

CLIMBING THE LADDER OF **BUSINESS INTELLIGENCE**

By JAMES E. CATES, SAM S. GILL, NATALIE ZEITUNY

ENABLED INTUITION
UNDERSTANDING
KNOWLEDGE
INFORMATION
DATA
FACTS



HappyAbout.info



“Climbing the Ladder of Business Intelligence” Book Excerpt

Happy About Creating Excellence
through Enabled Intuition

**By James E. Cates,
Sam S. Gill and Natalie Zeituny**

**Subset of the book brought
to you by Happy About**



20660 Stevens Creek Blvd.
Suite 210
Cupertino, CA 95014

WHITE PAPER Table of Contents (included here)

- Chapter 1: Introduction
- About the Authors, James E. Cates, Sam S. Gill and Natalie Zeituny
- Getting the book and other books from Happy About

Getting “Climbing the Ladder of Business Intelligence”
(<http://happyabout.info/climbing-ladder.php>)

“Climbing the Ladder of Business Intelligence” can be purchased as an eBook for \$11.95 or tradebook for \$19.95 at:
<http://happyabout.info/climbing-ladder.php> or at other online and physical book stores.

Please contact us for quantity discounts sales@happyabout.info or to be informed about upcoming titles bookupdate@happyabout.info or phone (408-257-3000).

Contents

NOTE: This is the Table of Contents (TOC) from the book for your reference. The eBook TOC (below) differs in page count from the tradebook TOC.

Chapter 1	Introduction	1
	How	2
	Information as Answers	6
	Creating a New Organizational Nervous System	9
	Nervous Systems	10
	People, Process and Technology	11
	Step by Step, Chapter by Chapter	13
	Each Chapter Answers Key Questions	13
	The Intelligent Business	14
Chapter 2	Best Companies, Best Practices	17
	The Intelligent Organization	17
	A Recipe for Success	18
	Fun as a Company Policy	19
	A Winning Business Model	21
	Level 5: Understanding	22
	The Joys of Smallness	22
	“Whatever it Takes”	24
	The Beauty of Automation	25
	Facts, Data, and Information	26
	Priorities at FedEx	27
	Intelligent Businesses	28
	Building Success	30
Chapter 3	Visions and Strategies	37
	Natural Bounty	38
	Vision as Direction	47
	Asking Questions	47
	Measuring Progress	48
	The Enterprise Roadmap	50
Chapter 4	Down from the Mountain	55
	Processes	61

	Process Improvement	64
	Steps to Improve Processes	65
	A Step Back	70
Chapter 5	People	73
	Getting from “They” to “We”	73
	Making Life Easier	74
	Business Role Intelligence Analysis (BRIA)	84
	People Again	88
	The Intelligent Business	89
	Looking Back	89
Chapter 6	Implementing Technology	97
	A Critical Point	98
	Saving Money	106
	Ongoing Process Management	109
	Recapping	110
Chapter 7	A New Way of Doing Business	113
	Building Bridges	114
	Operating Intelligently	122
	Level 3: Information	128
	Level 4: Knowledge	129
	Level 5: Understanding	130
	Level 6: Enabled intuition	132
	Building the Intelligent Organization	133
Chapter 8	The Corporation in the 21st Century	137
	Aspiration or Desperation?	137
	In a time not so long ago	138
	A Synergy of Forces	140
	Natural Bounty: New Challenges	142
	Challenges and Solutions in the 21st Century	147
	Compliance	148
	Competition	149
	Retrospective	153
Chapter 9	Innovation and Excellence	155
	The Innovation Economy	156
	Innovating with the Ladder	160
	A Tool for Evaluation	164

	Looking Back	166
	The Intelligent Business	167
Glossary	Glossary	169
Appendix A	Tom's Takeaways:	
	“What is Information?”	173
Author	About the Authors	177
Your Book	Create Thought Leadership for your Company . . .	179
	Why wait to write your book?	180

Introduction

What is it about some companies? Year in, year out, their performance just seems to get better and better. Occasionally they stumble, but then come back stronger than ever. They're not hard to find. All you need to do is read the headlines: "GE predicts double-digit growth for 2007." "Apple Tops *Business Week* list of Innovative Companies." "Southwest Carries More Passengers than Any Other U.S. Airline."

These companies seem to play in a different league than others. It's like watching the New York Yankees play a minor league baseball team.

In addition to being easy to find, the qualities that make these big league players successful are easy to define. They're fast-moving, aligned, proactive and innovative. We would also call them "intelligent." They make effective decisions, they anticipate or create market trends and they optimize all their resources, especially the unique skills of each individual. They use information technology skillfully.

So, we know who these winners are and what qualities they have. The next obvious question is: “How did they get there?” Or, perhaps more to the point: “How can my business get there?” This is what this book is about. It’s about how to create an *Intelligent Business*, one that is smart, innovative and profitable. What we’re offering is not incremental change, but transformation at the organizational level.

We encourage you to aim high. The concepts in this book are designed to create a business fully capable of operating in any league. A careful look at highly successful companies shows that they won’t settle for anything less than excellence in all their activities. Why should you?

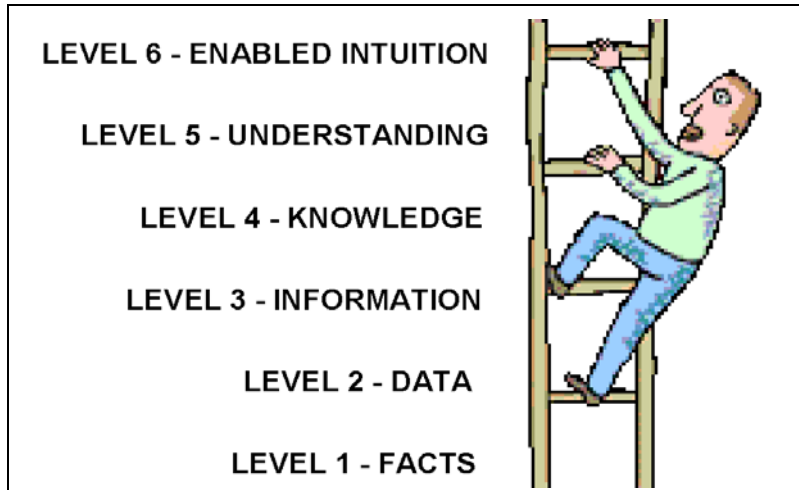
How

So, how does one go about creating an intelligent business? For most companies, it’s by a process of trial and error. Highly successful companies have arrived at their own unique methods of reaching the top. These businesses may have succeeded, but the path of trial and error is littered with failures and also-rans. In today’s demanding business environment, this path is no longer a viable option.

What we’re offering here is a guidebook to creating an organization that employs all its resources in an intelligent manner. We have developed a set of guiding principles called the Ladder of Business Intelligence. As an organization adopts and employs these principles, the Ladder becomes a framework around which a business can grow its intelligence.

This is a step-by-step process, as you can see from the diagram of the Ladder. As an organization climbs higher, it employs all its resources more skillfully.

Let’s take a brief look at the various steps on the Ladder.



Level 1

Facts represent the recording of an event or measure in the “real” world. Imagine a bulletin board with a number of post-it notes. Each of these notes contains certain facts, but they are totally unorganized. If you want to find facts in a certain category—say, automobiles for sale—you will have to search across the entire board.

Level 2

Data is composed of organized facts. Imagine that the bulletin board has now been organized into categories: each note has been placed in a labeled section of the board. Your search for a car has now become simpler, but you still have to search through all the postings for autos.

Level 3

Information is data that has been organized to answer a specific question. For example, there are now a number of Web sites where you can fill in the details about the kind of car you want. The site will then present you with a number of choices from sellers. Forget the

post-it notes. Because your search has been automated, it has become much simpler and less time consuming. You now have the information you need to make a good decision on buying a car. Translated to a business environment, it means freedom from searching through scores of spreadsheets for bits of data. Instead, the information technology organizes facts and data according to the questions you need answered. A sales manager, for instance, might have the total sales for the last three months available on her display device. This enables her to view trends and take action accordingly.

Level 4

Knowledge consists of information and the derived rules on how to use the information. It includes best practices and knowledge about trends and behavior.

Level 5

Understanding is knowledge that is shared. It refers to the alignment that occurs throughout an organization when company visions, strategies, and rules are shared and understood at all levels.

Level 6

Enabled Intuition is a higher level of understanding that facilitates decision makers to intuitively choose the right course of action that will benefit the business in any situation. With enabled intuition decision making is refined to an art.

The majority of businesses operate at Levels 1 and 2, with people struggling to gather facts and data and interpret them. Not only do they have to search for the data, they then have to organize it into a form that allows to them make an effective business decision.

At Level 3, the task of sorting through the data and organizing is performed by the information system. The information is then displayed on command to the individual that needs it.

We define Information as something that enables an intelligent decision and subsequent action.

As an example, at Level 2, the sales manager might have a figure for sales to Customer A for the month of August. This is a potentially useful piece of data, but there is no business context in which to place it. At Level 3, the manager is presented with sales to Customer A for the last three months, showing a decline during that period. This automated organization of data—this information—enables the manager to take immediate action.

As an organization becomes more skilled at turning facts and data into useful information, decision making is enhanced at all levels. Each individual is able to act more swiftly and with greater certainty that his or her decisions will move the company in the direction of its objectives. In addition, since information is disseminated among all players in any business process or project, communication and collaboration are also enhanced. This means, for example, that our sales manager will have plenty of informed people ready to help her address the situation with Customer A.

In an intelligent business, the right information is delivered to the right people at the right time.

Information as Answers

If we can agree that having key information delivered to your display device is a powerful asset, the next question might be: How does one create that key information? In the Ladder framework, the answer is, by asking the right questions.

Most of us have been trained in school to answer questions. Information is given to us and then we are asked to answer questions about this information. Getting good at asking questions, however, can

be a powerful way of learning. These should be insightful questions—the kind that produce significant answers. Asking insightful questions is one of the key steps to creating an intelligent business.

Later in the book, we'll devote an entire section to the process of asking the right questions. Right now, let's summarize that process.

At a certain point in the Ladder framework, each decision maker is asked to clarify his or her business role, with the help of his or her team. What are the specific objectives, activities and processes that this role is accountable for? What processes are involved in reaching his goals? Then, he is asked to formulate five to ten questions that he needs answered in order to perform his job better. What information does he need to appear on his display device every day, every week or every month?

Our sales manager, for example, would probably ask for a total monthly sales figure—a summary of regional sales figures. She would also like to see how this figure compares to previous months, as well as how it compares to projections made at the beginning of the fiscal year. Access to figures like these will give her the information she needs to make intelligent, timely decisions.

After each decision maker has formulated his or her questions, the Information Technology experts choose the right software applications to provide the correct information views for each business role.

Creating Good Information

Good information is created by implementing models that produce useful answers to insightful questions. The value of the resulting information is directly proportional to the business impact of the decision that has been enabled.

Therefore, we must all become very good at *asking the right questions*. If we ask the right questions, profits will follow. If we ask trivial questions, then the resulting information will have little impact on the business.

This view of information as an answer to a question is simple, yet powerful. Many people spend their lives chasing facts and data, not information.

The operational sequence is *Question—Information—Decision (Q-I-D)*. This is the operational decision triangle of power. The objective of a Business Intelligence (BI) team is to partner with the other business units to create the correct information views for making fast and effective business decisions.

The right decision by the right person at the right time is the oil for a smoothly running organization. Information provides correct answers to key questions. If the output from the computer does not answer a key question for you, then it is data and not information. Hence, you need to be focused on creating the correct questions to achieve your goals.

Creating a New Organizational Nervous System

The creation and management of information is essentially the nervous system of an organization. A nervous system—whether biological or organizational—has a number of tasks. Among the most important are:

- Reporting key events in the external environment and filtering out nonessential data
- Monitoring the internal environment
- Deciding on responses to external and internal conditions
- Coordinating the organism or organization to act
- Creating a knowledge base for future action

Speed and focus are the keys to successful reporting and coordinated action. Speed, because both the natural world and the business world require rapid responses, and focus because it's necessary to filter out extraneous data and present only critical information.

When an organization is able to create, retrieve, store and share information effectively, a better organizational nervous system has been created. A successful system enables effective business decisions, seamless communication, proactive management of processes and projects, the creation of a knowledge base and real organizational alignment.

Nervous Systems

The creation, retrieval, storage and dissemination of information make up the nervous system of an organization. The Ladder provides a framework for a new organizational nervous system—one that more closely resembles the exquisite systems of humans and animals.

In nature, survival depends on the ability to respond to an opportunity or a threat in a rapid and coordinated manner. This means that the control and feedback between the brain and the body must be almost instantaneous. For example, a rabbit escaping from a fox must speedily coordinate its entire body to evade the predator.

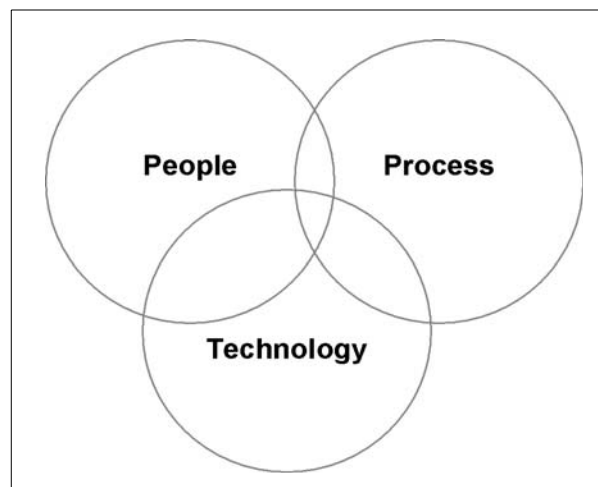
A business needs to imitate these neural feedback loops. It has to have a nervous system that smoothly connects a strategy to daily operations and decisions, just as the biological system coordinates the different organs and limbs of the body. When every business unit is aware of the overall direction and strategy of the company, then each decision they make will be, by definition, intelligent and aligned. These decisions will also be swift.

Luckily, these abilities do not need to evolve over millennia, but can be acquired in a relatively short time. An organizational nervous system is a combination of human and machine intelligence acting in concert. The Ladder provides a framework for this happy collaboration.

People, Process and Technology

When the new nervous system is in operation, a business is able to optimize all its resources, especially the most valuable ones like:

- *People*. An intelligent business employs human intelligence to its fullest capacity. People are skilled at envisioning and figuring out how to make the visions come true. When they are relieved of doing work better done by machines (like searching for and organizing data), people are free to exercise their intelligence and creativity.
- *Process*. An intelligent business has a first-rate infrastructure. Transforming visions into competitive products and services requires seamless, but flexible, business processes.
- *Technology*. Smart businesses make optimal use of business technology. These businesses use the right information to enable effective decision making, communication and collaboration.



People, Process and Technology: Here's a trio that you will see throughout this book. The Ladder framework enables organizations to streamline these key resources—their People, Processes and Technologies—and optimize the level of automation in the creation and

use of information. This creates a powerful infrastructure able to employ all its resources in bringing ideas to the marketplace smoothly and efficiently.

The key points in the three circles are the areas where they intersect. These are the places where People, Process and Technology are operating in synch. When this happens, two more qualities of an intelligent organization can emerge:

- *Proactive*. An intelligent business is able to observe the progress of its processes and projects. This enables its decisions to be proactive rather than reactive in correcting and enhancing business processes.
- *Innovative*. A business employing all its resources in an intelligent manner is able to stay ahead of its markets and its competitors. It encourages and enables innovation at every level of the organization. It is never complacent, but always looking to the future.

By the end of this book, you should be very familiar with these qualities—and understand why they are key to the success of any business.

In addition, you may discover that you possess new skills:

- *Diagnosis*. You may find yourself able to evaluate the level of intelligence of your business and others. Are your decision-makers skilled at retrieving and employing key information to make smart decisions? Are you able to act quickly on the decisions? Is there general understanding and support of the corporate vision and goals? What about your competitors: what level have they achieved?
- *Next Steps*. Once you have diagnosed the strengths and weaknesses of your company, the next steps are likely to become clear. For example, if your evaluation places your business intelligence system at Levels 1 and 2, you will understand what you need to do to enable it to reach Level 3 where it will generate useful information.

- *How to proceed.* When you reach the final page of this book, you will have an overview of how to ascend to the top of the Ladder. In other words, you will understand what it takes to create a successful, intelligent business.

Step by Step, Chapter by Chapter

It's important to note that the creation of an intelligent business involves a step-by-step process. The sequential nature of the ascent up the Ladder is what makes it effective. Certain steps simply will not work unless the previous steps have been mastered. This book is laid out so that the sequence is clear.

Each Chapter Answers Key Questions

Chapters 1 and 2 answer the questions: What and why? What is this Ladder? Why should I be interested? What can it do for me? In Chapter 2, we'll take a look at two successful, highly intelligent businesses and discuss how the Ladder can help your business operate in the same league.

Chapters 3,4, 5 and 6 answer: How? How do you go about changing the way a company functions? How do you optimize the key resources of a business: its People, Processes and Technology?

Chapter 7 answers the question: What are the results? What have we attained? What are the differences between organizations at Levels 1 and 2 and those at Levels 3 and up?

Chapter 8 answers: Is all this absolutely necessary? In the 21st century, yes! The demanding economic environment, rigorous competition and regulatory requirements mean that a business must employ all its resources to their fullest extent.

Finally, Chapter 9 answers: What about the future? Will this Ladder framework continue to help us to grow and innovate?

The Intelligent Business

Our goal in this book is to describe the creation of an Intelligent Business. The way this is achieved is by ascending each step of the Ladder of Business Intelligence. This carefully arranged process will enable a business to attain its goals and fulfill its true potential. A business that functions at Levels 3 and up essentially plays in a different league than those companies stuck at Levels 1 and 2.

Let's look at the key qualities of an intelligent business.

The Intelligent Business:

- Employs human intelligence at its fullest capacity
- Employs business intelligence optimally
- Uses quality information to enable effective decision making, communication and robust cross functional collaboration
- Employs the above three capabilities to create seamless business processes and a robust infrastructure
- Encourages innovation at every level of the organization
- Is always proactive, never complacent

This is the Intelligent Business—one in which People, Process and Technology—the most valuable assets in any business—work together to create a world-class enterprise. Why should you be satisfied with anything less?

NOTE: “We introduce a fictionalized company in Chapter 3 to illustrate the points of the Ladder throughout the book. Tom is the expert on the Ladder from that company and we summarize the chapters using Tom’s Takeaways.”

Tom's Takeaways: FAQs about the Ladder of Business Intelligence

Q. Are the Ladder methods difficult to implement?

A. Not when they're accomplished gradually. People who have done it say that it's usually much more difficult to continue conducting business in the old ways.

Q. Do I need to take an advanced course in Information Technology to understand the Ladder?

A. No. The beauty of this methodology is that managers can understand the larger picture and the specific cost benefits without understanding the technologies involved. These are left to the IT specialists.

Q. What kind of organization is a good candidate for the Ladder?

A. Any organization—business or non-business—large or small—that feels the need to grow and change. Whether you come from aspiration or desperation, the end results can be the same.

Q. Can the Ladder be employed for a single business unit?

A. Absolutely. We have worked with divisions of large corporations. Implementing the Ladder in one sector allows managers to view its advantages. They can then decide if it's right for the entire organization.

Q. Is all this going to cost an arm and a leg?

A. Generally, no. While the costs will vary for different organizations, most of the resources, like the people, are already there. And because the necessary software applications are carefully tailored to the needs of each business role, the cost of the technology is minimized. In addition, the increased efficiency and more rapid cycle time to action are soon reflected in the bottom line.

About the Authors



Jim Cates is currently the CIO of Altera, a Silicon Valley high-tech company with over a billion dollars in revenue. He has over 30 years of experience in the Information Technology field. He spent 20 years at IBM in various R&D management positions developing IT tools for thousands of customers. He has also spent 10 plus years In Silicon Valley as the CIO, VP/IT and Corporate Process Officer of four high-tech companies, each creating over \$500 million in revenue.



Sam Gill is a professor in the Information Systems department at San Francisco State University. Dr. Gill's career spans five decades of computing from the infant days of MAMRAM, the Israeli Ministry of Defense Computing Center, through his latest professional engagements as a consultant to fortune 1000 companies and state and federal agencies. During this span, Dr. Gill has been involved in several IT start-ups as well as managed several computing centers. Dr. Gill's latest venture was DataWiz Centers, one of the first Microsoft Solution Provider partners and the first Microsoft certified training partner.

Dr. Gill publishes (articles, books, and courseware) and teaches in many areas of information systems focusing on strategy, management, and technology. Currently, he is collaborating with Dean Lane on a book: CIO Perspectives. Dr. Gill's current research interests include the strategic, tactical, and operational management of Information Systems (IS), Business Intelligence, Software Testing and Quality Assurance (SQA), Information Technology (IT) Budgeting, Offshore and Outsourcing of IT, Development methodologies and frameworks, and development architectures, platforms and languages including: .NET, PHP/MySQL, Ruby on Rails, Visual Basic, C#, AJAX, and Java. Dr. Gill holds a Ph.D. from the University of California, Berkeley.



Natalie Zeituny has over seventeen years of experience working with international, world-class corporations, specializing in business strategy, process management and systems technology design and implementation. Ms. Zeituny has held highly visible leadership positions with companies such as 3com, Palm, Brocade, and Converse. She has designed & implemented corporate and IT process architecture, business effectiveness and efficiency models and aligned cross functional business operations.

In 2002 Ms. Zeituny founded and became the principal of NZconsulting, a Management Consulting firm which has served clients such as Palm, Seagate, Brocade, Network Appliance, Altera Yahoo, Safeway, and others. She is currently launching a new business using her past experience; she has architected a new integral system that enables a new business paradigm, language and practices to emerge. Conscious Business Center provides a framework for financial success through planned application of social consciousness, environmental sustainability, personal/technological creativity and spiritual/human self-realization.

A Message From Happy About®

Thank you for your purchase of this Happy About book. It is available online at: <http://happyabout.info/climbing-ladder.php> or at other online and physical bookstores.

- Please contact us for quantity discounts at sales@happyabout.info
- If you want to be informed by e-mail of upcoming Happy About® books, please e-mail bookupdate@happyabout.info

Happy About is interested in you if you are an author who would like to submit a non-fiction book proposal or a corporation that would like to have a book written for you. Please contact us by e-mail editorial@happyabout.info or phone (1-408-257-3000).

Other Happy About books available include:

- Overcoming Inventoritis: <http://happyabout.info/overcoming-inventoritis.php>
- Happy About People-to-People Lending With Prosper.com: <http://happyabout.info/prosper/>
- Happy About Online Networking: <http://happyabout.info/onlinenetworking.php>
- Happy About Apartment Management: <http://happyabout.info/apartment-management.php>
- Confessions of a Resilient Entrepreneur: <http://happyabout.info/confessions-entrepreneur.php>
- Memoirs of the Money Lady: <http://happyabout.info/memoirs-money-lady.php>
- 30-Day Bootcamp: Your Ultimate Life Makeover: <http://www.happyabout.info/30daybootcamp/life-makeover.php>
- The Business Rule Revolution: <http://happyabout.info/business-rule-revolution.php>
- Happy About Global Software Test Automation: <http://www.happyabout.info/globalswtestautomation.php>
- Happy About Joint-Venturing: <http://happyabout.info/jointventuring.php>
- Happy About LinkedIn for Recruiting: <http://happyabout.info/linkedin4recruiting.php>
- Happy About Website Payments with PayPal: <http://happyabout.info/paypal.php>
- Happy About Outsourcing: <http://happyabout.info/outsourcing.php>