Technology Institute

The future of software pricing excellence:
Transaction pricing management

Executive summary

Businesses with high profit margins are tempted to offer substantial discounts to capture new customers or keep current ones when faced with competitive pressures. This is an especially important issue in the software industry, where discounting off of the 'list' price of as much as 100% is common. This deep discounting can erode margins quickly without structure and management.

This paper, one of a series exploring the application of PwC's pricing management framework [Figure 1] in the software industry, focuses on software transaction management.

Figure 1: PwC's pricing management framework
For each framework component, companies need to focus on the elements that drive pricing maturity and impact financial results.

Successfully managing pricing during software transactions requires a process. That process includes defining pricing levers and then implementing those levers at the point of transaction—the point at which pricing strategy is executed. By following this process, software vendors can optimise pricing and protect their margins while still satisfying customer expectations for discounts and special offers.

Indeed, PwC has identified the characteristics that define the leaders, laggards and mainstream practitioners of software transaction pricing management. Laggards typically lack defined processes and chains of command for making decisions about transaction pricing, and, as a result, they have little data on which to base market predictions and pricing trends. Leaders, however, have created a closed loop in which they create formalised processes for capturing data about every aspect of the transaction, then use that data to further refine the processes for optimal pricing strategy. [Figure 2]

**Figure 2: Transaction pricing management practices, from laggards to leaders**

<table>
<thead>
<tr>
<th></th>
<th>Laggard</th>
<th>Mainstream</th>
<th>Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td><em>Ad hoc</em> processes and decision-making, no clear policies in place</td>
<td>Well defined but poorly integrated processes with limited cross-functional coordination</td>
<td>Fully-integrated, cross-functional processes across product creation, price setting, guided selling and discounting, including a closed-feedback loop to monitor performance and customer interactions and make adjustments as needed</td>
</tr>
<tr>
<td><strong>Organisation</strong></td>
<td>No clear owner of pricing—it is ‘shared’ across organisations</td>
<td>Pricing review committees overseeing pricing at the global level including regional pricing committees overseeing pricing and discounting at the regional level</td>
<td>Centralised pricing organisation defining pricing strategy, enforcing pricing and discounting policy with a centralised deal desk overseeing deal approvals as needed</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Excel is the system and tool of choice</td>
<td>Systems in place but they are primarily disparate, point solutions</td>
<td>Integrated systems leveraging product, pricing, customer, contract and entitlement master data to determine transaction price</td>
</tr>
<tr>
<td><strong>Data and analytics</strong></td>
<td><em>Ad hoc</em> capture of deal and discounting data, typically at a high-level (e.g., by overall transaction) and with limited analytic capabilities</td>
<td>Capture data at all levers of the price waterfall with the capability to then run analytics</td>
<td>Capture data at all levers of the price waterfall and use it to simulate and model future price curves and provide insight to inform pricing strategy</td>
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</tbody>
</table>

Source: PwC

The key factor separating industry leaders in transaction pricing management from the pack is a fully integrated, cross-functional approach that captures and leverages data about past deals to inform future deals. Sophisticated pricing models and promotions could be set up to leverage entitlement data and provide benefits based on customer loyalty.
A structured approach to building a transaction pricing management framework for the software industry requires the following key elements:

1. **Designing a price waterfall.** A price waterfall is a structured approach to calculating the price of a transaction. It requires software vendors to select the right pricing levers for their software business models.

2. **Defining analytics.** Analytics drive strategy for both price setting (list prices) and transaction pricing (discounting curves). Capturing the right data at the point of transaction gives software vendors greater visibility into the profitability of each transaction as well as rich aggregate data for simulation and modelling purposes.

3. **Policy and governance definition and enforcement.** Optimising pricing requires a fully integrated pricing function dedicated to creating and managing pricing policy throughout the company.

The remainder of this paper will elaborate on each of these elements.

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**Figure 3: Price waterfall framework example**

A well-designed price waterfall provides the framework to manage price discounting and shape customer buying behaviour. When applied appropriately, price discounts can give customers a powerful incentive to adopt or maintain buying patterns that work to the software vendor’s advantage—for example, as a reward for adhering to certain payment frequencies.

A price waterfall framework also provides the sales organisation with data to support a consistent, structured discounting process so sales people can negotiate prices more effectively while identifying additional (and more profitable) up-sell and cross-sell opportunities.

Most importantly, a price waterfall can improve profitability, both by imposing price premiums for non-standard terms and conditions that directly affect margin and by dissuading customers from undesirable behaviours that increase cost-to-serve. [Figure 3]

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A price waterfall provides the framework necessary to manage price discounting and shape customer buying behaviour for increased profitability.
PwC's experience in implementing price waterfalls at various clients has led to a series of proven steps for rolling out a price waterfall framework:

1. Identifying price levers is the first step in designing a price waterfall. Price levers must take into account business models, overall pricing strategy, operational factors and routes to market. Each price lever draws on recent transaction data to map discounting and premium pricing practices in order to identify trends and minimum/maximum values.

Companies can base their pricing levers on analytics that break down customer preferences by segment. Alternatively, they can take a more operational approach, basing their pricing levers on partner tiers and routes to market. In either case, the pricing levers can be broadly classified into six categories:

<table>
<thead>
<tr>
<th>Type of lever</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regional</td>
<td>Foreign exchange/currency adjustments</td>
</tr>
<tr>
<td></td>
<td>Country adjustment</td>
</tr>
<tr>
<td>2. Volume/Promotion</td>
<td>Volume</td>
</tr>
<tr>
<td></td>
<td>Term adjustment</td>
</tr>
<tr>
<td></td>
<td>Promotions</td>
</tr>
<tr>
<td>3. Up-sell/Cross-sell</td>
<td>Extended warranty</td>
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<tr>
<td></td>
<td>Trade-in</td>
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<tr>
<td></td>
<td>Bundle discount</td>
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<tr>
<td>4. Channel</td>
<td>Authorised dealer</td>
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<tr>
<td></td>
<td>Specialised reseller</td>
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<tr>
<td></td>
<td>One-time reseller</td>
</tr>
<tr>
<td>5. Payment</td>
<td>Extended credit terms</td>
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<tr>
<td></td>
<td>Non-standard billing terms</td>
</tr>
<tr>
<td>6. Delivery</td>
<td>Advance delivery</td>
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<tr>
<td></td>
<td>Expedited delivery premium</td>
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</table>

2. Next, determining the various price levels (e.g., list price, regional list, MSRP, invoice price etc.) builds the outer framework for the waterfall. The pricing levers are arranged between the price levels to reflect the adjustments.

3. After that, each lever requires defined policies that trigger its use, as well as determining who has decision-making authority when lever boundaries need to be exceeded. To realise target improvements to margin, the process must incorporate regular policy updates as well as alignment of sales compensation plans and end-to-end sales processes.

4. Finally, the new pricing waterfall requires implementation planning that incorporates a range of variables. For example, will you run a pilot programme to test the transaction management? Or will your company roll it out company-wide? Will it cover a single product line or your entire product portfolio?

In addition to choosing the right tools and systems to implement the price waterfall, you must ensure that these tools interact appropriately with your product configuration, quote, order, ecommerce portals, mobile apps and other transaction systems. You must also train key stakeholders to use and evangelise for the new pricing engine.
Defining analytics

The formalised price waterfall structure provides greater visibility into price adjustments at every lever, delivering data that can generate key business insights. This data can support informed decision-making not just for price-setting and discounting, but for customer and market segmentation, product and offerings design, channel strategy and cost analysis as well. [Figure 4]

Figure 4: Using the price waterfall framework to identify and close profitability leaks

Best practices for defining the components of the transaction analytics (typically pricing metrics) include the following:

- Define customer life time value (LTV) models to incorporate the cost to acquire, the cost to serve and churn ratio.
- Define appropriate metrics for measuring performance of sales and channels to structure incentives.
- Ensure your pricing metric aligns with perceived customer value to improve customer retention and track customer retention rates.
- Account for credits due to missed service level agreements, rebates for not consuming full entitlement and true-ups (additional charges for consuming entitlements).
- Define, capture and access entitlement and provisioning data to track usage, stem revenue leakage, shape offerings based on usage patterns and define segments and pricings.
- Maintain an up-to-date, easily accessible database of competitive transactions as well as deal information to enhance analytics.
Policy and governance definition and enforcement

Without policy, governance and enforcement, it’s impossible to realise the full potential value of a price waterfall framework and the metrics and analytics it generates. Pricing excellence demands clear, consistent policies and guidelines for pricing and discounting, enforced by a centralised pricing organisational structure.

A centralised pricing organisation helps develop policy to provide a consistent view into software pricing strategy, both within and across business units. It encourages behaviour that supports business and pricing strategy, such as margin-based compensation. A centralised pricing organisation can also serve as the company-wide champion of an integrated pricing process, helping to maximise operational efficiencies and define standards for data governance in support of pricing analytics. [Figure 5]

Figure 5: The role of a centralised pricing organisation

Source: PwC
Transaction pricing leaders typically have adopted most if not all of these policy, governance and enforcement practices:

- Centralise pricing policy development and treat it as an iterative process. Most organisations start with whatever policy they currently have and refine and improve through experience.

- Decentralise pricing authority to empower sales with authority to structure deals by using pricing levers in a manner consistent with the defined policy, thereby speeding transactions.

- Define clear accountabilities and escalation paths for approvals when lever boundaries have to be exceeded.

- Treat each request for a pricing exception as a request to change policy. This forces executives to consider broader and longer term implications of the precedents they are setting.

- Design the pricing organisation to be a specialist group, responsible for pricing analytics; price monitoring; defining and managing buying programmes and training sales, marketing, and product managers on the pricing strategy, systems and tools.

**Transaction pricing management in action**

A US$700 million software solutions firm lacked pricing coordination and transparency. Inefficient pricing processes, uncertainty about real project margins and business-wide disparities in discounting practices led to considerable price discounting.

The company adopted PwC’s methodologies to evaluate the effectiveness of its current pricing policies and identified several areas for improvement:

- simplifying and standardising pricing processes
- improving price segmentation methods
- identifying key pricing levers and developing pricing tools to manage pricing adjustments
- institutionalising informal pricing knowledge.

Implementing these changes led directly to a USD$15 million improvement in the company’s annual operating income.

**Conclusion**

Creating a framework for software transaction pricing management is complex and requires buy-in from both internal and external stakeholders. However, once software vendors define the framework using the key design elements set out in this paper, they can systematise data, processes and transactions and implement appropriate pricing systems and tools. By investing time and effort up front in careful design, they can turn transaction pricing management into an engine that preserves or expands margins, encourages future revenue growth, increases the ease of doing business and ultimately provides a differentiated customer experience.

PwC offers several additional reports further examining the impact of new pricing, licensing and delivery models on the software industry. These reports on software pricing excellence are intended to help vendors make wise tactical and financial choices as their product portfolios and business models evolve. To view the entire series go to [www.pwc.com/softwarepricing](http://www.pwc.com/softwarepricing).
**PwC can help**

If you’d like to discuss the challenge of software pricing in an ever-changing business environment, please reach out to one of our technology industry leaders listed below.

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In addition to the above contacts, Brian Hoard, Director, Management Consulting and Suchit Batheja, Manager, Management Consulting, provided key insights and clients’ real-world experiences for this report.

**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. For more information please contact Raman Chitkara, Global Technology Industry Leader at raman.chitkara@us.pwc.com.

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