

# **Revolutionary ROI: Capturing Library Value**

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## **Abstract**

The balanced scorecard is described by its creators as “A real and revolutionary opportunity... in studying and assessing how well prepared a company’s people, systems, and culture are to carry out its strategy” (Kaplan & Norton, 2004). Starting in 2010, the Raytheon Integrated Defense Systems Library (IDS Library) applied this proven business measurement and management tool as a means to assess its performance and to determine the return on investment (ROI) value of the Library to its customers and to the business.

Follow the IDS Library on its journey from using traditional performance-based metrics to adopting the balanced scorecard. Learn how the balanced scorecard provides a comprehensive picture of the Library’s successes and failures. A strategy map communicates the story of how value is created. Performance measures are used to view the organization from four perspectives: the User Perspective (customer), Internal Process Perspective (library processes), Organizational Readiness Perspective (learning and growth), and Financial Perspective (traditional and cost-benefit). Performance indicator targets, established for each perspective, enable the library to

estimate the business value of its tangible and intangible assets and adherence to its strategic plan.

## **Introduction**

Have you ever wondered how well the strategies in your library's strategic plan carry out your organization's goals and objectives? Have you stayed awake at night wondering how to quantify the value of your organization to management? Do you have the tools to collect the right metrics and to demonstrate the library's value and ROI to upper management?

To answer these questions, in 2009, we performed a Six Sigma project to select a vehicle for capturing the IDS Library's strategic contribution to Raytheon. The IDS Library needed to develop a methodology to ensure that the IDS Library was conforming to its mission statement of providing cost-effective and innovative resources and services by focusing on key strategic initiatives. The project goal was to implement a sustainable process that would effectively measure the IDS Library's services and contribution to its larger organization.

This paper begins with our journey to investigate our options, analyze potential approaches, and select the best tool to achieve the goal of demonstrating the IDS Library's value and ROI to upper management. This resulted in the selection and adoption of the balanced scorecard as the tool of choice. It then describes the initial creation, the implementation, and the refinement and sustainment of the balanced scorecard tool for the IDS Library. It concludes with a discussion of how the balanced scorecard has enabled the IDS Library to drive future decision-making and thereby improve performance and how upper management has used the output of the balanced scorecard to evaluate the IDS Library's performance and value.

## **The Journey and Adoption**

The project goal was to move from traditional performance-based metrics to adopting, implementing, and sustaining a more suitable tool. We began by defining the final destination as measuring the Library's value and ability to provide cost-effective, innovative information resources and services that lead to business and professional growth.

We then sought some overall perspective via the following actions:

- Used a review of the literature to analyze approaches to capturing value-added/return on investment in various types of libraries and institutions.
- Interviewed a Process Specialist to gain an understanding of a pure return on investment approach versus a strategic contribution approach.
- Interviewed a Raytheon Financial Consultant to investigate the possibility of using an earned value approach via the Raytheon Earned Value Management System.
- Interviewed the IDS Library Manager to learn his general perspective on requirements for value-added/return on investment approaches.

We then more deeply analyzed potential tools as follows:

- **Return on investment** compares organization's growth to its ROI. If the organization's growth is less than its increase in ROI, then the organization is doing more with less and vice versa. We concluded that this could be useful but would not serve as the primary tool.
- **Earned Value Management System's** main objective is to identify the very specific tasks necessary to complete a project and then to track performance in terms of these tasks. Value and effectiveness are measured by keeping within the budget (time and money) of the forecasts. Since it is not intended for measuring the value of a service-oriented group such as a library, we eliminated this tool from consideration.
- **SLA Competencies for Information Professionals** measures core skills and services relevant to the parent organization. We concluded that this could be useful but would not serve as the primary tool.
- **Balanced Scorecard** tracks adherence to the organization's strategic plan from the financial, customer, internal processes, and organizational readiness perspectives. We concluded that the balanced scorecard was consistent with the organizational initiatives and aligned with the strategic direction of Raytheon, the Integrated Defense Systems business unit, and the IDS Library.

To achieve the project goal of moving from traditional performance-based metrics to adopting, implementing, and sustaining a more suitable tool, we then selected the balanced scorecard as the tool of choice.

Our findings were reinforced by this statement from the Balanced Scorecard Institute: "BSCs are used extensively in business and industry, government, and nonprofit organizations worldwide. Gartner Group suggests that over 50% of large US firms have adopted the BSC. More than half of major companies in the US, Europe, and Asia are using the BSC, with use growing in those areas as well as in the Middle East and Africa. A recent global study by Bain & Co listed balanced scorecard fifth on its top ten most widely used management tools around the world, a list that includes closely-related strategic planning at number one. BSC has also been selected by the editors of Harvard Business Review as one of the most influential business ideas of the past 75 years" (Balanced Scorecard Institute, 2019).

## **Creating the Balanced Scorecard**

The balanced scorecard was first developed by Robert Kaplan and David Norton in the 1990's in response to the need for operational and financial ways to measure performance in the corporate environment. A balanced analysis of financial and operational measures based on the organization's strategic plan produces a more holistic picture of the current performance of the company, or, in this case, the library.

The strategic plan, which consists of the mission, the vision, and the goals of the organization, is a static document which describes the organization's goals but does not provide a roadmap for executing the goals or a vehicle for measuring performance. The balanced scorecard framework is the springboard which supports the organization in developing an actionable concept

document to which everyone can relate, against which organizational achievement can be measured, and from which the staff can take measurable actions. It includes:

- **Mission:** What we Do
- **Vision:** Picture of the Future
- **Perspectives:** Points of View
  - **Financial Perspective** asks “How do we look to shareholders or board members?”
  - **Customer Perspective** asks “How do our customers or users see us?”
  - **Internal Processes Perspective** asks “In what areas must we excel?”
  - **Organizational Readiness Perspective** asks “Can we continue to improve and add value?”
- **Strategic Goals, Measures, and Targets:** Components of Strategic Plan with measures and targets added for each goal
- **Strategy Map and Themes:** Perspectives/Goals Lead to Value Stream
- **Strategic Initiatives:** Projects and Action Plan that Drive Results
- **Business Contribution:** Return on Investment

The balanced scorecard document begins with a statement of both the mission and vision for the library organization. (See Figure 1.)

**MISSION STATEMENT**

The IDS Research Library is committed to providing the highest level of technical and business information to engineering, scientific, and business staff. It supports Raytheon’s focus on key strategic initiatives by offering cost-effective and innovative resources and services.

**VISION**

Be the leading choice for client’s information access and lifelong learning by continually offering focused, simple, excellent services and effectively adapting to technological, business, and cultural changes.

*Figure 1: Example of Mission Statement and Vision*

## **STRATEGIC GOALS, MEASURES, AND TARGETS**

The balanced scorecard methodology suggests that the organization develop goals (objectives), measures (key performance indicators (KPIs)), targets, and initiatives (actions) relative to each of the following points of view:

- **Financial Perspective:** Views organization financial performance and effective use of financial resources.
- **Customer Perspective:** Views organizational performance from the point of view of the customer, end-user, or other key stakeholders including customer satisfaction and retention.

- Internal Processes: Views organizational performance through the lens of the quality and efficiency related to the products or services or other key business processes. This perspective should stem from businesses processes having the greatest impact on customer satisfaction.
- Organizational Readiness Perspective: Originally called learning and growth, views organizational performance through the lens of human capital, infrastructure technology, culture and other capacities that are key to breakthrough performance.

Strategic goals are incorporated into the balanced scorecard under each perspective view directly from the strategic plan. “Strategic objectives are the continuous improvement activities that we must do to implement strategy. They break down the more abstract concepts like mission and vision into actionable steps. Actions that your organization initiates should be helping you achieve your strategic objectives. Examples might include: Increase Revenue, Improve the Customer or Stakeholder Experience, or Improve the Cost-Effectiveness of Our Programs” (Balanced Scorecard Institute, 2019). The *balancedscorecard.com, 2019* website points out that all good strategic objectives start with a verb, are endless, are actionable, and are measurable.

For each goal, at least one metric (measure or Key Performance Indicator (KPI)) will be identified along with its “best” and “better” achievement target and the method or vehicle by which its performance will be evaluated. “KPIs monitor the implementation and effectiveness of an organization's strategies, determine the gap between actual and targeted performance and determine organization effectiveness and operational efficiency” (Balanced Scorecard Institute, 2019). Quality metrics or measures:

- Objectively indicate whether or not each strategy is effective;
- Track change over time;
- Focus on actions most important to organizational success;
- Rate accomplishments rather than what has been done;
- Communicate results to organization.

For example of goals, metrics, and methods, see Figure 2.

- **Goal 1: Provide excellent service to customers**
  - Metric User.1.a: ROI surveys rated as positive.
    - Target 1: 95% of the returned ROI surveys are rated positive toward the Library
    - Target 2: 90% of the returned ROI surveys are rated positive toward the Library
    - Method: To be collected from 2015 Balanced Scorecard value responses.
  
- **Goal 2: Develop high quality collections that reflect the users' needs**
  - Metric User.2.a: Circulation of new title monographs.
    - Target 1: 60% of all new titles circulate within 1 year after cataloging.
    - Target 2: 50% of all new titles circulate within 1 year after cataloging.
    - Method: Annual report of new IDS titles (1 year).
  - Metric User.2.b: Circulation of focused collection areas (by Call Number)
    - Target 1: Increase circulation of focused collection areas by 10% over 2014.
    - Target 2: Increase circulation of focused collection areas by 5% over 2014.
    - Method: Annual report of new IDS titles (1 year).
  - Metric User.2.c: Balance electronic/print collection
    - Target 1: Increase usage of electronic resources by 5% over 2014
    - Target 2: Increase usage of electronic resources by 3% over 2014
    - Method: EOS reports and portal reports

*Figure 2: Example of Goals, Metrics, and Methods*

Since the Balanced Scorecard goals are derived from the organization's strategic plan, the goals, and the accompanying measures, targets, and initiatives need to be updated whenever the strategic plan is modified.

## **STRATEGY MAP AND THEMES**

Having developed goals (objectives), measures (key performance indicators (KPIs)), targets, and initiatives (actions) relative to each of the perspectives, we now create the Strategy Map. "Kaplan and Norton's *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment*, published in 2001, introduced the strategy map to show the specific activities required to achieve enterprise goals. The strategy map is a visual, one-page representation of the interrelationships among the activities" (Perkins, 2018). It outlines the strategic path and illustrates the strategic story. Nivens says "the Strategy Maps serve as the recipe of your success" (Niven, 2002, 164). He also states that "without this series of connections, you are left with nothing more than an ad-hoc collection of financial and non-financial measures" (Niven, 2002, 164).

The Strategy Map and Themes graphic incorporates themes within each perspective to illustrate how value is created by the organization. It shows the cause and effect relationships between these themes as the organization climbs the value stream ladder of perspectives from Organizational Readiness to Internal Processes to Customer to Financial. (See Figure 3).

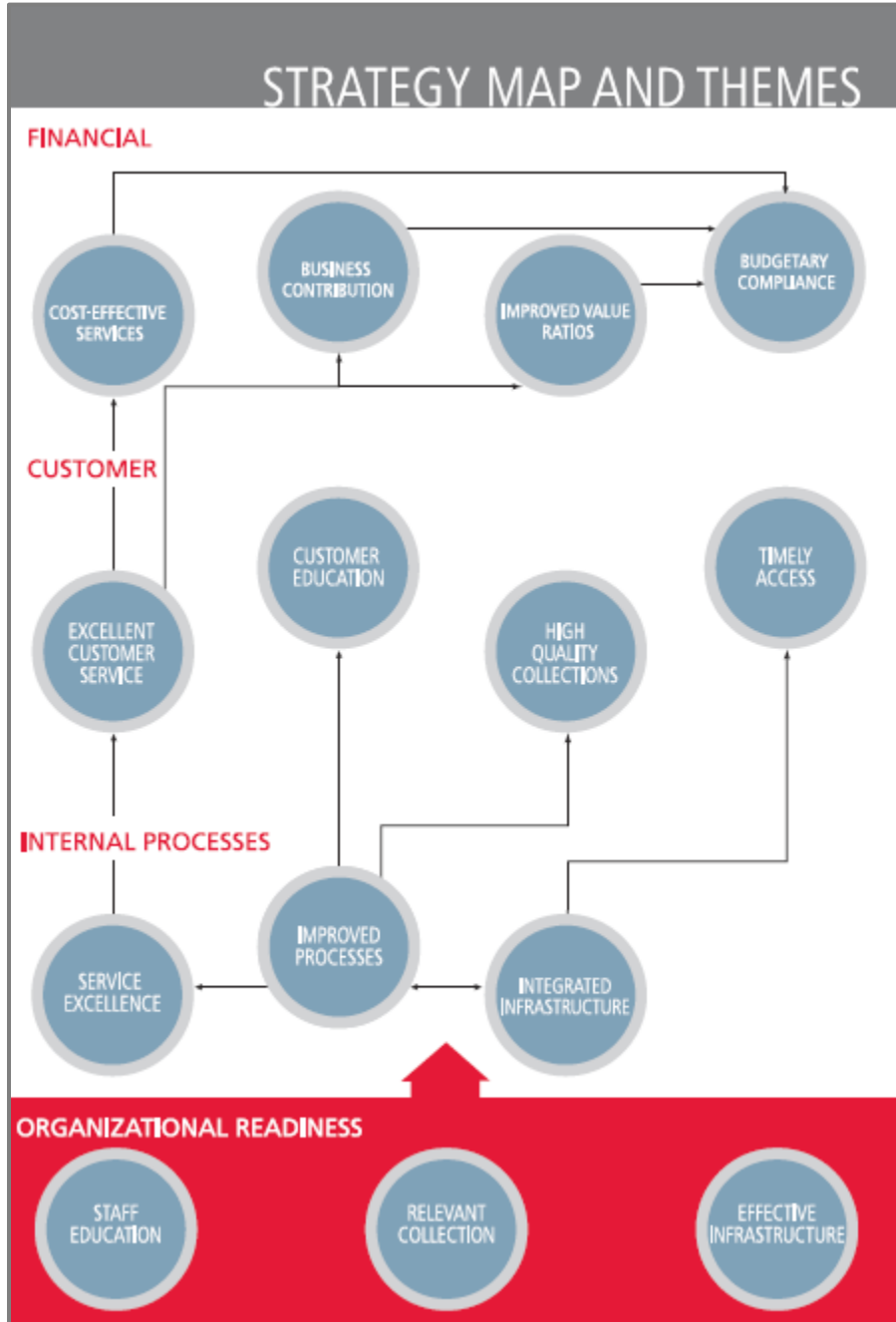


Figure 3: Example of Strategy Map and Themes

Associated with each of these themes are more specific goals, measures, targets, and initiatives which are contained in the balanced scorecard document. Since the balanced scorecard is designed to be a dynamic tool, the balanced scorecard document must be a living document which is continuously realigned to reflect the organization's goals and thereby drive results.

## Implementing the Balanced Scorecard

## DATA GATHERING

As documented in the IDS Library Balanced Scorecard, the following methods were needed to gather the required data and metrics for each perspective:

### User Perspective

- IDS Library Monthly Metrics Report (See Figure 4.)
- IDS Library ILS Monthly Metrics
- IDS Library SUMMON Discovery Layer Metrics
- OCLC Interlibrary Loan Metrics

### Internal Processes Perspective

- IDS Library Improve Internal Processes Team Monthly Report
- IDS Library Annual Staff Work/Life Survey (See Figure 5.)
- IDS Upper Management Feedback
- IDS Library ILS Outages Report
- IDS Library Portal Usability Studies/Focus Groups Reports
- IDS Library Marketing Team Report

### Organizational Readiness

- IDS Library Annual Staff Work/Life Survey (See Figure 5.)
- Raytheon Learning Management System Reports
- IDS Library Annual Staff Verbal Evaluation Reporting
- IDS Library Staff Monthly Reports
- IDS Library Balanced Scorecard Research Metrics Report (See Figure 7.)

### Financial

- IDS Library Point of Service Customer Survey (See Figure 6.)
- IDS Library Balanced Scorecard Research Metrics Report (See Figure 7.)
- IDS Library Annual Budget Compliance Report
- IDS Library Vendor eResource Metrics Reports

While a number of IDS Library pre-existing reports were incorporated into the data and metrics collection process, a number of new reports needed to be designed, developed, tested, and adopted:

- IDS Library Monthly Metrics Report (See Figure 4.)
- IDS Library Annual Staff Work/Life Survey (See Figure 5.)
- IDS Library Evaluation Form for educational events
- IDS Library Point of Service Customer Survey (See Figure 6.)
- IDS Library Balanced Scorecard Research Metrics Report (See Figure 7.)
- IDS Library Improve Internal Processes Team Monthly Report
- IDS Library Marketing Team Report

Figures 4, 5, 6, and 7 illustrate examples of the tools developed for data gathering.



	# customer generated recalls	# new items/ILLs completed on time	# articles/ documents delivered [include specs/stdns] [print/digital]	Formal alerts [# individual alert topics sent]	# short customer questions [<15 minutes]	# long research requests [>15 minutes]	# 15 minute intervals spent on research requests	Informal training: # people trained	Formal training: # people	# of ROI surveys sent out	# or ROI surveys returned	# of formal training of Discover!	# kudos [written or verbal]
January	9	16	413	21	193	28	195	40	0	15	3	13	32
February	8	28	459	23	362	39	310	75	131	12	2	23	84
March	11	35	571	25	202	36	325	30	25	21	4	55	78
April	9	19	535	24	185	29	202	32	0	11	2	10	43
May	8	21	492	24	210	27	207	22	0	13	2	9	41
June	13	14	522	26	205	32	210	26	0	23	11	11	45
July	7	27	513	28	217	31	296	23	0	12	3	12	56
August	5	38	498	41	160	24	212	21	0	9	2	13	51
September	6	32	587	47	200	28	261	18	0	16	6	12	63
October	7	24	423	39	155	22	208	13	0	19	7	10	55
November	8	13	308	34	130	19	193	10	0	12	9	5	47
December	11	20	268	35	80	11	131	5	0	14	4	3	33
<b>TOTAL</b>	<b>102</b>	<b>287</b>	<b>5589</b>	<b>367</b>	<b>2299</b>	<b>326</b>	<b>2750</b>	<b>315</b>	<b>156</b>	<b>177</b>	<b>55</b>	<b>176</b>	<b>628</b>

Figure 4: IDS Library Monthly Metrics Report (Sample/Not Actual Data)

Survey Questions	Sample (not actual data)	Targets/Actual Score-Sample	Targets Met? Sample
<b>Question 1:</b> Please rate the quality of internal communications between management and IDS Library staff members.		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	Y Y
<b>Question Option</b>	<b>Totals</b>	Actual: 6/6 = 100%	
Poor	0		
Fair	0		
Good	3		
Excellent	3		
<b>Question 2:</b> Please rate the quality of internal communications among IDS Library staff members.		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	Y Y
<b>Question Option</b>	<b>Totals</b>	Actual: 5/6 = 83%	
Poor	0		
Fair	1		
Good	3		
Excellent	2		
<b>Question 3:</b> Please rate how well the IDS Library internal processes support effective and efficient delivery of customer		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	N Y
<b>Question Option</b>	<b>Totals</b>	Actual: 4/6 = 67%	
Poor	0		
Fair	2		
Good	2		
Excellent	2		
<b>Question 4:</b> Please rate how well the IDS Library staff development opportunities are preparing the staff for the future.		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	N Y
<b>Question Option</b>	<b>Totals</b>	Actual: 4/6 = 67%	
Poor	1		
Fair	1		
Good	3		
Excellent	1		
<b>Question 5:</b> Please rate your level of job satisfaction.		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	N Y
<b>Question Option</b>	<b>Totals</b>	Actual: 5/6 = 83%	
Poor	0		
Fair	1		
Good	3		
Excellent	2		
<b>Question 6:</b> Please rate the team effectiveness in delivering predictable, best-in-class, and innovative information services.		Target 1: Positive Scores on 80% Target 2: Positive Scores on 60%	
<b>Question Option</b>	<b>Totals</b>	Actual: 6/6 = 100%	
Poor	0		
Fair	0		
Good	2		
Excellent	4		

Figure 5: IDS Library Annual Staff Work/Life Survey (Sample/Not Actual Data)

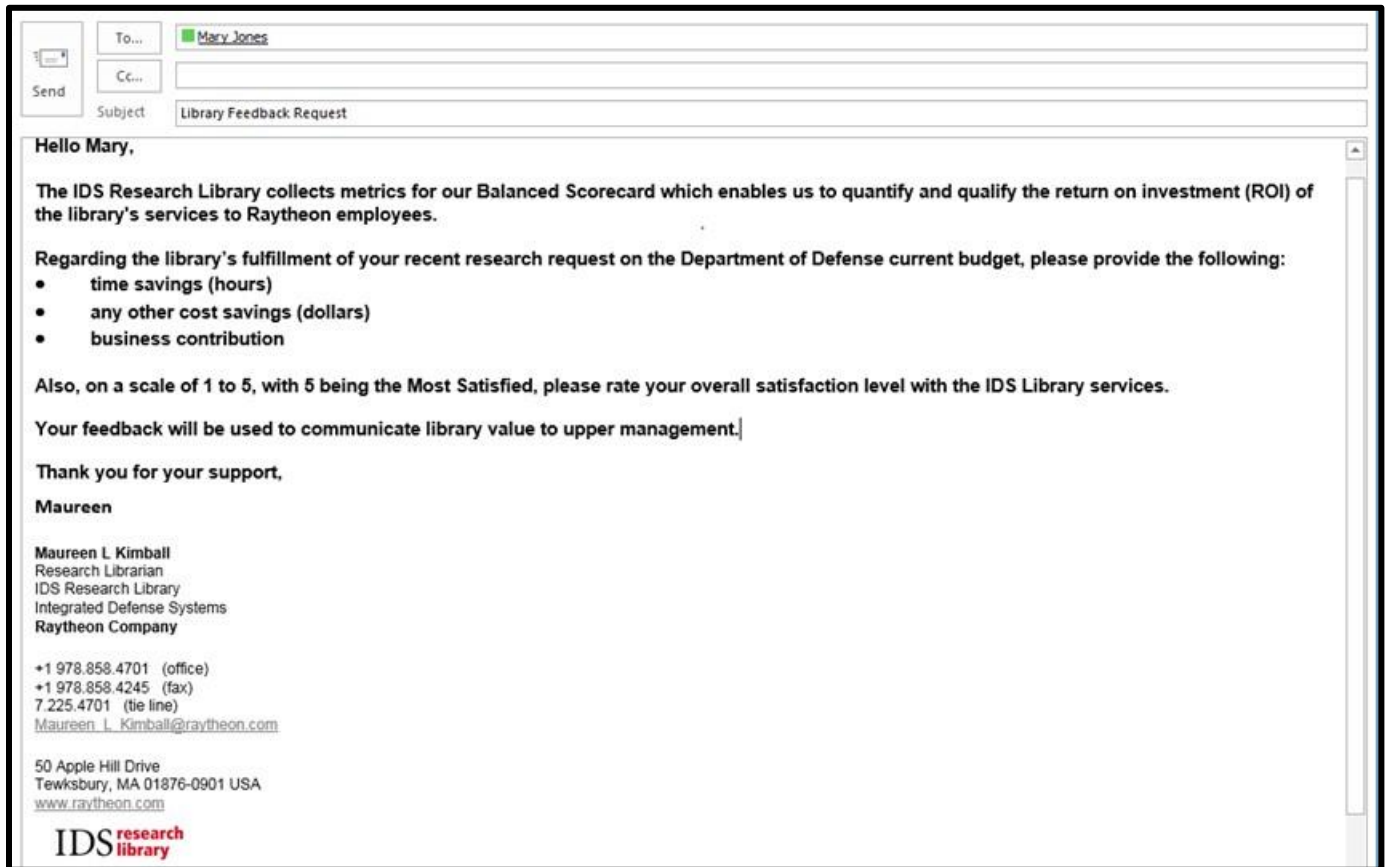


Figure 6: Example of IDS Library Point of Service Customer Survey

Date Response	Library	Requester	Request Type (Research or Article)	Library Staff Time (minutes)	Library Staff Time (dollars)	Client Time Savings (minutes)	Client Time Savings (dollars)	Client Cost Savings (dollars)	Client Intangible Savings	Business Contribution	Business Contribution Category
mm/dd/yyyy	IDS HQ	Jones, John	Research	120	150	1,920	4,800			significantly better intelligence	Competitive Edge
mm/dd/yyyy	IDS HQ	Smith, Sally	Articles	10	13	9,600	24,000			increase our competitive advantage across the board:	Competitive Edge
mm/dd/yyyy	IDS HQ	Martin, Mark	Research	60	75	480	1,200			my only option for finding the information I need	Competitive Edge
mm/dd/yyyy	IDS HQ	Good, George	Research	45	56	180	450			helped me to excel in my	Competitive Edge
mm/dd/yyyy	IDS HQ	Dole, David	Research	120	150	420	1,050			enabled me to be the unofficial "answer man"	Information Value
mm/dd/yy	IDS HQ	Piper, Peter	Research	120	150	460	1,150	500		information provided and the library made me look good	Information Value
mm/dd/yy	IDS HQ	Jordan, Jeff	Research	300	375		0	55,000		you find information I didn't think to look for	Information Value
mm/dd/yy	IDS HQ	Holmes, Harry	Research	600	750	0	0	150,000		time savings was enormous	Time/Cost Savings
mm/dd/yy	IDS HQ	Lane, Linda	Service	2	3	60	150		You saved me an hour as I would have had to go back to corporate	helped us to accelerate task completion	Time/Cost Savings
mm/dd/yy	IDS HQ	Bradley, Barry	Articles	20	25	80	200	7		lower cost to perform this	Time/Cost Savings
mm/dd/yy	IDS HQ	Taft, Thomas	Articles	90	113	2,515	6,288			your timeliness and help is exemplary...you are "go-to"	Time/Cost Savings
mm/dd/yy	IDS HQ	Castle, Carol	Articles	60	75	1,440	3,600	9		You actually provided the article before I figured out that I	Time/Cost Savings
			<b>TOTALS</b>	<b>1,547</b>	<b>1934</b>	<b>17,155</b>	<b>42,888</b>	<b>205,516</b>		<b>Total #</b>	<b>12</b>
										<b>Time Savings</b>	<b>5</b>
			<b>ROI - Time/Cost Savings</b>	<b>128</b>						<b>Competitive Edge</b>	<b>4</b>
										<b>Information Value</b>	<b>3</b>
			<b>ROI - Time Savings</b>	<b>22</b>						<b>Other</b>	<b>0</b>
										<b>Time Savings</b>	<b>\$ 103,502</b>
										<b>Competitive Edge</b>	<b>\$ 82,801</b>
										<b>Information Value</b>	<b>\$ 62,101</b>
										<b>Other</b>	<b>\$ -</b>
										<b>TOTAL</b>	<b>\$ 248,404</b>

Figure 7: IDS Library Balanced Scorecard Research Metrics Report (Sample/Not Actual Data)

## DATA ANALYSIS

We then needed to devise a process and associated reports and charts for analyzing the data and the metrics for each goal. The Balanced Scorecard Summary (see Figures 8a-8e) includes the following:

- Target 1 and Target 2 achievement indicators for each goal within each of the four perspectives
- Lack of achievement indicator for each goal
- Total achievement rate for each perspective
- Total achievement rate summary with accompanying charts

**IDS Research Library  
Balanced Scorecard Summary  
Sample/Not Actual Data**

PERSPECTIVE METRICS	Target 1 Met Count	Target 2 Met Count	Targets Not Met Count	Metrics Suspended or Data Not Provided	Percentage Target 1 Met <sup>1</sup>	Percentage Target 1 or 2 Met <sup>2</sup>
<b>USER PERSPECTIVE</b>						
Metric User.1.a: Capture complaints vs kudos. Target 1: Complaint/kudo ratio less than 5%. Target 2: Complaint/kudo ratio less than 10%.	1	0				
Metric User.2.a: Overall rating in IDS Library event education participant surveys. Target 1: Positive evaluation by 100% of participants responding. Target 2: Positive evaluation by 80% of participants responding.				x		
Metric User.3.a: Circulation of new title monographs. Target 1: 60% of all new titles circulate within 1 year after cataloging. Target 2: 50% of all new titles circulate within 1 year after cataloging.	0	1				
Metric User.3.b: Circulation of focused collection areas (by Call Number) Target 1: Increase circulation of focused collections areas by 10% over 2013. Target 2: Increase circulation of special collections by 5% over 2013.	1	0				
Metric User.4.a: Research Requests unable to resolve. Target 1: Research Requests unable to resolve <= 10% of total requests. Target 2: Research Requests unable to resolve <= 20% of total requests.	1	0				
Metric User.4.b: Turnaround time for new book and ILL requests. Target 1: Satisfy new book/ILL turnaround time 90% of time. Target 2: Satisfy new book/ILL turnaround time 80% of time.	0	1				
Metric User.4.c: Reduce the number of customer request-generated recalls placed each year. Target 1: Reduce the number of recalls by 5%. Target 2: Reduce the number of recalls by 0%.	1	0				
Metric User.4.d: Measure utilization of resources accessed via SUMMON Discover!. Target 1: Increase SUMMON Discover! utilization by 5% (increase of 12% for 2014 over 2013). Target 2: Increase SUMMON Discover! utilization by 2%.	0	1				
Metric User.4.e: Ensure collection is available for use. Target 1: 50% reduction in items from the list of missing, NOS, and lost items. Target 2: 25% reduction in items from the list of missing, NOS, and lost items.	1	0				
<b>USER PERSPECTIVE SUBTOTAL</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>63%</b>	<b>100%</b>

Figure 8a: Balanced Scorecard Summary User Perspective

PERSPECTIVE METRICS	Target 1 Met Count	Target 2 Met Count	Targets Not Met Count	Metrics Suspended or Data Not Provided	Percentage Target 1 Met <sup>1</sup>	Percentage Target 1 or 2 Met <sup>2</sup>
<b>INTERNAL PROCESSES PERSPECTIVE</b>						
Metric Process.1.a: Internal communications rating from staff work/life survey that relate to communication with management. Target 1: Positive scores on 80% of internal management communications responses. Target 2: Positive scores on 60% of internal management communications responses.	1	0				
Metric Process.1.b: Internal communications rating from staff work/life survey that relate to communication among staff. Target 1: Positive scores on 80% of internal staff communications responses. Target 2: Positive scores on 60% of internal staff communications responses.	1	0				
Metric Process.2.a: Process improvement. Target 1: Implement at least one major process improvement each year. Target 2: Implement at least one major process improvement every 2 years.	1	0				
Metric Process.2.b: Staff survey rating of internal processes. Target 1: Positive scores on 80% of internal process responses. Target 2: Positive scores on 60% of internal process responses.	0	1				
Metric Process.3.a: Reliability of EOS server. Target 1: Horizon will be up at least 99.9% of time. Target 2: Horizon will be up at least 99.0% of time.	1	0				
Metric Process.3.b: Conduct regular usability testing of library website. Target 1: Positive scores on 80% of overall rating. Target 2: Positive scores on 60% of overall rating.	1	0				
Metric Process.3.c: Conduct regular Discover! marketing and training activities. Target 1: Minimum of five formal/informal activities per month for each location. Target 2: Minimum of three formal/informal activity per month for each location.	1	0				
Metric Process.3.d: Develop and execute IDS Library events. Target 1: Participation by all locations in 100% of IDS Library events. Target 2: Participation by all locations in 80% of IDS Library events.	0	0	1			
Metric Process.3.e: Participate in Raytheon-sponsored events such as National Engineers Week, Mission Assurance Day, etc. Target 1: Participation by all locations in 100% of Raytheon-sponsored events. Target 2: Participation by all locations in 80% of Raytheon-sponsored events.	1	0				
<b>INTERNAL PROCESSES PERSPECTIVE SUBTOTAL</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>67%</b>	<b>78%</b>

Figure 8b: Balanced Scorecard Summary-Internal Processes Perspective

PERSPECTIVE METRICS	Target 1	Target 2	Targets Not	Metrics Suspended	Percentage	Percentage
	Met Count	Met Count	Met Count	or Data Not Provided	Target 1 Met <sup>1</sup>	Target 1 or 2 Met <sup>2</sup>
<b>ORGANIZATIONAL READINESS PERSPECTIVE</b>						
Metric Readiness.1.a: Impact of staff development. Target 1: Positive scores on 80% of responses to staff development statements in the staff work/life survey. Target 2: Positive scores on 60% of responses to staff development statements in the staff work/life survey.	0	1				
Metric Readiness.1.b: Completion of learning plan objectives for each year. Target 1: Completion of 100% of learning plan for each staff member. Target 2: Completion of 80% of learning plan for each staff member.	1	0				
Metric Readiness.1.c: Attend professional conference for staff development Target 1: Attendance of 100% of staff. Target 2: Attendance of 80% of staff.	0	0	1			
Metric Readiness.2.a: Job satisfaction among library staff. Target 1: Positive scores on 80% of responses to job satisfaction statements. Target 2: Positive scores on 60% of responses to job satisfaction statements.	1	0				
Metric Readiness.2.b: Team effectiveness among library staff. Target 1: Positive scores on 80% of responses to team effectiveness statements. Target 2: Positive scores on 60% of responses to team effectiveness statements.	1	0				
Metric Readiness.3.a: Review IDS Library Strategic Plan 2014 goals/accomplishments. Target 1: Accomplish 100% IDS Library Strategic Plan 2014 goals. Target 2: Accomplish 80% IDS Library Strategic Plan 2014 goals.	1	0				
Metric Readiness.3.b: Develop information relationship with IDS Capture Management Excellence Team. Target 1: Meet with 100% of Capture Management Excellence leaders. Target 2: Meet with 80% of Capture Management Excellence leaders.	1	0				
Metric Readiness.3.c: Provide competitive intelligence service to IDS Capture Managers/BD Leads. Target 1: Provide CI services for 8 Capture Managers/BD Leads/Chief Investigators/Price to Win. Target 2: Provide CI services for 6 Capture Managers/BD Leads/Chief Investigators/Price to Win.	1	0				
<b>ORGANIZATIONAL READINESS PERSPECTIVE SUBTOTAL</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>63%</b>	<b>75%</b>

Figure 8c: Balanced Scorecard Summary Organizational-Readiness Perspective

PERSPECTIVE METRICS	Target 1	Target 2	Targets Not	Metrics Suspended	Percentage	Percentage
	Met Count	Met Count	Met Count	or Data Not Provided	Target 1 Met <sup>1</sup>	Target 1 or 2 Met <sup>2</sup>
<b>FINANCIAL PERSPECTIVE</b>						
Metric Financial.1.a: Money saved Target 1: Saving 150% of librarians salary cost Target 2: Saving 125% of librarians salary cost	1	0				
Metric Financial.2.a: Comply with annual budget items Target 1: Contain expenditures to 100% of budgeted amount Target 2: Contain expenditures to 90%-99% of budgeted amount	1	0				
Metric Financial.3.a: Unit cost of electronic databases Target 1: No increase in cost per use each year Target 2: Less than 5% increase in cost per use each year	0	1				
Metric Financial.4.a: Benefit to Cost Ratio Target 1: Benefit to cost ratio is 150%. Target 2: Benefit to cost ratio is 100%.	1	0				
<b>FINANCIAL PERSPECTIVE SUBTOTAL</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>75%</b>	<b>100%</b>

Figure 8d: Balanced Scorecard Summary-Financial Perspective

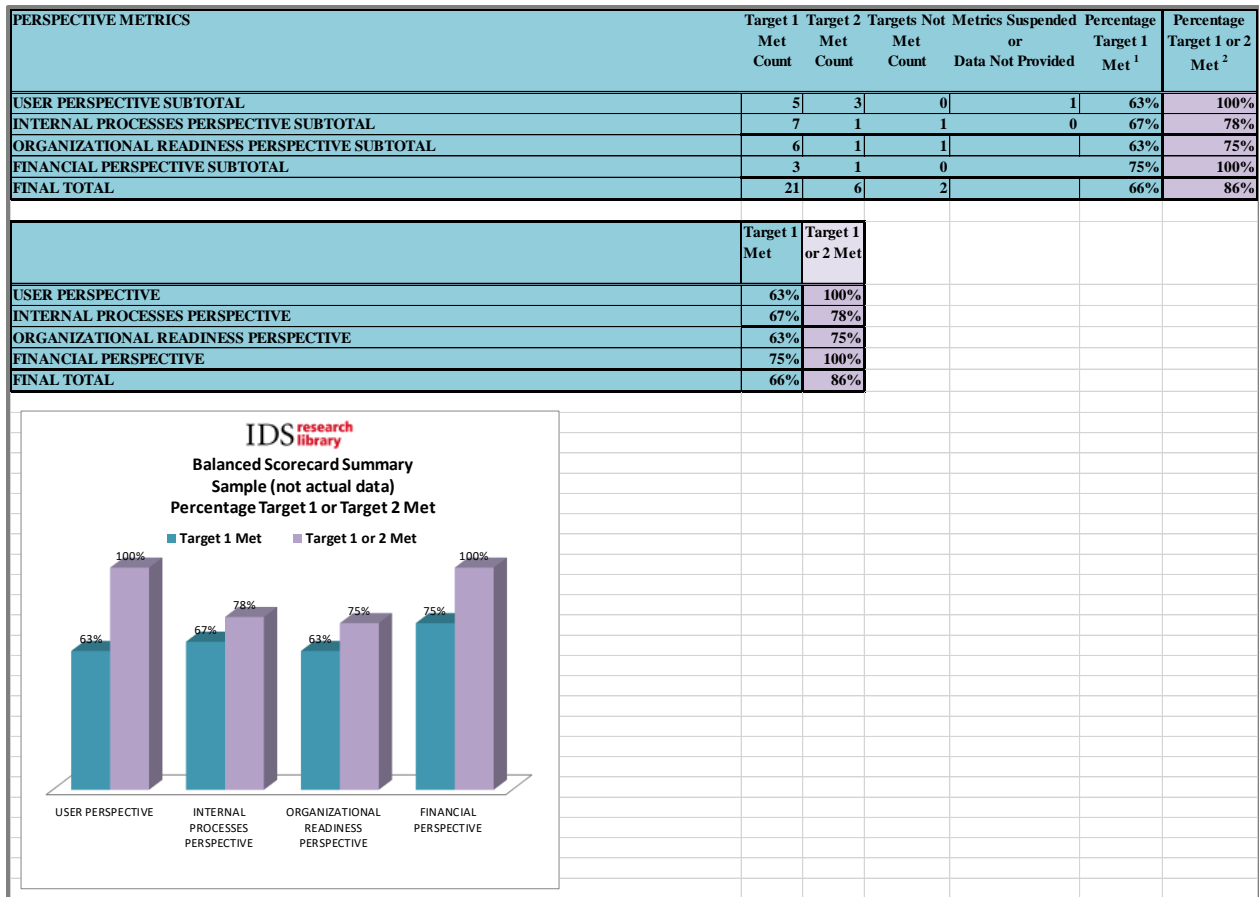


Figure 8e: Balanced Scorecard Summary-All Perspectives

The Balanced Scorecard Summary Report allows the library team to determine which goals were met and which goals were not met during the operating year. Suggestions for improving these outcomes can then be developed and incorporated into the subsequent year’s balanced scorecard goals and measurements as well as the strategic plan.

For example, Figure 8c: *Balanced Scorecard Summary Organizational Readiness Perspective* shows the following:

- Metric Readiness. 1.b: Completion of learning plan objectives indicates that Target 1: Completion of 100% of learning plan for each staff member (see Figure 8c) achieved a “best” achievement target.
- Metric Readiness. 1.a: Impact of Staff Development indicates that Target 2: Positive scores on 60% of responses to staff development statements in the staff work/life survey (see Figure 8c) achieved a “better” but not “best” achievement target.
- Metric Readiness. 1.c: Attend professional conference for staff development (see Figure 8c) indicates that neither achievement target has been met.

These metrics show the gaps between actual and targeted performance and subsequently drive the improvement process.

**IDS Library Balanced Scorecard  
2010-2015  
Percentage Target 1 or Target 2 Met**

PERSPECTIVE	2010 Target 1 Met	2010 Target 1 or 2 Met	2011 Target 1 Met	2011 Target 1 or 2 Met	2012 Target 1 Met	2012 Target 1 or 2 Met	2013 Target 1 Met	2013 Target 1 or 2 Met	2014 Target 1 Met	2014 Target 1 or 2 Met	2015 Target 1 Met	2015 Target 1 or 2 Met
User	80%	100%	100%	100%	43%	43%	44%	56%	67%	67%	100%	100%
Internal Processes	50%	100%	100%	100%	17%	33%	44%	56%	56%	78%	33%	56%
Organizational Readiness	33%	100%	86%	100%	57%	100%	0%	25%	25%	50%	14%	43%
Financial	100%	100%	100%	100%	50%	50%	100%	100%	75%	100%	75%	100%
<b>FINAL TOTAL</b>	69%	100%	95%	100%	42%	58%	40%	53%	52%	70%	48%	68%

*Figure 9: Balanced Scorecard Summary Historical Analysis Data*

The Balanced Scorecard Summary Historical Analysis Data (See Figure 9) enables the library team to see results and trends over time and thereby understand the big picture of improvements.



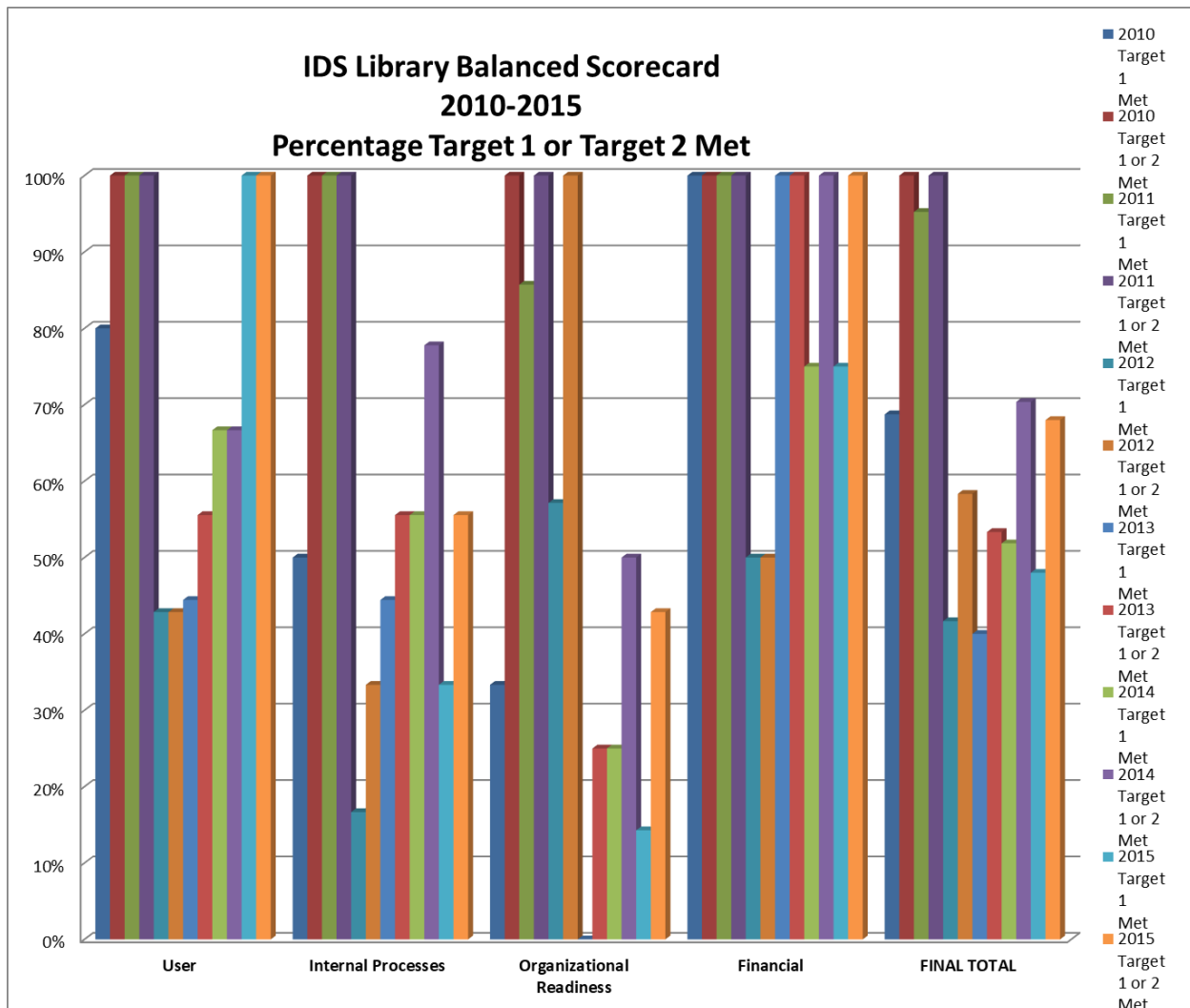


Figure 10: Balanced Scorecard Summary Historical Analysis Chart

The Balanced Scorecard Summary Historical Analysis Chart (See Figure 10) enables the library team to see results and trends over time and thereby understand the big picture of improvements versus the perspectives needing attention. Although fluctuation is seen in targets met for each perspective over time, some vary more than others. For example, the Organizational Readiness plunged midway in the report timeframe. The Library staff can then consult the more detailed *Balanced Scorecard Summary Organizational-Readiness Perspective* report which shows:

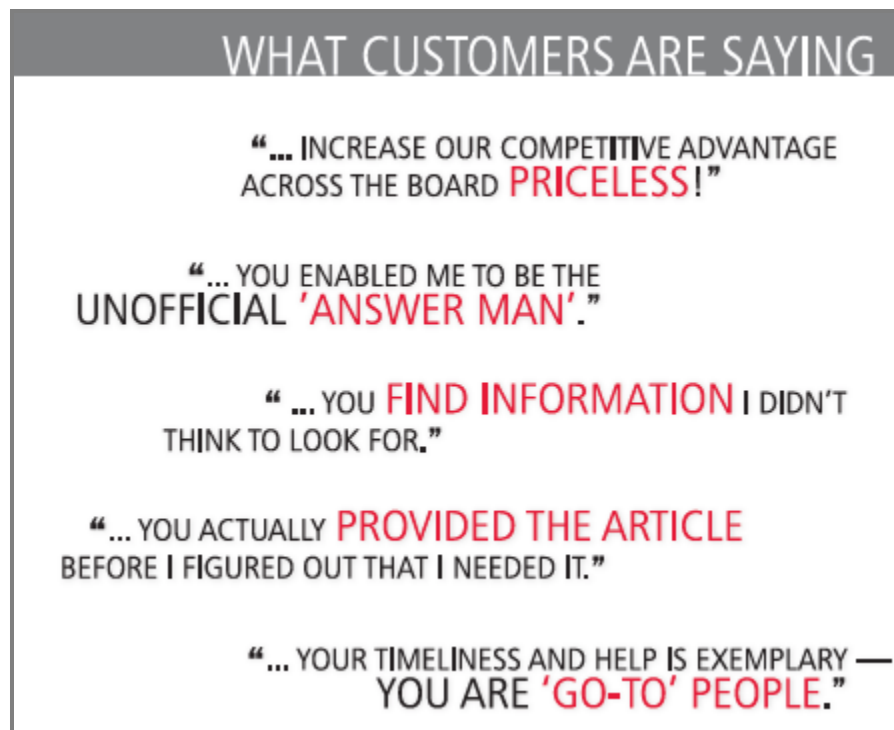
- Metric Readiness. 1.a: Impact of Staff Development indicates that Target 2: Positive scores on 60% of responses to staff development statements in the staff work/life survey (see Figure 8c) achieved a “better” but not “best” achievement target.
- Metric Readiness. 1.c: Attend professional conference for staff development (see Figure 8c) indicates that neither achievement target has been met.
- The remaining metrics each indicate that the completion rate of 100% for Target 1 was achieved as a “best” achievement target and therefore no additional action was required.

## Outcome

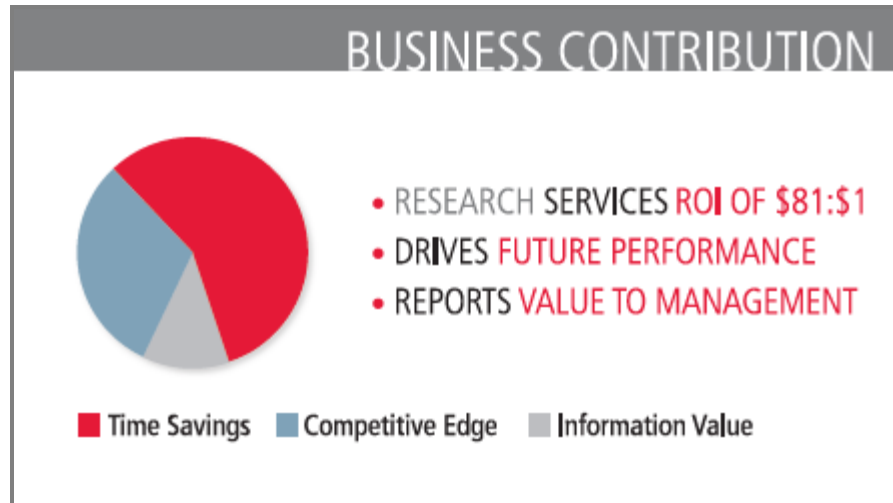
Implementing the balanced scorecard enables the IDS Library:

- to gather customer feedback, library metrics, and staff survey data;
- to analyze data with respect to predetermined targets from the financial, customer, internal processes, and organizational readiness perspective;
- to determine business contribution (negative or positive) which is used by the library to drive future decision-making and thereby improve performance

In addition, it provides upper management with a vehicle with which to evaluate library performance and value. (See Figure 11 and Figure 12).



*Figure 11: Customer Feedback*



**Figure 12: Business Contribution**

## End Notes

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