USING A BALANCED SCORECARD AS A STRATEGIC TOOL IN PUBLIC PURCHASING

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ABSTRACT. Purchasing professionals have recently sought methods to take on a more strategic role in their organization. One strategic tool showing success is the Balanced Scorecard. This tool can assist purchasing in making a valuable contribution to the organization and aligning the purchasing and organizational strategies. This paper reviews the elements of a Balanced Scorecard and investigates how to adapt it to public purchasing. Specifically, the paper discusses the implementation of a Balanced Scorecard, and how to effectively measure the purchasing role. The paper concludes with a sample of a Balanced Scorecard for a procurement division in a public organization.

INTRODUCTION

The last decade has seen many changes in how business is conducted in the growing global environment. In order to stay competitive and maintain customer and stakeholder support, organizations implemented strategic initiatives to guide, measure, and maintain exceptional performance. Unfortunately, many organizations failed at achieving their strategic goals. Many of the methods used were not suited for the changing environment, and were based primarily on only financial measures and lagging indicators. The Balanced Scorecard was developed by Robert Kaplan and David Norton in response to the growing need for organizations to accurately design and implement a successful strategic planning and measuring tool. They saw a need for organizations to have a balance of several performance indicators to

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better achieve strategic goals. “Specifically, the historical accuracy and integrity of financial measures must be balanced with the drivers of future financial performance in an attempt to view a wider spectrum of performance and execute strategy.” (Niven, 2003, pg. ix)

Shortly after the Balanced Scorecard was introduced in the early 1990’s, it was adopted and implemented by private-sector firms with great success. Public sector agencies were also able to benefit from the Balanced Scorecard methodology as a way to link specific operational tasks and objectives to the overall organizational long term strategic goals. The public sector found that even with unique characteristics not found in the private sector, they were able to easily adapt and implement the Balanced Scorecard as a performance management tool. Some of the characteristics unique to the public sector that impact the implementation of the scorecard are: (Procurement Executives’ Association, 2005)

1. Budget Process: Agencies must budget up to two years in advance.
2. Data Collection: Data collection and reporting are delayed.
3. External Factors: Uncontrollable political factors affect the process.
4. Hiring and Training Constraints: Limited flexibility at the department level.

Despite these and other unique characteristics of the public sector, there have been noted successes of agencies implementing the Balanced Scorecard method as a strategic tool. In order to achieve success, agencies had to move from the old method of measuring performance, which was a concentration on goals and projects, but not strategy, to a new theme, which is based on strategy and objectives. The Balanced Scorecard is a tool to measure performance under this new method. The below table shows a comparison of the two methods used for measuring performance. (Rohm, 2005)

The Balanced Scorecard can also be implemented at the department level, in both large and small agencies. Introducing this tool in public procurement can help the procurement function align strategy with the overall organizational strategy. By also using the scorecard as a measuring tool, it allows purchasing to manage performance, improve in critical strategic areas and benchmark performance against historical data.
<table>
<thead>
<tr>
<th>Old Method</th>
<th>New Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management and Board of Directors developed strategy</td>
<td>Strategy developed at all levels, including employees and stakeholders</td>
</tr>
<tr>
<td>Top management pushed the elements down through the organization</td>
<td>Cross functional teams are used to increase buy-in from entire organization</td>
</tr>
<tr>
<td>Day-to-day tasks and projects were labeled strategic goals</td>
<td>Performance measures are tied to strategic results, not projects</td>
</tr>
<tr>
<td>Strategic plan is printed, but not used</td>
<td>Balanced Scorecard is linked to strategies and is used as a tool in day-to-day operations</td>
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and with other procurement departments in similar agencies. The procurement function can strike the balance between minimizing costs and maximizing operational efficiency. (Martin, 2003)

**ELEMENTS OF A BALANCED SCORECARD**

“The balanced scorecard is a conceptual framework for translating an organization’s strategic objectives into a set of performance indicators distributed among four perspectives: Financial, Customer, Internal Business Processes, and Learning and Growth. Some indicators are maintained to measure an organization’s progress toward achieving its vision; other indicators are maintained to measure the long term drivers of success.” (Procurement Executives’ Association, 2005, pg. ix) The four perspectives of the Balanced Scorecard focus on a particular business area and define and answer specific questions as to the level of current performance, yet all four perspectives are interrelated.

1. Financial Perspective: Emphasis is on cost and the ability to provide the best value to customers and stakeholders. Are costs minimized? Are the current financial policies the most efficient?

2. Customer Perspective: The focus is on the agency’s overall responsibility to meet the customers needs in the most efficient and
effective manner. Who are the customers and stakeholders? What are their needs and are they being met?

3. Internal Business Processes: The focus is on performance expectations and ensuring the proper processes and resources are available and implemented to maximize performance. What can be done to add value to the service being provided? What processes add value?

4. Learning and Growth: The emphasis of this perspective is on the employee’s ability and the organizational structure needed to achieve the agency’s goals. Are the employees given the right tools to perform effectively? Is sufficient technology systems installed to achieve the goal?

An underlying concept of the Balanced Scorecard is that all four of the perspectives are balanced with each other. If the focus is too great on the financial perspective, service and customer satisfaction and employee morale may decrease. If the focus is too strong on the customer perspective, the financial perspective as well as the growth of the organization may be jeopardized. On the other hand, in order for an agency to achieve its strategic goals, it must invest in its employee’s growth and examine internal business processes. By improving performance in the internal business processes and learning and growth perspectives, the organization will be able to meet customer and stakeholder needs and improve the financial standing of the agency. The Balanced Scorecard identifies and provides the needed structure to meet the customers and stakeholders expectations. The scorecard also provides the framework to monitor and evaluate performance from the viewpoint of the areas that are impacted and that can impact the performance success of the organization. Essentially, the Balance Scorecard provides a balance between finance and non-finance measures, internal and external customers, ad lagging and lead indicators.

The relationship between the four perspectives of the Balanced Scorecard is shown below. (Procurement Executives’ Association, 2005)
The relationship between all four perspectives and the vision and strategy of the department or agency is the key to successfully developing and implementing the scorecard. The focus of all tasks and efforts will always contribute to the achievement of the overall goals and objectives.

IMPLEMENTATION OF A BALANCED SCORECARD

Approach

Before beginning to develop a Balanced Scorecard there are several decisions that must be made by the department. The first is to identify the fundamental need for change and the rational for using the scorecard. Why is it that the department has determined the need for a scorecard and how will the scorecard address the need? The need for the change should be greater than the resistance to change in the procurement department or else buy-in and success of the implementation will be at
risk. A procurement department may decide a Balanced Scorecard should be implemented based on some of the below reasons: (Niven, 2003)

- Improve Performance
- Demonstrate Accountability
- Meet Customer and Constituents Needs
- Align Department and Employee Goals with Organizational Goals
- Improve Communication within the Department and the Organization

A second decision that should be made prior to development is to determine to what extent the Balance Scorecard should be implemented. In larger organizations a pilot program may be first implemented in one or two divisions prior to a department wide implementation. The pilot program may be used to develop measures, business processes, gather and analyze information and report the results. The evidence of the pilot programs success will serve as a catalyst to gain acceptance for a broader implementation.

The final, and most critical, decision that must be made prior to developing a Balanced Scorecard is the decision to devote the necessary support and resources to the project. Obtaining executive level support and dedication from the purchasing department employees must be in place prior to a commitment being made to implement the new program. Before the support from all levels can be achieved, the department must communicate the amount of resources, both monetary and human, that will be required to successfully implement the Balanced Scorecard program. (Niven, 2003)

**Employee Time:** In the early stages of educating employees and developing the program, employee resources will be high. After the program is implemented, the amount of employee time required to maintain the program decreases.

**Consulting Fees:** The use of a consultant to train and guide the department through the development of the Balanced Scorecard will increase the success of the program.

**Reporting Software:** Unless a sufficient software program is currently in place to capture data and report information on the measures and progress toward the goals, a software program will
have to be purchased to achieve these tasks. This cost should not be overlooked because in order to report the purchasing departments, or pilot divisions success, the proper software tool must be utilized.

**Educational Materials:** Appropriate training and education materials are essential to a successful program. Depending on the departments need, this may be a small investment such as books and other reference materials, to a much larger investment such as sending each team member to intensive training.

**Logistics Expense:** Many organizations have found that performing the initial stages of developing a Balanced Scorecard is best done off-site. This approach eliminates distractions and can also improve the cohesiveness of the implementation team.

**Development**

Below are four basic steps for developing a Balanced Scorecard are. This is a process-oriented approach to the development that ensures input from all divisions of the purchasing department, or all employees from a division acting as a pilot program. Each step should be accepted prior to beginning the next step in the development process. Using this process oriented approach, will increase the acceptance and buy-in from stakeholders. The result will be a department culture that accepts and supports the use of the Balanced Scorecard as well as provide continuous feedback at each step of the process. (Kerr-Perrott, 2005)

**Develop the Mission, Values, Vision and Strategy**

The key to developing the purchasing department’s mission, values, vision and strategy statements is that they are linked to those of the organization’s. The department statements must align with the overall organizational strategy and not conflict or be counterproductive. Some guidelines for developing the mission are to ask the questions: What is our purpose? Who do we serve? What are the purchasing department’s core services? and What are the long-term outcomes that will determine if success is achieved? (Niven, 2003)

The values developed should be able to support the department mission and be the guiding principle to which purchasing contributes to achieving the organizational objectives. Particularly in procurement, values are the cornerstone of how day-to-day tasks are accomplished in maintaining ethical practices and compliance. The vision statement is a
look into the future, the goal of where the procurement function would like to be in the long-term. Some of the elements essential to the vision statement are: (Niven, 2003)

- The statement should be concise
- Be a balance between external and internal considerations
- Appeal to all groups affected by the procurement function
- Consistent with the mission and value statements of the organization
- Can be confirmed once achieved, not be nebulous
- Must be practical and achievable
- Be able to motivate the employees and stakeholders

Developing the strategy is the foundation of the Balanced Scorecard. There are many different ways to approach the development of a strategy, and the method used can depend on the size and structure of the department. Five basic steps to strategy development to facilitate the process are: (Niven, 2003)

1. Assessment: Review the department and organizational objectives and planning process. This review should also include any specific mandates that must be met and a review of the organization from a historical perspective.

2. Stakeholder Analysis: In order to ultimately achieve the goal of meeting stakeholders’ needs, a thorough analysis of who the stakeholders are must be conducted.

3. Analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT). “Strengths and weaknesses tend to be internal to the organization, while opportunities and threats represent external phenomenon. It’s very important to view the interplay between SWOT elements in order to generate strategic insights.” (Niven, 2003, pg. 143)

4. Identify Strategic Issues: The question of what policies and challenges will affect the department must be asked, and then the issues that are identified will help develop the four perspectives.
5. Develop the Strategies: These strategies developed should be broad in nature, in order to encompass the strategic issues identified.

Develop the Performance Measures

The performance measures should be a balanced mix of all the elements of the Balanced Scorecard. When developing the measures it should be kept in mind that the goals achieved must help achieve the organization’s mission and vision. The measures should be a mix of inputs and outputs and qualitative and quantitative measures. “When developing measures, it is important to include a mix of quantitative and qualitative measures. Quantitative measures provide more objectivity than qualitative measures. They may help to justify critical management decisions on resource allocation (e.g. budget and staffing) or systems improvements.” (Procurement Executives’ Association, 2005, pg. 16)

The figure below shows an example of how a mix of inputs and outputs are used in developing the four perspectives and the department mission. (Niven, 2003).

Another mix of measures that should be considered is that of using lagging and lead indicators. A lagging measure is based on past or historical results while a leading measure is a driver and measures the current process. Both types of measures are important to the Balanced Scorecard and accurately measuring performance. For example, a lagging procurement measure would be number of responses per solicitation and a leading indicator would be number of vendors registered.

Choosing the right measures for use in the Balanced Scorecard is critical to its success. The measures should be positive and not punitive. “Performance measures should be limited to those that relate to strategic organizational goals and objective, and that provide timely, relevant, and concise information for use by decision makers at all levels – to assess progress toward achieving predetermined goals.” (Procurement Executives’ Association, 2005, pg. 37)
FIGURE 2
Balancing Inputs and Outputs

Mission
Output: Procurement Department Mission

Customer
Output: Customer satisfaction survey

Business Process
Output: Number of e-commerce transactions

Learning & Growing
Input: Number of employees certified

Financial
Input: Cost Savings and Avoidance

**Develop Targets**

Targets are used to define the performance measures success on achieving the desired outcome. The targets are normally set for a defined time frame, for example, monthly, quarterly, or for a fiscal year. Targets should also be linked to the performance appraisal system for employees. If this approach is used, a full one year of measuring targets should be completed before using the information for appraising performance. The targets must be achievable and realistic, yet challenging enough to make an impact on overall performance. Baselines must be set in which to measure the level of achievement. Historical data and peer performance
are two ways where information can be obtained to set baseline performance.

Each of the four perspectives of the Balanced Scorecard should have specific targets assigned to specific measures, objectives, initiatives, and tasks. For example, for the perspective of Internal Business Processes, the objective may be to reduce the cycle time from request for a good or service to contract award. The measure would be the number of days in the cycle and the initiative would be to post all solicitations the agency’s website to reduce the cycle time. The target for this objective could be set at specific number of days to achieve the objective. The data from the purchasing software system could be used to evaluate the success of the objective.

**Develop Implementation and Evaluation Plans**

Probably the most important aspect of both the implementation and evaluation plans is communication. Effective, open and frequent communication with both employees and stakeholders is critical during the implementation process. Employees must understand the level of commitment from the top management and cascading down through the organization. Accountability for the implementation and success should be clearly defined and understood by everyone.

The Balanced Scorecard is a living document and should be able to be modified and adjusted as goals and objectives are achieved and as internal and external environmental factors change. It is essential that accurate and comprehensive reporting tools are used to communicate the progress made over the reporting period. At each evaluation period, the results should be used to make adjustments in measure, targets, or initiatives as needed to keep the alignment of the department’s goals and objectives with the organizational goals and objectives. The overall success of the Balanced Scorecard will depend on how well the gap between the measured performance and the preferred performance is evaluated and addressed.

**Barriers and Critical Success Factors**

**Barriers**

In order to have a successful implementation of a Balanced Scorecard, the department must understand the barriers that may impede success. Once the barriers are identified, strategy can be developed to
minimize or eliminate the barriers. Some of the barriers that the department may encounter while trying to implement the scorecard are outlined below. (Niven, 2003)

- **Vision Barrier:** All levels of employees must be able to understand and embrace the vision, mission and values of the department. If there is resistance to acceptance of the vision, then the implementation of the scorecard may not achieve the expected success.

- **People Barrier:** The Balanced Scorecard links employee incentives to achieving the organizational strategy. Employees must be willing to accept this link and realize the long-term connection between day-to-day performance and long-term goals and objectives.

- **Resource Barrier:** An underlying concept of the Balanced Scorecard is that the budget is tied to the strategy. Especially in the public sector, the budget process is stretched throughout two or more years, so the tasks, goals and objectives that support the strategy must be developed in advance of the actual budget year implementation.

- **Management Barrier:** The importance of gaining and maintaining executive level support cannot be disregarded. The actions of top level management must match verbal support. If full support is not executed throughout the implementation of the Balanced Scorecard, too much time will be spent on reactive measures than strategic measures.

**Success Factors**

There are a number of critical factors that should be present in an organization to help ensure the success of the Balanced Scorecard method. Several of these factors have been mentioned in the previous sections, but the below list should be used as a check and balance before implementing the program and as an ongoing exercise to assist in continuing success.

- **Commitment:** Commitment must be demonstrated at all levels of the organization, especially at the executive level.
- Clarity: The objectives of the program, and the underlying reason for the change should be understood by all employees and stakeholders.

- Communication: Communication should be an ongoing process and often checked to ensure that proper and timely communications are being practiced throughout the entire organization.

- Accountability: There should be clearly assigned and understood accountability for the process and results of the Balanced Scorecard program.

- Performance Measures: A system for measuring performance, that is positive, not punitive, must be developed and provide sufficient and accurate information to decision makers. Employee rewards and recognition should be tied to the performance measures through the employee evaluation process.

- Link to Strategy: The Balanced Scorecard at the department level should be clearly linked to the organization’s strategy. All objectives and tasks performed and measured should contribute to the overall progress toward success.

- Reporting: This is a critical factor that can be easily overlooked. Comprehensive reports documenting the success of the program, especially in a pilot program, can serve as tools for acceptance and expansion of the Balanced Scorecard program.

**Sample of a Balanced Scorecard**

The following section provides a sample of a Balanced Scorecard for a public transportation authority’s Procurement Division, which is a part of the Finance department. The process that was used to develop the scorecard did not necessarily follow the steps outlined in the above sections because the project was taken on as a larger organizational wide effort to update the strategic plan. As part of this effort, the Procurement Division developed a Balance Scorecard based on the vision, mission and values of the organization and the results of an analysis of the strengths and weaknesses of the procurement function.
Background

In 1998, Ann Arbor Transportation Authority’s (AATA) Board of Director’s commenced the project to develop a ten-year strategic plan. The plan that was developed was called Destination 2010. With the assistance of an outside consultant, the plan was developed by the Board of Directors, the employees of AATA, and external stakeholders. After five years of working toward the ten year goal with limited success, the Board of Directors challenged the staff to evaluate, and if necessary, revise the strategic plan for the second half of the term. The Procurement Division will act as the pilot division to develop a Balanced Scorecard, but with revising and using the Vision, Mission and Values statements for the entire organization. A major emphasis area that was to be incorporated was implementing e-business components to AATA’s operation.

Vision, Mission and Values Statements

Vision Statement

Ann Arbor Transportation Authority's vision is to provide the highest quality of mobility solutions to every resident and visitor throughout Washtenaw County. AATA respects and values it’s dedicated employees and will utilize innovative technologies to exceed customer, business partners and other external stakeholders’ expectations.

Mission Statement

Ann Arbor Transportation Authority will, through innovative planning and implementation options provide customer focused safe, reliable, efficient transportation to the community. AATA will explore and implement cost effective strategic business partnerships with the public and private sectors that will support the economy and the environment.

Values Statement

The following are the core values of how AATA conducts its business and interacts with its customers, the community, its suppliers and stakeholders.

Teamwork

- Employees will work together in a harmonious manner to provide superior service to its customers.
• Team with strategic suppliers to ensure the highest quality goods and services are being used to provide service.

Integrity
• The integrity of all customers and business partners’ information collected and used in the course of doing business will be protected to the highest extent.

Responsibility
• Responsible for all actions, not only to customers, but also to the community, stakeholders, business partners and the environment.

Diversity
• Encourage and support diversity in the workplace and treat all employees and potential employees, with respect.
• Actively pursue business partners without discrimination and put forth-extra efforts to ensure that small and disadvantaged business are afforded the opportunities to enter into a business relationship.

Professionalism and Accountability
• Stress the importance to all employees of maintaining a professional appearance and manner at all times.
• Be accountable for its service and business transactions.

Strength, Weakness, Opportunities, and Threats (SWOT) Analysis
An internal environmental analysis helps to identify the Procurement Divisions strengths and weaknesses. The result of the analysis will guide the division in developing specific strategic objectives that will maximize its strengths and minimize and eliminate its weaknesses.

Strengths:
• High Ethical Standards
• Employee Training
• Implementing New Technologies

Weaknesses:
• Focus on Internal Customer Service
• Measuring and Tracking Progress
• Facilitating Change
• Supplier Management

Threats:
• Unsecured Funding
• Political Changes
• Government Regulations

Opportunities:
• Improve Business-to-Consumer Technology
• Implement Business-to-Business Technology
• Establish Proactive Processes
• Establish Performance Measures and Initiatives

Long-Term Objectives

Procurement identified long-term objectives that would help achieve long-term success and sustained growth. Each of the areas contains specific objectives that provide the “road map” for the future.

Meeting Customers Needs

• **Objective 1**: Design AATA’s website to enable customers to purchase bus passes online. Vendors will also be able to purchase bid specifications, when applicable.

• **Objective 2**: Collect more detailed customer and supplier information through the website.

Productivity and Profitability

• **Objective 3**: Participate, where cost effective, in online auctions through transit industry portals and reverse auctions.

• **Objective 4**: Establish and maintain a vendor performance management system to better identify the vendors that are adding value.
Employee Development

- **Objective 5**: Establish a training program for non-technical as well as technical learning.

Employee Relations

- **Objective 6**: Establish performance measures for employees that are directly tied to the strategic goals and objectives.

Technological Leadership

- **Objective 7**: Establish partnerships with major suppliers such as fuel suppliers, to allow AATA to manage accounts, accept electronic invoices and send electronic payments.
- **Objective 8**: Implement technology that will enable electronic purchase orders to be sent directly to vendors.

Public Responsibility

- **Objective 9**: Increase the number of suppliers being offered to participate in the bidding process, with an emphasis on small and disadvantaged businesses.

**Balanced Scorecard**

The long term objectives were incorporated into a Balanced Scorecard and assigned measures and targets. The objectives will be evaluated at the end of every fiscal year, and modified if needed. Employee performance will be linked to the scorecard beginning the fiscal year. The first year of data will be used as a benchmark for the future.
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate, where cost effective, in online auctions through transit industry portals and reverse auctions</td>
<td>Cost savings from traditional method</td>
<td>Reduce costs by 10%</td>
</tr>
<tr>
<td>Establish and maintain a vendor performance management system to identify vendors that add value to AATA</td>
<td>Vendor performance measured by defective materials and returned products</td>
<td>Improve performance by 20%</td>
</tr>
<tr>
<td><strong>Internal Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish partnerships with major suppliers such as fuel suppliers, to allow AATA to manage fuel account, accept electronic invoices and send electronic payments.</td>
<td>Costs associated with processing invoices.</td>
<td>25% reduction in costs</td>
</tr>
<tr>
<td>Implement technology that will enable electronic purchase orders to be sent directly to vendors.</td>
<td>Reduction in cost of processing paper purchase orders</td>
<td>20% reduction in costs</td>
</tr>
<tr>
<td>Increase the number of suppliers being offered to participate in the bidding process.</td>
<td>Increase the average number of bids received per solicitation</td>
<td>Increase by 10%</td>
</tr>
<tr>
<td><strong>Learning and Growth</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish training program for non-technical as well as technical learning.</td>
<td>Employee satisfaction as measured through surveys.</td>
<td>Increase employee satisfaction by 5%</td>
</tr>
<tr>
<td>Establish performance measures for every employee that is directly tied to the strategic goals and objectives.</td>
<td>Performance measures tied to employee evaluation schedule</td>
<td>Benchmarks determined by end of year three.</td>
</tr>
<tr>
<td><strong>Customer Relations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design AATA’s website to enable customers to purchase bus passes online and vendors to purchase solicitations, where applicable.</td>
<td>Decrease in the number of passes sold manually</td>
<td>Decrease the number of passes sold manually by 35%</td>
</tr>
<tr>
<td>Collect more detailed customer and supplier information through the website.</td>
<td>Reduction of advertising costs</td>
<td>15% decrease in advertising budget</td>
</tr>
</tbody>
</table>
CONCLUSION

“Managers can use the Balanced Scorecard as a means to articulate strategy, communicate its details, motivate people to execute plans, and enable executives to monitor results. Perhaps the prime advantage is that a broad array of indicators can improve the decision making that contributes to strategies success.” (Crawford, 2005, pg. 22) The Balanced Scorecard can be easily adapted to any public agency, and to any department within a public agency. Public sector procurement must be able to adapt to the changes in the business environment, especially as technology makes the global environment smaller and smaller. The scorecard provides a tool to help adapt to the changes and is adaptable to many different structures of public organizations and procurement function.

The scorecard can also link the organizational strategy down through departments and employees, so that the entire organization is working toward achieving a unified goal. The ability of the Balanced Scorecard to measure performance and progress toward the goals and objectives provides the road map to achieving the long term strategic goals. The scorecard acts as the common thread of communication throughout an organization, leading the entire organization and stakeholders to the desired success.

REFERENCES


