ERP's
SECOND WAVE

Maximizing the Value of ERP-Enabled Processes

Including Deloitte Consulting's Perspective on:
Making ERP spell ROI

SECOND WAVE, NEW BEGINNING

There's little middle ground when companies talk about their Enterprise Resource Planning (ERP) implementations.

For some, "going live" – turning off their old legacy system and turning on ERP – helps create a reenergized organization, with customers, shareholders, and employees more empowered than ever to drive new business value. For others, however, the result can be an organization fatigued from the long implementation experience, people frustrated by a perceived lack of business benefits and uncertain of their company's direction – or their own future within it.

What accounts for this wide gap in outcomes? To clarify and document our observations, Deloitte Consulting commissioned Benchmarking Partners, Inc. – a prestigious ERP research firm – to conduct a survey focusing on the benefits of ERP implementations and the critical success factors that drive them. We are also grateful for the guidance we received from Hammer and Company, and especially its founder, Dr. Michael Hammer, author of Reengineering the Corporation.

The combined efforts of Deloitte Consulting and its research partners confirm that going live is not the end. Rather, going live is the end of the beginning *of a journey toward improvement, innovation and agility. Until now, conventional wisdom saw going live as the end.*

In sharp contrast to this view, our study uncovers at least two distinct waves of ERP-enabled enterprise transformation. The First Wave refers to the changes to an organization that include and accompany going live with ERP. The Second Wave, on the other hand, refers to the actions that are taken after going live that help organizations achieve the full capabilities and benefits of ERP-enabled processes.

Deloitte Consulting's view of the Second Wave is that companies – far from being "done" at go-live – must continue to address a universe of people, process, technology and strategy changes if they're to realize the full benefits of ERP-enabled processes. As experience shows, full benefits come only with continued focus and effort after going live.

To set the stage, the first half of this paper mainly focuses on the research findings. In the second half, however, we are more prescriptive, with a piece entitled Making ERP Spell ROI.

To be clear, this study is not a fix-it but a maximize-it effort. The result is something quite new in the ERP world: A repository of principles and practices that now can help organizations succeed at every step of the journey – both before and after going live.
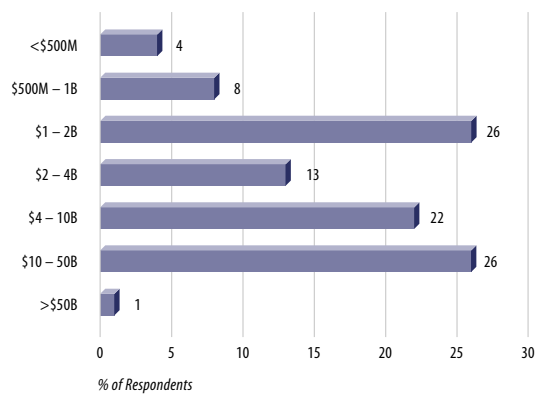
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ABOUT THE SURVEY

Conducted in the summer of 1998 by Benchmarking Partners, Inc., the Deloitte Consulting Second Wave survey consisted of in-depth interviews with 164 individuals at 62 Fortune 500 companies. Of these organizations, 88 percent have $1 billion or more in revenues, with only four percent below $500 million. The companies represent the two industries that are farthest along in their implementation of ERP programs: manufacturing and consumer business.

All use one of the four predominant ERP solutions: Baan, Oracle, PeopleSoft or SAP. Half of the companies are Deloitte Consulting clients. All have gone live with their ERP-enabled processes – some within the past few months, others within the past few years.
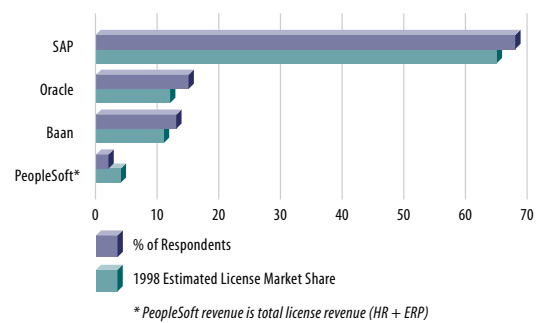
To achieve a balanced perspective, Benchmarking Partners interviewed three distinct groups of people within organizations: implementers (41 percent, typically the project director); users (27 percent, often vice-president of operations); and executives (32 percent, usually the CEO or COO).

The survey data was complemented by information from a variety of other sources, including on-site case interviews, partner focus groups, and successful post-implementation engagements.
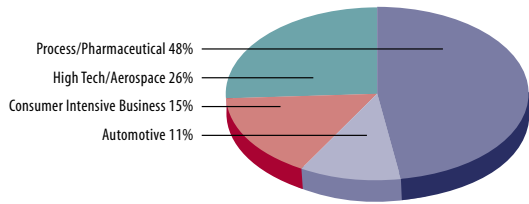
Respondent Profile by Parent Company Size

Size	% of Respondents
<$500M	4
$500M – 1B	8
$1 – 2B	26
$2 – 4B	13
$4 – 10B	22
$10 – 50B	26
>$50B	1

% of Respondents

Respondent Profile by ERP Solution

Solution	
SAP	
Oracle	
Baan	
PeopleSoft*	

% of Respondents
1998 Estimated License Market Share

* PeopleSoft revenue is total license revenue (HR + ERP)

Respondent Profile by Industry

- Process/Pharmaceutical 48%
- High Tech/Aerospace 26%
- Consumer Intensive Business 15%
- Automotive 11%

Respondent Profile by Role

- User 27%
- Implementer 41%
- Executive 32%

Respondents by Percentage of Users Live on the System

Range	% of Users Live
1 – 20%	14
21 – 40%	17
41 – 60%	14
61 – 80%	22
81 – 99%	0
100%	33
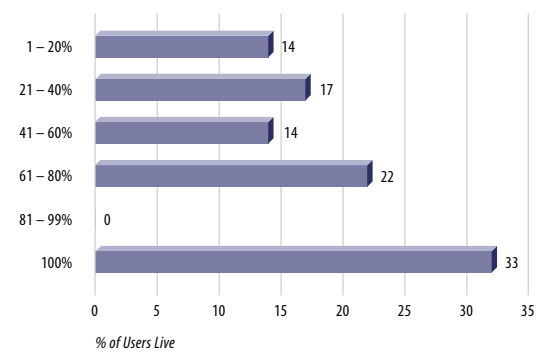
% of Users Live
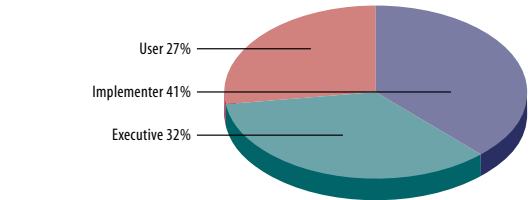
EXECUTIVE OVERVIEW

GOING LIVE: THE END OF THE BEGINNING

By the time companies go live with their ERP systems, they've run a marathon – the average implementation can take up to four years. Yet when it comes to results, half of our survey respondents (49 percent) clearly recognize that going live isn't the end of their ERP program, but merely *the end of the beginning*.

Far from being over at go-live, ERP-enabled transformation occurs in waves – waves that, if properly managed, can help companies maximize, accelerate and sustain the fuller benefits of ERP-enabled systems. Unfortunately, some companies lose focus once they go live. Thus, while one ERP-enabled company hits the tide perfectly, the next might miss the boat.

Which raises some questions. Why do companies using the same basic technology often get such different results? When is the ERP implementation process "complete"? And if the ERP program isn't delivering expected results by the time it goes live, what then? Can new benefits be achieved past the go-live point?

Absolutely. As this research and our experience both show, whatever the stage of the ERP journey, there are *always* actions companies can take to drive benefits and realize competitive advantage.

What Is ERP?

An Enterprise Resource Planning system is a packaged business software system that allows a company to:
- *Automate and integrate the majority of its business processes*
- *Share common data and practices across the entire enterprise*
- *Produce and access information in a real-time environment*

SOMETHING NEW: BEST PRACTICES TO NAVIGATE THE STAGES OF ERP'S SECOND WAVE

Our research shows that the journey doesn't just divide into waves. In fact, our experience – substantiated by statistical survey results – shows that the Second Wave can be divided into three distinct stages.

Using this knowledge and our research about what successful companies are doing, we have developed issues, actions and expectations for each stage – in all, a framework designed to help companies stay ahead of the curve, correctly anticipating needs and taking precisely the right actions at the right times.

The destination: an enterprise that is informed, integrated and agile. The vehicle: ERP-enabled processes. And the way to propel those processes through the three stages? The answer is a new body of best practices, not focused on implementation – we have those – but good for the entire journey.

Considering that the ERP-enabled enterprise didn't even exist a decade ago, it's easy to understand why the world has never had a substantial body of post-implementation experience, much less the best practices to go with it. However, on page 21, we change all that – with 12 best practices for ERP's Second Wave.

A NEW VISION OF THE JOURNEY – AND ITS REWARDS

As we've suggested, going live with an ERP system doesn't mean a company can suddenly turn on all the benefits. True, many benefits do result from going live – pronounced organizational and process change, not to mention the heightened energy level of an organization that knows itself to be in the midst of a significant improvement. But why settle for these benefits, substantial as they are? Why say "enough" when your organization can have much more?

Clearly, the most significant benefits are more likely to be realized sometime after the go-live date. That's because the Second Wave occurs when all the primary forces of the ERP-enabled enterprise finally come together: the technology, the redesigned processes, the strategy redesign and – most important – the people who must now operate the new system and perform the new processes.

Above all, the lessons of the Second Wave clarify what, until now, was a big unknown. It shows us that the path isn't particularly smooth or short and that there likely will be dips in performance – necessary dips that, as with a heavy workout, actually prove that the organization is developing new muscle. Not to mention the return on investment (ROI) that results.

At last: documented assurance that – with effort – there are many ways to reap far greater value from your ERP investment. But only for those who take that forceful next step on a continuing journey.

Top

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Findings of
ERP's Second Wave

1 Going live is not the end of the ERP journey.

The fact that 49 percent of survey respondents saw their ERP process as never-ending shows conclusively that a Second Wave does exist.

The fact is, all organizations – wherever they are on the journey – can profit from this knowledge. Organizations just starting out in the First Wave will need to plan for a more comprehensive but ultimately more rewarding journey – one leading to the kind of enterprise-wide integration that will differentiate them from their competition and help drive new business value. What's more, the benefits go far beyond cost reduction, touching virtually every aspect of the integrated enterprise.

Meanwhile, with a growing body of experience and best practices to draw on, organizations already past the go-live stage can still harvest the full benefits of their ERP investment.

2 ERP delivers significant tactical and bottom-line strategic benefits.

Consider some of these actual benefits:

- An electronics company that was able to better than triple its inventory turnover – from eight times a year to 26.
- A high-tech company that doubled in size over three years – and was able to manage such rapid growth thanks to the flexibility and accuracy of its ERP system.
- A manufacturer with a previously chronic on-time delivery problem that saw its on-time rate rise from 70 to 90 percent – a gain that would have been impossible without the real-time information that results from an integrated ERP system.

Today, in all the areas that matter – productivity improvement, cost reductions, more effective procurement, revenue enhancement – ERP truly is delivering on its promise.

3 ERP also yields significant returns from unexpected benefits.

One of the greatest benefits of a massive change like ERP is that it is virtually impossible to envision all the benefits it can deliver. The new capabilities. The attitudes that will change. The ideas that will surface. The old roadblocks that will suddenly be removed. Consider the following benefits reported by some of the survey respondents:

- *Streamlined processes*. Before ERP, the discovery of a product problem would have brought a company's shipping operations to a standstill until the problem items were found. Now the company can flag the sub-par units in the system and still maintain operations. The result: more satisfied customers and a smoother, more efficient production process.
- *Improved visibility*. Production control in one factory now has customer-on-time delivery as one of its measures. To the company's surprise, employees check it religiously. Why? Give people the power to check something, and they will check it, in much the way shareholders with Internet access follow stock prices on-line. With far easier access to company-wide data, employees now have something more than just better information: They've been put in charge.
- *Enhanced cooperation*. One company found that the shared information of an integrated ERP system actually helped bring together people and departments that previously had been at odds. As one respondent put it, "They are not limited to seeing their own little world but instead are developing a whole-company process orientation. Suddenly, they all feel they're in the same boat."

The key is to create an environment of discovery in which your organization can create new value. Indeed, the most transformational change may be the new energy in people.

4 Companies should anticipate a temporary dip in performance after going live.

It takes time and focus to realize the full benefits of an ERP implementation. There's also the sheer magnitude of the change. After going live, this change can be dramatic, especially in how people do their jobs.

Managing the dip begins with a plan that addresses the organization's unique circumstances – starting with training and change initiatives for those who use the system. On a broader level, what the dip *really* shows is an organization stabilizing after doing something new. In that sense, the dip is a sure sign of growth and new capabilities – a bounce that then rises to new performance levels.

5 There are three distinct stages in each wave after going live.

These stages are:

I.   Stabilize (secure and sustain the core ERP functionality);

II. Synthesize (build for the future by adding still other capabilities – often non-ERP – to the mix);

III. Synergize (achieve value in use by thoroughly mastering those new capabilities).

On a deeper organizational level, our research identified distinct issues and actions that organizations can anticipate at each stage to reap the maximum benefits of ERP. The three stages are discussed in more detail on page 19.

6 ERP enables better, faster decisions by unleashing the power of the integrated enterprise.

Building on what they achieved in the First Wave, organizations can get even more innovative in the Second, transforming sales, marketing, service and the supply chain, and more. For example, one large, multinational pharmaceutical manufacturer realized $100 million in benefits through such new abilities as reduced materials costs and a better understanding of pricing patterns, knowledge that helped the company negotiate more advantageous contracts with its suppliers.

Of the benefits our survey uncovered, 30 percent were efficiency benefits – transactional processes done better, faster and more cheaply than before. However, the remaining 70 percent represented *effectiveness or transformational* benefits – capabilities and outcomes the organization had never had before, at all new levels of mastery.

Something else to consider: By creating such markedly new and improved business capabilities, your company can rethink and change its fundamental strategies. The result: a company opening itself up to new markets, new products and new acquisitions.

7 **ERP provides a backbone to further extend functionality through bolt-ons and other solutions.**

Our research shows that ERP-enabled enterprises are now using a variety of bolt-ons and other complementary technologies. Though not necessarily part of ERP, these applications provide additional functionality while better leveraging the ERP backbone.

Some of the most cutting-edge are: supply chain optimization (especially finite scheduling, forecasting and transportation), warehouse management, taxation systems and sales force automation.

As one of the survey respondents stated, "Our ERP System is not the whole answer, it's only one piece. ERP together with transportation, warehouse management and EDI will provide the improvements and benefits."

8 **Issues and obstacles show dramatic shifts in emphasis after going live.**

The lesson: Be prepared. The following are some of the stronger shifts between the First and the Second Wave detected in our survey:

• An increase in focus on: providing ongoing support (by 24 percent); managing the dip in performance (by 21 percent); filling voids in reporting (by 20 percent); accelerating role transitions (by 19 percent); providing ongoing training (by 16 percent); and addressing functionality gaps (by 16 percent).

• A decrease in focus on: planning and program management (by 13 percent) and consultant knowledge transfer (by 8 percent).

9 **An ERP implementation is, at its core, a people project.**

As respondents make clear, the biggest challenge before and after implementation is not the technology – only 19 percent of respondents cite technology as a prime challenge in the post-implementation period. Rather, as 51 percent of the respondents said, the biggest issues are people-related.

Respondents made it equally clear that at every stage, companies must work harder still to manage change, secure buy-in, communicate with and educate their employees. Top human resources issues in the survey: change management, training and internal staff adequacy.

10 **Successful companies have demonstrated 12 best practices for accelerating, maximizing and sustaining the benefits of the ERP journey.**

In fact, if you turn to page 21, you'll find 12 proven best practices that can help organizations successfully continue the journey. Yes, there is life after go-live.

QUESTIONS, QUESTIONS...

To clarify and document our own observations on the journey of the ERP-enabled enterprise, Deloitte Consulting commissioned Benchmarking Partners, Inc. – a prestigious ERP research and consulting firm – to conduct a survey on the benefits and critical success factors in ERP implementations. The highlights of this comprehensive investigation are contained in the following snapshots.
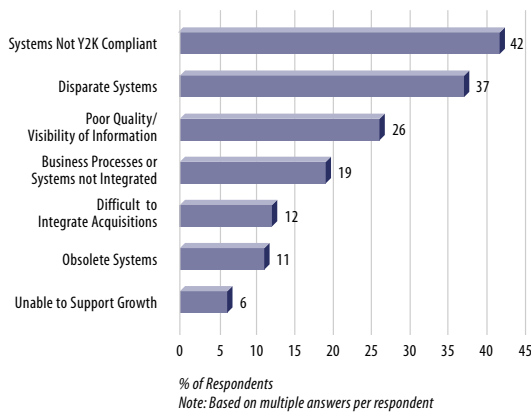
MOTIVATIONS FOR ERP

SOME MOTIVATIONS STEM FROM TECHNOLOGY PROBLEMS...

After the need for Year 2000 compliance, it's clear that companies hoped ERP-enabled systems would address a host of other technology problems, such as the confusion of disparate systems, poor quality of information and overly complex business processes. Translation: Companies need systems and processes that offer a faster, more accurate picture of what's really happening across their business.

...AND SOME FROM OPERATIONAL PROBLEMS

Organizations also told us that their motivation for pursuing ERP-enabled processes cut much deeper than technology. Indeed, they were looking at solving some fundamental operational problems – problems that left alone, could have resulted a tremendous strategic disadvantage.

Technology Motivations for ERP Program

Motivation	%
Systems Not Y2K Compliant	42
Disparate Systems	37
Poor Quality/Visibility of Information	26
Business Processes or Systems not Integrated	19
Difficult to Integrate Acquisitions	12
Obsolete Systems	11
Unable to Support Growth	6

% of Respondents
Note: Based on multiple answers per respondent

Operational Motivations for ERP Program

Motivation	%
Poor/Uncompetitive Business Performance	27
Cost Structure Too High	24
Not Responsive Enough to Customers	21
Complex, Ineffective Business Processes	20
Unable to Support New Business Strategies	15
Business Becoming Global	15
Inconsistent Business Processes	10

% of Respondents
Note: Based on multiple answers per respondent
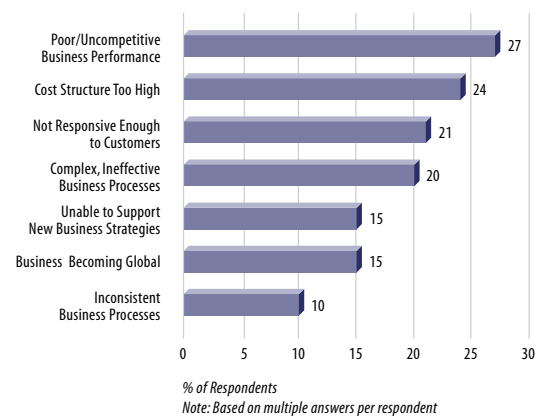
DESTINATIONS

IMPROVED INFORMATION, PROCESSES AND INTEGRATION LED EXPECTED CAPABILITIES

This chart shows us the evolution of ERP-enabled processes – from simply making them more efficient to improving effectiveness and to the ultimate benefit, transformation.

Added together, the second and third bars in the chart below show that companies are simply looking to achieve *efficiency* benefits – faster, less costly processes. The improved quality and visibility of information they're seeking in the first bar is a higher-order *effectiveness* benefit – one that leads to better decision-making. Together, greater efficiency and effectiv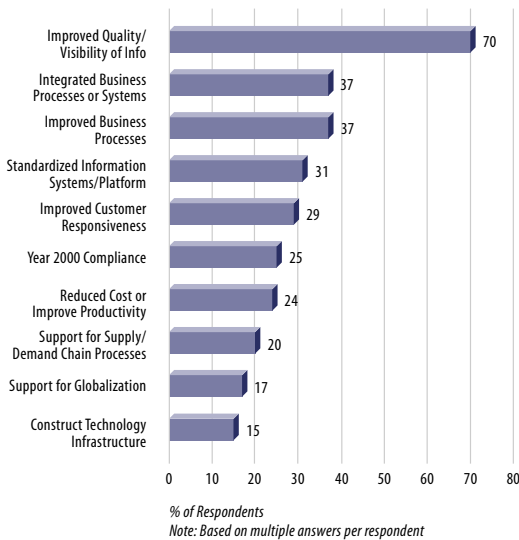eness can lead to *transformation* – the ability to fundamentally change the business. This can include developing new product lines, targeting new market segments and even taking over a competitor.

THE MAIN ANTICIPATED BENEFIT OF ERP: COST REDUCTIONS

Here, companies are looking for two basic benefits: Cost reductions (in personnel, information technology or maintenance), and faster time cycles (perhaps with regards to order fulfillment or generating financial information). And what can faster, less costly processes lead to? The goal of every CEO: improved revenues and profits.

Expected Capabilities Upon Completion of ERP Program

Capability	%
Improved Quality/Visibility of Info	70
Integrated Business Processes or Systems	37
Improved Business Processes	37
Standardized Information Systems/Platform	31
Improved Customer Responsiveness	29
Year 2000 Compliance	25
Reduced Cost or Improve Productivity	24
Support for Supply/Demand Chain Processes	20
Support for Globalization	17
Construct Technology Infrastructure	15

% of Respondents
Note: Based on multiple answers per respondent

Anticipated Benefits of ERP Program

Benefit	%
Personnel Reductions	44
Inventory	42
IT Cost Reduction	27
Productivity Improvements	23
Order Management/Cycle Time	19
Cash Management	16
Revenue/Profit	15
Procurement	12
Financial Close Cycle	10
Maintenance	8

% of Respondents
Note: Based on multiple answers per respondent
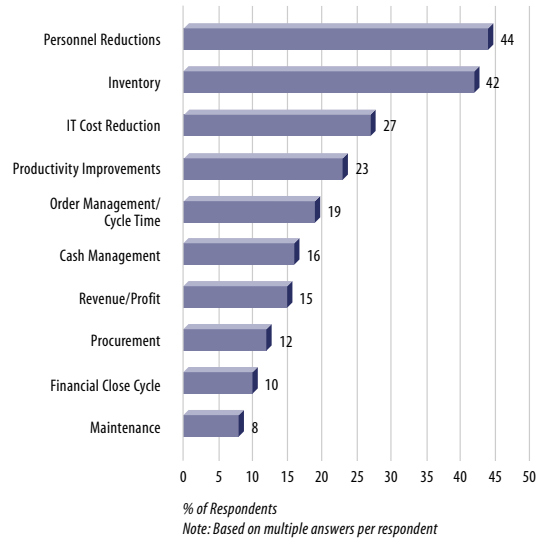
ERP IMPLEMENTATION: WHAT DOES IT MEAN, BEING COMPLETE?

QUESTION: WHEN WILL RESPONDENTS SEE THEIR ERP PROGRAM AS COMPLETE?
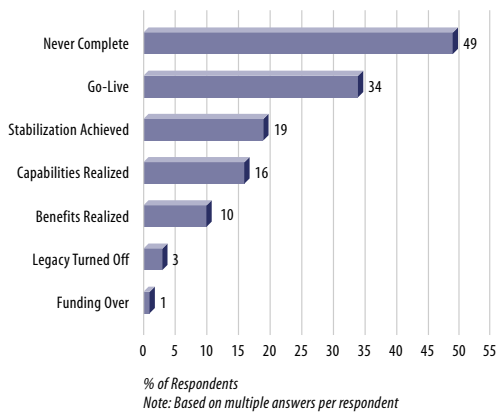
Until recently, virtually everyone believed that the work of an ERP program was substantially complete once the system went live. As this chart shows, however, many respondents are already rethinking this proposition. Virtually half (49 percent) now say the journey will never be complete, meaning that transformation is an ongoing activity.

Definition of "Complete": All Respondents

Category	% of Respondents
Never Complete	49
Go-Live	34
Stabilization Achieved	19
Capabilities Realized	16
Benefits Realized	10
Legacy Turned Off	3
Funding Over	1

% of Respondents
Note: Based on multiple answers per respondent

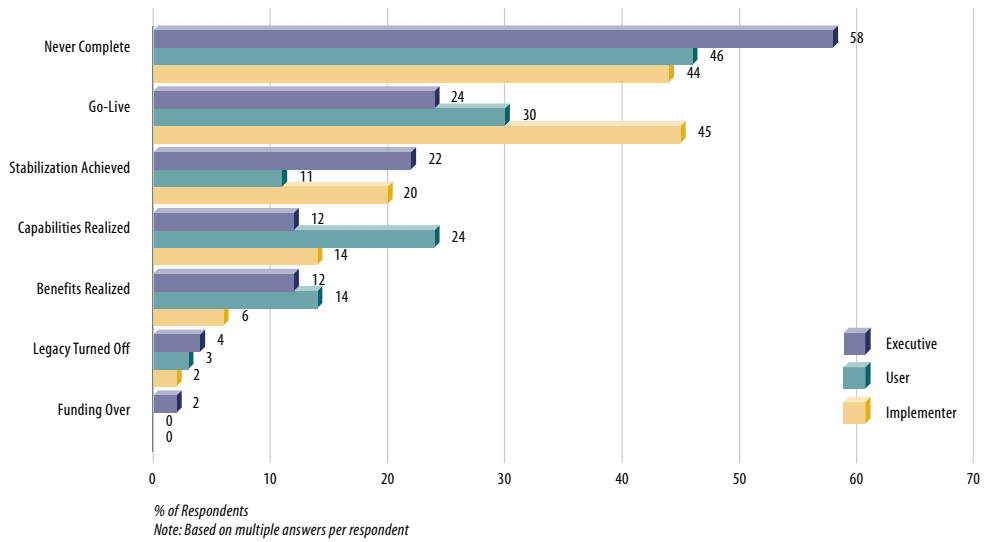## "COMPLETE" DEFINED: EXECUTIVES EXHIBIT A LONGER-TERM VIEW THAN ERP IMPLEMENTERS

The chart on the right tells us a lot about personal motivations. Contrast the top two bars. The majority of executives – nearly 60 per cent – believe that their ERP program is never complete, that it is, in fact, an ongoing journey. Their eyes, then, are on the real prize: transforming their enterprise. Almost half the implementers, though, have a project mentality, meaning they're focused on going live.

What's encouraging is that implementers are nearly evenly split when asked when they see their ERP program as being complete. Forty-four percent see the program as never complete, whereas 45 percent believe it is complete at go-live. This close split shows that implementers are gaining a fuller recognition of the potential of ERP-enabled processes.

"COMPLETE" DEFINED: LEADERS SEE THE NEED FOR A SECOND WAVE AS THEY APPROACH GOING FULLY LIVE

The moral here? Companies still close to the start of their ERP program see going live as the final destination. This is an optimistic view that companies in the later stages of their program don't share. They clearly have a longer-term view, beginning with the broad opportunities afforded by ERP-enabled processes – not to mention a host of unanticipated benefits.

Definition of "Complete" by Respondent Role

Category	Executive	User	Implementer
Never Complete	58	46	44
Go-Live	24	30	45
Stabilization Achieved	22	11	20
Capabilities Realized	12	24	14
Benefits Realized	12	14	6
Legacy Turned Off	4	3	2
Funding Over	2	0	0

Legend:
- Executive
- User
- Implementer

% of Respondents
Note: Based on multiple answers per respondent

Definition of "Complete" by Percentage of Users Live

Category	81 – 100%	41 – 80%	0 – 40%
Never Complete	47	62	38
Go-Live	26	27	52
Stabilization Achieved	25	13	17
Capabilities Realized	19	18	7
Benefits Realized	12	36	5
Legacy Turned Off	2	2	3
Funding Over	0	0	3

Percentage of
Users Live
- 81 – 100%
- 41 – 80%
- 0 – 40%

% of Respondents
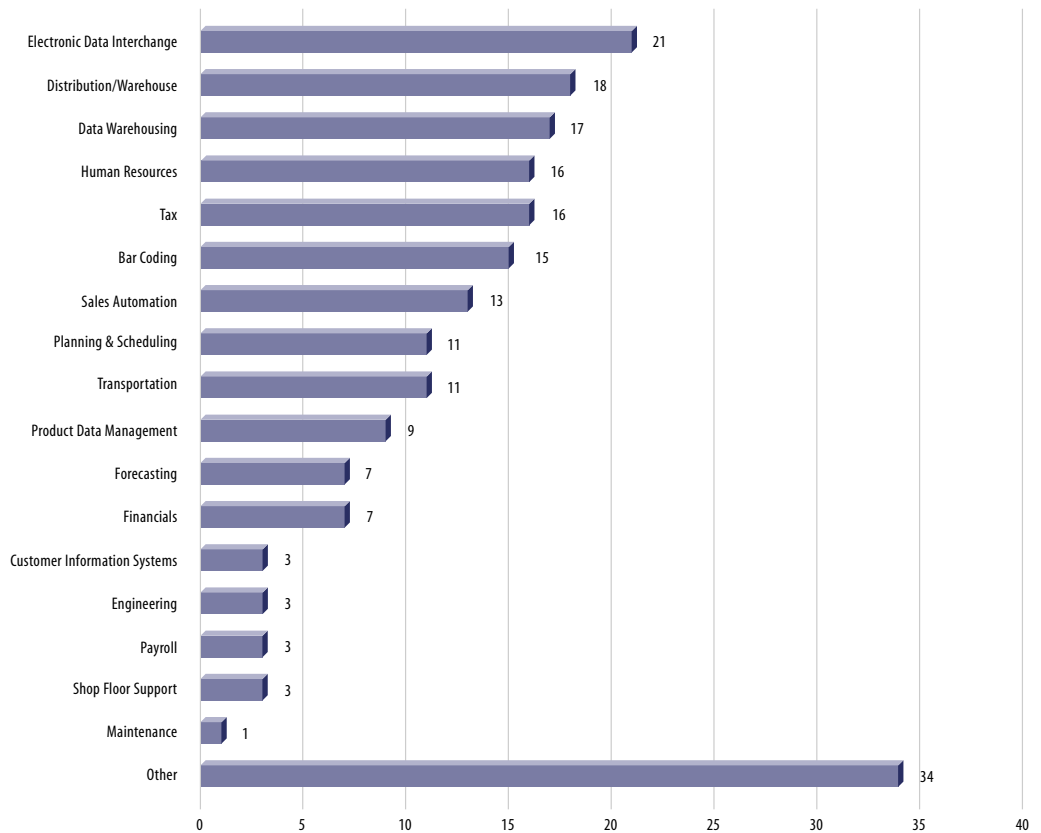*Note: Based on multiple answers per respondent*
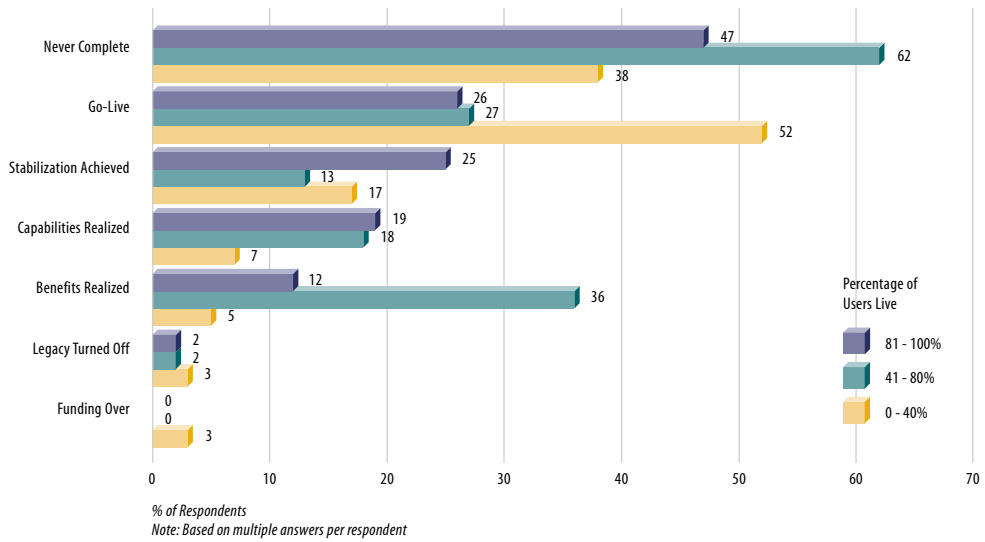
EXTENDING ERP'S REACH

ERP CAN'T DO IT ALL: RESPONDENTS USE MANY COMPLEMENTARY SOLUTIONS WITH ERP

Reality check: For all its power, ERP software alone cannot drive all the processes an enterprise needs. Recognizing this, organizations and their suppliers are extending ERP's power and reach through an array of complementary technology solutions.

Other Solutions Implemented as Part of ERP Program

Solution	% of Respondents
Electronic Data Interchange	21
Distribution/Warehouse	18
Data Warehousing	17
Human Resources	16
Tax	16
Bar Coding	15
Sales Automation	13
Planning & Scheduling	11
Transportation	11
Product Data Management	9
Forecasting	7
Financials	7
Customer Information Systems	3
Engineering	3
Payroll	3
Shop Floor Support	3
Maintenance	1
Other	34

% of Respondents
Note: Based on multiple answers per respondent

"Other" includes: *Time & Attendance, Electronic Catalogue, Contracts & Pricing, Laboratory Information Management Systems, Document Management, Forms, Purchasing, Employee Self Service, Data Collection, Call Management, Customer Support, Product Configuration, Process Planner*

FULL BENEFITS: HOW TO DEFINE THEM? AND WHEN WILL THEY COME?

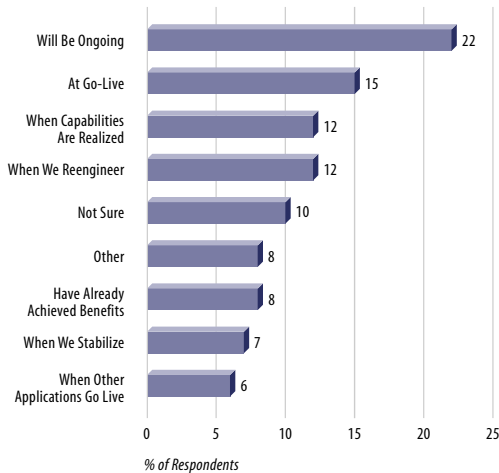## MANY RESPONDENTS SEE BENEFITS REALIZATION AS ONGOING

Nearly two-thirds of our respondents – 63 percent – said they expect to see full benefits when a specific post-implementation event occurs, usually after going live. However, as the top bar indicates, most of these respondents believe that going live is not the final step on the journey and that more milestones – and more benefits – lie ahead.

MOST RESPONDENTS WHO GAVE A TIME-BASED ANSWER BELIEVE FULL BENEFITS WILL COME 12 MONTHS AFTER FINAL GO-LIVE
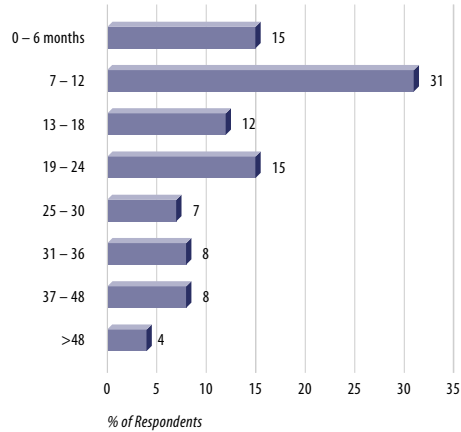
The remaining 37 percent of our respondents provided a time-based answer when asked at what point they expect full benefits to arrive. The most popular answer here is seven to 12 months before most companies realize the efficiency benefits they're looking to achieve – things like faster, more cost-effective processes.

The more enlightened companies – those that envision a more realistic period until they achieve full benefits – are reaching into the higher-order effectiveness and transformation benefits that, in the long run, will help their companies achieve more substantial change.

Expected Realization of Full Benefits: Event-Based Answers

Category	% of Respondents
Will Be Ongoing	22
At Go-Live	15
When Capabilities Are Realized	12
When We Reengineer	12
Not Sure	10
Other	8
Have Already Achieved Benefits	8
When We Stabilize	7
When Other Applications Go Live	6

% of Respondents

Expected Realization of Full Benefits: Time-Based Answers

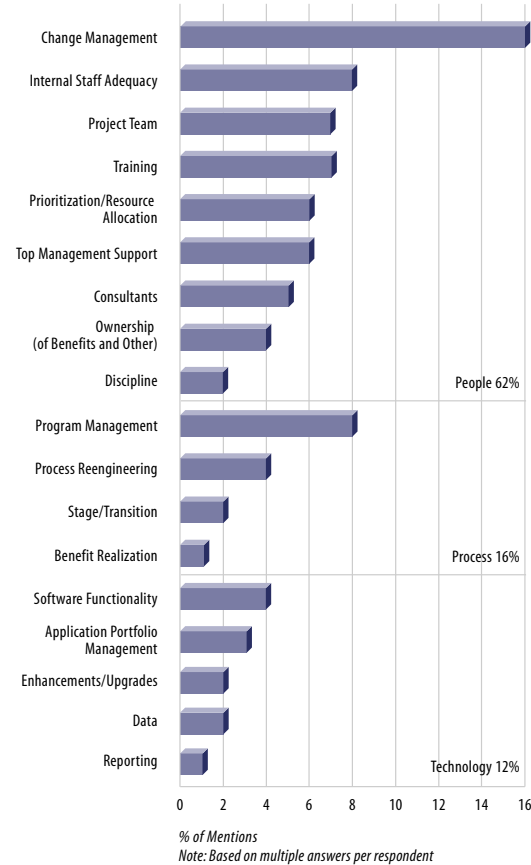| Category	% of Respondents
0 – 6 months	15
7 – 12	31
13 – 18	12
19 – 24	15
25 – 30	7
31 – 36	8
37 – 48	8
>48	4

% of Respondents
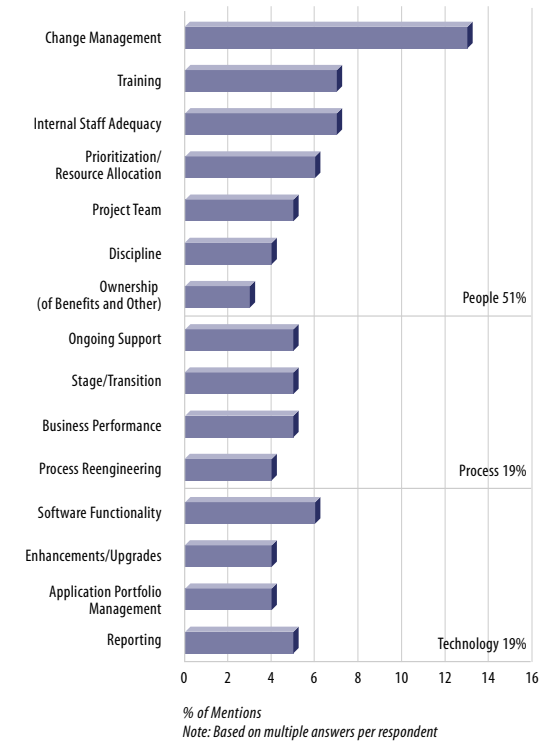
ISSUES AND OBSTACLES

ALL ALONG THE JOURNEY, PEOPLE ISSUES ARE KEY

Here's an antidote to conventional wisdom: When we look at the categories here, it becomes plain that an ERP implementation – for all its reputation as a vast technical undertaking – is ultimately a *people* project. These two charts, together, show us that – before going live *and* after – people are the most important factor in determining success.

Issues/Obstacles Until Going Live

Category	
Change Management	16
Internal Staff Adequacy	8
Project Team	7
Training	7
Prioritization/Resource Allocation	6
Top Management Support	6
Consultants	5
Ownership (of Benefits and Other)	4
Discipline	2

People 62%

Program Management	8
Process Reengineering	4
Stage/Transition	2
Benefit Realization	1

Process 16%

Software Functionality	4
Application Portfolio Management	3
Enhancements/Upgrades	2
Data	2
Reporting	1

Technology 12%

% of Mentions
Note: Based on multiple answers per respondent

Issues/Obstacles Going Forward

Category	
Change Management	13
Training	7
Internal Staff Adequacy	7
Prioritization/Resource Allocation	6
Project Team	5
Discipline	4
Ownership (of Benefits and Other)	3
Ongoing Support	5
Stage/Transition	5
Business Performance	5

People 51%

Process Reengineering	4

Process 19%

Software Functionality	6
Enhancements/Upgrades	4
Application Portfolio Management	4
Reporting	5

Technology 19%

% of Mentions
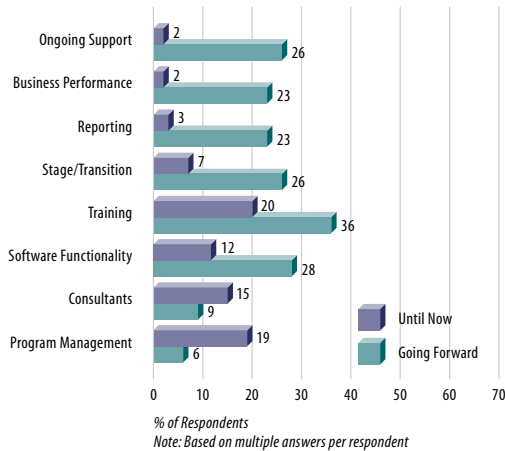*Note: Based on multiple answers per respondent*

ACTUAL BENEFITS

ISSUES AND OBSTACLES BEFORE AND AFTER GO-LIVE: A DRAMATIC SHIFT IN EMPHASIS

Concerns change – dramatically – as projects near going live. All the shifts in emphasis shown here are significant. But the shifts in the top three bars – ongoing support, business performance and reporting – are simply huge. From Ongoing Support (*Where do I turn for support now?*) to Reporting (*Where do I find the information I need?*) to Stage/Transition (*Who is responsible after we go live?*), all are issues symptomatic of the many uncertainties raised by going live.

Meanwhile, concerns about consultants and program management (planning and tracking) shrink after going live – likely because of the valuable experience that the ERP program has provided the implementation team.
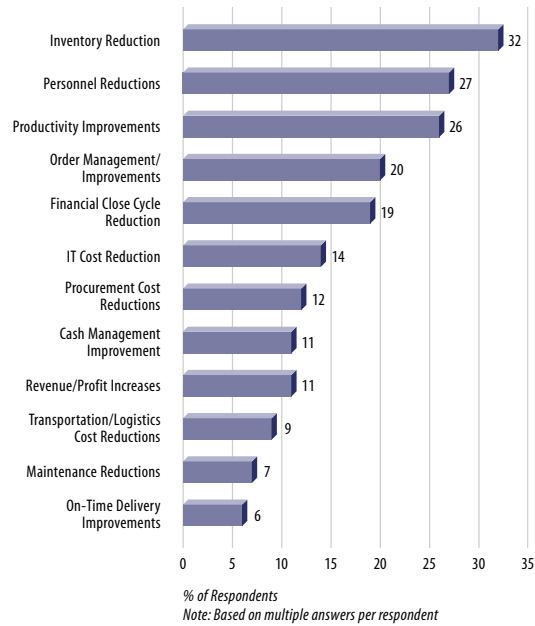
AFTER GOING LIVE: TANGIBLE BENEFITS ARE REALIZED

Clearly, whatever the challenges, respondents believe that going live with a new ERP system is worth the investment. Certainly, this is true in terms of tangible benefits…
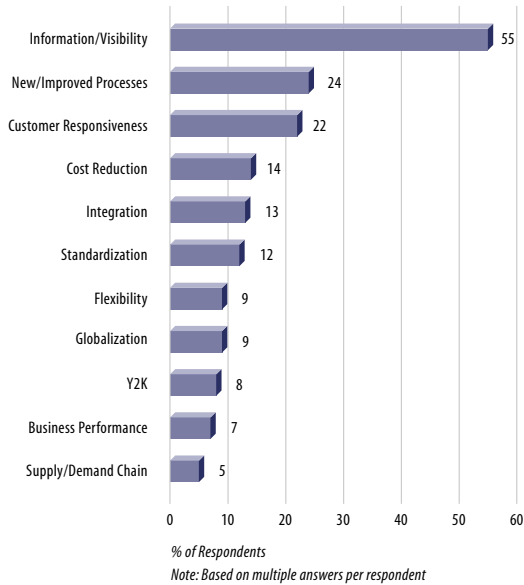
Tangible Benefits Realized From ERP Program

Benefit	%
Inventory Reduction	32
Personnel Reductions	27
Productivity Improvements	26
Order Management/Improvements	20
Financial Close Cycle Reduction	19
IT Cost Reduction	14
Procurement Cost Reductions	12
Cash Management Improvement	11
Revenue/Profit Increases	11
Transportation/Logistics Cost Reductions	9
Maintenance Reductions	7
On-Time Delivery Improvements	6

% of Respondents
Note: Based on multiple answers per respondent

Issues/Obstacles Before and After Go-Live

Issue	Until Now	Going Forward
Ongoing Support	2	26
Business Performance	2	23
Reporting	3	23
Stage/Transition	7	26
Training	20	36
Software Functionality	12	28
Consultants	15	9
Program Management	19	6

% of Respondents
Note: Based on multiple answers per respondent

AFTER GOING LIVE:
INTANGIBLE BENEFITS ALSO APPEAR

...and it is also true of *intangible* benefits. In terms of driving better, faster decision-making, many of these "intangibles" are leading the way toward enterprise transformation. And that, after all, is what ERP is all about: big change in all the fundamental dimensions – especially people, technology, process and strategy.
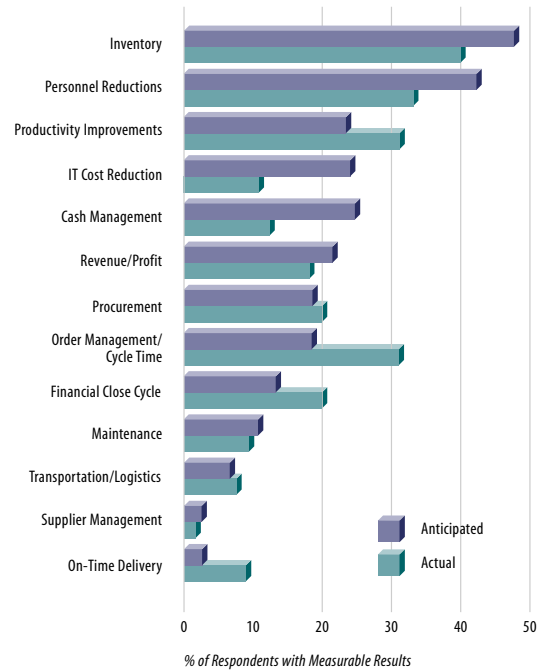
TIME-BASED BENEFITS TEND TO EXCEED ORIGINAL EXPECTATIONS

While survey respondents indicated some unexpected shortfalls in benefits realized from their ERP program, they also received some significant *unanticipated* benefits, as well. In particular, time-based benefits – such as improved on-time delivery, faster financial close cycles and improved order management cycle time – tended to far exceed expectations. Again, these are first-order efficiency benefits that can ultimately lead to transformation.

Intangible Benefits Realized from ERP Program

Category	%
Information/Visibility	55
New/Improved Processes	24
Customer Responsiveness	22
Cost Reduction	14
Integration	13
Standardization	12
Flexibility	9
Globalization	9
Y2K	8
Business Performance	7
Supply/Demand Chain	5

% of Respondents
Note: Based on multiple answers per respondent

Anticipated vs. Actual Benefits of ERP

Categories (top to bottom): Inventory, Personnel Reductions, Productivity Improvements, IT Cost Reduction, Cash Management, Revenue/Profit, Procurement, Order Management/Cycle Time, Financial Close Cycle, Maintenance, Transportation/Logistics, Supplier Management, On-Time Delivery

Legend: Anticipated, Actual

% of Respondents with Measurable Results

Making **ERP** *Spell*
ROI

**Why does one ERP implementation spell
trouble, while another spells ROI?**

WE'VE GONE LIVE – NOW WHAT?

Here's a question: Why does one ERP implementation spell trouble, while another spells ROI?

Based on the research in the first part of this report and our own experience with hundreds of ERP implementations, the biggest difference – really, the defining difference – comes down to one question: How long- or short-term-focused is a company's view of what it means for its ERP program to be "complete"?

If the company sees "complete" as going live, that can spell disappointment. If, on the other hand, it takes a longer view – if it sees going live as a major milestone toward the ultimate benefits of a longer, more ambitious journey – then the result can typically be very different. If the company is not yet enjoying success, it is likely on the right path to achieving it.

It is this longer-term view of the ERP-enabled enterprise – and the benefits it can deliver – that this paper is really about. For if there's any one lesson here, it's that taking a longer-term view is crucial if a company is to realize the benefits it expected – not to mention others – when it first approved the investment in its ERP program.

This also reflects the very nature of ERP as a platform system that can cohabitate with many other complementary systems – often non-ERP-enabled. In that sense, it is like a reef – able to support many other business systems, as well as the people and business processes that depend on it. This is not something that will happen in one "big bang" at go-live.

On the contrary. ERP-enabled processes are designed to *evolve* – to live in time and to grow in power for those organizations that take the time and effort required to grow with them. Above all, the rewards go to those who venture into the wave where the greater benefits lie – not the First Wave of going live, but the post-implementation Second Wave.

And that's what we'll learn here. First, how to understand and navigate the three stages – the "map" of ERP's Second Wave. Then we'll look at the best practices that can help organizations traverse the three stages. Finally, we'll cover the steps that organizations can take to prepare themselves for continuing this important journey.

Wherever a company is today – in ERP's First Wave or its Second – those greater benefits can start here. Now. Not by simply turning the system on, but by forcefully *moving on* into the deeper journey, where the fuller capabilities and benefits of the ERP-enabled enterprise are found.

THE STAGES OF ERP'S SECOND WAVE

In the first half of this report – the research findings – we explained and showed the waves of ERP-enabled transformation. Still, in a practical sense, the waves are just useful milestones – they don't, by themselves, do anything. Rather, the waves give us a reference point as to where a company is in its journey.

But what *does* help us do things are the stages of the Second Wave. As the chart on the next page shows – and as our research proves – results build in three stages in ERP's Second Wave. The fact that these three stages are not present in the First Wave is not because the work of that period does not have multiple objectives. Rather, it reflects the fact that going live is often the only objective that companies actually accomplish in the First Wave. The Second Wave, then, is an opportunity to take the organization to the next level by leveraging capabilities and driving benefits.

18

Going Live with ERP Marks a Key Milestone in the ERP Journey

The Tool
ERP

First Wave
ERP Implementation

Go-Live

Second Wave
Process Optimization

The Destination
Growth
Agility
Profitability

THE JOURNEY: ENTERPRISE TRANSFORMATION

LEVERAGING THE STAGES OF THE POST-IMPLEMENTATION TO NEW LEVELS OF BENEFIT

The point of dividing the post-implementation period into stages is that companies can use those stages to build to higher and more powerful benefits. Training and coaching for a more cohesive organization; powerful, more accurate information; and faster decision-making. Helping create the kinetic organization – something that wasn't possible in the old legacy environment.

Stage One: Stabilize. *Secure the base.*

In the first stage, the organization – having just gone live – is working to stabilize the backbone ERP technology and the people charged to work with it. The task: to fine-tune the new processes and thoroughly master the change on an organizational level before making any further changes. The result: significantly improved speed and cost reductions in handling routine business transactions. Ultimately, this stage is all about gaining *efficiencies* from smooth-running ERP-enabled processes.

Duration: three to nine months.

Stage Two: Synthesize. *Build for the future.*

This is done both by adding still other capabilities (often non-ERP) to the mix and by putting more effort into people and process improvements. The goal here is to achieve targeted capabilities and benefits by building on the ERP platform. Typically, this comes with focus in at least three areas: complementary applications (such as a data warehouse, sales process automation or EDI); complementary work in process improvements; and work to train and motivate people fully to undertake this next level of change. The result: distinctly new capabilities at new speeds.

This stage is all about realizing additional *effectiveness* from the better decision-making capabilities afforded by ERP. For example, Stage I led to accurate inventory data while educating people about ERP principles. Stage II now allows companies to use ERP to optimize their inventories.
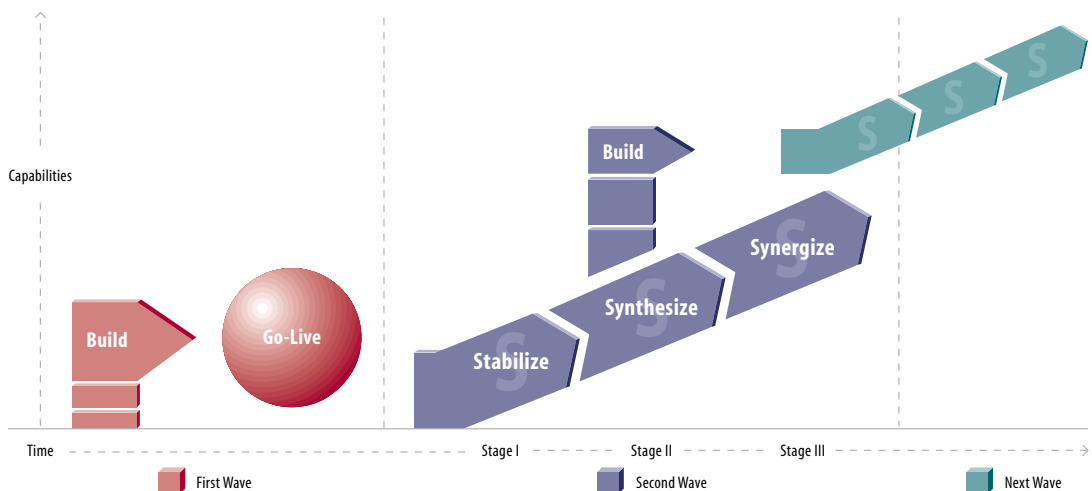
Duration: six to 18 months.

Stage Three: Synergize. *Achieve value in use.*

This is really another level of change: new competencies; redefined business processes; ultimately, a kinetic, "instant-action" enterprise that can dynamically adapt to serve markets of one. In this stage, the organization is able to achieve new, sweeping changes that fundamentally benefit the company.

This stage is *transformational* in nature – adopting new business strategies or developing new partnerships, for example.

Duration: 12 to 24 months.

Navigating from One Stage to the Next Enhances Capabilities and Drives Benefits

Capabilities

Build

Go-Live

Stabilize

Synthesize

Build

Synergize

Time — Stage I — Stage II — Stage III

First Wave — Second Wave — Next Wave

In the simplest terms, the stages are landmarks that companies will encounter during the next phase of the journey, during the post-implementation period.

Clearly, the benefits of these three stages can't all happen at once. As the chart below illustrates, some can follow only once others are in place. Which is to say that every issue, and each action, has its stage – stages that, to be effective, must build on and fit with the issues and actions of other stages. Even an ERP system can't put the cart before the horse.

MAXIMIZING BENEFITS IN A BALANCED WAY BY STAGES

Companies that have gone live will confirm something else: that once they go live, there can be a dip in performance. Once organizations understand the dip, however, they can actually minimize and shorten it, turning it to their advantage and raising the organization to new levels of performance.

Why is there a dip? Because going live with ERP-enabled processes is a significant change for any company. The dip will vary between organizations, depending on how well they prepared for the introduction of this new functionality. The most important point is, it helps enormously for people to know there *is* a dip, that this dip is natural and that it can be minimized with the right kind of preparation.

But more than being natural, the dip is a part of the stabilization process, the result of doing something new. In fact, like aching muscles after a good workout, it's a sure sign that the organization is adding the muscle that comes from venturing into new areas, at all new levels of performance.
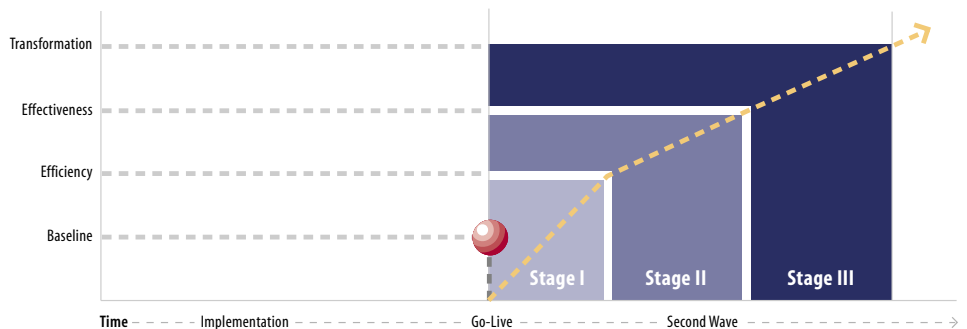
How?

By fully understanding where each stage can lead – and how it can benefit the company. Planning by stages helps clarify many things. It shows precisely *where* the organization is, *what* it is trying to accomplish and *how* it can get there.

Based upon our research, there is a clear roadmap for each stage, including the issues you should prepare for and expect to encounter. And there are specific actions that can be taken to address the issues and opportunities presented at each stage.

And what exactly will a company find at ERP's true destination? Full benefits. So we compared those respondents that realized measurable results with those that were less successful. And we found differences in what these companies did and how they did them. These became our best practices.

Most Companies Report a Decline from Baseline Performance During the Initial Stage After Going Live

Transformation	
Effectiveness	
Efficiency	
Baseline	Stage I Stage II Stage III

Time – – – – – Implementation – – – – – – – – – – Go-Live – – – – – – – Second Wave – – – – – – – – – – →

BEST PRACTICES SUSTAIN
THE JOURNEY – AND DELIVER
THE BENEFITS

The afterlife of going live: As Columbus proved, you don't fall off the edge of the world, you keep going. The same holds true with ERP's journey – during which there are more opportunities to explore and conquer beyond simply going live.

The real goal is to acquire the full set of capabilities and benefits, and the way to get there – the map – comes through the three stages. How do companies traverse those stages – rapidly and successfully? By following the post-implementation best practices outlined on these pages.

These are best practices with a difference, created not to design better processes or accelerate implementation – years of experience have taught us those – but to ensure that an organization reaps the full benefits that are possible once it goes live. With a clear focus on results, these tenets should also prove valuable to companies still passing through ERP's First Wave.

Proven by statistical research and tested in the field, these 12 best practices represent our prescription for what really delivers at this stage of the journey.

1 Focus on capabilities and benefits, not just going live.

In the scheme of things, the bright star of going live – large as it looms at the time – is only *a* point. It is not *the* point, which should be the full constellation of business benefits realized over time. Improved cost structures. More effective business processes. Faster responsiveness to customers. Benefits are why the journey starts, and they should be milestones on the way to the full power of the integrated enterprise.

Put it this way: Successful companies may miss a scheduled date to go live, but they should never miss out on an expected benefit.

2 Align the organization on the true destination.

The destination does not reside in some mission statement or memo, and even the most elaborate rollout will not, by itself, make the destination real. This lesson rings even truer after going live, when all the previous knowns are suddenly up in the air. *Where to now? When will all these loose ends be tied up?* Sensing it's really not over at go-live, people will be relieved to know that there's more to come. That it's all part of a broader plan.

This is a time to ensure that everyone in the organization has the same vision about the original motivations for implementing ERP-enabled processes: what the targeted capabilities were, as well as the targeted benefits. Only then can an organization really know how close its ERP program is to being complete.

Aligning on the destination, then, is a hearts-and-minds issue, and that requires special focus on people: communicating, managing expectations, education, top management support. Successful organizations keep all eyes trained on each new destination – and the next.

Post-implementation initiatives are no different. Milestones should be established for each stage, the dependencies between initiatives need to be identified and synchronized, staff need to be deployed effectively, and priorities must be set. Process designs, education materials, role transitions, retention programs – nothing is left to chance.

Pre-live companies should prepare a plan right away, with a formal release strategy – complete with plans to realize higher performance levels. As for post-live companies, it's not too late.

3. Achieve balanced people, process and technology changes across all areas.

As we've seen, companies undertaking the ERP journey must make changes and take actions in all areas of the modern enterprise. They need the best-of-breed technology tools. The most effective work processes using world-class practices. People who are trained and motivated. Ultimately, strategies that fully leverage these new organizational abilities.

Far from being a one-dimensional project, then, the ERP journey must keep change in play, and in balance, in *all* these areas – a fact that successful companies never forget. Before, during and especially after going live.

4. Use the business case as a management tool.

For successful companies, the business case is anything but a static, one-time exercise intended to secure funding. On the contrary, the business case is a dynamic management tool – one that should live as long as the journey. And evolve constantly along the way.

What's more, successful companies use the business case tool in a variety of ways: justifying the program, validating the design, setting post-implementation targets and managing to them, and prioritizing post-implementation change initiatives. In short, every time the business plan changes – as well as the plan to capture benefits – the business case should change as well.

5. Apply planning and program management practices throughout the program life cycle.

If there's one thing companies should master by the time they go live, it's program management and planning. Companies that will succeed in ERP's Second Wave accept the fact that – if they're to achieve their benefits – the Second Wave demands at least as much planning as the First did. Successful projects are guided by rollout plans, milestone plans and detailed workplans. Key dates – and deliverables that are due on each – are spelled out and synchronized, while benefits scoreboards are created and results are tracked.

6. Transition project roles to a way of life.

Information technology people, ERP experts, process experts, site leaders, the project manager and the steering committee – going live can involve hundreds of people, in dozens of roles. But at go-live, once the program is operationalized, the ways roles change – and the way such change is orchestrated – can be an even larger undertaking. It can also be more emotionally intricate: for instance, the often delicate negotiation necessary to establish "who will decide what" in the post-go-live environment. It's hard to downplay how different this new phase of life really is – for everyone.

Companies successful in the post-implementation wave are simply better at mobilizing and guiding such efforts. They're also better at preparing people for the critical shift, moving from being team members to stewards. Stewards who are ready to get the full benefits in which they've invested.

7. Build and leverage process expertise.

Process focus is, if anything, more important after going live – and no wonder, since the company now has an even greater core of process expertise. Successful companies fully capitalize on this expertise and the power of ERP-enabled processes. One way is by seeding process experts from the implementation team back into the organization, or by having some serve at centers of excellence, some as key process performers and some as business managers.

This is all about fostering continuous process improvement. It's something that process owners and executive sponsors can do – and should champion. After all, who better to manage continuous improvement and process renewal than the process experts who mastered these techniques as part of the implementation team?

Successful companies never forget the point of the integrated enterprise: that it's not about ERP so much as it's about people involved in ERP-enabled processes.

8

Extend capabilities beyond the ERP foundation.

As a backbone technology, ERP delivers more powerful benefits when companies do their utmost to build on that platform. In doing so, successful companies turn to a host of complementary applications that generate ROI, from advanced planning and scheduling to warehouse management to sales force automation. Successful companies also pay closer attention to the constant stream of innovative new solutions developed by today's software developers.

9

Promote post-implementation commonality.

Commonality: a common system and a common language. Common practices. Common information seen at the same time – and provoking largely the same conclusions – by all who see it, whether in the United States, Japan or Germany.

In terms of sheer change, commonality is perhaps one of the most underrated benefits of the ERP environment – really a stealth benefit, since it is so hard to quantify. Still, commonality's power is profound – in its seamlessness, in its ability to present one face to the customer and in the efficiencies it yields. Commonality: Among uncommon companies, it's a key focal point.

It's also a point that needs to be emphasized once the implementation team has left. After companies go live, there is a real risk that ERP systems will revert back to the same non-standard systems and processes they were meant to replace. Far-flung offices might make their own changes after the implementation team has moved on to the next location.

Successful companies use process owners to promote and ensure commonality of *post*-implementation modifications as well. This helps preserve and promote commonality – and the integration benefits that come with it.

10

Teach the organization to use new capabilities.

The natural progression from building capabilities is actually using them. While this may sound obvious, many organizations are far better at building new capabilities than at teaching (and motivating) people to use them. Successful companies avoid this fundamental imbalance. For them, teaching goes hand in hand with building new capabilities, from defining roles to developing skills to culture shifts.

11

Assign clear ownership of benefits.

During implementation, it's usually clear that the responsibility for going live – on time and on budget – ultimately belongs to one person, the project leader. But again, going live is only an interim destination.

So, after going live, who owns the benefits that are being targeted? In many companies, that's a difficult question to answer – no one's been identified as the owner. But in successful companies, accountability for results is no mystery. The owner may be the business unit leader, a project sponsor, a process owner – or someone else. What's important is that there be *somebody* – some person – whose fortunes ride on realizing benefits.

12

Define metrics and manage to them.

There is a fallacy that if you create something powerful enough, success more or less just happens. That's simply not true.

Successful companies set targets, establish budgets, and *make* it happen – especially after going live. On the other hand, after seeing head counts fall and inventory shrink to more efficient levels, less successful companies can see these gains reversed if they don't continue to define metrics and stick to them. Metrics: Think of them as the glue of the post-implementation, the glue that keeps your organization stuck on real benefits.

GETTING THERE: FIVE STEPS TO CONTINUING THE JOURNEY

Just launching an ERP implementation involves a lot of fanfare. First, there's the need for board approval. But that's only the beginning. Before companies even get their hands dirty with the implementation, they need to define their project's vision, set targets and define timelines and deliverables. Only then can they mobilize people and secure the resources to get the job done. But, as we've said time and again, going live is not the final destination – realizing the full benefits of ERP-enabled processes is.

Companies need to sit back and take stock of how far they've come and how they measure up against the 12 best practices. And then… it's time to move forward.

Our research has identified a five-step program that these types of companies follow to propel themselves beyond the go-live point toward realizing full capabilities and benefits. These five steps help companies incorporate our best practices – things like focusing and aligning on a destination, shifting roles and leveraging process expertise.

It's a chance for them to reenergize their people, refocus their effort, replot their course and reschedule their timelines for getting there. It's a map – a way to navigate the post-implementation stages effectively – and to set sights clearly on the targeted capabilities and returns of one of their most important investments.

WHY? AND WHERE TO NOW?

So why should organizations do all this? Why summon a new level of effort for the next phase of ERP – especially when many organizations assumed they were done once they went live?

Because at the rate the business world is changing, you can't plan for the future – but you can be ready for it. The faster and more nimble your organization becomes – the more visible information is to guide strategy and make rapid decisions – the better your chances of staying ahead in a hypercompetitive marketplace.

That's the why of ERP – it's about ROI – but what about the where? Just where are we in this new post-live epoch? As one of our survey respondents said, "This program is like an iceberg. The tip represents the tangible ROI – which we've gotten. The 'soft benefits' have not yet been fully realized, but are much greater in scope – like the portion of an iceberg below the water line."

What specifically do we know now?

We know that ERP is not about going live but about achieving the full business benefits of your investment. And we know the key to realizing those benefits begins with having a far longer – and broader – view of the road ahead.

We've learned something else from successful companies: that, for all the effort it requires, the integrated enterprise of ERP truly is worth it – worth it today, and worth even more with continued focus and effort tomorrow.

ERP's Second Wave: It's not about fixing the First Wave, it's about making ERP spell ROI.

Five Steps to Successfully Continue the Journey Toward Full Benefits

1 Confirm the Destination

2 Determine Progress to Date

3 Develop a Plan to Continue the Journey

4 Organize to Continue the Journey

5 Create a Means for Tracking Progress

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FOR MORE INFORMATION

To find out more about ERP's Second Wave, please contact us at secondwave@dttus.com. For more information about Deloitte Consulting, visit us on the World Wide Web at www.dc.com.

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