The Software Industry: Pricing benchmark results

Technology Institute

August 2015

pwc

Table of contents

1. Introduction to the software industry pricing survey

In 2014-2015 PwC conducted a pricing survey, which had participation from 32 leading companies across the software industry ranging from startups to Fortune 50 companies. The survey covered elements of pricing across strategy, price formulation, transaction management, and performance management. The insights shared in this document summarize the survey results and PwC's extensive experience in advising on pricing for software companies.

The table below shows the range of professionals who responded to the survey, by business area.

Business area	Position/ title
Finance	CFO
	VP, Finance
Pricing	VP, Pricing & Licensing
	Senior Director, Pricing
	Director, Global Pricing
	Senior Manager, Pricing
Marketing and Sales Ops	VP, Marketing
	VP, Product Management
	VP, Sales Strategy & Operations
	Director, Product Marketing
	Director, Pricing Operations
	Director, Strategy & Business Development
	Senior Manager, Sales Ops
	Product Manager, Monetization

We would like to extend our sincere thanks to all respondents for taking the time to complete the survey. The survey was conducted online through a secure survey tool which enabled confidentiality of all company specific data. All data was summarized, aggregated, and anonymized in a manner that further protected confidentiality.

2. Scope

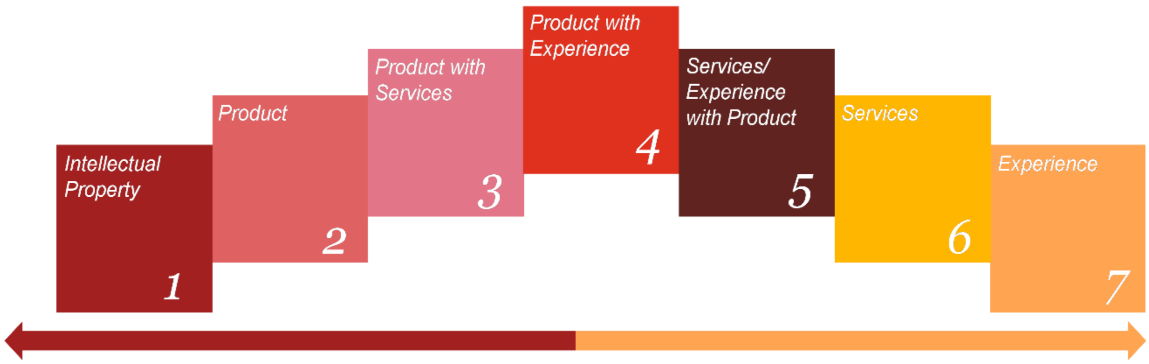
The survey has been developed using PwC's pricing framework, which covers all aspects of pricing in a holistic manner. This framework includes four elements - pricing strategy, price formulation, transaction management, and performance management. The survey also analyzes the maturity of participating companies' pricing practices, compared with leading practices in the software industry.

Chart 1: PwC's pricing framework

3. Summary observations

Today's software industry is characterized primarily by seven business models. Irrespective of the model used, software companies are under increasing margin pressure primarily due to an inability to understand the true cost to serve customers and the value perceived by customers.

Chart 2: Software companies business models



Characteristics	*Value is closely tied to product features and functionality*	↔	*Value is determined upon consumption*
Pricing Model	***License*** ↔	***Bundle, tiered*** ↔	***Freemium, subscription***
Examples	*Norton Antivirus software, Microsoft Office*	*Dropbox, Spotify*	*Autodesk 360, LinkedIn*

Key observations

1. Pricing strategy

Companies consider the market's willingness to pay in developing a product's pricing strategy but are unable to assign value and develop offerings that will capture the value.

2. Price formulation

Market-segment-based price books are not actively used; regional price books are based on local currencies, but a lack of rigor in updating local price books causes revenue leakage.

3. Transaction management

High discounting levels, ineffective rebates, and under-used deals desk highlight governance gaps in transaction management among participants.

4. Performance management

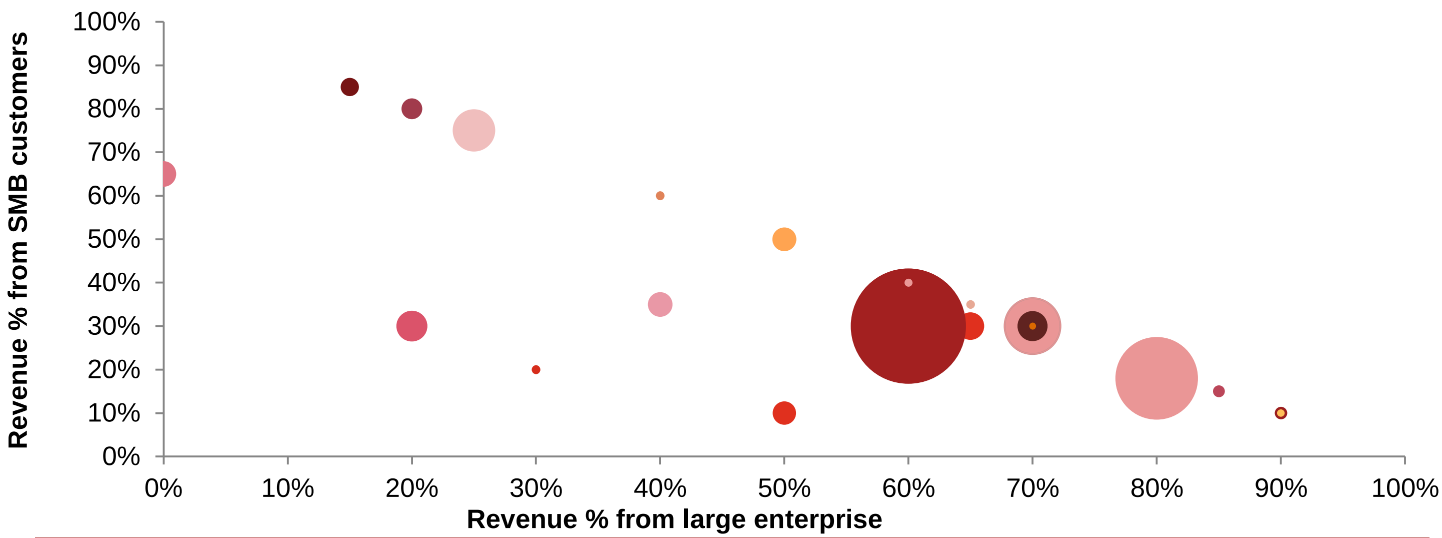
Performance management infrastructure and analysis do not adequately include customer lifetime value and cost to serve.

4. Analysis and findings

4.1. Profile of participating companies

Thirty two companies participated in the first phase of the software industry pricing survey. These companies have annual revenue ranging from $100 million to $86 billion, with a median of $3 billion. A majority of the companies generate over 50% of their revenue from large enterprise customers.

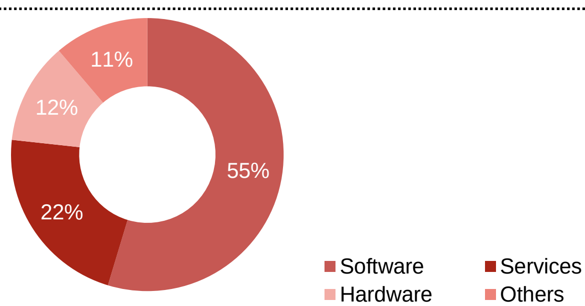
Chart 3: Revenue profile of participating companies



Based on publicly available data sources or survey responses; data not available for all companies. Size of each bubble represents participating company revenue.

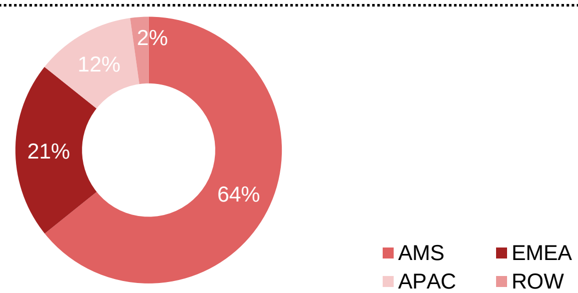
On average, software and service offerings account for over 77% of participating companies' revenue. Hardware offerings account for 12% of total revenue.

Chart 4: Revenue by offering type



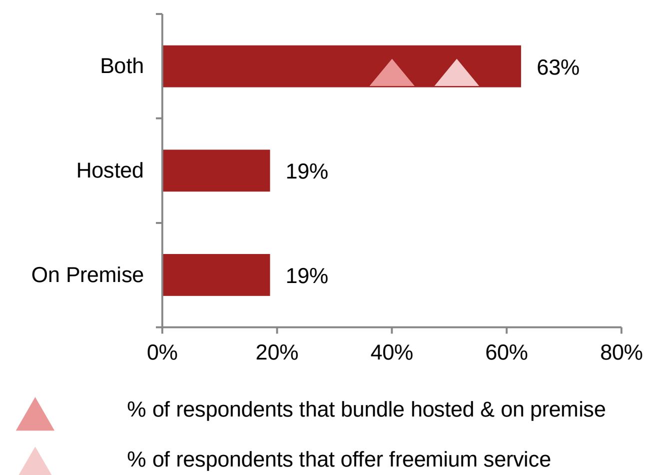
On average, the America region accounts for over 64% of revenue for participating companies. EMEA accounts for 21% of revenue.

Chart 5: Revenue by region



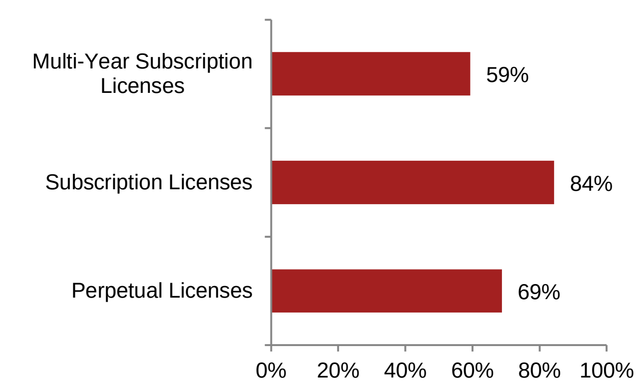
The service profiles of participating companies indicate a mix of traditional and emerging ("as-a-service") models. We observed that an increasing number of companies are providing "as-a-service" offerings. 67% of participating companies offer both hosted and on- premise solutions; 30% bundle on-premise and "as-a-service" offerings.

Chart 6: Service type



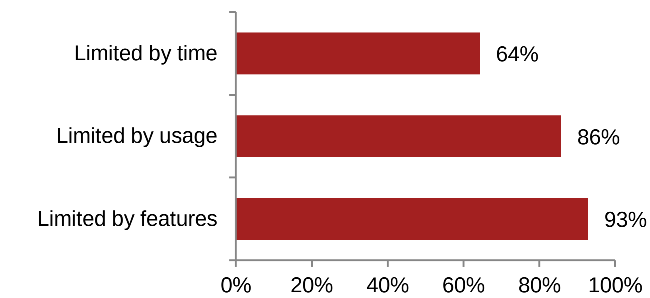
The subscription-based pricing model is supplanting the perpetual license model among participating companies. Eighty-four percent of participating companies offer a subscription-based pricing model for their products and services.

Chart 7: License type



Fifty percent of participating companies use a freemium model for customer acquisition and segmentation. Among companies offering a freemium model, usage-based and feature-based models are the most common.

Chart 8: Freemium model



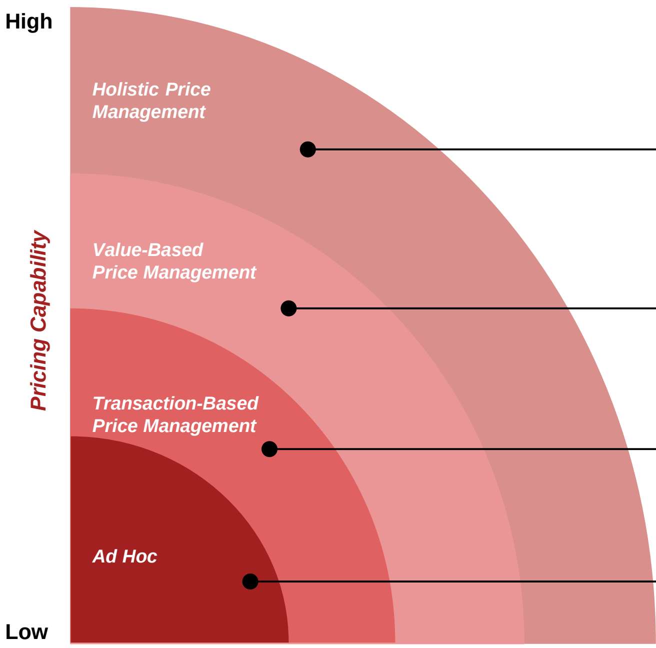
Sixty-three percent of participating companies offer both hosted and on-premise solutions.

4.2. Pricing maturity

Using PwC's pricing capability maturity model, the survey evaluated maturity of pricing practices across the pricing organization, process, technology, and data analytics dimensions.

Chart 9: PwC's Pricing maturity framework

Pricing capability maturity model

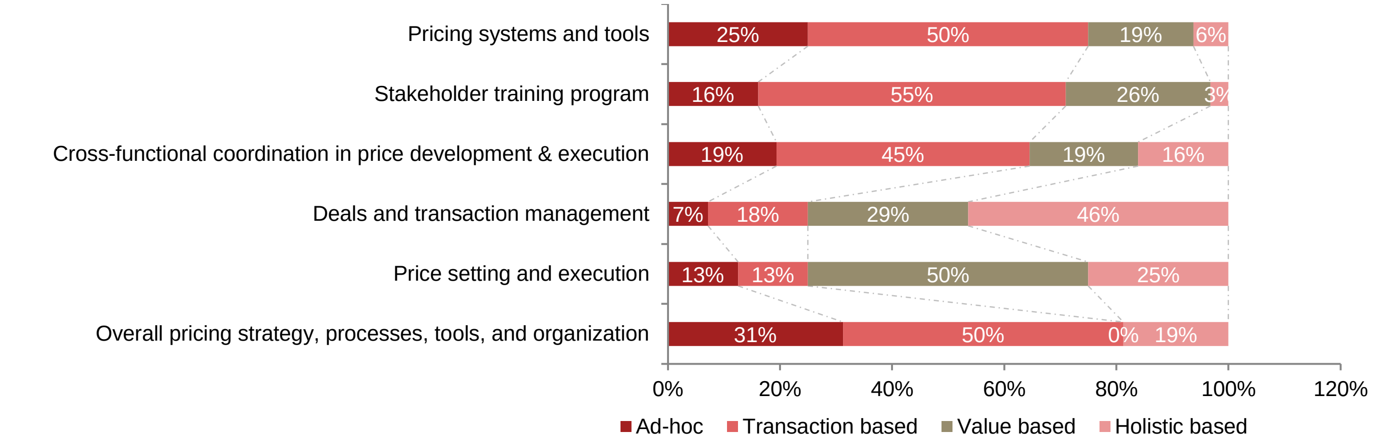


Organization	*Process*	*Technology*	*Data and Analytics*
Pricing organization has fully integrated function to optimize pricing throughout the value chain	Formal and standardized processes for price optimization throughout the whole value chain	Complete pricing platform integrating price setting, price optimization, management, market and customer data	On-going management of pricing based on economic, customer, and sales data
Formal customer analytics and market intelligence function	Formal and standardized processes for price optimization	Pricing optimisation system integrated with price management	Monthly price management based on customer and sales data
Centralized price setting and price management function	Formal and standardized processes for price setting and price management	Price management system has been implemented	Quarterly price management based on market and sales data
No centralized price setting and management organization	No formal or standardized processes in place	Underutilization of available tools or Excel-spreadsheet-driven	Annual Price management based on sales data

Eighty-one percent of respondents rate their overall pricing function maturity (in terms of strategy, process, organization, and tools) **at transaction-based level or below. Deals and transaction management is the most mature process** area among participating companies. Seventy five percent of respondents have formal and standardized deals and transaction management process. Approximately 75% of respondents practice value-based price setting and price execution.

However, **pricing systems and tools form the least mature category**, with **75%** of respondents using ad-hoc or transaction-based analytics infrastructure and techniques. Most respondents are also lagging on stakeholder training programs and cross-functional coordination for price development and execution.

Chart 10: Ratings of pricing function maturity



4.3. Pricing strategy

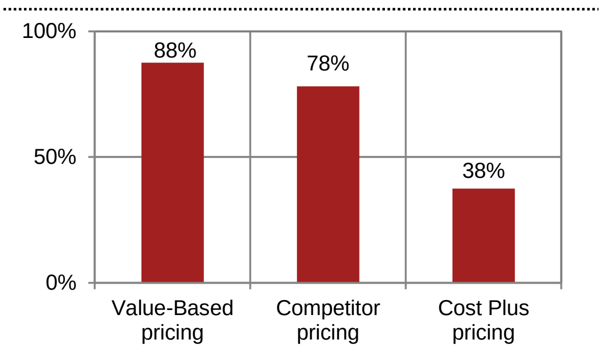
Pricing strategy enables companies to capture the value created from their products and services. It requires companies to understand the intrinsic and perceived value of their offerings, analyze the competition's pricing, and consider the cost drivers while aligning to overall corporate objectives and strategies.

We asked the participating software companies to identify their pricing approach, the level of business involvement in setting pricing strategy, their discount and price maintenance policies, and the pricing meters used in developing pricing structures.

Price-setting approaches and levels

A majority of respondents price their products and services based on the value perceived by customers and on the price of competitors' products. Eighty-eight percent of respondents follow value-based pricing, which indicates a high level of sophistication. However, many respondents expressed concerns about being able to capture the right value.

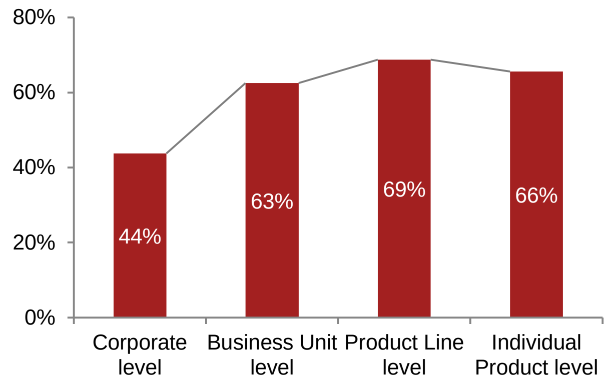
Chart 11: Price setting approach



PwC' leading pricing practices recommend setting pricing strategy at the Business Unit Level. Approximately 63% of respondents set their pricing strategy at this level.

Most companies have the foundational elements of a sound pricing strategy in place, yet they are not clear about the value captured.

Chart 12: Pricing strategy setting level



Most respondents indicate that they struggle with the enforcement of discount policies and practices. Fifty eight percent of respondents indicate that they strictly follow discounting and pricing policies, however, deeper analysis reveals average discounts of 40% off the list price, which raises questions about the effectiveness of the discounting process.

Chart 13: Corporate-level discount and price maintenance policies

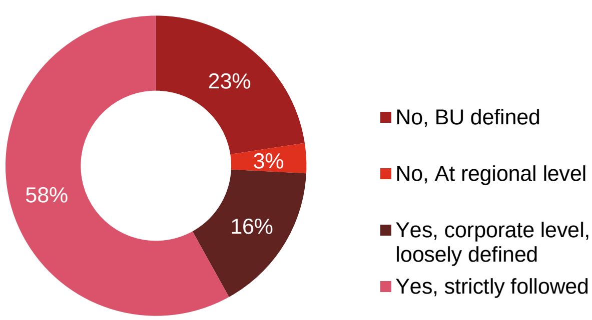
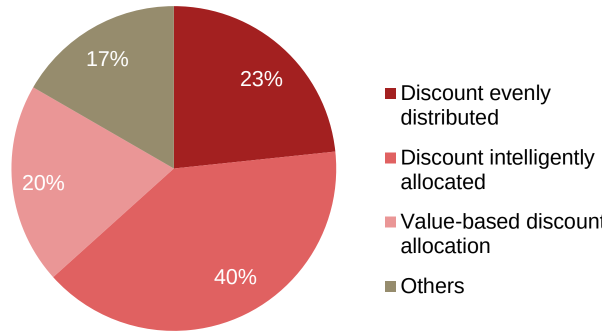


Chart 14: Bundle pricing approach



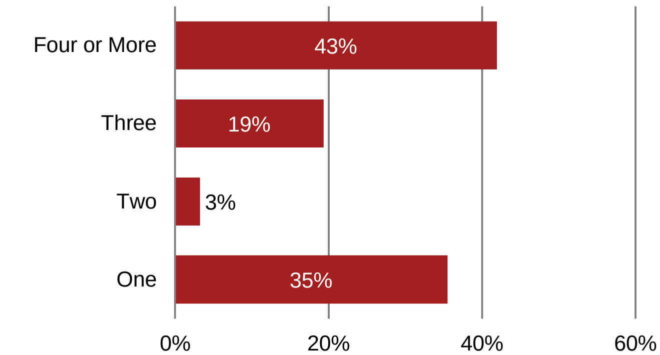
Sixty percent of respondents either use a value-based bundling strategy or distribute discounts intelligently, which indicates a good understanding of the bundling value proposition. However, bundling is a challenge to 24% of respondents, who distribute discounts evenly.

Pricing meters

There is wide variability in the number and types of pricing meters used by respondents. Sixty-one percent of respondents use three or more pricing meters, which increases the complexity of downstream price maintenance and billing processes. The increased number of pricing meters also has negative implications the customer experience.

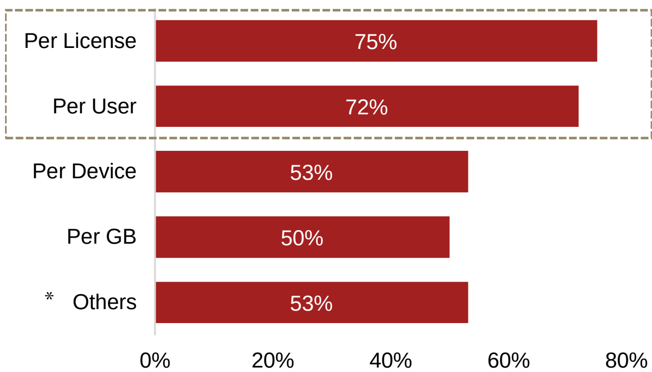
Lack of standardization of pricing meters is contributing to overall process complexity.

Chart 15: Number of pricing meters used per product



"Per License" and "Per User" are the most widely used pricing meters. However, these meters are product-specific and vary widely across companies.

Chart 16: Typical pricing meters



*Others: Per CPU, Per Virtual Machine, Per Visitor, Per Profile, etc.

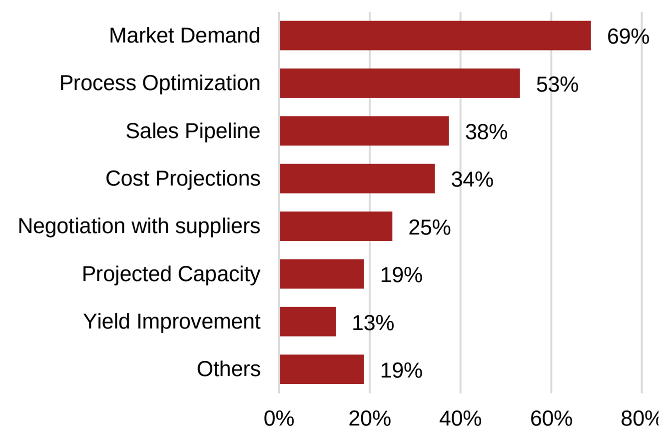
4.4. Price formulation

Price formulation facilitates an understanding of the factors considered by companies in setting the pricing structure and price points. We asked the participating companies to describe the factors considered in setting and distributing price lists. We also asked the companies about their multi-currency pricing approaches and practices.

Factors considered in price setting

69% of respondents cite market demand as the most frequently used factor for setting prices. Fifty-three percent of respondents use process optimization for setting prices.

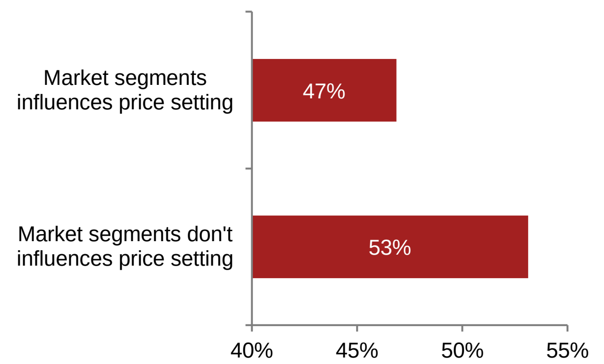
Chart 17: Factors considered in setting prices



However, 53% of respondents do not set price lists by market segment, which indicates disconnect between price setting and value capture for different market segments.

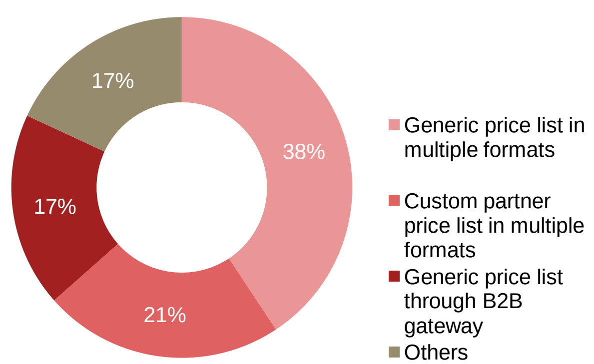
Price setting based on market and channel demand presents improvement opportunities.

Chart 18: Price setting by market setting



Only 21% of respondents customize prices for channel partners, while 55% use "generic" price lists for all channel partners. These findings indicate a potential opportunity to improve channel engagement and profitability through better pricing.

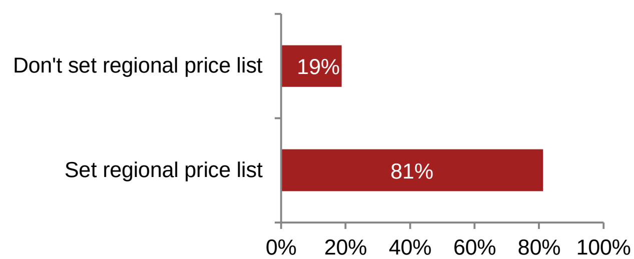
Chart 19: Distribution of price list to channel partners



Regional price setting

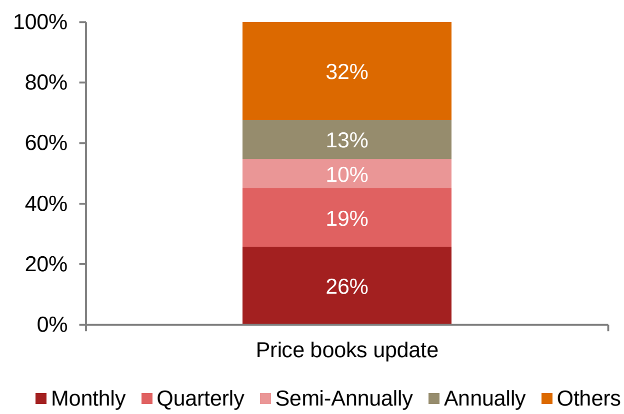
Eighty-one percent of respondents use regional price lists to customize prices based on regional customer needs and market dynamics. However, 81% of respondents derive their regional price lists from a global price list, indicating a "top-down" approach to regional price setting.

Chart 20: Regional price list formulation



Forty-five percent of respondents update their regional price book every month or every quarter. However, the remaining respondents are at a competitive disadvantage due to out-of-date pricing and inability to capture value due to changing regional trends.

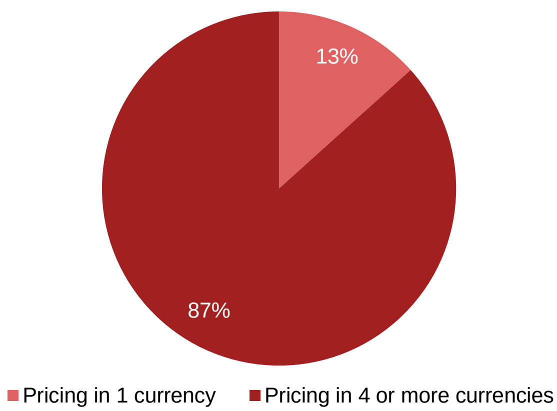
Chart 21: Frequency of price-book updates



Multi-currency pricing

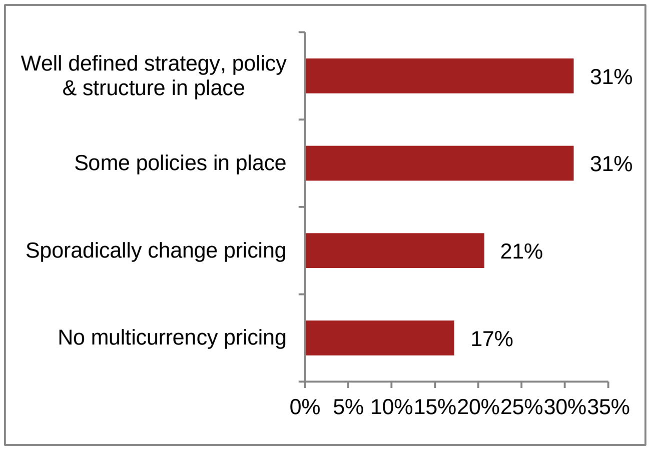
A vast majority of respondents have multi-currency pricing to meet customer demand globally and align pricing based on customers' willingness to pay. Eighty-seven percent of respondents support four or more currencies.

Chart 22: Number of currencies supported



However, only 31% of respondents indicate that they have well-defined strategies, policies, and structures in place to support multi-currency pricing. Approximately 52% of respondents have a reactive approach to multi-currency pricing, and 17% do not offer multi-currency pricing for various reasons.

Chart 23: Multi-currency pricing maturity



While most companies support multiple currencies, few have mature and rigorous strategies and practices.

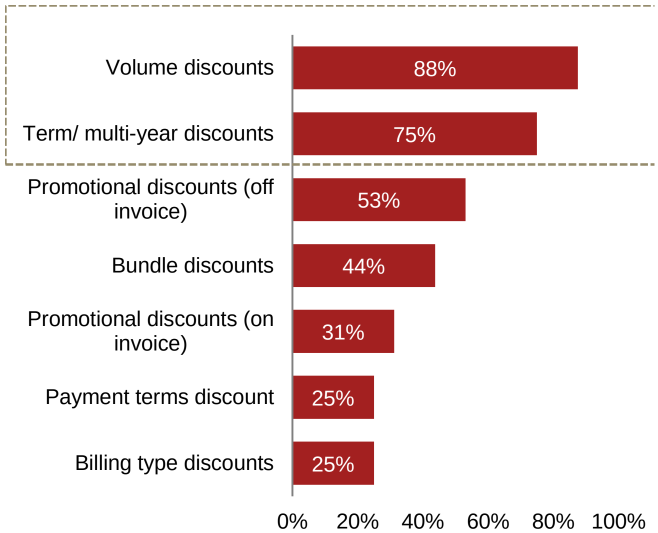
4.5. Transaction management

Transaction management allows companies to better understand the willingness to pay across different customer segments and allows acquisition of marginal customers through appropriate discount and promotion strategies. It demands that organizations analyze "real" costs to create reasonable discounting thresholds and floors, bundling strategies, and deals-desk functions. We asked the participating companies about typical discounting levers, deals-desk organization, and level of departmental involvement

Discount management

Volume and term discounts are the most common transaction-management levers, as over 75% of respondents cite using one of them. Approximately 50% of respondents use bundle discounts and/or promotional discounts to exploit the willingness-to-pay variation across customer segments.

Chart 24: Typical discounts associated with products

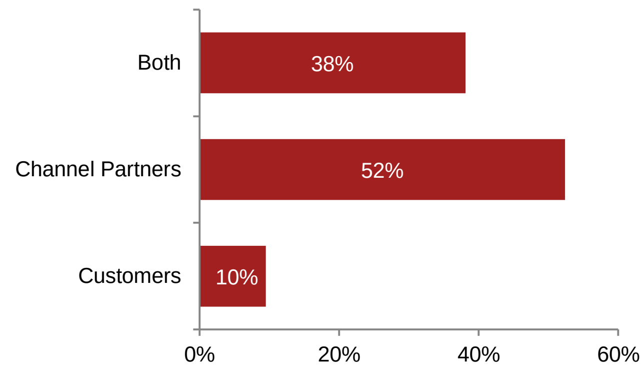


Backend rebates are also common, with **62% of respondents using these rebates**. Fifty two percent offer rebates to channel partners, and 38% offer rebates to both customers and channel partners.

Although discounts and rebates are used extensively, the effectiveness of these techniques is unclear.

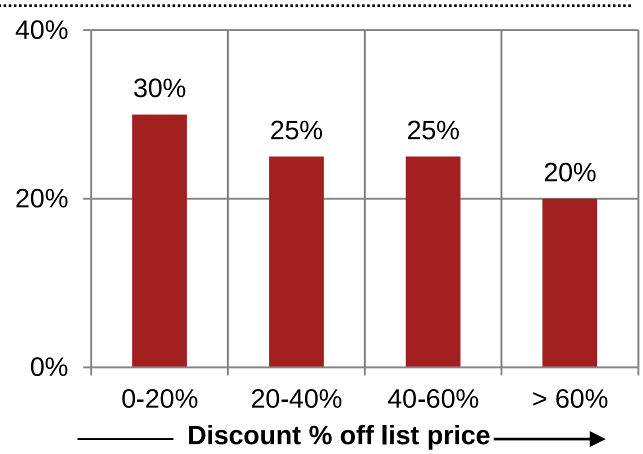
However, most respondents indicate that the backend rebates are ineffective, because partners often discount upfront prices in anticipation of financial compensation for hitting volume targets.

Chart 25:Backend rebate used



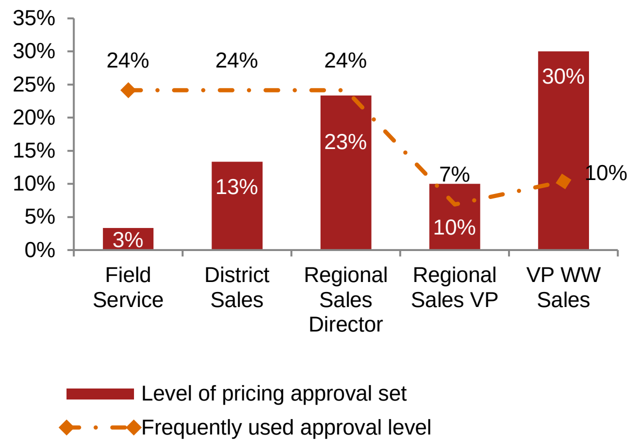
Fifty-eight percent of respondents indicate that they rigorously follow a well-documented pricing-approval process, yet the underlying data indicates deep discounting; on average, 45% of respondents discount over 40% off the list price. This indicates a disconnect between discounting policies and execution.

Chart 26: Discount off list price



Seventy-two percent of companies claim to frequently approve pricing at the sales-director level and below. When combined with observed deep discounting, this finding implies that many deeply discounted quotes are not being approved at the VP level, as intended.

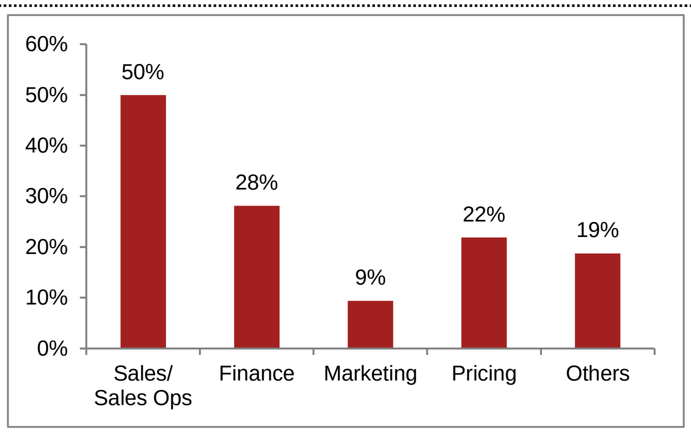
Chart 27: Discount approval levels



Deals desk

For most respondents, the deals desk is aligned to one or two functions. Fifty percent have deals desk aligned to sales or sales ops, 22% have it aligned to the pricing function, and 28% to the finance function.

Chart 28: Deals desk alignment

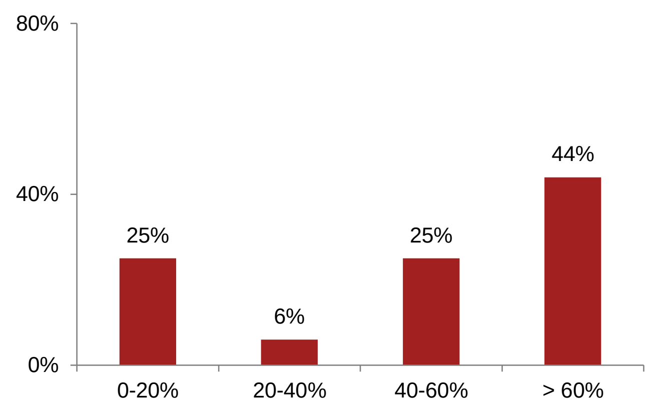


Industry-leading practices recommend that deals desks act as an organizational hub for all major corporate functions to ensure involvement and buy-in from all stakeholder groups. However, this is not observed for most respondents.

Chart 29: Deals desk acts as an "organizational hub"

44% of respondents use their deals desk for more than 60% of quotes. An additional 25% use it for 40-60% of quotes. Low deals-desk usage typically indicates a lack of governance and rigorous analysis of deals by size/opportunity.

Chart 30: Deals % through deals desk



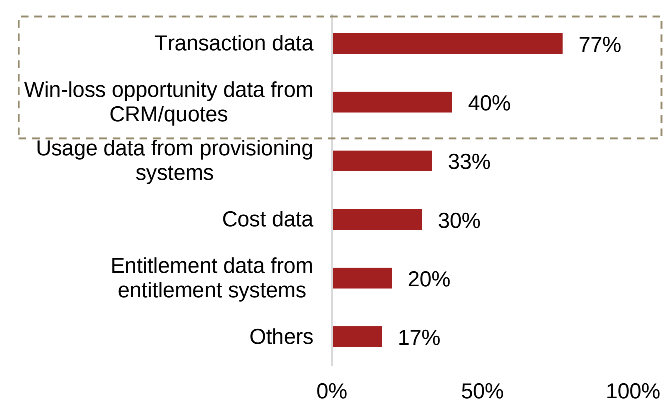
4.6. Performance management

Performance management, a key the component of pricing function, enables companies to measure strategies and practices that are yielding desired results. The companies should focus on developing holistic and real-time processes for measuring pricing performance and deriving meaningful insights to inform the pricing strategy. We asked participating companies to identify the data source they used for performance measurement, the metrics they measured, and the insights they drawn from the analysis.

The performance management infrastructure is immature for most participating companies.

Seventy-seven percent of respondents use transaction data for performance management. Only 40% use opportunity data from their customer relationship management (CRM) systems.

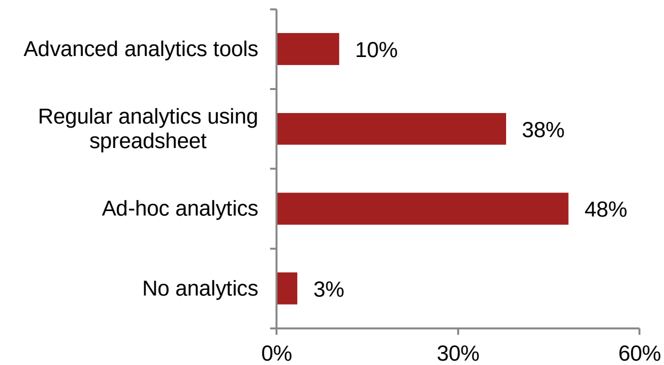
Chart 31: Data sources used



*Others: market research, competitive and partner feedback, line optimization

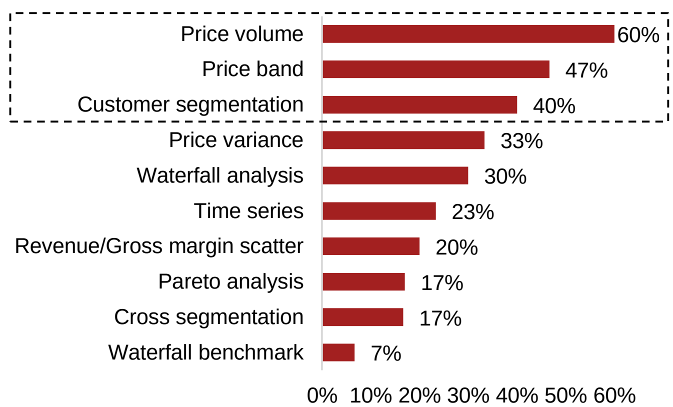
Most respondents have rudimentary pricing analytics capabilities. Eighty-six percent use ad-hoc and spreadsheet-based analytics tools, which indicate significant room for improvement, considering the commercial availability and affordability of big-data and analytics platforms.

Chart 32: Price analytics capabilities



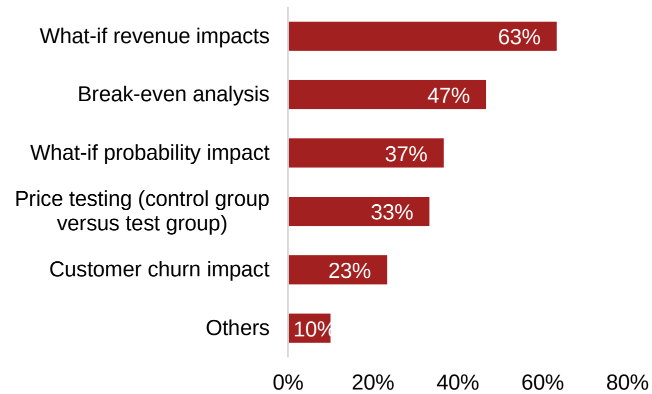
Price volume, price band, and customer segmentation are the top three price analytics used by respondents. Waterfall analysis is used by only 30% of respondents, highlighting a lack of understanding of the true cost to serve among most respondents.

Chart 33: Price analytics executed



Most respondents execute "what-if" revenue analysis and break-even analysis as the two main types of pricing simulations; only 23% of the companies look at customer churn, which is the key to understanding customer lifetime value.

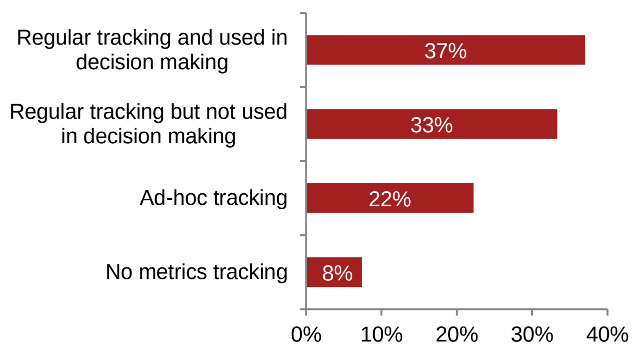
Chart 34: Price simulations executed



Pricing metrics

Only 37% of respondents use metrics for strategic decision making, which is a prerequisite for a holistic approach to setting pricing strategies. Fifty-five percent of respondents do not have a set target associated with the tracked pricing metrics, and 33% use pricing metrics primarily to understand gross margin at the end of the quarter.

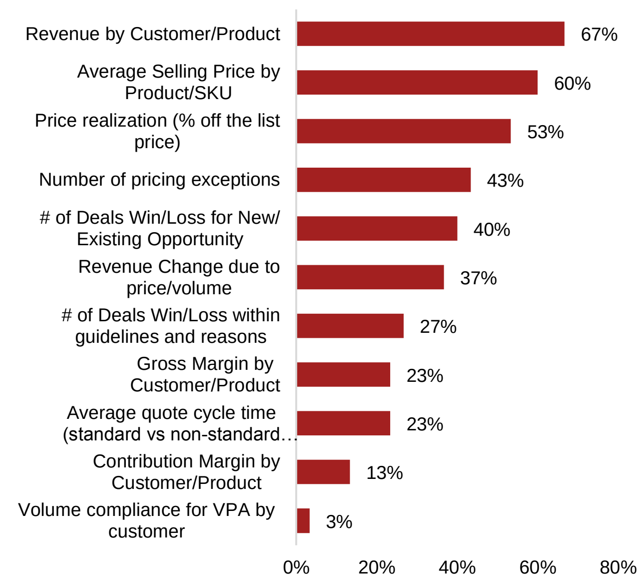
Chart 35: Pricing metrics tracking maturity



The pricing metrics collected by companies are not well linked to strategic decision making.

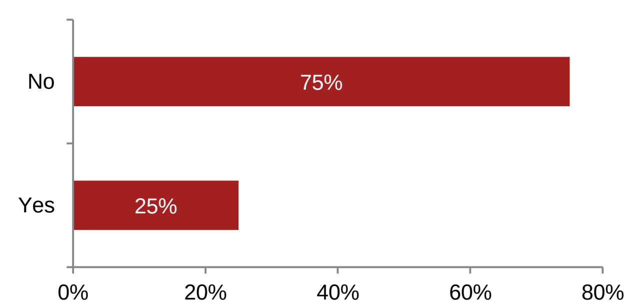
The most commonly collected metrics are revenue by customer and product, average selling price for product or SKU, and price realization (% off the list price). Only 13% of respondents indicated that they analyze profitability at contribution margin level.

Chart 36: Key pricing metrics tracked



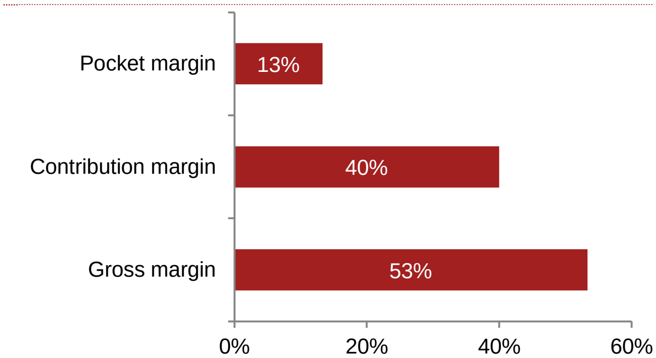
Seventy-five percent of respondents report difficulty in developing and maintaining price waterfall models, which is foundational to understanding actual discounts off the list price.

Chart 37: Use of price waterfall



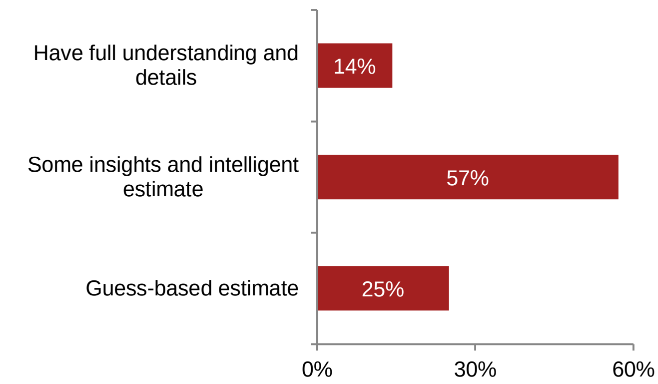
Only 13% of respondents measure customer profitability at the pocket-margin level, which highlights a blind spot with respect to understanding net profitability.

Chart 38: Measure of customer profitability



Only 14% of respondents have a full understanding of the true cost to serve customers; 57% use intelligent estimates and insights to derive these insights. Pocket margin and cost to serve are significant areas of improvement for most companies.

Chart 39: Understanding of cost to serve



Only 13% of companies measure pocket margin, which is a key metric to understand the true cost to serve.

5. Conclusion

PwC's software pricing survey indicates that most software companies have sound pricing practices yet fail to capture value. The table below summarizes three key reasons that contribute to the inability of companies to capture value.

Reasons	Representative examples of contributing factors
Lack of communication and understanding of value at a customer/market level	• A majority of companies do not set price lists by market segment. • Only a small fraction of companies measure pocket margin and understand the true cost to serve. • Pricing meters are product-specific and vary widely across companies.
Immature governance and policies	• Sixty-two percent of companies have ineffective backend rebate administration and tracking. • Pricing approval and discounting execution is out of sync with policies. • Low deals-desk usage and a lack of rigor in deal analysis are contributing to margin loss.
Underinvestment in analytics infrastructure	• Use of ad-hoc and spreadsheet-based analytics tools is highly pervasive. • A majority of companies are using price analytics primarily for revenue impact and break-even analysis. • Pricing metrics collected by companies are not linked in a meaningful way to strategic decision making.

PwC can help

In the wake of rapidly evolving business models, increased focus on customer experience and fierce competition, software companies are faced with the challenge of developing an efficient and effective pricing strategy. For a deeper discussion on PwC's pricing management consulting services, please contact one of our leaders:

Joe Lo
US Technology Customer Leader
408 817 5040
joe.lo@us.pwc.com

Let's talk

Please reach out to any of our technology leaders to discuss this or other challenges. We're here to help.

Pierre-Alain Sur
US Technology Industry Leader
646 471 6973
pierre-alain.sur@us.pwc.com

Kayvan Shahabi
US Technology Advisory Leader
408 817 5724
kayvan.shahabi@us.pwc.com

Cory Starr
US Technology Assurance Leader
408 817 1215
cory.j.starr@us.pwc.com

Diane Baylor
US Technology Tax Leader
408 817 5005
diane.baylor@us.pwc.com

Acknowledgements

The following PwC professionals contributed their experience and knowledge to produce this paper.

Amit Dhir
Customer Pricing Consultant
408 893 8373
amit.dhir@us.pwc.com

Neha Garg
Customer Pricing Consultant
408 808 2952
garg.neha@us.pwc.com

Chittur Narayan
Customer Pricing Consultant
214 754 7502
chittur.p.narayan@us.pwc.com

About PwC's Technology Institute

The Technology Institute is PwC's global research network that studies the business of technology and the technology of business with the purpose of creating thought leadership that offers both fact-based analysis and experience-based perspectives. Technology Institute insights and viewpoints originate from active collaboration between our professionals across the globe and their first-hand experiences working in and with the technology industry.