Forrester[®]



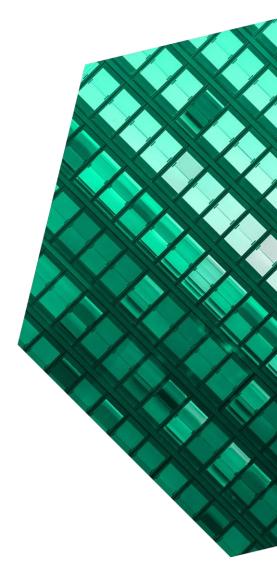
Cost Savings And Business Benefits Enabled By Migrating To Microsoft's Cloud-Based Dynamics 365 Business Central

SEPTEMBER 2020

Table Of Contents

Executive Summary	1
The Microsoft Dynamics 365 Business Central Customer Journey	6
Key Challenges	6
Solution Requirements	6
KEy Results	7
Composite Organization	7
Analysis Of Benefits	8
reduction in required Finance And Operations St Hires	8 9 .11 ort
Unquantified Benefits	
Flexibility	.14
Analysis Of Costs	.15
Subscription Fees Paid To Microsoft	.15
Implementation, Ongoing Management, And Training Personnel Costs	.16
Financial Summary	.18
Appendix A: Total Economic Impact	.19
Appendix B: Supplemental Material	.20
Appendix C: Endnotes	

Consulting Team: Richard Cavallaro Samuel Sexton



ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. For more information, visit forrester.com/consulting.

© 2020, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on the best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies.

Executive Summary

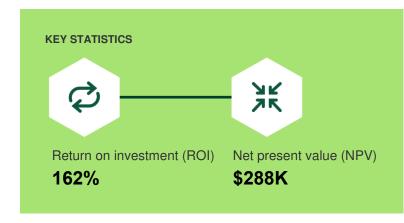
Forrester's analysis of five current Microsoft customers found that Dynamics 365 Business Central enabled these organizations to bolster operational efficiency, avoid costs, and comfortably scale their deployments with growth while benefitting from the flexibility inherent in the cloud. An analysis based on a \$15-million, 250-employee composite organization modeled after the five interviewees demonstrates benefits of \$466K over three years versus costs of \$178K, adding up to a net present value (NPV) of \$288K and an ROI of 162%.

Forrester Analytics' Business Technographics® data suggests that some business leaders are considering replacing their on-premises enterprise resource planning (ERP) suites with the new breed of cloud-based core business applications, which Forrester calls digital operations platforms (DOPs). Leaders believe a DOP will enable them to increase business agility, improve the employee experience (EX), and deliver superior business operations.¹

Microsoft commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Microsoft Dynamics 365 <u>Business Central</u>. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Business Central on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five customers with experience using Business Central. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Before migrating to Business Central, the interviewees' organizations managed their operations with a disparate collection of on-premises Microsoft and non-Microsoft ERP tools that lacked key functionality as organizations looked to scale and modernize their businesses. By migrating to Dynamics 365 Business Central, organizations gave



their finance and operations users the improved functionality, visibility, and access required of a modernized digital business aiming for growth.



We were looking for an upgraded ERP solution capable enough for our complicated operations, in the cloud. Business Central is that solution. We have everything we need in one tool.

— CEO, specialty manufacturing

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- Avoidance of one full-time equivalent (FTE)
 and one part-time equivalent finance and
 operations hires. The functionality, visibility, and
 access improvements for finance and operations
 staff allowed the interviewed organizations to
 continue their growth trajectory without the need
 to hire additional staff, reducing the need to hire
 by an average of 10%.
- Improved flow of operations by an average of 8%. Finance and operations professionals have better tools to execute their daily responsibilities, improving workflows throughout finance and operations. Staff use their reclaimed productivity to make other iterative improvements to operations.

- Elimination of more than \$44K of third-party reporting spend over three years. After migration to Business Central, organizations can leverage additional functionality and Microsoft tools such as Power BI and eliminate reliance on externally generated reports for a more granular visibility into their business.
- Avoidance of more than \$40K in costs pertaining to the previous solutions. Migrating from on-premises Microsoft and non-Microsoft ERP tools yields savings in the form of license fee and infrastructure reductions, as well as support personnel savings.

Unquantified benefits. Benefits that are not quantified for this study include:

Improved EX. On Dynamics 365 Business
Central, employees are less burdened by some
of the common frustrations around finance and
operations exacerbated by a disparate set of
ERP tools.

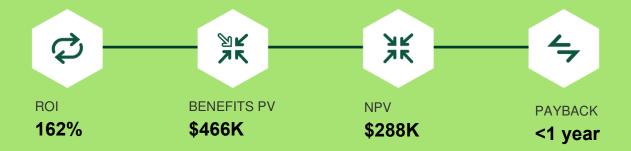
- Integration with other Microsoft products.
 Interviewees cited integration with their other Microsoft solutions such as SharePoint and Power BI as additional boons to their Business Central migrations.
- Increased confidence from real-time visibility.
 For the first time, for some organizations, decision makers could view key business data, reports, and metrics in real time. Beyond productivity, this real-time view into data fosters confidence in those who need to use it.

Costs. Risk-adjusted PV costs include:

- Subscription fees paid to Microsoft of just over \$51K over three years. The interviewed organizations paid a monthly subscription fee by user for their Dynamics 365 Business Central access.
- Implementation, ongoing management, and training personnel costs of \$126K over three years. Each interviewee described the level of personnel effort from both IT and the business inherent to a major ERP tool implementation.

The move to Business Central has been especially helpful during the pandemic, as our users can access key business functions remotely.





Benefits (Three-Year)





TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in Microsoft Dynamics 365 Business Central.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that Dynamics 365 Business Central can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Microsoft and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Business Central.

Microsoft reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

Microsoft provided the customer names for the interviews but did not participate in the interviews.



DUE DILIGENCE

Interviewed Microsoft stakeholders and Forrester analysts to gather data relative to Business Central.



CUSTOMER INTERVIEWS

Interviewed five decision makers at organizations using Business Central to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewed organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Microsoft Dynamics 365 Business Central Customer Journey

Drivers leading to the Business Central investment

Interviewed Organizations						
Industry	Region	Interviewee	Number Of Users			
Specialty manufacturing	Europe	CEO	6			
Travel	Europe	CEO	15			
Specialty manufacturing	Europe	Managing director	6			
Specialty manufacturing	North America	Controller	20			
Direct marketing	North America	Director of IT and operations	17			

KEY CHALLENGES

Before migration to Dynamics 365 Business Central, the interviewed organizations struggled with common challenges, including:

- functionality for finance and operations staff.

 Decision makers interviewed for this report noted challenges pertaining to their on-premises

 Microsoft and non-Microsoft tools prior to migration. Some organizations struggled with customizing their deployments for their industries while others needed to multisource ERP tools or pay other organizations for additional reporting not available with their current tools. Functionality left a lot to be desired, as interviewees described tedious, manual processes throughout their operations due to a lack of visibility and automation capabilities.
- Difficulty scaling current ERP tools. To all of the interviewees, growing with their legacy setup tools seemed daunting. Expanding current, onpremises solutions would only go so far from a functionality standpoint and would be costly, and other platforms represented too large a leap for a small to medium-size organization.

"We needed a solution we could grow with quickly; Dynamics 365
Business Central was perfect for a smaller organization like us experiencing healthy growth given the easy interface and scalability. If we had kept the status quo, we'd be looking for a new solution every two to two and a half years."

Managing director, specialty manufacturing

A constant flow of manual updates.

Interviewees' firms struggled to manually keep on-premises deployments up to date.
Interviewees noted that their IT staff lacked the capacity to always keep their ERP tools on the most current versions, leaving additional functionality and security on the table.

SOLUTION REQUIREMENTS

The interviewed organizations searched for a solution that could:

 Provide a means to customize based on the organization's industry.

- 9
- Deliver a lightweight, straightforward interface to end users.
- Automatically stay up to date.

KEY RESULTS

The interviews revealed that key results from the Dynamics 365 Business Central investment include:

- Functionality improvements for finance and operations staff. Enhancements to finance and operations from Dynamics 365 Business Central come in the form of the ability to automate key processes not possible on legacy tools, improvement to ERP access across a myriad of devices, and "single-pane-of-glass" visibility across all finance and operations.
- An overall cost reduction for ERP tools. By migrating to the cloud for ERP functionality on Dynamics 365 Business Central, companies can eliminate the costs associated with multiple solution licenses, infrastructure, and related support.
- Greater scalability of the ERP solution. Moving
 to the cloud inherently provides a level of
 scalability not possible on on-premises solutions.
 This was especially important for each of the
 interviewed organizations, as the more volatile
 growth trajectories of smaller enterprises require
 the flexibility to scale up or scale down to
 provision with demand accordingly.

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and a ROI analysis that illustrates the areas financially affected. The composite organization is representative of the five companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization for this report is a regional, \$15-million

specialty manufacturing organization that also sells its products through multiple channels. The organization has 250 total employees and is experiencing a healthy growth trajectory at 10% per year. The composite organization is based on the characteristics of the organizations interviewed for this report, which ranged in employee total from under 100 to 600.

Deployment characteristics. The organization migrates to Dynamics 365 Business Central from a collection of ERP tools based around an on-premises Microsoft NAV deployment, which it struggled to keep up to date. Due to contract restraints, the organization phases out legacy tools over the course of the three years of the analysis, with 50% phased out in Year 1. On Business Central, the organization is contracted for 15 Business Central Enterprise user licenses for personnel across finance and operations.

Key assumptions

- 15 Business Central Enterprise users across finance and operations
- 50% of legacy tools phased out in Year 1

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total Benefits								
REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE		
Atr	Reduction in required finance and operations staff hires	\$93,075	\$93,075	\$93,075	\$279,225	\$231,464		
Btr	Improvement to flow of operations	\$59,130	\$59,130	\$59,130	\$177,390	\$147,048		
Ctr	Avoided costs of third-party reporting	\$18,000	\$18,000	\$18,000	\$54,000	\$44,763		
Dtr	Avoided costs of previous solutions and support	\$14,008	\$17,383	\$20,758	\$52,148	\$42,695		
	Total benefits (risk-adjusted)	\$184,213	\$187,588	\$190,963	\$562,763	\$465,970		

REDUCTION IN REQUIRED FINANCE AND OPERATIONS STAFF HIRES

Evidence and data. Before implementing Dynamics 365 Business Central, each of the interviewed organizations was experiencing growth common with smaller organizations as they continued to expand their customer bases. This created the need for additional finance and operations headcount to work within current processes, limited by disparate ERP tools.

- One of the specialty manufacturer interviewees noted that one year the organization's revenues grew over 40%. Had the company been using its prior ERP tools, additional hires in-line with growth would have been inevitable.
- The CEO of the travel organization noted that its sales staff were often bogged down by nonselling processes such as manual invoicing, decreasing the time they spent selling and increasing the need for salespeople.

After implementing Business Central, the interviewees noted savings in the form of avoided hires by enabling their current employees with the tools to become more effective within their same working hours.

- The aforementioned specialty manufacturer interviewee noted that despite the 40% yearover-year growth, the company only needed to hire 20% more accounting and operations personnel to manage the new business.
- The travel organization was able to use Business Central to set up auto-invoicing for the first time, enabling its salespeople to spend more time selling.

"Our salespeople are spending less time in the [ERP] system and more time selling."

CEO, travel

 Another specialty manufacturer interviewee noted that Business Central allowed the company to manage 25% year-over-year growth without significant additions to personnel ranks.

Modeling and assumptions. For the composite analysis, Forrester assumes that:

 The composite organization is experiencing 10% growth, which would mandate 10% additional finance and operations hires on top of its 15 current staff.

- 9
- The yearly rate for a finance or operations FTE is \$73,000.
- The organization avoids one full-time and one part-time hire.

Risks. Risks that could affect the realization of this benefit include:

 Change management effectiveness as it pertains to finance and operations processes. Each interviewee noted that the users needed to embrace the net-new functionality on Business

- Central to achieve enough newfound effectiveness to avoid hires.
- A downturn in an organization's business, which would affect its need to hire net-new personnel in the first place.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$231,464.

Redu	Reduction In Finance And Operations Staff Hires: Calculation Table								
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3				
A1	Total finance and operations FTEs (users)		15	15	15				
A2	Required headcount growth for business growth		10%	10%	10%				
A3	Yearly avoided hires (full-time and part-time)	A1*A2	1.5	1.5	1.5				
A4	Yearly rate for finance and operations FTE		\$73,000	\$73,000	\$73,000				
At	Reduction in finance and operations staff hires	A3*A4	\$109,500	\$109,500	\$109,500				
	Risk adjustment	↓15%							
Atr	Reduction in finance and operations staff hires (risk-adjusted)		\$93,075	\$93,075	\$93,075				

IMPROVEMENT TO FLOW OF OPERATIONS

Evidence and data. Each of the interviewees reported an increase in the effectiveness of their finance and operations functions after moving to Dynamics 365 Business Central, resulting from increased ERP access for employees across multiple devices, increased visibility into operations across the organization, and increased functionality such as automation in key processes. Interviewees noted that improved productivity of staff allowed them to focus on other initiatives to further increase the effectiveness of key processes.

 One of the specialty manufacturers linked the serial numbers of its products to the ERP solution for the first time, allowing the operations staff real-time visibility into the history of specific parts, increasing the efficiency of the staff members, and promoting a better and faster customer experience (CX). The interviewee added: "Business Central allows us to dream to be a big company. Historically, tools that allow us to do things like this are too cost-prohibitive for a smaller organization like ours."

- Another interviewee estimated a general increase in speed of 10% across workstreams from a companywide inventory tracking implementation.
 Within finance, the same organization experienced an increase in reporting accuracy and decrease in rework.
- The travel industry CEO summarized the experience of all of the interviewees with whom Forrester spoke: "We were very stressed before [Dynamics 365 Business Central] because everything related to our ERP solution took

9

forever. Now we have more free time to focus on the important things that will improve our business."

- The director of IT and operations at a marketing firm told Forrester that each of the accountants within finance reclaimed about 2 hours each week attributable to Business Central's interactivity with Excel. This was not possible before Business Central based on the deployment of the previous solution.
- Another specialty manufacturing interviewee cited access across all devices as a major benefit to the fluidity of operations. Previously, users needed to utilize a VPN connection to access ERP functionality.
- The CEO at the final specialty manufacturer also described the benefit of Business Central to its operations: "Our production team simply couldn't keep track of everything on our previous ERP solution. Our product is too complicated. Business Central allows our team to keep track of an order from creation, through production, to delivery."

Modeling and assumptions. For the composite analysis, Forrester assumes that:

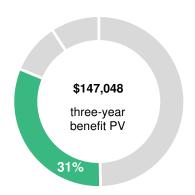
 Fifteen total finance and operations users reclaim 8% of their total working time for their current responsibilities, allowing them to focus on other value-adding initiatives.

- The average yearly rate for each of the finance and operations users is \$73,000.
- Not all reclaimed productivity directly results in value-adding activities. As such, Forrester applies a 75% productivity capture.

Risks. This benefit will vary among organizations based on:

- The average skill and effectiveness of an organization's finance and operations staff.
- The functionality gap between Business Central and an organization's incumbent ERP solutions as it relates to an increase in user efficiency.
- An organization's industry as it affects its ability to customize Business Central for industryspecific functionality.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$147,048.



Impro	Improvement To Flow Of Operations: Calculation Table							
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3			
B1	Total finance and operations users		15	15	15			
B2	Average productivity increase for current responsibilities		8%	8%	8%			
В3	Average yearly rate for finance and operations FTE		\$73,000	\$73,000	\$73,000			
B4	Productivity capture		75%	75%	75%			
Bt	Improvement to flow of operations	B1*B2*B3*B4	\$65,700	\$65,700	\$65,700			
	Risk adjustment	↓10%						
Btr	Improvement to flow of operations (risk-adjusted)		\$59,130	\$59,130	\$59,130			



AVOIDED COSTS OF THIRD-PARTY REPORTING

Evidence and data. One of the interviewees noted to Forrester that the previous on-premises Microsoft Dynamics GP solution proved so cumbersome to the organization's accounting staff that it paid a third-party firm to generate key reports multiple times per year. After migrating to Business Central, accounting could leverage cloud-based Excel integration as well as Power BI to generate its own highly detailed reports.

The interviewee summarized: "Our previous environment was far too complex and customized. We were constantly reconciling multiple systems of record since the only data that was really being produced out of GP was financials, accounts, and schedules. With Business Central and Power BI, that's all changed, and our accountants no longer rely on another firm to customize their reports."

Modeling and assumptions. For the composite organization, Forrester assumes that:

- The company previous used a third-party firm to generate a report once per quarter, on average.
- The cost of each report is \$5,000.

Risks. This benefit will vary among organizations based on:

- The skill and capacity of an organization's finance personnel as it relates to report generation and customization.
- The availability of necessary data to generate insightful reporting.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$44,763.

Avoided yearly paid third-party reporting \$18,000

Avoid	Avoided Costs Of Third-Party Reporting: Calculation Table							
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3			
C1	Cost per customized report		\$5,000	\$5,000	\$5,000			
C2	Reports per year		4	4	4			
Ct	Avoided costs of third-party reporting	C1*C2	\$20,000	\$20,000	\$20,000			
	Risk adjustment	↓10%						
Ctr	Avoided costs of third-party reporting (risk-adjusted)		\$18,000	\$18,000	\$18,000			

9

AVOIDED COSTS OF PREVIOUS SOLUTIONS AND SUPPORT

Evidence and data. Each interviewee characterized the pre-Dynamics 365 Business Central ERP solutions as a disjointed collection of on-premises Microsoft and non-Microsoft solutions, which presented multiple challenges to the organizations as they looked to grow.

- The marketing organization struggled to keep its
 Microsoft GP solution up to date, as a heavy
 amount of customization over the years
 combined with a lack of IT capacity to deploy
 updates led to an out-of-date solution.
- Other interviewees, such as one of the decision makers at a specialty manufacturer, noted that the company could not scale its on-premises ERP solutions with its growth without a significant investment in infrastructure and IT personnel capacity.

Once migrated to Dynamics 365 Business Central, interviewees described multiple sources of reclaimed costs to Forrester.

- The travel organization provisioned licenses for demand, consolidating user licenses and avoiding costs amid the 2020 pandemic.
- After running multiple ERP solutions alongside
 Microsoft Dynamics GP for additional
 functionality, the marketing organization retired
 these solutions and decommissioned the related
 infrastructure for a savings of over \$12,000 per
 year after migrating to Business Central. One of
 the specialty manufacturer interviewees also
 cited savings of nearly \$6,000 per year by
 eliminating redundant non-Microsoft ERP tools.

Modeling and assumptions. For the composite organization, Forrester assumes that:

 The company avoids \$15,000 in costs per year, including licenses fees for now-redundant ERP

- tools and infrastructure after migration to Business Central.
- Decommissioning of solutions and infrastructure occurs on a yearly basis due to contract and capacity constraints. By Year 3 of the analysis, the organization avoids 100% of the cost.
- The organization avoids 16 IT personnel hours per month at \$42 per hour on support, management, and development.

Risks. This benefit will vary among organizations based on:

- The scope of an organization's previously deployed stack of ERP tools and related infrastructure.
- Contract constraints as they relate to an organization's ability to avoid redundant license fees.
- The skill and capacity of an organization's IT personnel supporting the ERP solution.

Avoided Year 3 costs for previous ERP solutions



\$20,758



To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$42,695.

Avoid	Avoided Costs Of Previous Solutions And Support: Calculation Table							
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3			
D1	Cost of incumbent tools and infrastructure		\$15,000	\$15,000	\$15,000			
D2	Percentage of total spend retired		50%	75%	100%			
D3	Retired spend	\$7,500	\$11,250	\$15,000				
D4	IT personnel supporting and developing previous tools		2	2	2			
D5	Hours per month spent on support and development (per IT FTE)		8	8	8			
D6	IT FTE hourly rate (rounded)		\$42	\$42	\$42			
D7	Cost of support and development for previous tools	D4*D5*D6*12 months	\$8,064	\$8,064	\$8,064			
Dt	Avoided costs of previous solutions and support	D3+D7	\$15,564	\$19,314	\$23,064			
	Risk adjustment	↓10%						
Dtr	Avoided costs of previous solutions and support (risk-adjusted)		\$14,008	\$17,383	\$20,758			

UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not able to quantify include:

Improved EX. On Dynamics 365 Business Central, employees are less burdened by some of the common frustrations around finance and operations exacerbated by a disparate set of ERP tools.

One interviewee shared: "The solution is set up for our users so that all their boring tasks are reduced to a minimum and automated. They have more time to spend time with their customer on the phone. They have more time to do the things that make their jobs rewarding."

Integration with other Microsoft products.

Interviewees noted that users within their organizations leveraged connectivity between Business Central and other Microsoft applications to drive further productivity and functionality gains.

The marketing organization users create insightful Power BI reports using data from Business Central. Before migration, the organization could not have deployed Power BI to this level of effectiveness.

Multiple interviewees also reported that they have more effectively deployed SharePoint.

Increased confidence from real-time visibility.

Interviewees noted that their Business Central deployments increased confidence in the numbers they were seeing related to their businesses.

The interviewed financial controller noted the improvement in accuracy when the organization's sales team reports revenue.



FLEXIBILITY

The value of flexibility is unique to each customer.

There are multiple scenarios in which a customer might implement Business Central and later realize additional uses and business opportunities, including:

The scalability of the cloud. Nearly every interviewee described their ability to scale users and license types for their current business needs. During periods of rapid growth or through turbulent times like the 2020 pandemic, organizations have been able to provision their ERP resources accordingly on Business Central and save on cost.

In the wake of the 2020 pandemic, the travel CEO spoke to the company's ability to scale their user totals amid trying times.

"We can scale up or scale down in 10 minutes. Business Central has given us a more resilient cost structure."

CEO, travel

Enabling the future of work. The 2020 pandemic will have short-, medium-, and long-term consequences on the future of work. Forrester predicts that firms that invest in technologies that enable remote work and digital collaboration will ultimately gain a competitive edge via a more engaged workforce.² Interviewees noted that Business Central facilitated their transition to remote work in ways that their previous ERP deployments simply could not:

"We recently completed our migration to Business Central a few months before COVID hit. If we had not, it would have been very bad. People in accounting would have to come into the office, or we would have to set up VPN connections. It would have been a lot of money in a time when we don't have as much money. A financial hardship for our business, a mental hardship for our employees."

Director of IT and operations, direct marketing

The travel CEO added that over 80% of the company's employees immediately transitioned to the home office. Business Central facilitated this transition.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

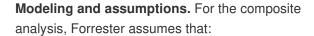
Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs								
REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE	
Etr	Subscription fees paid to Microsoft	\$0	\$20,700	\$20,700	\$20,700	\$62,100	\$51,478	
Ftr	Implementation, ongoing management, and training personnel costs	\$75,038	\$20,700	\$20,700	\$20,700	\$137,138	\$126,515	
	Total costs (risk-adjusted)	\$75,038	\$41,400	\$41,400	\$41,400	\$199,238	\$177,993	

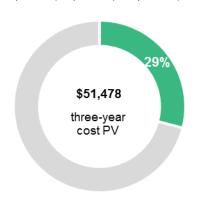
SUBSCRIPTION FEES PAID TO MICROSOFT

Evidence and data. Interviewees pay Microsoft a subscription fee for their usage of Dynamics 365 Business Central. Firms pay the license fee on a permonth, per-user, or per-device basis. Pricing for the composite organization is based on the Dynamics 365 Business Central list price. Microsoft has reviewed these assumptions. For pricing or configuration options specific to your organization, please contact Microsoft.



 The organization pays \$100 per month for each of the 15 Business Central users.

Risks. This cost will vary by organization based on:



- The specific tier of Dynamics 365 Business Central license.
- The number of licenses and/or users.

To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$51,478.

Subsc	Subscription Fees Paid To Microsoft: Calculation Table								
REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3			
E1	Total subscribed users			15	15	15			
E2	Monthly price per user			\$100	\$100	\$100			
Et	Subscription fees paid to Microsoft	E1*E2*12 months	\$0	\$18,000	\$18,000	\$18,000			
	Risk adjustment	↑15%							
Etr	Subscription fees paid to Microsoft (risk-adjusted)		\$0	\$20,700	\$20,700	\$20,700			



IMPLEMENTATION, ONGOING MANAGEMENT, AND TRAINING PERSONNEL COSTS

Evidence and data. The interviewees collectively described a migration experience that averaged three months from concept to implementation. Interviewees stressed that while the actual implementation of the software was quite straightforward (cloud delivery), the change management required to alter the way employees have been working represented the most significant challenge.

- The CEO at one of the specialty manufacturers summarized the change management required for the organization: "The human management, telling people to accept the new system and work in a new way, was the greatest obstacle. And that's not easy, but we managed that quite well by selling them on the benefits before we went live."
- Another interviewee noted that, compared to the previous on-premises Microsoft ERP solution, Business Central in the cloud was quite intuitive, which promoted a quick ramping period of users: "There's a bit of fear when you move to a new platform and change the way people have been doing things for the last couple of years. Our users learned Business Central quickly, and they are not regretting the move."
- Each of the organizations either dedicated IT and business FTE resources to implementation efforts or worked with a third-party for consulting services to implement Business Central.
- Most of the organizations provided structured training for users on Business Central once deployed to maximize their initial effectiveness on the solution.

Modeling and assumptions. For the composite organization and financial analysis, Forrester assumes that:

- Four IT and business FTEs spend 50% of their working time over four months on the initial implementation of Business Central.
- The average yearly rate for an IT or business
 FTE working on implementation is \$90,000.
- Once deployed, one IT FTE spends 20% of their time managing and continuing to develop on Business Central for the subsequent years of the analysis.
- Each of the 15 Business Central users undergoes an initial 10 hours of training to maximize their effectiveness on the platform from initial implementation.

Risks. This cost will vary among organizations based on:

- The skill and effectiveness of the FTEs managing Business Central's deployment or that of the third-party consultancy working with an organization on deployment.
- An organization's change management tendencies as they related to user training and effectiveness.

To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of \$126,515.



Average implementation

4 months

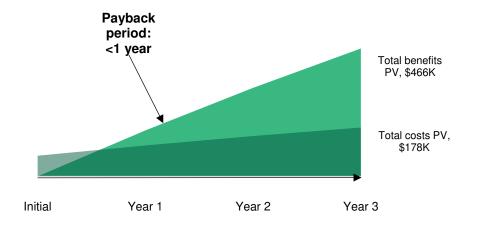
Imple	Implementation, Ongoing Management, And Training Personnel Costs: Calculation Table								
REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3			
F1	Implementation: required personnel		4						
F2	Implementation and initial ramping: duration (years)		0.33						
F3	Implementation: personnel time on task		50%						
F4	Average personnel yearly rate		\$90,000	\$90,000	\$90,000	\$90,000			
F5	Implementation: total personnel cost	F1*F2*F3*F4	\$60,000						
F6	Ongoing management: required personnel			1	1	1			
F7	Ongoing management: time on task			20%	20%	20%			
F8	Ongoing management: total personnel cost	F4*F6*F7		\$18,000	\$18,000	\$18,000			
F9	Training: total users		15						
F10	Training: hours per user per year		10						
F11	Training: user hourly rate (rounded)		\$35						
F12	Training: total personnel cost	F9*F10*F11	\$5,250						
Ft	Implementation, ongoing management, and training personnel costs	F5+F8+F12	\$65,250	\$18,000	\$18,000	\$18,000			
	Risk adjustment	↑15%							
Ftr	Implementation, ongoing management, and training personnel costs (risk-adjusted)		\$75,038	\$20,700	\$20,700	\$20,700			

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Financial Summary

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.



These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	(\$75,038)	(\$41,400)	(\$41,400)	(\$41,400)	(\$199,238)	(\$177,993)
Total benefits	\$0	\$184,213	\$187,588	\$190,963	\$562,763	\$465,970
Net benefits	(\$75,038)	\$142,813	\$146,188	\$149,563	\$363,525	\$287,977
ROI						162%
Payback period						Less than 1 year

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendix B: Supplemental Material

Related Forrester Research

"Look Beyond ERP: Introducing The DOP," Forrester Research, Inc., October 8, 2019.

"Modernize Core Applications With Cloud," Forrester Research, Inc., August 5, 2019.

"On-Premises ERP: Should You Love It Or List It?" Forrester Research, Inc., July 17, 2020.

"The New, Unstable Normal: How COVID-19 Will Change Business And Technology Forever," Forrester Research, Inc., July 14, 2020.

Appendix C: Endnotes

¹ Source: "On-Premises ERP: Should You Love It Or List It?" Forrester Research, Inc., July 17, 2020.

² Source: "The New, Unstable Normal: How COVID-19 Will Change Business And Technology Forever," Forrester Research, Inc., July 14, 2020.

