Goals Deployment

January 24, 1988©

by

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Presentation date:	Venue:	Notes:
1/24/88	Internal presentations at ADI	Current

As we approached the completion of our planning process, I sensed uncertainty among some of my colleagues as to the robustness of the set of metrics that we had developed for our scorecard. In January of 1988, I attempted to more rigorously test this using the following model.

Looking back, this effort represented the start of a very useful approach to testing the appropriateness of a set of scorecard metrics:

- Express your strategy in the voice of your stakeholder's requirements.
- Determine how they each might rate your absolute and relative (to their other options) performance.
- Identify the vital few things that you can do to improve your performance relative to their most important unmet needs.
- Find the internal levers (i.e. processes) that drive these strategic improvements.
- Define appropriate metrics and goals that link to these internal levers.

Slide 1

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 Slide 1 Title

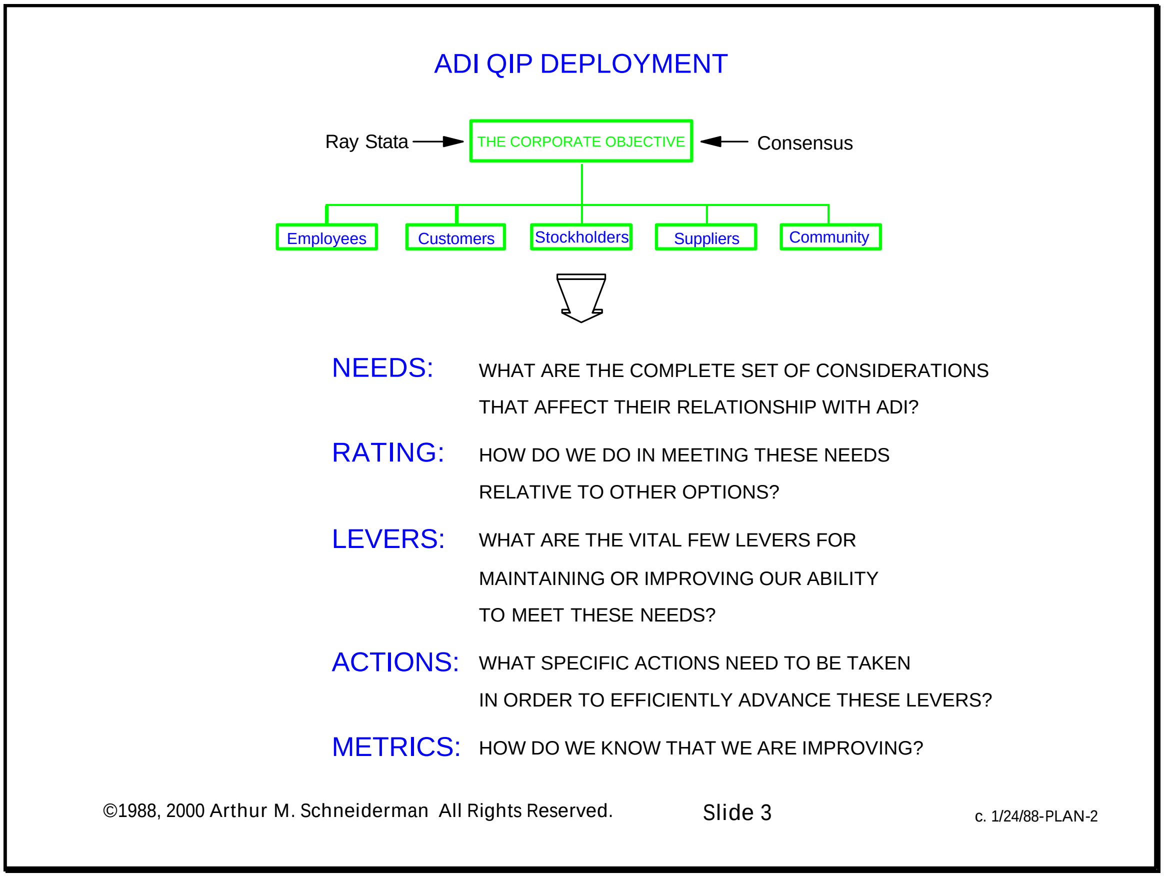
Slide 2

THE QUALITY IMPROVEMENT PROCESS

- GOALS DEPLOYMENT
- METRICS
- COMMUNICATIONS
- TRAINING

 Slide 2 c. 1/24/88-PLAN1

Slide 3



For each of our stakeholders, I started by identifying their most important needs. If you look at the Analog Devices Corporate Objective, you will see that in each case I took the list of needs directly from that document. Next, I asked the question: "How are we doing?" For those important needs that require improvement, I tried to identify the vital few "levers" for their improvement. Once identified, I made sure that there were specific things that we could do to "actuate" them. Finally, I asked the question "How do we know that we are improving?" This type of logic path is still the best way I know of for linking scorecard metrics to strategic objectives.

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ADI'S EMPLOYEES

NEEDS: SECURITY, SAFETY, PURPOSE, RECOGNITION, IDENTITY, REALIZATION OF FULL POTENTIAL

RATING: TURNOVER RATE, APPLICATIONS PER OPENING

LEVERS:
- CHALLENGING AND STABLE WORK ENVIRONMENT
- ABOVE AVERAGE COMPENSATION FOR ABOVE AVERAGE PERFORMANCE AND CONTRIBUTION
- UNRESTRICTED OPPORTUNITY FOR PERSONAL ADVANCEMENT
- MUTUAL RESPECT, CONFIDENCE AND TRUST
- COMMITMENT TO INTEGRETY, HONESTY, OPENNESS AND COMPETENCE

ACTIONS:
- ASSURE CORPORATE GROWTH AND SUCCESS
- EFFECTIVE UPWARD AND DOWNWARD FEEDBACK
- EFFECTIVE COMMUNICATIONS
- PERSONAL DEVELOPEMENT
- TRAINING

METRICS:
- TURNOVER RATE
- PROMOTION RATE
- TRAINING HOURS/EMPLOYEE

 Slide 4 c. 1/24/88-PLAN-3a

As you can see, Analog's strategy with respect to employees was focused creating and maintaining a workforce that valued the quality of work life, not just the quantity of compensation. We recognized that our major competitive strength was employee knowledge and that a stable, learning organization was essential to our continued competitive success.

The ultimate test of whether we were satisfying the needs of employees was their loyalty, as measured by voluntary turnover, and the desire of people to come to work at Analog, as evidenced by the number of applications per opening. Note that Analog was rated one of the 100 best companies to work for during this period.

We identified the five most important levers for maintaining and improving employee satisfaction and determined that we needed to take action to increase our revenue growth, improve our communications, and grow our employees skill levels.

We would measure our success in terms of the turnover rate, internal promotion rate, and training hours per year per employee.

Slide 5

ADI'S CUSTOMERS

NEEDS:
- SUPERIOR, EASY TO USE RELIABLE PRODUCTS
- CONFORMANCE TO SPECIFICATION
- INNOVATIVE SOLUTIONS TO PROBLEMS
- SUPPORTING PRODUCT LITERATURE
- CUSTORMER SERVICE
  - APPLICATIONS ASSISTANCE
  - QUICK RESPONSE TO INQUIRIES
  - ON TIME DELIVERY
- PARTNERSHIP

RATING: RELATIVE MARKET SHARE, PROFIT MARGIN

LEVERS:
- ON TIME DELIVERY
- INCOMING QUALITY LEVEL
- LEAD TIME

ACTIONS:
- MANUFACTURING CYCLE TIME
- PROCESS PPM IMPROVEMENT
- YIELD IMPROVEMENT
- TIME TO MARKET

METRICS:
- ONTIME, RESPONSIBILITY, LATENESS, LEADTIME
- TIME TO MARKET
- OUTGOING PPM
- YIELD

 Slide 5 c. 1/24/88-PLAN-3b

Customers' needs were changing dramatically during this period. Moving from a two dimensional view of suppliers (price and availability), customers were increasingly recognizing the concept of cost of ownership and the value of collaboration with their suppliers. We knew that our success in meeting their needs would be evidenced in dominant market share and above average profits. Our greatest opportunities in improving both current and future customers' satisfaction was through improved quality, availability, and on time delivery.

To achieve these objectives, we would have to significantly reduce our manufacturing cycle time, improve our internal quality, reduce yield loss, and accelerate our introduction of new products. Our key metrics would be related to delivery performance, time to market, manufacturing yield and delivered quality.

Slide 6

ADI'S STOCKHOLDERS

NEEDS: A RATE OF RETURN SIGNIFICANTLY ABOVE THAT OF ALTERNATIVE, COMPARABLE INVESTMENTS

RATING:
STOCK PRICE APPRECIATION
OWNERSHIP TURNOVER

LEVERS:
EARNINGS PER SHARE
FUTURE GROWTH POTENTIAL
ASSET BASE

ACTIONS:
NEW PRODUCT INTRODUCTIONS
PRODUCTIVITY IMPROVEMENT
COST REDUCTION
ASSET AMANAGEMENT
RELATIVE MARKET SHARE

METRICS:
NEW PRODUCT BOOKINGS, NPBR
NP INTROS, PEAK REVENUE, TIME TO PEAK, DECAY TIME
PRODUCTIVITY
UNIT COST
ROA
REVENUE GROWTH RATE

 Slide 6 c. 1/24/88-PLAN-3c

The Capital Asset Pricing Model served as the basis for Analog's assessment of its stockholders' needs: a return in excess of that of stocks of the same β. The market would rate us in terms of our stock price and high stockholder loyalty, their vote for our continued success in the future. We would have to reinforce their favorable perception through stable earnings performance and demonstration that our new product stream would provide the basis for aggressive profit growth. We also need to demonstrate that we were making optimum use of their assets.

How would we accomplish this? By maintaining a continuous stream of new products, improving the efficiency of all our business processes and maintaining or improving or performance relative to competition. Our metrics included a variety of new product related measures as well as some yet-to-be-defined measures of cost and productivity.

Slide 7

ADI'S SUPPLIERS

NEEDS:
- OPEN AND FRANK COMMUNICATION OF OUR PLANS
- OUR UNDERSTANDING OF THEIR CONSTRAINTS
  - TECHNOLOGY, COST STRUCTURE, FINANCIAL RESOURCES
- FORECASTS BEYOND THEIR CYCLE TIMES
- EARLY INVOLVEMENT IN OUR PLANNING
- ASSISTANCE IN THEIR QIP
- QUICK RESPONSE TO INQUIRIES
- PARTNERSHIP/SOLE SOURCING
- FAIR PROFIT

RATING:
- RELATIVE MARKET SHARE, PROFIT MARGIN

LEVERS:
- COMMUNICATIONS
- JOINT EFFORTS
- ADI DEMAND FORECASTS

ACTIONS:
- SUPPLIER MANAGEMENT PROGRAM

METRICS:
- NUMBER OF SUPPLIERS
- SUPPLIER PERFORMANCE
  - ONTIME, LATENESS, LEADTIME
  - INCOMING PPM

 Slide 7 c. 1/24/88-PLAN-3d

Our relationship with our suppliers represented a here-to-fore untapped source of potential value creation. Analog, like several other contemporary companies was exploring the synergy associated with effective supply chain management. We knew that the share of our potential business that went to them and the profit margins they could maintain would be among the key elements of how they rated us as a customer/partner.

To nurture the potential synergy, we needed to understand their internal process and provide them with information that would help these processes work more effectively and efficiently. This would not happen without a specific imitative, which I tentatively called the "Supplier Management Program." We would measure the effectiveness of this program in terms of the reduction in the number of our suppliers as well as a vendor rating system.

One of our major customers, Teradyne, was also one of our major suppliers. As Analog's Executive Sponsor to them (my role in our Customer Partnership Program), I actively integrated their involvement as a supplier into all of our joint efforts.

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ADI'S COMMUNITIES

NEEDS:
STABLE EMPLOYMENT
SUPPORT OF WORTHY CAUSES
EMPLOYEE INVOLVEMENT
ACADEMIC FINANCIAL AID

RATING:
EXPANSION ENCOURAGEMENT

LEVERS:
BUSINESS SUCCESS
EXTERNAL COMMUNICATIONS
LOCAL PREFERENCE WHERE JUSTIFIED

ACTIONS:
COMMUNITY PARTNERSHIP PROGRAM

METRICS:
TAXES/BENEFITS
VOLUNTARY EXPENDITURES
  COMMUNITY
  ACEDEMIC
PARTICIPATION RATE

 Slide 8 c. 1/24/88-PLAN-3e

Analog's communities want businesses that provide stable employment for their citizens, support worthy local causes, encourage employee involvement in community activities, and provide financial aid to local schools and institutions of higher learning. To be rated #1 by them, is to be first on their list of businesses whose expansion they would like to encourage and whose needs they are willing to accommodate. How do we get to that position? First, we must be successful as a business, next we need to communicate with them effectively, and finally, all other things being equal, we should share our success with our communities through local preference in selecting our suppliers.

These things don’t happen on their own, so we need to develop a partnership program analogous to the formal partnership programs we have with our other stakeholders. How will we know we’re doing those things necessary to achieve our objectives? We measure taxes and other required benefits paid to communities, voluntary expenditures, and employee participation rates.

Slide 9

PARTNERSHIP

A JOINING OF TWO ENTITIES FOR THEIR
MUTUAL BENEFIT BASED ON

TRUST
SYNERGY
FINANCIAL STABILITY
COMPETENCE
HONESTY
OPENNESS AND FRANKNESS
CONFIDENTIALITY

WHICH LEADS TO

SHIP TO STOCK
EARLY INVOLVEMENT
FIDELITY
SOLE SOURCING (MONOGOMY)
PLAN SHARING

 Slide 9 c. 1/25/88-PLAN-4

As Analog struggled to transform from adversarial to strategic partnership relationships with its various stakeholders, we began to explore the concept of partnership, particularly as it applied to our suppliers. This slide attempted to capture the ingredients of partnership as well as the expected rewards.