2020 STATE OF REVENUE

A SURVEY OF SENIOR EXECUTIVES

Model N



INTRODUCTION

Business executives have long managed a wide range of factors in order to maximize revenue growth. Today, in the digital era, the number of factors they must consider has increased exponentially, introducing a quantity of data and levels of complexity not seen before.

As a result, businesses are considering new and automated ways of operating, including innovative trends like artificial intelligence, which offers a compelling way to cope with and harness the power of all this data. Data and Al can now be leveraged across a wide range of business processes: rebates, contracts, price modeling, compliance, and more. Many functional areas, including sales, marketing, finance, IT, and operations teams, are grappling with how the digital age impacts their business and, specifically, how they manage revenue.

Historically, the travel industry has been at the forefront of revenue management innovation, with airlines and hotels offering highly customized pricing to optimize inventory availability. More recently, the advantages of revenue management have been embraced across all types of businesses. Highly regulated life sciences companies, such as pharmaceutical and medical device manufacturers,

use revenue management to manage pricing and discounts across various markets and governments to meet local requirements without jeopardizing overall revenues. Semiconductor, electronic component manufacturers (ECMs), and high-tech manufacturing companies have embraced revenue management to manage complex channel and incentive models while operating in a highly competitive global environment.

This research examines the reality of modern revenue management and endeavors to answer important questions: How are modern executives dealing with the challenges of revenue management? In which areas can companies do better? What role can technology play in delivering better outcomes? The following report, sponsored by Model N, is based on an online survey of 306 C-level executives responsible for revenue management at large pharmaceutical, medical technology, semiconductor/ ECM or high-tech manufacturing companies.





KEY FINDING #1

Executives struggle to deliver optimize and manage revenue

82%

say revenue management is increasingly difficult

ΑI

continues to top the list of trends impacting revenue management

98%

of executives face challenges with revenue management

73%

agree their pricing decisions leave money on the table

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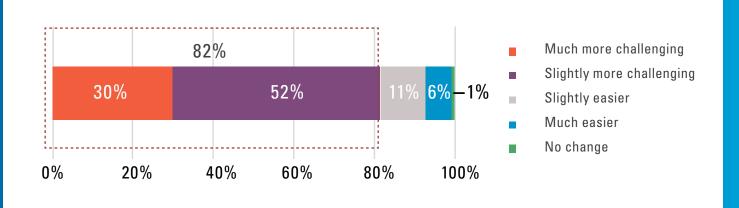
Detailed Findings: Executives struggle to effectively optimize and manage revenue

REVENUE MANAGEMENT IS INCREASINGLY DIFFICULT

Revenue management has never been easy. Even the most basic task of setting a price that balances optimal customer value and business profit is difficult. But revenue management goes much further. It is a significant and cross-functional effort to manage the complexity of product availability, channels, geographies, rebates, and contracts all while maintaining compliance requirements and strong customer relations. Revenue management is a mission-critical process for the success of any company, and this research shows that it is becoming increasingly complex and harder to manage in today's business environment.

Today's senior executives are saying that this exacting job is becoming even more challenging. When asked how the effort needed to deliver effective revenue management has changed in recent years, the vast majority (82%) say that it has become more difficult. This includes close to a third (30%) that characterize the change as "much more challenging" today than five years ago.

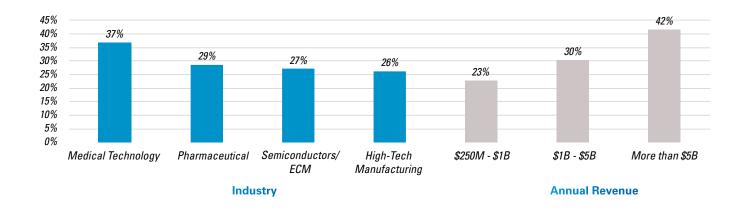
HOW HAS THE EFFORT NEEDED TO DELIVER EFFECTIVE REVENUE **MANAGEMENT CHANGED IN THE PAST 5 YEARS?**



These changes have been particularly challenging for executives at large companies. More than 2 in 5 (42%) of executives working at companies with more than \$5B in annual revenue characterize the change in revenue management effort as "much more challenging" compared to less than a quarter (23%) of executives at companies with only \$250M - \$1B in annual revenue. Executives at medical technology companies were more likely to say that revenue management was "much more challenging" than their counterparts in other industries surveyed.



"MUCH MORE CHALLENGING"



Multiple factors impact revenue management, with AI topping the list

has been the top trend impacting the way companies manage revenue for the past two years

To try and understand some of the factors causing this increased difficulty, we asked about the impact of a variety of business trends in the way companies manage revenues. The list was broad - eight different trends were selected by more than half of our participants as having a "large" impact on the way their companies manage revenue. This list covered a wide range of trends. Technology factors took the top spots, with artificial intelligence topping the list (#1) followed closely by digital transformation (#2). Cloud applications and infrastructure (#4) also had a high ranking. The emerging millennial workforce (#5) and geopolitical disruption, including Brexit and trade wars, (#3) rounded out the top five in the list.

Artificial intelligence continues to be the top trend having a large impact on the way companies manage revenue among all four industries surveyed. The research indicates that this is an ongoing change to which companies are continuing to respond, as AI was also identified as the top trend impacting the way companies manage revenue in a similar survey conducted by Model N in 2019.

How much of an impact is each of the following trends currently having on how your company manages revenue?

- 1 Artificial intelligence
- 2 Digital transformation
- **3 Geopolitical disruption** (Brexit, trade wars, US policy changes, etc.)
- 4 Cloud (SaaS applications, infrastructure in the cloud, etc.)
- **5** Emerging millennial workforce
- **6** Subscription economy
- **7 On-demand work** (gig, contingent, and contract workers)
- **8** Aging Workforce

Revenue execution moments increasing dramatically

76%

of executives report that the number of individual revenue execution moments at their company has increased by more than 10 times in just 5 years!

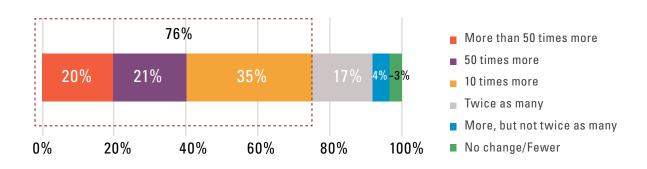
Revenue execution moments are individual decisions, transactions, or processes that impact revenue. Each of these moments can matter independently, but taken as a holistic revenue management operation, the impact on business outcomes is very significant.

In order to understand how the number of individual decision moments is changing, we asked participants to take a moment and think of all the "revenue execution moments" that occur in their organization. Examples of revenue execution moments were provided to clarify the vocabulary. This included setting and updating pricing strategies, generating and updating quotes, discounting, managing and

processing rebates, and creating/ editing/managing contracts.

With modern businesses being more globally and digitally connected, and modern analytics providing information that enables nuanced decision-making, it would not be surprising for executives to report an increase in revenue decision points. What is surprising is the extent of the increase. A remarkable 76% of executives report that the number of individual revenue execution moments at their company has increased by more than 10 times in just 5 years! This includes 1 in 5 (20%) that report that the increase has been more than 50 times as many, a phenomenal rate of change in only a few years.

HOW MANY MORE REVENUE EXECUTION MOMENTS DID YOU HAVE IN 2019 (THE PAST YEAR) THAN IN 2014 (5 YEARS AGO)?



Almost all companies reported challenges with revenue management

Executives report wide range of challenges with revenue management

To gain a deeper understanding of the specific difficulties faced with revenue management, we asked about challenges faced both by companies as well as by the executives during the course of their work.

Companies clearly face issues with revenue management. Almost all (98%) reported challenges. The top issues indicated included increasing volatility of pricing and market demands (51%), difficulties managing global pricing (40%), and compliance with regulatory requirements (44%).

Pharmaceutical companies were much more likely to say that pricing and market demands were difficult (64%), semiconductor/ECM organizations reported the most challenges with real-time visibility (47%), and medical technology companies struggled more with the different needs of a wide range of channels and market segments (39%).

WHAT CHALLENGES DOES YOUR ORGANIZATION FACE WITH REVENUE MANAGEMENT?



While executives may be hesitant to admit that they struggle with job-related responsibilities, almost all executives in our study (98%) reported that they personally deal with challenges related to revenue management in their work.

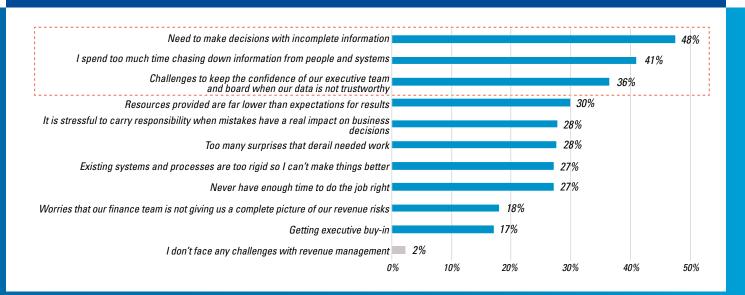
It is particularly interesting to note that the top three revenue management challenges that executives personally deal with have to do with data. Almost half (48%) need to make decisions with incomplete data information, many need to chase down information from people or systems because it is not readily available (41%), and more than a third (36%) deal with untrustworthy data that impacts their ability to keep the confidence of the executive team and board.

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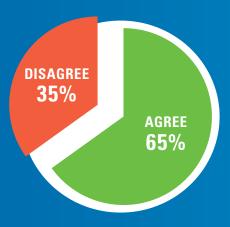
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Marketing executives are the most likely to report that they face challenges. They are also more likely to report that they are worried their finance team is not giving them a complete picture of risk. Sales executives are more likely to have concerns about getting executive buy-in for revenue management decisions, as well as being more likely to say that they never have enough time to do the job right.

WHAT CHALLENGES DO YOU PERSONALLY FACE WITH REVENUE MANAGEMENT?



"I AM LESS **CERTAIN ABOUT THE ACCURACY** OF OUR REVENUE **REPORTS NOW THAN** I WAS FIVE YEARS AGO."



The concern that senior executives have about the data and information they rely on for effective revenue management is a recurring theme throughout the study. In addition to topping the list of personal challenges, this topic also came up in questions about accuracy of data. It is unnerving to discover that in spite of recent advances in technology, particularly around data and analytics, about two-thirds (65%) of executives are actually LESS confident in the accuracy of their revenue reports today than they were a few years back.

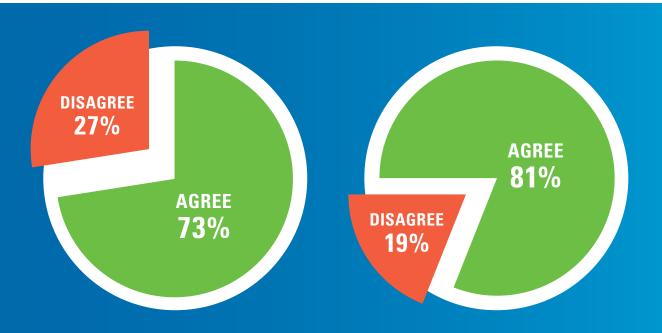
73%

Almost three quarters of senior executives (73%) expressed frustration that they were leaving money on the table with their pricing decisions.

Executives report revenue management issues directly impact business outcomes

The senior executives in this study were very clear on the direct connection between their revenue management decisions and overall business outcomes. Almost three quarters (73%) expressed frustration that they were leaving money on the table with their pricing decisions as they didn't have a clear path to resolve the problem.

It is impossible to calculate the exact impact of addressing revenue management concerns, as the potential for change is complex and the specific impact is unique to each business, but it is clear that senior executives believe that the potential is huge. A remarkable 81% put the potential impact of revenue issues for their industry in the trillions of dollars!



"WE KNOW WE LEAVE MONEY **ON THE TABLE WITH OUR** PRICING DECISIONS, BUT WE DON'T KNOW HOW TO FIX IT." "OUR OVERALL INDUSTRY LOSES TRILLIONS OF DOLLARS BECAUSE OF REVENUE ISSUES SUCH AS LEAKAGE. **INEFFICIENT PRICING, AND OFFERING LOWER PRICES THAN NEEDED."**

KEY FINDING #2

Executives know their revenue management practices can be improved

99%

can identify places where they can improve revenue management

95%

report that they face issues with revenue leakage

63%

expect that closing all revenue leakage would impact revenues by 4% or more

98%

say their customers are exposed to conflicting pricing

90%

report regulatory compliance has a direct contribution to revenue loss



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Detailed Findings:

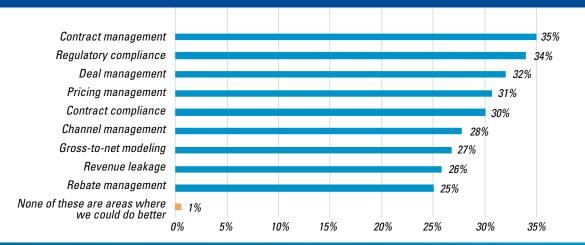
Executives know their revenue management practices can be improved

EXECUTIVES CAN EASILY IDENTIFY PLACES FOR IMPROVEMENT

While revenue management is challenging, executives do not believe it is impossible to fix. When asked about areas that had the potential to impact overall business results if they were managed more effectively, executives were overwhelmingly (99%) able to identify functions where better reporting or improved processes could make a difference. We asked participants to identify up to three areas, and most did choose all choices permitted – a clear indication that they see multiple areas where they could improve.

Specific areas with the potential for improvement did vary among different types of participants. High-tech manufacturers were particularly likely to identify regulatory compliance (46%) and price management (37%) as target functions to do better, while pharmaceutical companies were more likely to report they would have the best results from focusing on revenue leakage (36%) and contract compliance (40%). Among semiconductor/ECM companies, there were higher expectations of impact from improvements in contract management (43%) and rebate management (36%).





This report will focus on three specific areas of revenue management improvements to gain a more nuanced understanding of specific issues and potential: revenue leakage, price management, and compliance.

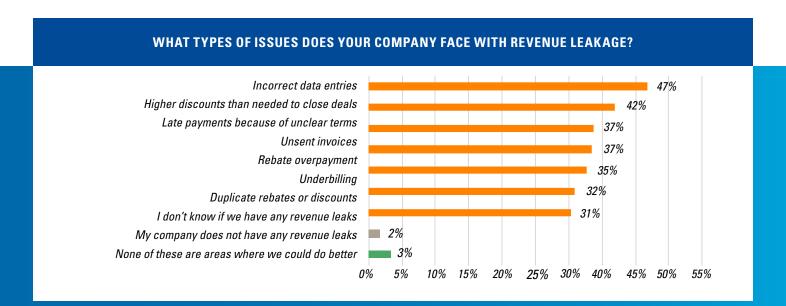
Executives report that closing revenue leakage would have clear impact on revenues

Revenue leakage is an issue that clearly impacts most (95%) companies. Revenue leakage occurs in myriad ways. Incorrect data entry (47%) is a particularly common problem. There are also issues reported with giving higher discounts than needed to close deals (42%), late payments because of unclear terms (37%), unsent invoices (37%), rebate overpayments (35%), underbilling (32%), and duplicate rebates or discounts (31%).

Certain industries face higher levels of problems with revenue leakage. Medical technology companies are most likely to deal with issues around unsent invoices (46%) and rebate overpayment (41%). Pharmaceutical companies report the highest levels of late payments (47%), and high-tech manufacturing is most likely to face issues with underbilling (37%).

95%

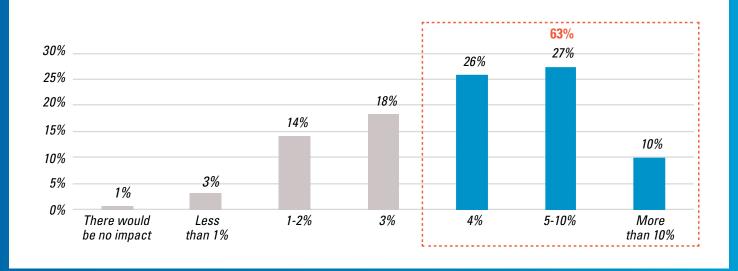
of companies are impacted by revenue leakage



About two thirds estimate that if they could identify and close revenue leakage issues, there would be an impact of 4%.

The impact of this revenue leakage is staggering. It is difficult to know exactly what amount of revenue is lost due to leakage, since these are usually the result of errors that are fiendishly difficult to track. But what this research does show is that executives believe the number, whatever it is, is very high. About two thirds (63%) estimate that if they could identify and close all revenue leakage issues, there would be an impact of at least 4% of their overall revenues! And while there may be some disagreement on the exact percentage, there is close to unanimous agreement (99%) that there would be an impact on revenues.

IF YOUR ORGANIZATION IDENTIFIED AND CLOSED ALL REVENUE LEAKAGE ISSUES, WHAT IS YOUR BEST GUESS FOR THE POTENTIAL IMPACT TO OVERALL REVENUES?





The vast majoring of companies in our study report that they face issues with price management.

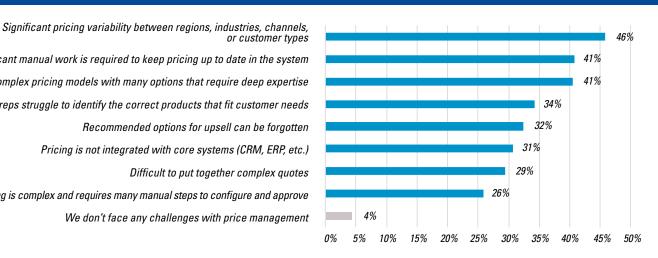
Conflicting pricing is an ongoing and embarrassing revenue management problem

Price management is another area where companies face revenue management challenges. The vast majority (96%) of companies in our study report that they face issues with price management.

The problems reported include variability of pricing between regions, industries, channels, and types of customers (46%), manual work to keep pricing up to date (41%), complex pricing models (41%) and much more. High-tech manufacturing companies were most likely to report they had issues because their pricing processes were not integrated into core systems such as CRM and ERP, executives at semiconductor and ECM companies were more concerned about pricing variability issues, pharmaceutical companies highlighted the issues they face with pricing models requiring deep expertise, and medical technology executives were most likely to report issues with manual work to keep pricing up-to-date.

WHAT CHALLENGES DOES YOUR COMPANY FACE WITH REVENUE MANAGEMENT?

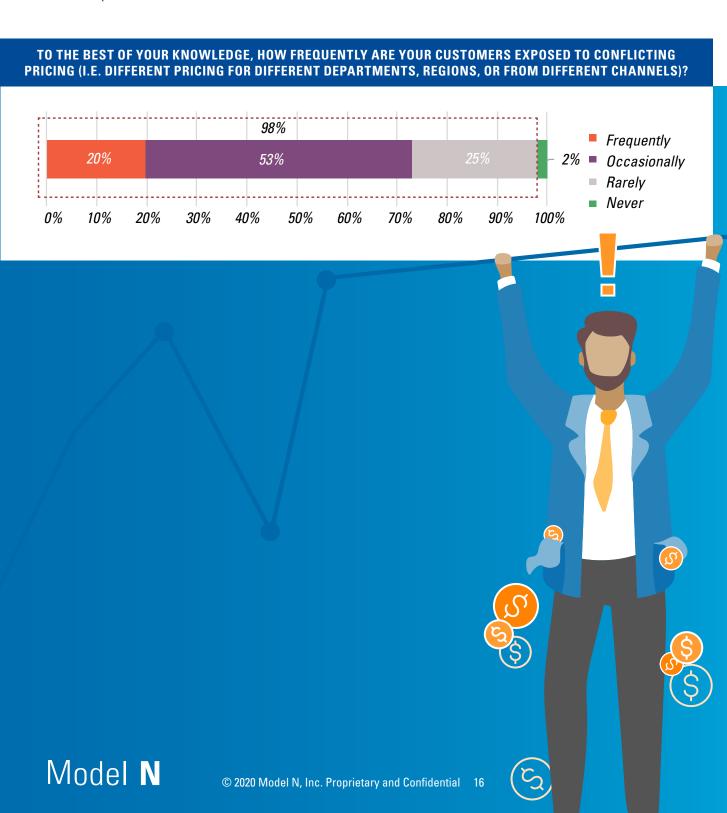
or customer types Significant manual work is required to keep pricing up to date in the system Complex pricing models with many options that require deep expertise Sales reps struggle to identify the correct products that fit customer needs Recommended options for upsell can be forgotten Pricing is not integrated with core systems (CRM, ERP, etc.) Difficult to put together complex quotes Quoting is complex and requires many manual steps to configure and approve We don't face any challenges with price management



Issues with price management are particularly problematic when confusion leaks through to the customers. Senior executives strongly agree (84%) that when customers are exposed to conflicting pricing from sources in different regions or channels, it is embarrassing. Worse, it will have a direct revenue impact as the customers will demand the lower of the prices they are shown.

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Unfortunately, exposing customers to conflicting pricing is a worrisomely common occurrence. It happens at almost all companies (98%), at least occasionally. And an alarming 20% say that their customers are "frequently" exposed to conflicting pricing. This is particularly problematic at the largest organizations. At companies with annual revenues above \$5B an alarming 40% of executives report conflicting pricing is a frequent occurrence.



High levels of regulation have a direct impact on top-line results

Both pharmaceutical and medical technology companies are being forced to accept lower price points.

All organizations represented in this study deal with regulation. All participants (100%) indicated that their companies were regulated, including 22% that characterized themselves as "slightly regulated" and 78% that indicated they were "highly regulated." Regulations are particularly high among the life sciences with all (100%) pharmaceutical companies and almost all (95%) medical technology companies indicating that they were "highly" regulated.

Regulatory compliance is frequently (90%) associated with lost revenue. This occurs in a variety of ways including being forced to accept lower price points to avoid risk of regulatory errors (48%), avoiding engaging with some new customers because of regulatory concerns (46%), delaying revenue while regulations are reviewed (45%), and avoiding contracting arrangements due to regulatory concerns (37%). The life sciences are particularly impacted by being forced to accept lower price points (56% for both pharmaceutical and medical technology companies.)

IN WHAT WAYS DOES YOUR COMPANY EXPERIENCE REVENUE LOSS AS A RESULT OF REGULATORY COMPLIANCE?



of senior executives worry about the potential for future regulations

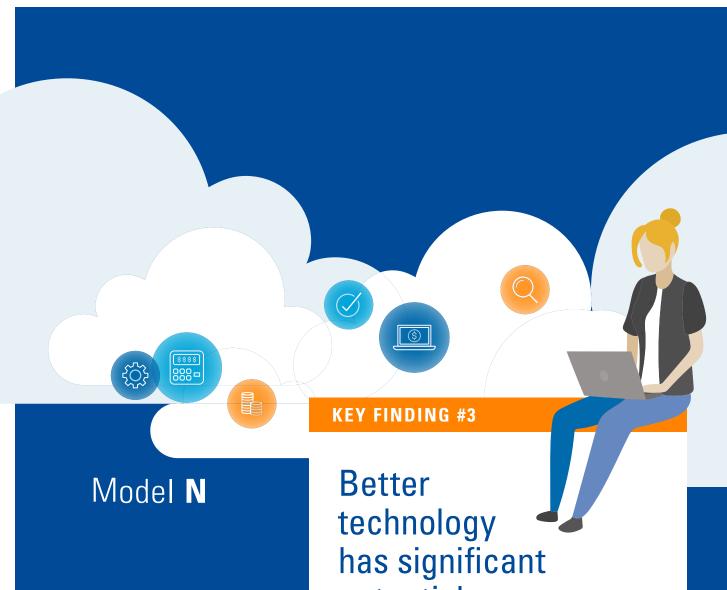
Senior executives are not just dealing with current compliance issues, they worry that the future will bring even more regulations. Most (86%) are concerned about the potential for future regulations that could have additional revenue impact, including a third (33%) that are "very" concerned. These worries are highest among executives at the largest companies, with 60% saying they were "very" concerned about future regulations, more than twice as many as executives at firms of smaller sizes.

HOW CONCERNED ARE YOU THAT NEW OR ADDITIONAL REGULATIONS COULD IMPACT FUTURE REVENUES? More than \$5B 60% 36% 4% Very concerned 29% 16% \$1B - \$5B Somewhat concerned Not concerned \$250M - \$1B 25% 59% 16%









potential to impact outcomes

99% would benefit from additional revenue management capabilities

91% agree that cloud is the ideal approach to revenue management technology

61% report that better technology would add millions of dollars to their company's top line

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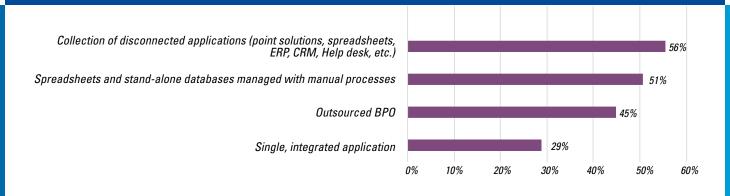
Detailed Findings: Better technology has significant potential to impact outcomes

TECHNOLOGY FOR MANAGING REVENUE IS STILL VERY DISJOINTED

Revenue management is a natural fit for technology solutions. Tracking and analyzing huge amounts of complex data is impossible without modern applications and infrastructure. However, many companies rely on outdated technology for revenue management. Error-prone and inefficient stand-alone databases and spreadsheets operated in a manual fashion are used for revenue management by more than half of companies (51%). When applications do exist, they are frequently a collection of disconnected point solutions (56%). Close to half (45%) say they have given up direct control of their data and outsourced to a BPO.

Less than a third (29%) have modern technology that delivers revenue management capabilities in a single, integrated application. While this is slightly more common at pharmaceutical (36%) and high-tech manufacturing companies (34%), it is still a very low rate. There are significant opportunities for applications to improve.

WHICH OF THE FOLLOWING BEST DESCRIBES THE TECHNOLOGY (SYSTEMS, APPLICATIONS, DATA ANALYSIS TOOLS, ETC.) THAT YOUR ORGANIZATION USES FOR REVENUE MANAGEMENT?



The vast majoring of companies in our study report that they face issues with price management.

Companies would benefit from a wide range of revenue management capabilities

Executives are aware of the potential for technology to help solve their revenue management issues. Almost all (99%) are able to identify specific capabilities that would benefit the unique needs of their organization, with real-time visibility into revenue performance, channel sales, and inventory data topping the list (47%). Sales executives are more likely to look to technology solutions to help eliminate inefficiencies that result in inaccurate or too-low pricing. Marketing executives are most likely to see value in real-time visibility into revenue performance.

WHICH OF THE FOLLOWING TECHNICAL CAPABILITIES FOR REVENUE MANAGEMENT WOULD BE BENEFICIAL TO YOUR ORGANIZATION?

Real-time visibility into revenue performance, channel sales and inventory data Improve the speed and accuracy of doing business with channel partners

Identify and reduce revenue leakage

Handle complexity and high volume in pricing and contracts

Improve discount and volume compliance

Eliminate inefficiencies that result in inaccurate or too-low pricing

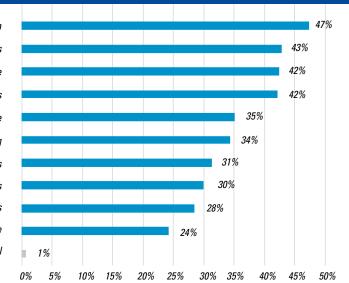
Unify processes and data flow across entire revenue execution process

Eliminate incentive, rebate, or chargeback overpayments

Reduce manual and error-prone processes

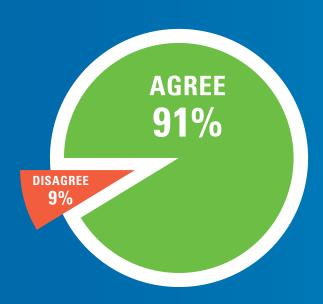
Ensure regulatory and contract compliance

None of these would be beneficial



Executives prefer cloud solutions for revenue management

While executives vary in the types of technology capabilities that would help their revenue management efforts, their opinion on how that technology should be hosted is consistent. The data shows that the industry-wide excitement about cloud is just as strong for revenue management. More than 9 in 10 (91%) senior executives responsible for revenue management report that their ideal technology solution would be cloud based.



"THE IDEAL REVENUE MANAGEMENT SOLUTION WOULD BE CLOUD BASED."

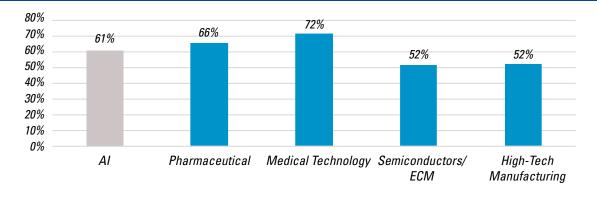
Great revenue management technology could impact a company's top line by millions

Everyone agrees that technology would have a positive impact on top-line results.

It is always challenging to calculate the ROI of any new technology even when you know your environment and the capabilities to be implemented, but we did want to get a sense of what potential there would be for revenue management technology to have on top-line results. We asked our participants to imagine the scenario where they had their ideal technology for revenue management, and then we asked them what the most likely impact would be on top-line results for their company if that technology were in place.

There was complete agreement (100%) that technology would have a positive impact on top-line results. And many reported that the impact would be significant. Close to two-thirds (61%) expected that their ideal revenue management technology would have a top-line impact of "millions" of dollars. This expectation was highest at medical technology companies where 72% cited a potential impact in the millions.

"THE IDEAL TECHNOLOGY FOR REVENUE MANAGEMENT WOULD POTENTIALLY **IMPACT OUR TOP-LINE REVENUE BY MILLIONS OF DOLLARS."**

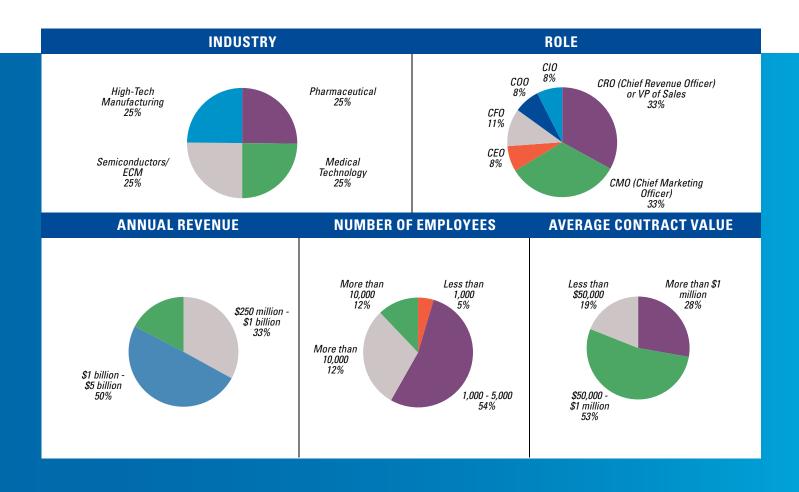




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Survey Methodology and **Participant Demographics**

In January 2020, Model N commissioned an independent research firm, Dimensional Research, to conduct an online survey of independent sources of senior executives working in select industry verticals. A total of 306 qualified executives completed the survey. All participants had direct responsibility for revenue management in an executive role at a company with more than \$250 million in annual revenue. A variety of questions were asked on a range of topics including current approach to revenue management, opportunities to improve it, and the role of technology.





About Dimensional Research

Dimensional Research® provides practical market research for technology companies. We partner with our clients to deliver actionable information that reduces risks, increases customer satisfaction, and grows the business. Our researchers are experts in the applications, devices, and infrastructure used by modern businesses and their customers. For more information, visit dimensionalresearch.com.

About Model N

Model N is a leading provider of cloud revenue management solutions for life sciences and high tech companies. Driving mission-critical business processes such as pricing, quoting, contracting, regulatory compliance, rebates and incentives, our software helps companies know and grow their true top line and maximize every revenue moment at speed and scale. With deep industry expertise, Model N supports the complex business needs of the world's leading brands in pharmaceutical, medical technology, semiconductor, and high tech manufacturing across more than 120 countries, including Johnson & Johnson, AstraZeneca, Novartis, Microchip Technology and ON Semiconductor. For more information, visit www.modeln.com.

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