have a really sophisticated system, but we don't spend a whole bunch of time training our associates, our general managers, how to use it. The problem we have, most of our training is done by the general manager to the associate manager level and they typically . . . it's just like home, they don't want the associates to know--we have some old school guys--everything that's going on in the business. It's like, we'll train you how to use the computer and when you know how to use it…he'll train the associate how to enter invoices because he doesn't want to do it, but as far as doing the reports, using it as an analytical tool, we don't get the bang for our bucks that we have available there. Some are like me, probably so old school that they don't want to change and they don't want to use the tools, they'd rather sit down and write it down on a piece of paper and figure it out. Most are that guarded with the store information.

Participant 5
I would say yes. Training, a lot of the training that takes place is on the job and you get, you get experience, you, you get exposed to the trends, you see what the key drivers in our traffic and our sales

and as you get exposed to that you, you get a much better understanding. It's not really a, you know, sending one to a seminar on how this works. It's basically you learn on the job and you see how it works and that's how you get your, that's how you get your training.

Participant 11
Absolutely no. We know. And its interesting, we have nine divisions, we're relatively decentralized and, and we've not sent out a company-wide, ah, company-sponsored forecasting method. You know, we, we've simply left the management, left it up to the individual divisions as how to they want to teach and train forecasting.

Participant 3
I think it's gotten better. And to give you a specific answer in that regard, some of these frustrations that can come from individual stores or regionals is inconsistency in the forecast . . . But still there is frustration over it not being the same for everybody. And I think that level of satisfaction, now I think that's later on in the questionnaire, but the level of satisfaction from the people that generate these forecasts is probably mixed.

Participant 3
I think by the time, after they go through it once they then become pretty familiar with it. Maybe their first time as a regional manager there might be some questions, but after that they have a pretty good understanding . . . The information is there. We do have a pretty good amount of data and research available. I think it's primarily, based on experience, primarily what you need . . .

With the possible addition of the new training construct to the research, scenarios were developed as to the relationship that training may have with the original constructs (functional integration, approach, systems, performance measurement, and level of managers' satisfaction with the sales forecasting process) that received support in the research findings. The scenarios explaining the proposed relationships between training and the other research constructs will be developed the next chapter.

Assessing the Trustworthiness of the Research Findings

Lincoln & Guba (1985) and Wallendorf and Belk (1989) put forth a set of criteria to assess the trustworthiness of qualitative research. These criteria included the

following: How do we know whether to have confidence in the findings (credibility)? How do we know the degree to which the findings apply to other contexts (transferability)? How do we know the finding would repeat if the study could be replicated in essentially the same way (dependability)? How do we know the degree to which the findings emerge from the context and the participants and not solely from the researcher (confirmability)? How do we know whether the findings are based on false information from the informants (integrity)? These criteria will be discussed as they were answered throughout the data collection, analysis, and results stages. The data in Table 5.3, page 183, lists the assessment criteria, tests, and the applications within the research.

Credibility

     Credibility is defined as the adequate and believable representations of the participants' constructions of reality (Wallendorf & Belk, 1989). In other words, do the results of the proposed research seem believable, complete, and adequate? The techniques used to assess/ensure credibility were prolonged engagement and triangulation across sources (Lincoln & Guba, 1985; Wallendorf & Belk, 1989).

     Prolonged engagement was accomplished by spending a reasonable amount of interviewing time with the participants in their place of employment. Each interview lasted approximately ninety minutes to two hours. Following the interviews, the researcher toured the facilities and examined the environment.

     Triangulation across sources was accomplished through redundancy in the interviews. Redundancy was the key to completing the data collection stage. Redundancy was reached during the sixth interview.

Table 5.3. Assessing the Trustworthiness of the Research Findings

Criteria of Trustworthiness	Test	Application to Research
Credibility: How do we know whether to have confidence in the findings?	1) Prolonged Engagement 2) Triangulation	1) Length of interview 2) Redundancy of interviews
Transferability: How do we know the degree to which the findings apply in other contexts?	Sample selection	Participant assistance in sample selection
Dependability: How do we know the finding would repeat if the study could be replicated in essentially the same way?	External reviewer	External audit
Confirmability: How do we know the degree to which the findings emerge from the context and the participants and not solely from the researcher?	External reviewer	1) External audit 2) Use of quotations from transcripts
Integrity: How do we know whether the findings are based on false information from the informants?	1) Good interview techniques 2) Triangulation 3) Safeguard participants	1) Length of time participants spoke 2) Redundancy of interviews 3) Participant and company anonymity

<u>Transferability</u>

Transferability is the ability to which findings from one study in one context will apply to other contexts (Wallendorf & Belk, 1985). The design and the participant selection remained flexible in order to take advantage of the discovery process (Strauss & Corbin, 1990). The participants responded favorably by recommending other managers in other restaurant companies that would be willing to participate in the study.

<u>Dependability and Confirmability</u>

Dependability is defined as the degree to which the interpretation was constructed so as to limit interpretation instability (Wallendorf & Belk, 1989). Confirmability is the ability to trace the researcher's steps taken to analyze the qualitative data (Wallendorf & Belk, 1989). In short, would these findings emerge if a different researcher conducted the identical research study?

By suggestion of Lincoln and Guba (1985), a dependability/confirmatory audit was performed. Dr. Michael Garver of Central Michigan University was given raw data, interpretations and research findings. Dr. Garver reviewed the information and found that he was comfortable with the interpretation and research findings. In addition, actual quotations from the participants were used throughout the research findings stage to add to the dependability and confirmability of the results.

<u>Integrity</u>

Integrity refers to the degree of trustworthiness placed in the data, assuming that participants do not purposefully mislead or misinform the researcher (Wallendorf & Belk, 1989). Techniques to ensure integrity include triangulation across participants, good interviewing techniques, and safeguarding participants.

Triangulation across participants again refers to the redundancy found in the sixth interview. Redundancy is an acceptable measure of triangulation across participants (Wallendorf & Belk, 1989). The degree of talking by participants was the test used to assess good interviewing techniques. The interviews ranged from ninety minutes to two hours. During this time, the participants did the majority of the talking. The interviewer was a facilitator, and the participants were able to speak freely on the topic. Finally, the

participants were assured that their answers and company information would be held in complete confidence. The participants and companies have not and will not be identified throughout the course of this research. This assurance gave the participants the psychological freedom to discuss their perspectives (Wallendorf & Belk, 1989). The participants gave their permission to be audiotaped solely for the purpose of providing data for this study.

Chapter Summary

The research findings and propositions of the study were presented in this chapter. Likewise the stage for each company for each dimension was presented. A discussion on combining two research constructs (performance measurement and level of accuracy of the sales forecast) and results of the research propositions were presented. Each proposition was presented with research findings, and actual quotations from participant interviews were used to support the findings. A possible new construct, training, was explored and presented. Finally, the trustworthiness of the data was accessed using criteria developed by Lincoln and Guba (1985) and Wallendorf & Belk (1989). The criteria were presented with applications within the research.