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The Independent Software Vendor Business Case For Mixed Reality

Organizations are increasingly looking to innovative emerging technologies, such as augmented reality (AR) and mixed reality (MR), to increase productivity, improve communications, drive collaboration, and deliver great customer experiences. Microsoft commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study to examine the business opportunity and return on investment (ROI) independent software vendors (ISVs) may realize by building commercial-grade mixed reality applications. To better understand the revenues, margins, investments, and risks associated with building and scaling a mixed reality business, Forrester interviewed 10 ISVs with years of experience building, piloting, and deploying mixed reality applications internationally. This summary is based on a full TEI study, which can be downloaded here.

Through interviews with 10 ISVs with mixed reality solutions built around Microsoft technologies, Forrester concluded that a representative composite ISV that sells mixed reality solutions can accrue $7.2 million in gross profits versus costs of $3.7 million, resulting in a net present value (NPV) of $3.6 million and a practice-level ROI of 97%.

Partner revenue and margin opportunities. ISVs generated revenue by building and delivering the following mixed reality solutions and services.

› **Mixed reality licensing subscriptions bring 57% gross profit margins.** These recurring licensing revenues came from the sale of mixed reality software applications to end customers and account for 63% of the composite ISV's total three-year gross profit.

› **Mixed reality proof-of-concept (PoC) professional services bring 32% gross profit margins.** PoC engagements serve as the typical entry point for a net-new mixed reality customer and account for 12% of the composite ISVs three-year gross profit.

› **Mixed reality implementation and system integration bring 2 to 3 times the service revenues of PoC engagements.** Full deployments require additional services to tailor the ISV's ready-built commercial mixed reality solutions to each customer's specific needs and typically bring at least 2 to 3 times the services revenues of PoC projects.

› **Mixed reality managed services bring average profit margins of 35%.** ISVs can commercialize and monetize a variety of managed services around their mixed reality solutions spanning end user and technical support, training, HoloLens device management, and digital asset management.

ISVs Consuming Azure Are Larger And More Profitable

264%
Higher mixed reality practice revenues

28%
More mixed reality customers

15%
Higher software gross margins

SUMMARY

Based on a commissioned study "The Microsoft Mixed Reality Business Opportunity For Independent Software Vendors."

METHODOLOGY

The objective of the TEI framework is to identify the investments, revenues, margins, and risk factors that affect an investment decision. . Forrester took a multistep approach to evaluate the business impact of building mixed reality solutions for ISVs, including interviews with Forrester analysts, Microsoft stakeholders, and 10 ISVs. Forrester constructed a financial model representative of the interviews using the TEI methodology.

COMPOSITE ISV

This analysis uses a composite ISV, based on the interviewees, to present the aggregate financial analysis.

RISK ADJUSTMENT

Forrester risk-adjusted the financial model based on issues and concerns of the interviewed ISVs to account for uncertainties in revenue, margin, and investment estimates.

The Microsoft Mixed Reality Partner Journey

For this study, Forrester interviewed 10 ISVs with experience developing, selling, and delivering commercial-grade mixed reality applications to businesses across the globe. ISVs interviewed by Forrester had low seven-digit average annual mixed reality revenues and had nearly triple-digit year-over-year mixed reality practice growth targets for the next calendar year. Seventy percent of interviewed ISVs were consuming Microsoft Azure through their mixed reality applications at the time of the interviews.

## Business Catalysts For Developing Mixed Reality Solutions

Interviewed ISVs experienced a common set of business challenges and opportunities that drove them to build commercial-grade mixed reality solutions.

› **Retention and conversion of legacy customers.** While several interviewed ISVs were mixed reality startups or businesses with standalone, greenfield mixed reality applications, others had legacy applications and large existing customer installed bases. These ISVs identified mixed reality as a strong complement to, and cross-selling opportunity for, their existing portfolios.

› **Competitive edge for ISVs in the mixed reality realm**. Most system integrators and service providers in the mixed reality space were focused on custom development projects at the time of the interviews. ISVs with ready-built, scalable, and easy-to-deploy mixed reality applications provide customers an alternative to building from scratch, greatly simplifying and accelerating deployment and providing ISVs with a competitive advantage in the marketplace.

ISV Best Practices And Success Factors

The interviews revealed the following ISV best practices and key success factors learned from their journeys to building and scaling their mixed reality solution areas:

› **Cloud-based solutions have better adoption.** ISVs that had not built cloud-connected technologies revealed that they had a difficult time tracking user adoption during the initial PoC stage, making it difficult to justify the business case and ultimately win the full deployment business.

› **Land and expand.** A number of ISVs are seeking to land with a single mixed reality product and expand by deploying those products more broadly and by offering additional mixed reality solutions tailored for new lines of business.

› **Implement coselling and partner-to-partner collaboration.** Achieving the Azure consumption targets to become Microsoft cosell ready was worth the investment for many ISVs. One North American ISV indicated that 40% of its mixed reality leads came from Microsoft and that it was able to achieve a 50% conversion rate on these leads.

› **Establish a customer success team to manage churn.** At the time of the interviews, ISVs revealed that between 20% and 90% of their PoC engagements were graduating to full mixed reality deployments. The most successful ISVs were actively investing in customer success programs to increase the conversion from PoC to full deployment and to reduce customer churn.

› **Engage with IT early and often.** Mixed reality purchasing decisions have traditionally been made in the lines of business. However, as PoCs begin to graduate into full deployments, IT will have a seat at the table to ensure these technologies are secure and compatible with other enterprise IT systems, impacting how ISVs engage with clients around mixed reality going forward.

70%
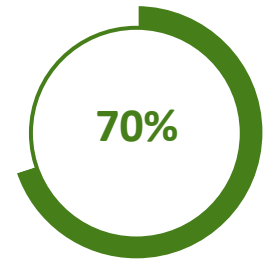
of interviewed ISVs were driving Azure consumption through their MR applications.

"We are building a scalable platform because instead of designing every solution from scratch, we want to provide all the tools and components to do a Lego-block like environment. It simplifies and speeds up development."

CEO and founder, spatial visualization ISV

"The sales cycle is getting shorter, and there are plenty of reasons for that. Our products can be deployed and tested easier than ever before, and the market is becoming more educated on the business impact of mixed reality. Also, companies are willing to spend more money."

-- CEO, North American ISV

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Composite ISV

Based on the interviews, Forrester constructed a TEI framework, a composite ISV, and an ROI analysis that illustrates the areas financially affected, covered in greater detail in the full study.

The composite ISV is a US-headquartered mixed reality software-as-a-service (SaaS) vendor. The composite ISV developed its mixed reality application from the ground up; this solution is built on Microsoft Azure and consumes several Azure services including Remote Rendering, Cosmo DB, and Artificial Intelligence services. The composite ISV charges $3,330 per user, per year for its mixed reality solution and has a 5% annual churn rate.

Microsoft Mixed Reality Business Opportunities For ISVs

Forrester explored the end-to-end revenue and margin opportunity for ISVs that build commercial-grade mixed reality solutions. In this analysis, Forrester closely examined how ISVs were leveraging Microsoft's mixed reality portfolio (e.g., HoloLens, Dynamics 365 mixed reality applications, Azure services) and third-party mixed reality solutions in building their own mixed reality practices, including an assessment of the impact these decisions had on ISV business outcomes.

The analysis below, built on a composite ISV representative of those interviewed by Forrester, is intended to be used as a framework to help ISVs understand the total business potential associated with building and scaling a mixed reality solution area. Over three years, the composite ISV accrues risk-adjusted gross profits to be a present value (PV) of $7.2 million.

Total Gross Profits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Atr	Mixed reality licensing subscriptions	$262,191	$1,308,234	$4,276,419	$5,846,844	$4,532,477
Btr	Mixed reality proof-of-concept services	$169,290	$324,473	$620,730	$1,114,493	$888,423
Ctr	Mixed reality implementation and system integration	$83,125	$540,313	$1,579,375	$2,202,813	$1,708,715
Dtr	Mixed reality managed services	$3,938	$31,500	$106,313	$141,750	$109,487
	Total gross profits (risk-adjusted)	$518,543	$2,204,519	$6,582,837	$9,305,899	$7,239,102

› **Mixed reality licensing subscriptions.** These recurring mixed reality software licensing revenues were generated through direct selling, coselling with Microsoft enterprise sellers, joint go-to-market with Microsoft partners, and sales within Microsoft and third-party marketplaces (e.g., Windows Store, AppSource, Azure Marketplace). At the time of the interviews, annual licensing revenues for mixed reality solutions on a per-seat basis varied from a low of $720 per year, per user to a high of over $12,000 per user, per year, with average annual licensing revenues coming in at $3,330. Mixed reality licensing subscriptions bring risk-adjusted gross profit margins ranging from 53% to 57% over the three-year analysis, with profitability improvements resulting from larger deal sizes and faster, more efficient customer onboarding.

› **Mixed reality proof-of-concept professional services.** Serving as the typical entry point for a net-new mixed reality customer, PoC engagements tailor and deploy mixed reality solutions to between two and 16 users for a period of three to six months. Mixed reality PoC engagements generally include professional services spanning customization, configuration, deployment, content creation, and training, bringing in

> "Today, we currently have around 30 to 40 licensed customers and we're planning to double our revenues year over year. This growth won't only come in terms of our customer count, but in terms of the deal size and the user count in our licensing agreements."
>
> *CEO and founder, Global ISV*

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average consulting revenues of $45,000. PoC projects bring average gross profit margins of 33%, or just over 31% after adjusting for risk.

› **Mixed reality implementation and system integration services.** Full mixed reality deployments require additional services to tailor the ISV's ready-built, commercial-grade mixed reality solutions to each customer's specific business needs and IT environment. These projects bring a diverse range of professional service needs spanning solution configuration, onsite implementation, custom 3D content design and creation, training, change management, business process reengineering, and system integration with other enterprise systems. Mixed reality implementation and system integration projects command at least 2 to 3 times the service revenues of PoC engagements and bring gross profit margins averaging just over 33% after adjusting for risk.

› **Mixed reality managed services.** Several ISVs commercialized and monetized a variety of managed services spanning end user and technical support, training, HoloLens device management, and digital asset management. Attach rates for ISV-provided mixed reality managed services hover around 50% of total mixed reality full deployment projects today, although one ISV saw an 80% attach rate for its managed support services. Average managed services profit margins were 35% at the time of the interviews.

ISV Investments And Cost Structure

In addition to direct delivery costs and channel discounts, which are included in the gross margin calculations in the previous section, interviewed vendors made a number of strategic investments to build, market, and sell their mixed reality applications to end customers. Over three years, the composite ISV incurred risk- and present value-adjusted total investments of $3.7 million.

Total Costs

REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Etr	Incremental staffing costs	$0	$550,883	$743,385	$943,408	$2,237,675	$1,823,966
Ftr	Research and development expenses	$577,549	$104,353	$104,353	$104,353	$890,607	$837,059
Gtr	Marketing and SG&A costs	$0	$108,809	$377,370	$764,924	$1,251,103	$985,492
Htr	Lab and demo equipment expenses	$21,000	$0	$14,700	$0	$35,700	$33,149
	Total costs (risk-adjusted)	$598,549	$764,044	$1,239,808	$1,812,685	$4,415,086	$3,679,666

› **Staffing costs.** These are incremental staffing costs for new hires dedicated to building and supporting the growth of the vendor's ISV mixed reality solutions in the marketplace. Common staff acquisition areas included developers, 3D designers and animators, customer success managers, customer and technical support personnel, IT operations staff, and technical account managers.

› **Research and development expenses.** These include the initial and ongoing labor expenses required to build a minimum viable version of the ISV's mixed reality solutions and the ongoing development resources to maintain, update, and provide new feature releases over time.

› **Marketing and selling, general, and administrative (SG&A) costs.** These expenses include incremental marketing costs for positioning and promoting the ISV's mixed reality applications with end customers, partners, and Microsoft. Additionally, this cost category includes SG&A costs, excluding sales staff salaries, which range from 3% to 5% of annual mixed reality revenues over the three-year analysis.

› **Lab and demo expenses.** These are for upfront and ongoing capital expenditures for HoloLens devices, network hardware, software, and other equipment for the composite ISV's developers and sales team to build, showcase, and demo its mixed reality solutions to prospective customers and partners.

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Financial Summary

The financial results calculated in the revenue and investment sections can be used to determine the ROI, NPV, and practice break-even period for the composite ISV's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

Mixed Reality ISV Gross Profit Margins

Year 1	Year 2	Year 3
53%	55%	57%
32%	32%	33%

■ Software gross margin   ■ Services gross margin
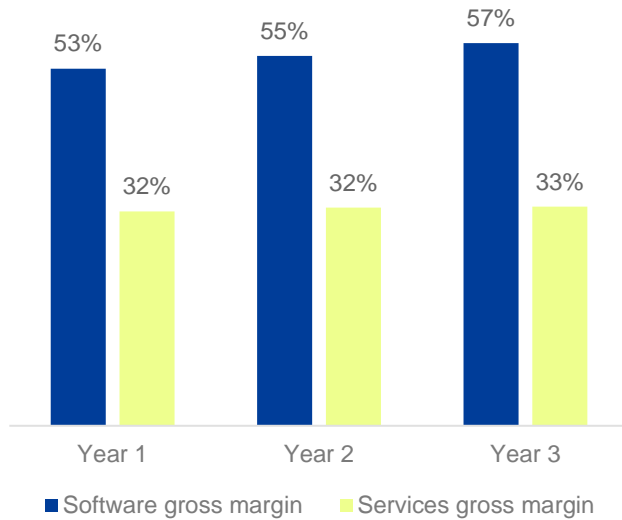
ROI
97%

Total gross profit (PV)
$7.2M

NPV
$3.6 million

For more information, you can download the full TEI analysis here.

Disclosures

This document is an abridged version of a case study commissioned by Microsoft, titled: "The Microsoft Mixed Reality Business Opportunity For Independent Software Vendors, June 2019." The full study can be downloaded here.

Forrester's Total Economic Impact™ (TEI) framework identifies the investments, revenues, margins, flexibility, and risk factors that affect the investment decisions. Forrester took a multistep approach to evaluate the business impact of building mixed reality solutions for ISVs, including interviews with Forrester analysts, Microsoft stakeholders, and 10 ISVs. Forrester constructed a composite ISV and aggregate financial analysis based on the interviewees, and risk-adjusted the financial model to account for uncertainties in estimates.

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