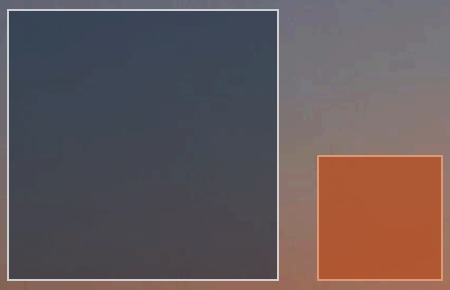
MARKET ENTRY STUDY · 2027–2031

Mexico first. *Colombia second.*

Market entry study: industrial 3D printing and 3D design software in Mexico and Colombia, 2027–2031

SERVICEABLE MARKET, 2026 · DRAWN TO AREA



$165m
Mexico

$35.2m
Colombia

Additive and design software combined. Illustrative estimates; method in Appendix A.



PREPARED FOR

The leadership team of Balcones Technical Systems
Daniel Escobedo, President and Chief Executive Officer
Study sponsor: **Marcus Bell**, Vice President, Corporate Development

SAMPLE WORK

The company, people and all sizing, share and financial figures in this study are illustrative and invented for demonstration. Market context (trade, industry and policy facts) is drawn from public sources named in the notes.

CONTENTS

One question, one answer, thirteen steps to it.

The report reads in the order a skeptical leadership team asks its questions: the answer first, then *is it big enough, can we win, what does it cost and return, what could go wrong*, then the plan and the ask.

01	**The answer on one page** Enter Mexico in 2027 from Querétaro; stage Colombia from Medellín in 2029	03
02	**The question and how we answered it** Two pools, three filters	04
PART I · THE MARKET		
03	**The market is a consumables business**	06
04	**How big: Mexico** $165m serviceable today, $229.9m by 2029	07
05	**How big: Colombia** A fifth of Mexico, in different industries	09
06	**Where demand sits: industries**	11
PART II · WINNING IT		
07	**Who we would fight**	14
08	**How customers buy**	16
09	**How the money works**	18
10	**Risks and how we hold them**	20
PART III · THE DECISION		
11	**The decision** Mexico 4.10, Colombia 2.45, and the stress test	24
12	**The staged entry**	26
13	**The ask** $2.8m in three gated tranches	30
A	**How the sample numbers were built**	31
B	**Sources for the real context**	32

WHAT IS REAL AND WHAT IS ILLUSTRATIVE

Market structure, geography, trade and policy facts are real and drawn from public sources; each carries a numbered note linked to Appendix B. Every market size, share, cost and revenue figure is an illustrative estimate built for this sample, and the method is in Appendix A. Balcones Technical Systems, its leadership team (Daniel Escobedo, Karen Lindqvist, Marcus Bell, Mei-Ling Tran) and its figures are invented. Local Mexican and Colombian competitors are described by type, never by name.

THE COMPANY, IN BRIEF

US value-added reseller of industrial and professional 3D printers, materials, scanners and mid-market CAD/CAM software. Founded 2004, San Antonio, Texas. Six US offices, 160 people, about 2,100 active accounts, FY2026 revenue of $68m (expected).

READING THE EXHIBITS

- Mexico · additive pool
- Colombia
- Design-software pool

FIGURES

US dollars; $m is millions. Base year 2026. Entry year 2027 is Year 1, so Mexico's Year 3 is 2029 and staged Colombia's Year 3 is 2031. Totals are the sum of the rounded parts shown.

SOURCE NOTES

A raised number in terracotta marks a public fact and links to its source in Appendix B. Every exhibit carries its own source line and the mark **SAMPLE WORK** where its figures are illustrative.

01 THE ANSWER

Daniel Escobedo, President and CEO, asked for one answer before the December board. This is it.

Enter Mexico in 2027 from Querétaro; stage Colombia from Medellín in 2029, and only when five triggers are met.

We recommend one move now and one move later.

Now: Mexico. Open a legal entity and a demo and application centre in Querétaro in the first half of 2027, cover Monterrey from a satellite office in 2028, and serve the Tijuana medical-device border from our existing San Diego office. Mexico's serviceable market is **$165m** today across additive and design software and grows to **$229.9m** by 2029. A plan built on 4% of the additive market and 3% of design software reaches **$8.4m** of revenue in Year 3 (2029), crosses operating break-even around **month 30**, and pays back its full investment around **month 59**.

Later: Colombia. Colombia's serviceable market is **$35.2m** today, about a fifth of Mexico's, and its demand sits in dental, consumer goods, education and energy rather than in the auto and aerospace lines that are our strength. Entered first and alone, it does not break even inside our planning window. Entered in 2029 as a satellite run from Querétaro, sharing application engineers and OEM rights, it reaches **$2.7m** by its Year 3 and pays back around month 60. We return to the board in Q4 2028 with five triggers scored.

WHY MEXICO WINS

Three reasons, in order of weight.

1. **Density.** Nearly a million people work in transport-equipment plants inside Mexico's IMMEX programme alone[2], in corridors a reseller can cover with one centre and one satellite.
2. **A right to win nobody else has.** 140 of our US accounts already operate 190 plants in Mexico; 118 of those sit in our target corridors and spend an estimated $9.0m a year through Mexican resellers today. We follow them south.
3. **A capex tailwind in force to 2030.** Plan México lets qualifying buyers deduct 35–89% of a new machine in year one from 2027, plus an extra 25% on increased training spend[6].

WHAT COULD GO WRONG

The binding risk is not demand; it is permission. Without a written Mexico territory addendum from our primary industrial OEM there is no business, so the plan releases capital only after that addendum is signed. The second risk is US trade policy: USMCA was not renewed on 1 July 2026 but remains in force[7], and our downside case (Year 3 at $5.8m, break-even month 40) still beats Colombia's best realistic case.

THE ASK

A **$2.8m** envelope for Mexico, released in three tranches against gates: $0.4m on approval, $1.6m on the signed OEM addendum, $0.8m at the month-12 review. No Colombia capital now.

$229.9m	$8.4m	Month 30	$2.8m
Mexico serviceable market, 2029	Mexico revenue, Year 3 (2029)	Operating break-even (mid-2029)	Board envelope, three gated tranches

02 THE QUESTION

One question, two pools, three filters: we sized what a reseller can actually sell, not the headline market.

"If we open outside the US next year, where do we start, and what does it take?"

The leadership team's single question. Marcus Bell, Vice President, Corporate Development, sponsored the study.

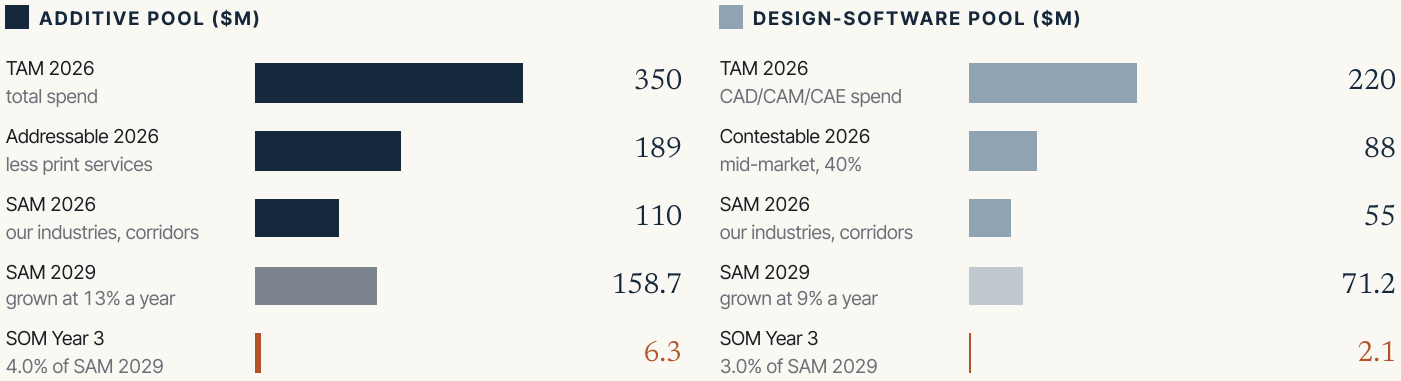
We answered it in four steps.

1. **Size two pools, separately.** We sell two different things. The **additive pool** is printers, materials, service contracts and build software. The **design-software pool** is CAD/CAM/CAE seats and subscriptions. They have different buyers, different competitors and different margins, so we never add them into one unlabelled number.
2. **Filter each pool three times.** From the total market (TAM) we remove what a reseller cannot sell (third-party print services in additive; enterprise licences bought direct or at a foreign headquarters in software), then keep only the industries and corridors we would actually target (SAM), then apply a share a new entrant can credibly win by Year 3 (SOM).
3. **Test the plan against the field.** Competitive archetypes, the buying motion, unit economics, a risk register.
4. **Decide on a weighted scorecard and stress it.** Then ask what it would take for the answer to flip.

WHAT IS REAL AND WHAT IS ILLUSTRATIVE

Market structure, geography, trade and policy facts are real and sourced. Every market size, share, cost and revenue figure is an illustrative estimate built for this sample. The methodology is in Appendix A.

EXHIBIT 1 The three filters, applied to Mexico: from $570m of total spend to $8.4m of Year-3 revenue



Bars drawn to one scale across both pools ($350m = full width). Totals: TAM $570m · addressable $277m · SAM 2026 $165m · SAM 2029 $229.9m · SOM $8.4m. Method in Appendix A.

SAMPLE WORK · Illustrative figures

WHY TWO POOLS

Additive is sold to plant engineering on capital budgets and earns on consumables. Design software is sold to engineering teams on renewal cycles. Adding them into one number would hide both.

WHY THE FILTERS BITE

Print services are 48% of global additive revenue [1] and a reseller sells none of them. In software, CATIA and NX for the large OEMs are bought direct, and many plants run licences bought abroad.

WHY 4% AND 3%

Both shares sit inside what a new entrant can take in a crowded, churn-prone field. A trade reader would treat more than 6% in three years as naive.



The box opens the account: a printed end-of-arm gripper and inspection fixture, the work an automotive plant's engineers bring to a benchmark. Illustrative photograph

PART I

The market

How big each country is, in which industries the money sits, and why a reseller should read this as a consumables business.

0.21

Colombia's serviceable market as a share of Mexico's, 2026: **$35.2m** against **$165m**. Size alone does not decide it; the industries do.

03

A consumables business. The box opens the account; materials, service and software pay for it.

04

How big: Mexico. $165m serviceable today, $229.9m by 2029; $8.4m of it ours by Year 3.

05

How big: Colombia. A fifth of Mexico's size, with demand in different industries.

06

Where demand sits. Mexico buys what we already sell; Colombia's lead industries are ones we would have to learn.

03 THE MARKET

The box opens the account; materials, service and software pay for it.

The global additive market reached **US$24.2bn in 2025, up 10.9%**[1]. Its shape has changed.

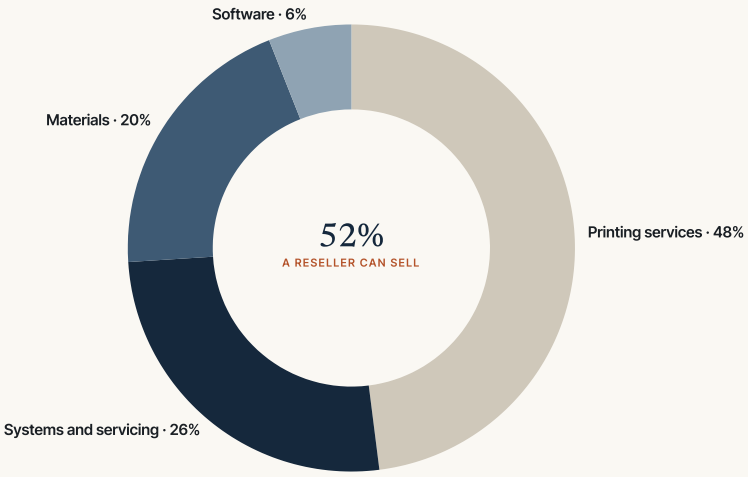
Printing services are now **48%** of revenue and grew 15.5% last year; systems and their servicing are **26%**, materials **20%**, software **6%**. System sales grew only 3.6%[1].

Two consequences follow for a reseller.

First, the reseller does not sell the 48% that is printing done by service bureaus. What it can sell, systems, materials, service and software, is about **52%** of the global market. In Mexico and Colombia, where service bureaus are thinner, we use **54%**.

Second, inside that 54%, the hardware line is the lumpy, low-margin one. Materials (often proprietary and sold only through the authorized channel), annual service contracts, software subscriptions and training are recurring and carry two to three times hardware's margin. A reseller entering a new country wins on the installed base it builds and services, not on the boxes it ships.

EXHIBIT 2 A reseller can sell about half the additive market; the other half is print services



Global additive manufacturing revenue by segment, 2025 (US$24.2bn). Source: Wohlers Report 2026 (ASTM International / Wohlers Associates)[1]. **Market data: public source**

"We are not entering a printer market. We are entering a materials, service and software market that happens to start with a printer."

WHAT A RESELLER CAN SELL

SEGMENT, GLOBAL 2025	SHARE	A RESELLER SELLS IT?
Printing services	48%	No: done by service bureaus
Systems and servicing	26%	Yes: the box, then the service contract
Materials	20%	Yes: often sold only through the authorized channel
Software	6%	Yes: build and design software
Reseller-sellable, global	**52%**	**We use 54% for Mexico and Colombia, where service bureaus are thinner**

Shares: Wohlers Report 2026[1]. The 54% is this study's assumption. **SAMPLE WORK · 54% illustrative**

+15.5%

Growth of print services in 2025, against **+3.6%** for system sales[1]

12.6%

Average company growth in the Americas, 2025[1]; our Mexico plan assumes 13%

The recurring lines carry two to three times hardware's margin. Section 9 shows what that means for the Mexico plan: half of Year-3 revenue recurring, at a blended 28.9% gross margin.

04 HOW BIG: MEXICO

Mexico offers a $165m serviceable market today and $229.9m by 2029; a credible entrant takes $8.4m of it by Year 3.

Additive pool. We estimate Mexico's total additive spend at **$350m in 2026**, about 1.3% of a global market we put near $26.8bn this year. That is below Mexico's weight in world manufacturing, and deliberately so: much prototyping for Mexican plants is still done at US and European headquarters. Removing third-party print services leaves **$189m** a reseller can sell.

Keeping only the industries and corridors we would target, auto, aerospace and medical devices in the Bajío, Monterrey and the Baja California border, plus consumer goods, tooling and selected dental and education accounts, leaves a **serviceable market of $110m**. Growing at 13% a year, slightly above the 12.6% average for companies in the Americas[1], it reaches **$158.7m in 2029**.

Design-software pool. Mexico's CAD/CAM/CAE spend is about **$220m**. The large automotive and aerospace OEMs buy CATIA and NX direct, and many plants run licences bought at their foreign headquarters, so only **$88m (40%)** is contestable mid-market. In our corridors and industries that is **$55m**, growing at 9% to **$71.2m in 2029**.

The share we plan on. 4.0% of the additive serviceable market and 3.0% of design software by Year 3. Both sit inside what a new entrant in a crowded, churn-prone field can take; the software share is lower because CAD is a fight for renewals against entrenched resellers, not a land grab.

MEXICO ($M)	ADDITIVE	DESIGN SOFTWARE	TOTAL
TAM 2026	350	220	570
Addressable / contestable 2026	189	88	277
SAM 2026	110	55	165
SAM 2029	158.7	71.2	229.9
SOM Year 3 (2029)	**6.3**	**2.1**	**8.4**

The data behind Exhibit 3, overleaf.

SAMPLE WORK · Illustrative figures

THE FOLLOW-THE-ACCOUNTS WEDGE

118

plants of our own US accounts sit in our Mexico target corridors.



140 of our US accounts operate 190 plants in Mexico. 118 of them sit in our target corridors. Today they buy an estimated **$9.0m** a year of printers, materials and CAD through Mexican resellers.

Those plants supply **$1.2m** of our $2.5m Year-1 revenue and **$2.6m** of the $8.4m in Year 3.

SAMPLE WORK · ILLUSTRATIVE FIGURES

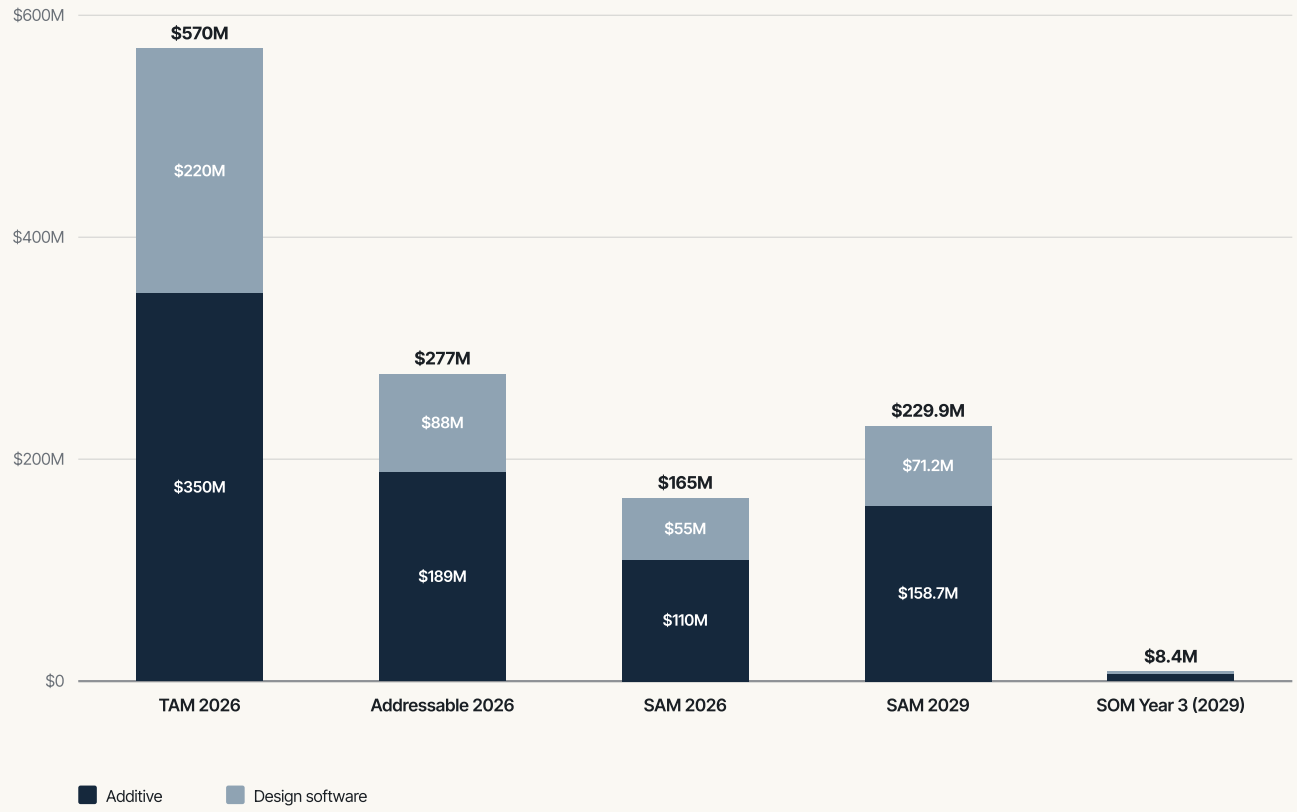
$350m
Additive TAM 2026, about 1.3% of a global market near $26.8bn

54%
Reseller-addressable share of additive TAM

13% · 9%
Growth a year to 2029, additive · design software

4.0% · 3.0%
Year-3 share planned, additive · design software

EXHIBIT 3 Mexico: $165m serviceable today, $229.9m by 2029, $8.4m ours by Year 3



Mexico: from total market to Year-3 revenue (US$), additive and design-software pools stacked. The Year-3 bar splits $6.3M additive and $2.1M design software. Drawn on the same $600M axis as Colombia, Exhibit 5. Illustrative estimates; method in Appendix A.

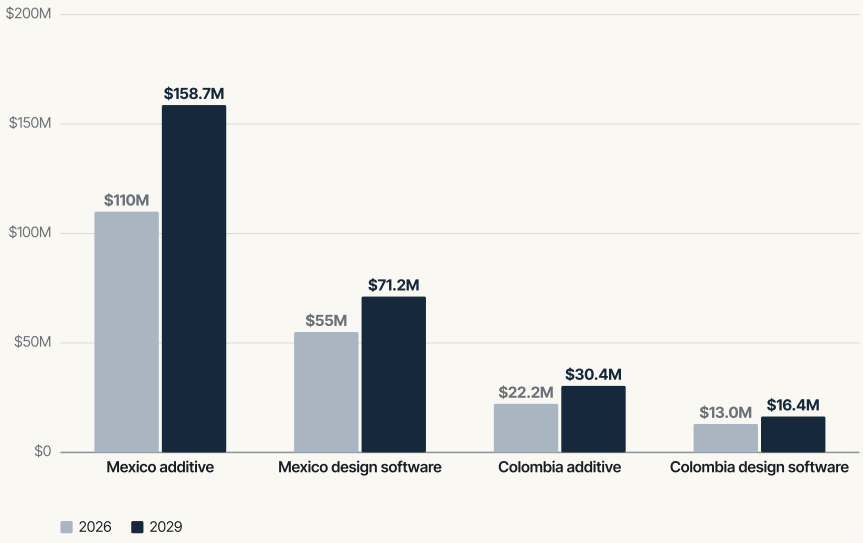
SAMPLE WORK · Illustrative figures

READING THE LADDER

Each step removes spend we cannot reach. **TAM** is everything bought. **Addressable** removes third-party print services (additive) and enterprise licences bought direct or abroad (software). **SAM** keeps our industries in the Bajío, Monterrey and the Baja California border. **SOM** is the share we plan to win by Year 3.

The serviceable market grows by **$64.9m** to 2029 in Mexico, against **$11.6m** in Colombia.

EXHIBIT 4 Mexico's serviceable market grows by $64.9m to 2029; Colombia's by $11.6m



Serviceable market (SAM) by country and pool, 2026 and 2029 (US$).

SAMPLE WORK · Illustrative figures

05 HOW BIG: COLOMBIA

Colombia is a fifth of Mexico's size, and its demand sits in different industries.

$70.0m
Additive TAM 2026, 0.20× Mexico

$35.2m
Serviceable market 2026, both pools

10.1%
Manufacturing share of GDP, 2024 [11]

12.25%
Policy rate, Sept 2026 [11]

Additive pool. Colombia's total additive spend is about **$70m in 2026**, 0.20 times Mexico's. The ratio is not a guess: Colombia's economy is roughly a quarter the size of Mexico's and manufacturing is about **10.1%** of its GDP [11], around half Mexico's share. Industrial printer demand tracks manufacturing more than GDP, which on its own would put Colombia nearer 0.12 to 0.15 of Mexico; a strong private dental market, a national technical-training system and a consumer-goods base in Medellín, Bogotá and Cali lift it to 0.20.

After removing print services, **$37.8m** is addressable. In our target cities and industries the serviceable market is **$22.2m**, growing at 11% a year to **$30.4m in 2029**. Growth is slower than Mexico's: the base is small, but money costs 12.25%.

Design-software pool. CAD/CAM/CAE spend of about **$44m**, of which **$22.0m (50%)** is contestable, a higher share than Mexico's because Colombia has fewer large enterprise accounts that buy direct. Serviceable: **$13.0m**, growing at 8% to **$16.4m in 2029**.

Colombia's economy is concentrated: Bogotá, Antioquia and Valle del Cauca together produce about half of national GDP [12]. A reseller covers the market from two cities, which is the one structural point in its favour.

COLOMBIA ($M)	ADDITIVE	DESIGN SOFTWARE	TOTAL
TAM 2026	70.0	44.0	114.0
Addressable / contestable 2026	37.8	22.0	59.8
SAM 2026	22.2	13.0	35.2
SAM 2029	30.4	16.4	46.8
SOM Year 3 if entered first (2029)	**1.4**	**0.6**	**2.0**

The data behind Exhibit 5, overleaf.

SAMPLE WORK · Illustrative figures

IF WE ENTERED COLOMBIA FIRST

With the same playbook, we would expect **4.5%** of additive and **3.5%** of software by Year 3, slightly above our Mexico shares because the field is thinner.

$2.0m
Year-3 revenue, against Mexico's **$8.4m**: a ratio of 0.24

Still loss-making in Year 3; break-even beyond month 48.

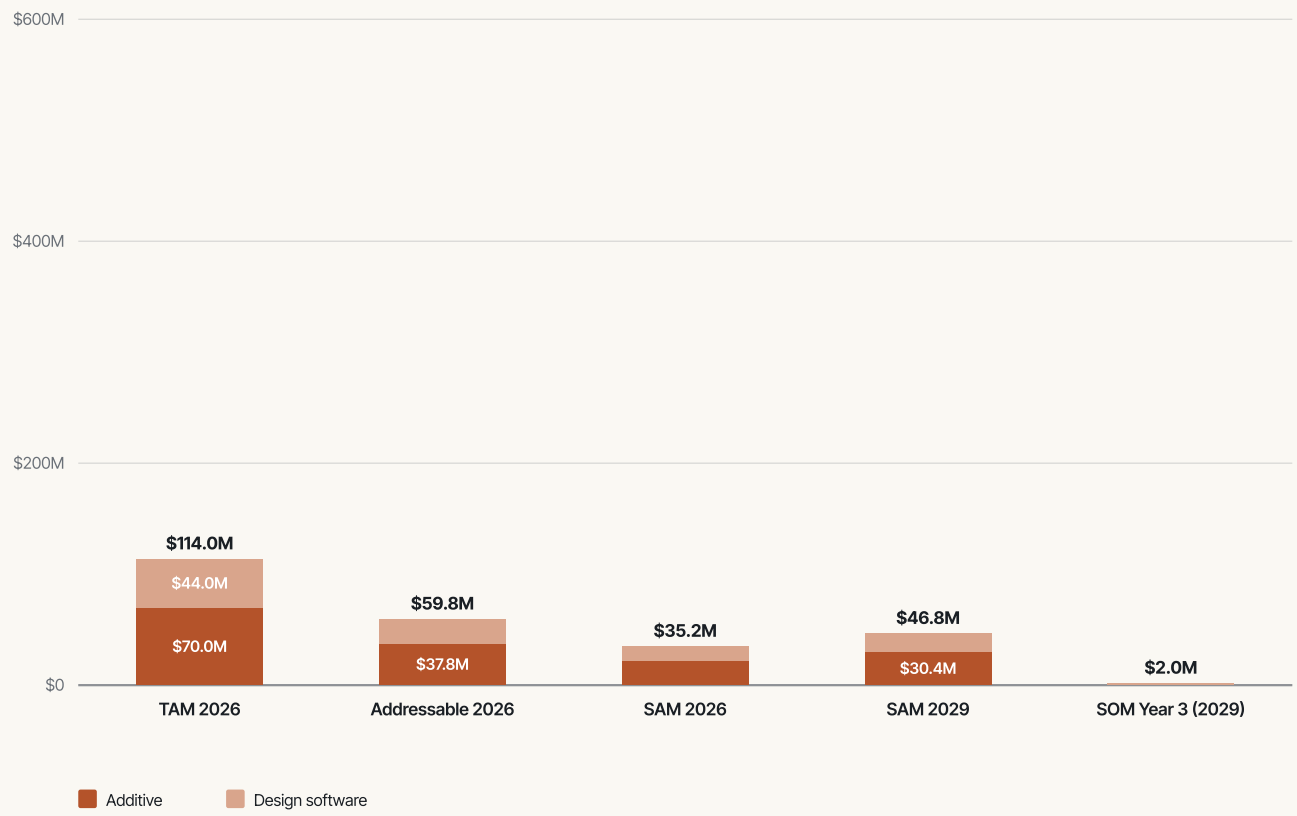
CONTEXT The two countries side by side: the public facts the sizing sits on

	MEXICO	COLOMBIA
Manufacturing base	6,516 IMMEX establishments employing about 3.18 million people (INEGI, July 2026) [2]; 3.95 million light vehicles built in 2025 [3]	Manufacturing about 10.1% of GDP (2024) [11]; Bogotá, Antioquia and Valle del Cauca about half of GDP [12]
Investment pull	Manufacturing FDI US$13.5bn in H1 2026, up 9.3% [2]; Plan México immediate deduction on new fixed assets to 30 Sep 2030 [6]	Policy rate 12.25% and inflation 6.29% (Sept 2026) [11]: capex waits on financing
Currency	USD/MXN about 18.4–18.8 (late Oct 2026); the peso weakened about 9% from September to October [9]	USD/COP about 3,160–3,220 (late Oct 2026); about 17% stronger over 12 months, but 5,118 at its weakest (Nov 2022) [11]
Trade and politics	USMCA not renewed on 1 July 2026, in force pending resolution [7]; 1,463 tariff lines raised for non-FTA origins from 1 Jan 2026 [8]	President Abelardo de la Espriella inaugurated 7 Aug 2026 after a runoff won about 49.7% to 48.7%, with a small congressional bloc [13]
Ecosystem	About 400 aerospace firms in five clusters [4]; Baja California 50%+ of medical-device exports [2]	SENA Tecnoparque network [15]; Ruta N in Medellín [16]; 3DFest at Colombiaplast [17]

Public facts, read as published in 2025–2026; sources in Appendix B.

Market data: public sources

EXHIBIT 5 Colombia: $35.2m serviceable today, about a fifth of Mexico, on Mexico's axis



Colombia: from total market to Year-3 revenue if entered first (US$). Drawn on the same $600M axis and at the same size as Mexico, Exhibit 3, so the difference in scale reads at a glance. The Year-3 bar splits $1.4M additive and $0.6M design software.

SAMPLE WORK · Illustrative figures

WHERE THE 0.20 RATIO DOES NOT HOLD, AND WHY

INDUSTRY ($M)	MEXICO	COLOMBIA	CO ÷ MX
Aerospace	23	0.8	**0.03**
Automotive	56	2.0	**0.04**
Medical devices	20	1.6	**0.08**
Other industrial	26	6.5	**0.25**
Consumer and industrial goods	24	9.0	**0.38**
Dental and clinical	25	10.0	**0.40**
Education and research	9	4.5	**0.50**
Energy, oil and gas, mining	6	3.4	**0.57**
Total ($m, 2026)	**189**	**37.8**	**0.20**

Reseller-addressable additive spend, 2026. Ratios above 0.20 are argued, not derived.

SAMPLE WORK · Illustrative figures

Colombia runs at 0.03 to 0.04 times Mexico in automotive and aerospace, and well above 0.20 in dental, education and energy.

There is no assembly-plant cluster and no five-cluster aerospace base. Dental runs at **0.40×** on private dentistry and medical tourism; education at **0.50×** on SENA's Tecnoparque network [15]; energy at **0.57×** on an Ecopetrol and mining supply chain, against Mexico's Pemex-constrained one.

The size gap is real. The industry gap is what decides the order of entry, and Section 6 takes it industry by industry.

06 INDUSTRIES

We ranked each country's buying industries on four tests: the size of reseller-addressable spend, its concentration in corridors one team can cover, its fit with the products and engineers we already have, and the speed of the sale.

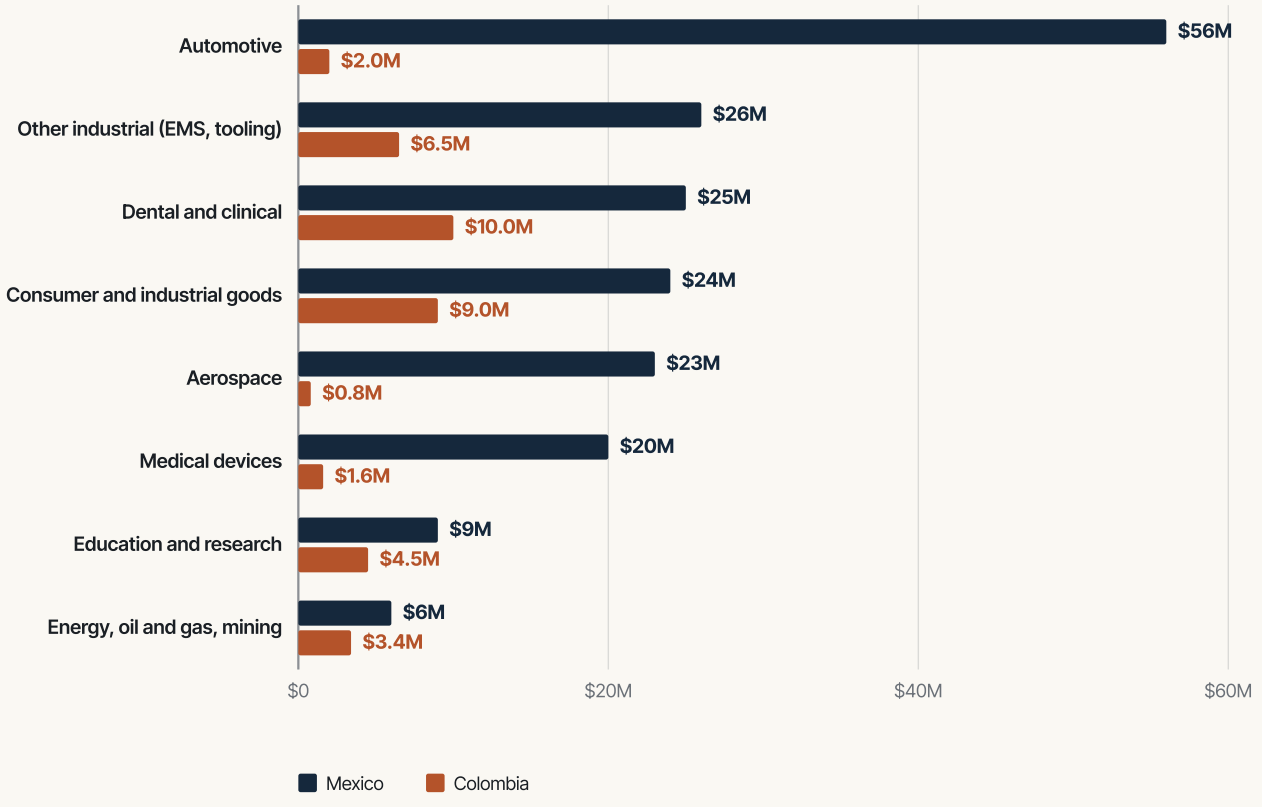
Tier 1 where Year-1 and Year-2 revenue comes from

Tier 2 built from Year 2

Tier 3 served opportunistically or through a partner

In Mexico we lead with the three industries where we already win in the US; in Colombia the lead industries are ones we would have to learn.

EXHIBIT 6 Mexico's demand is auto, aerospace and medical; Colombia's is dental and consumer goods



Reseller-addressable additive spend by industry, 2026 (US$). Totals: Mexico $189M, Colombia $37.8M.

SAMPLE WORK · Illustrative figures

SO WHAT

That difference, more than size, is why Colombia goes second.

Mexico's Tier 1 is **automotive, aerospace and medical devices**: the same plant-engineering buyers, the same industrial-polymer systems and the same application engineers we deploy in Texas, Michigan and Arizona today.

Colombia's Tier 1 is **dental and consumer goods**: markets we serve in the US, but with a different channel, a different buyer and much smaller tickets. Colombia's automotive and aerospace demand, the heart of our US book, runs at 0.03 to 0.04 times Mexico's.

Mexico

TIER LIST · RESELLER-ADDRESSABLE ADDITIVE SPEND AND SAM, 2026, $M

TIER	INDUSTRY	ADDR.	SAM	WHERE	WHY THIS TIER
1	**Automotive** OEM plants, tier 1–3 suppliers	56	**42**	Bajío (Guanajuato, Querétaro, Aguascalientes, San Luis Potosí), Saltillo–Ramos Arizpe, Monterrey	The largest pool. Jigs, fixtures, gauges and end-of-arm tooling on industrial polymer, bought by plant engineering for uptime and launch support. 3.95 million light vehicles built in 2025 [3]. Most of our 118 followed plants are here.
1	**Aerospace**	23	**16**	Querétaro, Nuevo León, Baja California, Sonora, Chihuahua	About 400 firms in five clusters, exports near US$11bn [4]. Flight-qualified polymers, scanning for inspection, CATIA and NX-adjacent seats. Querétaro is the anchor: Safran, Bombardier and Airbus Helicopters operate there [5].
1	**Medical devices** contract manufacturing	20	**16**	Tijuana–Mexicali, Ciudad Juárez, Querétaro	Baja California makes more than half of Mexico's medical-device exports, with 75+ manufacturers [2]. Fixtures, validation prototypes, cleanroom-compatible tooling. Served from our San Diego office from day one.
2	**Consumer and industrial goods**	24	**15**	Monterrey, Bajío	Appliances, HVAC, packaging, beverages: Monterrey's domestic industrial groups. Prototyping and tooling inserts. Built from the Monterrey satellite in 2028.
2	**Other industrial** EMS, tooling and moulds	26	**11**	Bajío, Monterrey (Jalisco and Chihuahua later)	Line-changeover fixtures for electronics; conformal-cooling inserts and CAM for mould shops. Follows the Tier 1 corridors.
3	**Dental and clinical**	25	**6**	Bajío and Monterrey labs only	A large market, but owned by the national dental channel. Served through Partner OEM B's dental line in our corridors, not nationally.
3	**Education and research**	9	**4**	Querétaro and Monterrey	High unit count, low ticket, budget-year tenders. Worth it for reference sites and the engineering talent pipeline, not for revenue.
3	**Energy, oil and gas** out of scope	6	**0**	Gulf coast	Pemex's finances and procurement make it an opportunistic segment at best. Not in the plan.
	Total	**189**	**110**		

Colombia

TIER LIST · RESELLER-ADDRESSABLE ADDITIVE SPEND AND SAM, 2026, $M

TIER	INDUSTRY	ADDR.	SAM	WHERE	WHY THIS TIER
1	**Dental and clinical**	10.0	**5.5**	Bogotá, Medellín	Colombia's largest single pool relative to its size: strong private dentistry and medical tourism. Resin printers, materials and scanners, sold through or alongside the dental channel.
1	**Consumer and industrial goods**	9.0	**6.5**	Medellín, Bogotá, Cali	Food, beverages, personal care, packaging, textiles and apparel. Prototyping, packaging mock-ups and tooling inserts.
2	**Education and research**	4.5	**3.5**	National, through public tender	SENA's Tecnoparque network and the engineering universities of Medellín and Bogotá buy fabrication equipment on budget-year tenders [15]. Proportionally far larger than in Mexico.
2	**Energy, oil and gas, mining**	3.4	**2.0**	Ecopetrol chain, mining regions	Spare parts on demand, reverse engineering, metal repair. Real, slow, tender-driven.
2	**Other industrial** tooling, moulds, plastics	6.5	**3.0**	Medellín, Bogotá	The plastics trade is organized enough to host an additive pavilion, 3DFest, inside Colombiaplast [17].
3	**Automotive and motorcycle parts**	2.0	**0.9**	Medellín area	A small parts base; nothing like Mexico's.
3	**Medical devices**	1.6	**0.8**	Bogotá	Small contract base.
3	**Aerospace**	0.8	**0.0**	–	A small MRO and defence base. Not in the plan.
	Total	**37.8**	**22.2**		

Tiers by size of addressable spend, corridor concentration, fit with our products and engineers, and speed of sale.

SAMPLE WORK · Illustrative figures

II

PART II

Winning it

The first gate of entry is the OEM's signature, ahead of any customer. Everything after it is execution: engineers in the corridor, a benchmark centre, and an installed base that buys materials, service and software.

≈9

major distributors in Mexico, plus probably 20 or more further resellers [10]

50%

of Mexico's Year-3 revenue is recurring: materials, service contracts and software subscriptions

15

the plan's highest Mexico risk score, of 25: OEM territory authorization refused or delayed

07

Who we would fight. Mexico is crowded and churns; Colombia is thin and young.

08

How customers buy. From a local partner, after a benchmark part, on a capital budget.

09

How the money works. Half of Year-3 revenue recurs, and it carries the margin.

10

Risks. Mexico's is permission; Colombia's is the price of money.

07 COMPETITION

Mexico is crowded and churns; Colombia is thin and young. In both, the first gate is the OEM's permission, not the customer.

The first gate of entry is the OEM, ahead of any customer.

Tier then controls our discounts, our lead flow and whether we may sell the industrial lines at all.

How the channel is built. Global OEMs make the machines, materials and software. They authorize resellers by territory and by tier, and a US reseller's agreement covers named US territories, not Mexico or Colombia. To sell a brand in a new country we need that OEM's written consent for the territory, and incumbent partners there will argue against us. Tier then controls our discounts, our lead flow and whether we may sell the industrial lines at all, which are normally reserved for partners with certified application engineers and a demo centre.

The field: real brands. In additive, the brands fought over are global: Stratasys, 3D Systems, HP, EOS, Formlabs, UltiMaker, Markforged and Carbon in polymer; EOS, Nikon SLM Solutions, Trumpf and Renishaw in metal; SprintRay and Asiga in dental; and a rising wave of Chinese entrants (Bambu Lab and Creality on the desktop; Farsoon, BLT and Eplus3D in industrial). In design software: Dassault Systèmes (SOLIDWORKS sold through resellers; CATIA largely direct), Autodesk, Siemens (NX, Solid Edge), PTC (Creo, Onshape) and the CAM specialists. **We do not compete with these firms. We compete with the other resellers of them.**

THE COMPETITORS Seven archetypes and a long tail. We describe local competitors by type, not by name.

ARCHETYPE	WHAT IT IS	WHERE IT WINS	WHERE IT IS WEAK	MEXICO	COLOMBIA
Incumbent Industrial VAR	15+ years, multi-brand, top tier with one or two OEMs; capital-city HQ with a corridor branch	Installed base, OEM relationship, tier-1 auto accounts	Thin application engineering outside its HQ city; slow on new brands	**34%** the leading 4–5 firms	**24%** often a multi-country Andean distributor
Regional Specialist	Smaller reseller plus print service, one corridor, one or two industries	Proximity, response time, plant relationships	Capital for a demo fleet; one-OEM dependence	**14%**	**16%**
Dental Channel	National dental distributor carrying printers, resins, scanners	Dental labs and clinics nationally	No industrial reach	**13%**	**26%**
CAD VAR adding printers	Software-first reseller bolting on professional printers	Owns engineering seats and renewals	Little industrial-printer service depth	**9%**	**8%**
Service Bureau that also resells	Print shop holding a reseller agreement	Try-before-you-buy; converts print customers	Sells parts and machines to the same customer	**6%**	**9%**
Low-Cost Importer	Online and marketplace sellers of Chinese brands	Price	Support, warranty, compliance	**8%**	**11%**
OEM selling direct	The OEM's own regional team on strategic accounts	Global framework agreements with multinationals	Covers few accounts; relies on partners for the rest	**12%**	**4%**
Long tail	Small resellers	Niche, price	Staying power	**4%**	**2%**
Total				**100%**	**100%**

Share of reseller-addressable additive spend, 2026. Archetypes describe real channel types, not named firms; the Dental Channel share ties to dental's weight in each market (Mexico 25 ÷ 189; Colombia 10.0 ÷ 37.8).

SAMPLE WORK · Illustrative shares

Mexico, in one paragraph

The market has had authorized resellers since 1996. A dozen entrants arrived in 2013–14 and most were gone by 2018; a second wave came with the pandemic. Today there are about nine major distributors and probably 20 or more further resellers, almost all multi-brand, clustered in Mexico City with branches in Querétaro, Chihuahua and Monterrey[10]. Service bureaus are the thin segment, with quality and reliability a known complaint[10].

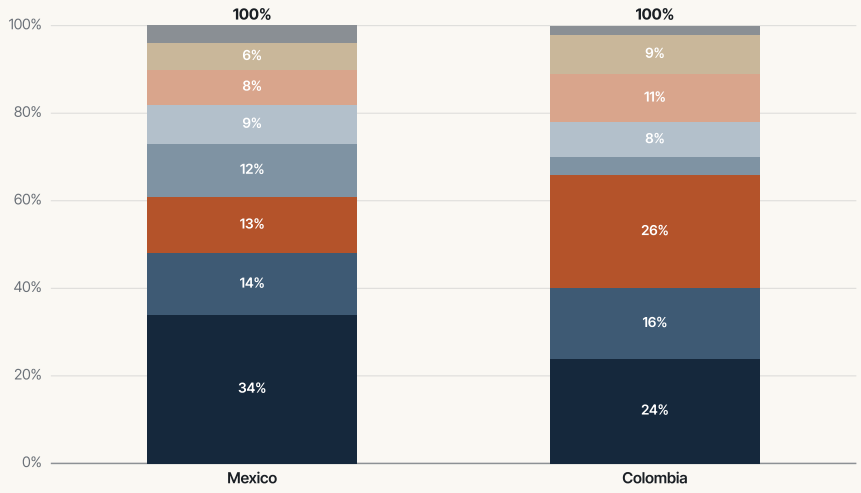
Read: we are entering a share fight against incumbents with OEM relationships, in a market that punishes entrants without staying power. Our edge is not price. It is application engineering in the corridor, a demo centre where a plant can print its benchmark part within a day's drive, and 118 plants whose US parents already buy from us.

Colombia, in one paragraph

Smaller, younger and centred on Bogotá and Medellín, with resellers who also print, sell filament and run training. OEM coverage is often run from Mexico, Miami or a Bogotá regional hub, and few partners hold industrial tier. The dental channel is the single largest seller. Four to six professional and industrial resellers of note, few at industrial tier (our estimate).

Read: less competition, but also less proven industrial demand. A thin field is an opening only if the demand behind it is there.

EXHIBIT 7 Incumbents hold a third of Mexico; the dental channel is Colombia's largest seller



ARCHETYPE, BOTTOM TO TOP

	MX	CO
Incumbent Industrial VAR	34%	24%
Regional Specialist	14%	16%
Dental Channel	13%	26%
OEM selling direct	12%	4%
CAD VAR adding printers	9%	8%
Low-Cost Importer	8%	11%
Service Bureau that resells	6%	9%
Long tail	4%	2%

Who sells today: share of reseller-addressable additive spend by archetype, 2026. **SAMPLE WORK · Illustrative shares**

WHAT THE 2026 TARIFF MOVE DOES TO THE FIELD

From 1 January 2026 Mexico raised duties on **1,463 tariff lines**, by 5 to 50%, for goods from countries without a trade agreement with Mexico, China among them[8].

Whether additive machines are on those lines is not confirmed. The direction is clear either way: it favours US, European and Israeli brands sold through an authorized channel over low-cost imports.

≈9 + 20

Mexico: major distributors, plus probably 20 or more further resellers[10]

4–6

Colombia: professional and industrial resellers of note, few at industrial tier (sample estimate)

08 BUYING MOTION

Five features of the buying motion decide the entry model.

Industrial customers buy from a local partner, after a benchmark part, on a capital budget; we must be in the corridor, invoice locally and finance the sale.

1

DISTRIBUTOR-LED

Almost every industrial sale passes through a local partner who demos, quotes in local terms, installs, trains and services. A reseller selling across the border with no engineers in the country loses to one with a van in Querétaro.

2

BENCHMARK-DRIVEN

Industrial buyers send a test part and judge the print. A demo and application centre within reach of the plant is close to mandatory for industrial sales.

3

CAPEX-HEAVY AND LONG

A professional printer closes in weeks; an industrial polymer system in four to twelve months; metal in nine months to two years, usually after a visit to a reference customer. Volume comes from a long tail of professional units; value from a short list of industrial deals.

4

LOCAL INVOICING

Not optional. Mexico requires electronic invoices (CFDI) issued through the tax authority, SAT; Colombia requires DIAN electronic invoicing. Both mean a local legal entity to sell to domestic customers.

5

FINANCING IS THE PRODUCT

More so in Colombia. Industrial B2B in Mexico is commonly quoted in US dollars, with smaller domestic buyers wanting pesos. Colombia's policy rate of **12.25%** [11] makes leasing, OEM financing and phased payment a condition of the sale.

WHO SIGNS Three buyer types, three different routes to a signature

BUYER TYPE	CHAMPION	APPROVER	WATCH FOR
Multinational plant in Mexico	Manufacturing-engineering manager	Plant manager	Corporate procurement at the US or European HQ may hold the global framework agreement and preferred-supplier list. **That is our wedge: we are already on many of those lists.**
Mexican or Colombian family-owned group	Engineering lead	Owner or general director	Relationship and local presence weigh more than the spec sheet.
University or public body SENA, research centres	Lab or programme head	Tender committee	Budget-year timing; a licitación decides.

2–8 wks

Professional printer, $3k–60k: the long tail that brings volume

4–12 mo

Industrial polymer system, $80k–500k: the short list that brings value

9–24 mo

Metal system, $300k–1.5m+: not in the plan before Phase 3

THE MAQUILADORA WEDGE

Our cleanest Mexico revenue is not new logos. It is following existing accounts to their Mexican plants.

Plants registered under IMMEX may import machinery temporarily free of import duty and VAT[4]. Many are owned by US parents that already buy from US resellers. With Mexico territory rights in hand, we supply the machine, the materials and the service under the same framework the parent already signed.

48%
of Year-1 Mexico revenue from followed plants: $1.2m of $2.5m

31%
of Year-3 revenue: $2.6m of $8.4m, as new logos grow

THE PLAN MÉXICO LEVER

A qualifying buyer can deduct **35 to 89%** of a new fixed asset in its first year for assets acquired between 2027 and September 2030, depending on asset type, plus an extra **25%** deduction on increased training spend[6]. Eligibility conditions apply and each buyer must confirm its own position.

For our sales team it changes the conversation: a printer bought in 2027 can be largely expensed in year one, and the training we sell earns the buyer a deduction of its own.

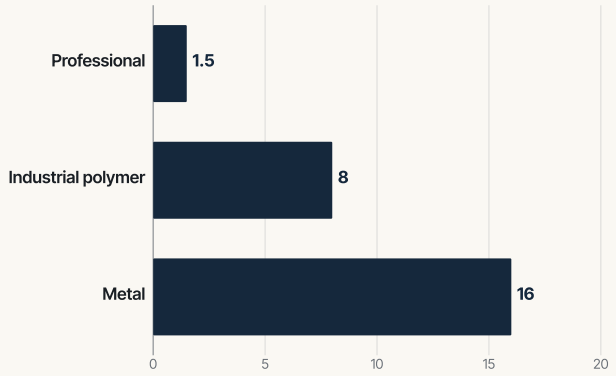
35–89%
First-year deduction on a new asset, 2027–2030, by asset type

41–91%
The same deduction for assets acquired in 2025–26

+25%
Extra deduction on increased training spend

Decree of 21 January 2025 (DOF)[6]. New fixed assets acquired to 30 September 2030; eligibility conditions apply.

EXHIBIT 8 An industrial system takes eight months to close; a demo centre in the corridor shortens it



Typical sales cycle by product tier, months (midpoint of range). **SAMPLE WORK · Illustrative midpoints**

PRODUCT TIER	TICKET	CYCLE RANGE	MIDPOINT
Professional resin, benchtop SLS, composite FDM	$3k–60k	2–8 weeks	**1.5 mo**
Industrial polymer	$80k–500k	4–12 months	**8 mo**
Metal	$300k–1.5m+	9–24 months	**16 mo**

Ranges reflect how the market buys; midpoints are this study's. **SAMPLE WORK**

WHAT THE YEAR-3 HARDWARE LINE IS MADE OF

About **70 professional units** at an average of $18k ($1.26m) and **9 industrial polymer systems** at about $260k ($2.34m): **$3.6m** of hardware. No metal before Phase 3.



Benchmark-driven: industrial buyers send a test part and judge the print. A demo and application centre within reach of the plant is close to mandatory. Illustrative photograph

09 UNIT ECONOMICS

Half of Mexico's Year-3 revenue is recurring, and the recurring lines carry the margin.

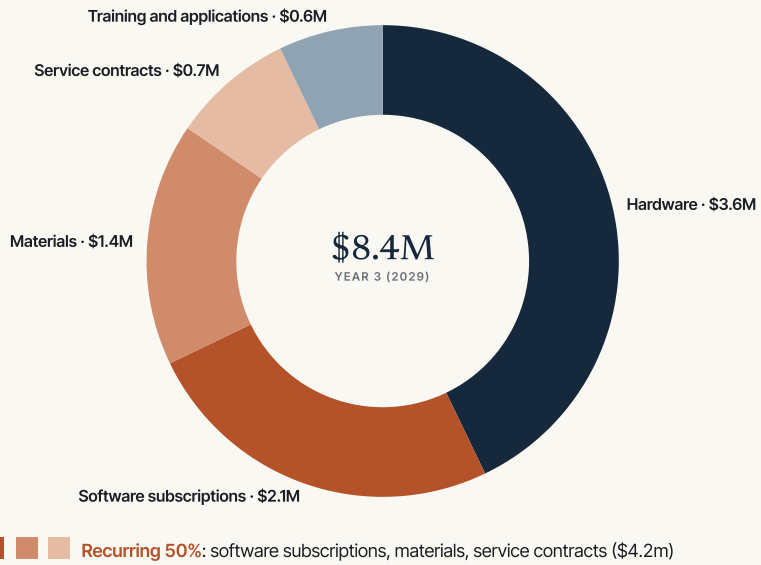
By Year 3 (2029) the Mexico business sells **$8.4m**.

That is $3.6m of hardware (about 70 professional units at an average of $18k and 9 industrial polymer systems at about $260k), $1.4m of materials, $0.7m of service contracts, $0.6m of training and applications work, and $2.1m of software subscriptions.

Hardware is 43% of revenue but earns only 22% gross margin. Service and training earn 50%, materials 33%, software 25%. Blended, the business earns **28.9%** gross margin and **$2.43m** of gross profit in Year 3.

Materials, service contracts and software subscriptions together make **50%** of revenue: the line the board should watch grow, because it compounds with every system installed and survives a bad capex year.

EXHIBIT 9 Half of Year-3 revenue is recurring



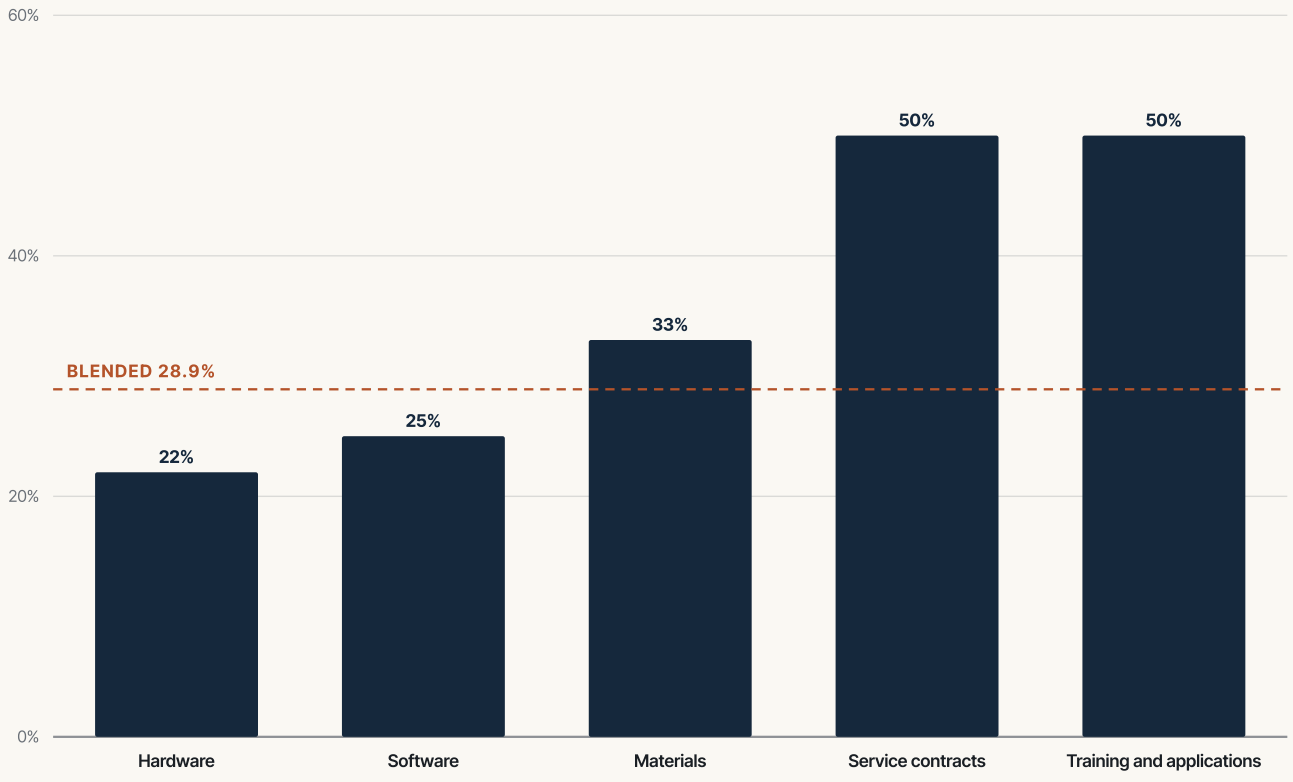
Mexico revenue by line, Year 3 (2029): US$8.4M. SAMPLE WORK · Illustrative figures

MEXICO, YEAR 3 (2029)	REVENUE ($M)	GROSS MARGIN	GROSS PROFIT ($M)	RECURRING?
Hardware	3.6	22%	0.79	No: opens the account
Materials	1.4	33%	0.46	Yes
Service contracts	0.7	50%	0.35	Yes
Training and applications	0.6	50%	0.30	Project work
Software subscriptions	2.1	25%	0.53	Yes
Total	**8.4**	**28.9%**	**2.43**	**Recurring share 50%**

Gross profit to two decimals re-adds to 2.43 (0.792 + 0.462 + 0.350 + 0.300 + 0.525 = 2.429). SAMPLE WORK · Illustrative figures

EXHIBIT 10

Service and training earn more than twice hardware's margin



Gross margin by revenue line, Mexico Year 3. Dashed rule: blended 28.9%.

SAMPLE WORK · Illustrative figures

TWO PRACTICAL CONSEQUENCES

Price to win the installed base; earn it back on attach.

1

We price industrial systems to win the installed base and earn back on attach: materials, service contracts and software subscriptions.

2

We take over service on machines our followed accounts already run in Mexico, which builds service revenue before we have sold a single new system there.

43%	28.9%	$2.43m	50%
Hardware share of Year-3 revenue, at 22% margin	Blended gross margin, Year 3	Gross profit, Year 3	Recurring share: the line to watch

10 RISK

Mexico's biggest risk is permission and Colombia's is the price of money; each has a mitigation built into the plan, not bolted on.

We rated each risk on likelihood and impact, one to five, and multiplied.

12+

Plan-shaping. The plan is designed around it. Mexico four, Colombia two.

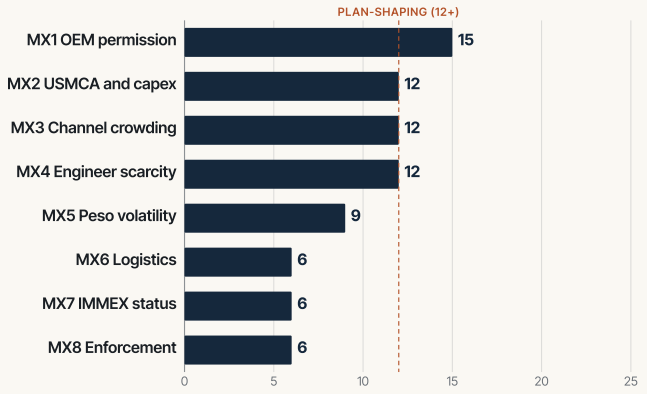
8–11

Managed. Mexico one, Colombia four.

< 8

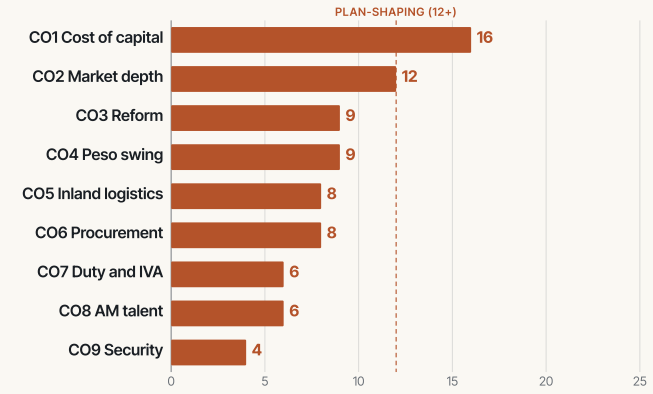
Monitored. Mexico three, Colombia three.

EXHIBIT 11 Mexico's risks are execution risks, led by OEM permission



Mexico risk register: likelihood × impact (max 25). SAMPLE WORK

EXHIBIT 12 Colombia's top risks are the market itself: money and depth



Colombia risk register: likelihood × impact (max 25). SAMPLE WORK

SO WHAT

That is the other reason Colombia waits.

Mexico's four plan-shaping risks are all about execution: **permission, policy timing, a crowded channel, and people**. Each has a gate or a design choice against it.

Colombia's two plan-shaping risks are about the market itself, **money and depth**, which no execution fixes. Full registers with mitigations follow.

PLAN-SHAPING RISKS Each one has its answer written into the plan

MX1 · 15 · OEM permission
Tranche 2 ($1.6m) released only on the signed Mexico addendum; a second industrial OEM is the named fallback.

MX2 · 12 · USMCA and capex
Pipeline weighted to running plants; the downside case ($5.8m in Year 3) is built on this risk.

MX3 · 12 · Channel crowding
Compete on response time and engineering in the corridor; price systems to win the base, earn on attach.

MX4 · 12 · Engineer scarcity
Two bilingual engineers seeded from the US team; a training academy as revenue line and hiring pipeline.

CO1 · 16 · Cost of capital
Trigger 4: no launch without a leasing partner signed or the policy rate at or below 10%.

CO2 · 12 · Market depth
Trigger 5: three anchor accounts or letters of intent first; run as a satellite from Querétaro.

Mexico risk register

Eight risks. Four plan-shaping, one managed, three monitored. L = likelihood, I = impact, each 1 to 5.

ID	RISK	WHAT WE SEE	L	I	SCORE	MITIGATION BUILT INTO THE PLAN
MX1	**OEM territory authorization refused or delayed**	Rights are territorial; incumbent partners lobby against new ones	3	5	**15**	Capital tranche 2 is released only on a signed Mexico territory addendum from Partner OEM A. We open the negotiation with the accounts already in that OEM's US book. A second industrial OEM with thin Mexico coverage is the named fallback.
MX2	**USMCA review outcome slows plant capex**	The US declined to renew USMCA on 1 July 2026; it remains in force pending resolution[7]. Manufacturing FDI still rose 9.3% in H1 2026 to US$13.5bn[2], but IMMEX employment has drifted down[5].	3	4	**12**	Weight the pipeline to plants already running, whose lines need tooling regardless of new investment. Our downside case is built on this risk (Year 3 at $5.8m).
MX3	**Channel crowding and price war**	About nine major distributors and 20+ further resellers, history of churn[10]	4	3	**12**	Compete on response time and application engineering in the corridor, not box price. Price systems to win the base and earn on attach.
MX4	**AM application-engineer scarcity**	Deep engineering labour pool, but experienced AM engineers are few and poached	4	3	**12**	Seed Querétaro with two bilingual application engineers from our US team, released by Mei-Ling Tran's Applications Engineering group; build a training academy that doubles as a revenue line and a hiring pipeline with the Querétaro and Monterrey engineering schools.
MX5	**Peso volatility**	USD/MXN about 18.4 to 18.8; the peso weakened about 9% from September to October 2026[9]	3	3	**9**	Quote multinationals in US dollars; peso price lists carry an FX-adjustment clause; hedge peso-denominated payroll.
MX6	**Logistics and cargo security**	Highway cargo theft is a known cost	3	2	**6**	Insured, tracked freight; spares and materials stocked in Querétaro.
MX7	**Customers' IMMEX status**	170 programmes cancelled and 600+ suspended in 2025[4]	2	3	**6**	Confirm the customer's IMMEX standing at quote for any duty-free temporary import.
MX8	**Contract-enforcement uncertainty**	Foreign firms flag questions after recent judicial changes	2	3	**6**	Arbitration clauses; deposits on industrial systems; credit limits by account.

Shaded rows: plan-shaping (score 12 or more). Context facts carry source notes; likelihood and impact ratings are the study's.

SAMPLE WORK · Illustrative ratings

"The binding risk is not demand; it is permission."

Without a written Mexico territory addendum from our primary industrial OEM there is no business, so the plan releases capital only after that addendum is signed.

Colombia risk register

Nine risks. Two plan-shaping, four managed, three monitored. L = likelihood, I = impact, each 1 to 5.

ID	RISK	WHAT WE SEE	L	I	SCORE	MITIGATION BUILT INTO THE PLAN
CO1	**Cost of capital defers capex**	Policy rate raised to 12.25%; inflation 6.29% against a 3% target [11]	4	4	**16**	Trigger 4: no Colombia launch without a leasing partner signed or the policy rate at or below 10%. Lead with consumables-heavy dental and education, where tickets are smaller.
CO2	**Thin market depth**	Smaller base, fewer multinational plants, unproven industrial demand	3	4	**12**	Stage it. Trigger 5 requires three anchor accounts or letters of intent before launch. Run it as a satellite from Querétaro, sharing engineers.
CO3	**Reform execution**	A market-friendly president inaugurated 7 August 2026 after the narrowest runoff in the country's history, with a small bloc in Congress [13]	3	3	**9**	Plan on no new incentive; treat any technology tax incentive as upside.
CO4	**Peso swing**	The peso is about 17% stronger over 12 months, but hit 5,118 to the dollar in November 2022 [11]	3	3	**9**	Dollar quotes for industrial systems; peso lists for consumables with quarterly repricing.
CO5	**Inland logistics**	Bogotá and Medellín are inland from Buenaventura and Cartagena; road freight is slow and costly	4	2	**8**	Spares and materials stock in Medellín; service-level promises written to the reality.
CO6	**Slow public procurement**	SENA, universities and the Ecopetrol chain buy by tender	4	2	**8**	Keep public tenders under 20% of the Colombia plan; never let a tender be a launch trigger.
CO7	**Import duty and IVA**	19% IVA on customs value plus duty [14]; US-origin machinery often enters at 0% under the trade agreement	2	3	**6**	Confirm the tariff classification of each product line before the first price list.
CO8	**Thin AM talent pool**	Strong design schools, few experienced AM engineers	3	2	**6**	Shared application engineers from Querétaro in Year 1; local hires trained there.
CO9	**Regional security**	Much improved in the cities; regional risk persists near some energy and mining sites	2	2	**4**	Remote support first; site visits under a travel-security protocol.

Shaded rows: plan-shaping (score 12 or more). Context facts carry source notes; likelihood and impact ratings are the study's.

SAMPLE WORK · Illustrative ratings

"A thin field is an opening only if the demand behind it is there."

Colombia's plan-shaping risks are about the market itself, money and depth. Triggers 4 and 5 are written against them.

III

PART III

The decision

WEIGHTED SCORE, OUT OF 5

4.10 **2.45**

Mexico. Leads on size, growth, right to win and entry economics; ties on risk.

Colombia. Wins only competitive intensity, and a thin field is worth little without the demand behind it.

The answer holds even if we have overestimated Mexico by 40%. Capital follows gates: permission first, Querétaro in 2027, Monterrey in 2028, Medellín in 2029 if five triggers are met.

11
The decision. The scorecard, the stress test, and the four options we rejected.

12
The staged entry. Four phases, each released by a gate, with the economics of each stage.

13
The ask. $2.8m in three gated tranches; Colombia returns in Q4 2028.

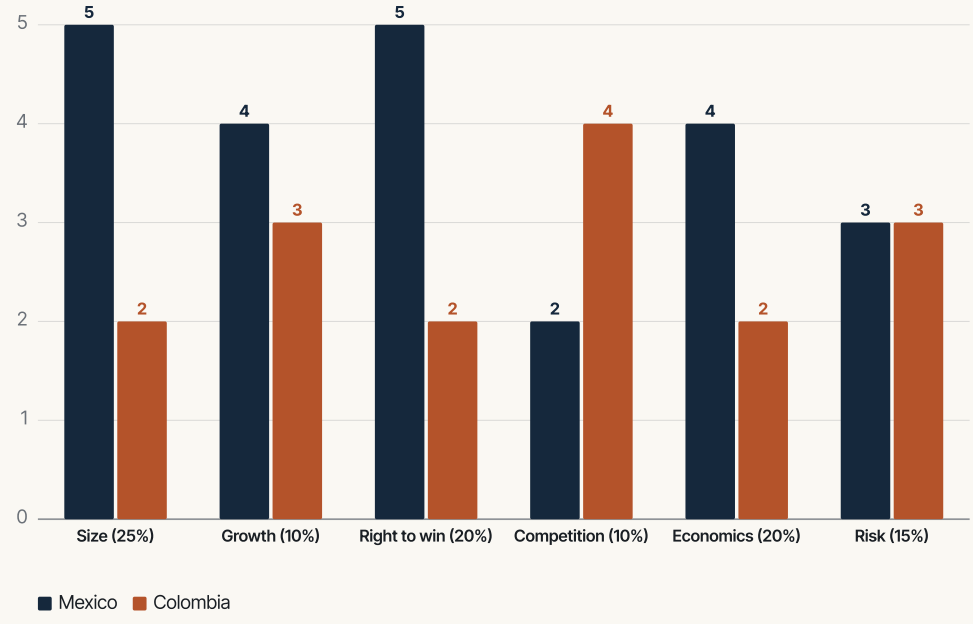
11 THE DECISION

We scored both countries on six weighted criteria. For competitive intensity and risk, 5 means least contested or lowest risk.

Mexico scores 4.10 against Colombia's 2.45, and the answer holds even if we have overestimated Mexico by 40%.

CRITERION	WEIGHT	MEXICO	COLOMBIA	BASIS
Market size	25%	**5**	**2**	SAM 2029: $229.9m against $46.8m
Market growth	10%	**4**	**3**	Additive 13% against 11% a year
Right to win	20%	**5**	**2**	118 followed plants in corridor; Tier 1 industries match our US strengths
Competitive intensity (5 = least contested)	10%	**2**	**4**	Crowded, churning field against a thin, young one. **The only criterion Colombia wins.**
Entry economics	20%	**4**	**2**	Break-even month 30 against beyond month 48 if entered first
Risk (5 = lowest)	15%	**3**	**3**	Execution risks against market risks; comparable in weight
Weighted score (out of 5)	**100%**	**4.10**	**2.45**	Mexico 1.25 + 0.40 + 1.00 + 0.20 + 0.80 + 0.45 · Colombia 0.50 + 0.30 + 0.40 + 0.40 + 0.40 + 0.45

EXHIBIT 13 Country scorecard: Mexico 4.10, Colombia 2.45



4.10

Mexico, weighted score out of 5

2.45

Colombia, weighted score out of 5

Six weighted criteria, score out of 5. For competitive intensity and risk, 5 = least contested / lowest risk.

SAMPLE WORK

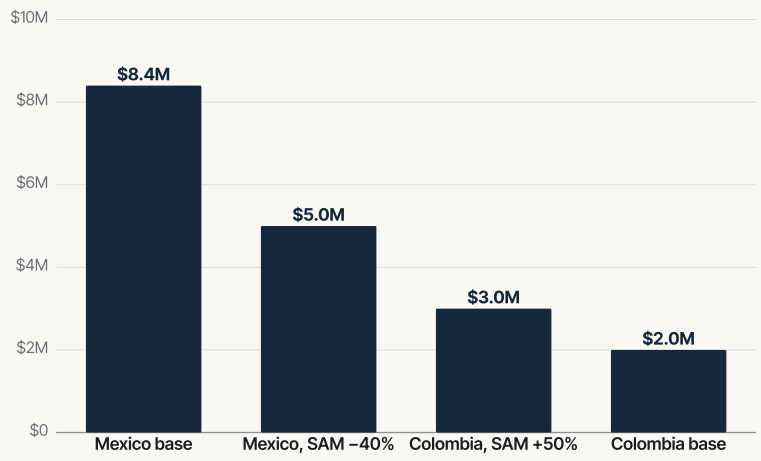
STRESS TEST

We asked what it would take to flip the answer.

If our Mexico serviceable market is 40% too high, Mexico's Year-3 revenue falls from $8.4m to **$5.0m**. If Colombia's is 50% too low, Colombia's rises from $2.0m to **$3.0m**. Mexico is still two-thirds larger.

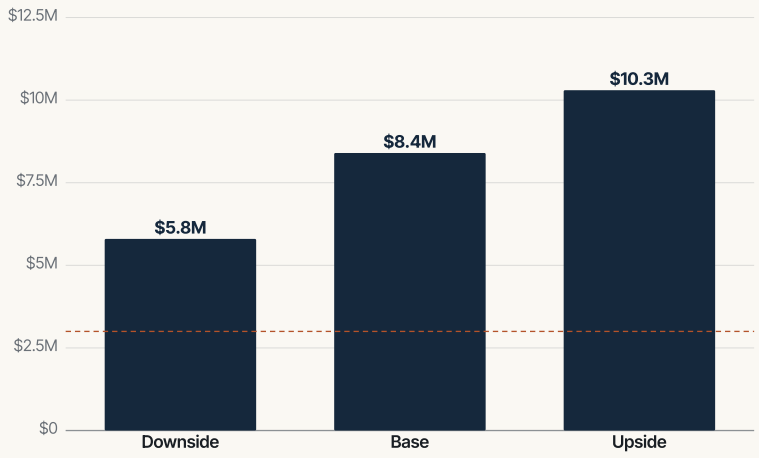
Even our Mexico downside scenario, built on a hostile USMCA outcome and a single OEM line, delivers **$5.8m**.

EXHIBIT 14 Cut Mexico by 40% and lift Colombia by 50%: Mexico still leads



Year-3 revenue under stress (US$). Colombia base is the first-entry case. SAMPLE WORK

EXHIBIT 15 Even the downside beats Colombia's best realistic case



Mexico Year-3 (2029) revenue by scenario (US$). Dashed rule: Colombia with SAM 50% higher, $3.0M. SAMPLE WORK

SCENARIO	YEAR 3	BREAK-EVEN
Downside USMCA tightens rules of origin, capex slips about two quarters, one OEM line. SAM growth 8% / 6%; share 3.0% / 2.5%	**$5.8m**	≈ month 40
Base As planned: 4.0% / 3.0% share	**$8.4m**	≈ month 30
Upside Plan México pull, two OEM lines. SAM growth 16% / 11%; share 4.5% / 3.5%	**$10.3m**	≈ month 24

WHAT WE REJECTED Four other ways in, and why each loses

COLOMBIA FIRST

A fifth of the market, Tier 1 industries outside our strengths, and money at 12.25%. Year-3 revenue of $2.0m, still loss-making in Year 3; break-even beyond month 48.

BOTH AT ONCE

Splits a scarce pool of application engineers and two OEM negotiations across two countries, and puts Colombia's cost base in place before Mexico's attach revenue can carry it.

SERVE MEXICO FROM TEXAS

Cannot issue CFDI invoices to domestic customers, cannot run a benchmark centre in the corridor, and loses every response-time comparison to a local incumbent.

PARTNER INSTEAD OF ENTERING

Keeps the followed-account revenue in someone else's hands, and the OEM will see us as a referral source, not a partner.

12 STAGED ENTRY

Four phases, each released by a gate: permission first, Querétaro in 2027, Monterrey in 2028, Medellín in 2029 if the triggers are met.

Why Querétaro

It sits at the centre of the Bajío's automotive corridor, hosts one of Mexico's five aerospace clusters and an emerging medical-device base, is about two hours from Mexico City, and is home to federal manufacturing research centres. **64 of our 118 followed plants** are within a day's drive.

Monterrey is the stronger heavy-industry and consumer-goods base, and becomes our second office in 2028; opening there first would leave the aerospace cluster and most of our followed plants a long drive away.

Why Medellín for Colombia

Colombia's industrial and innovation city: plastics, textiles and apparel, food, metalworking and energy, the Ruta N innovation centre [16], and strong engineering and design universities.

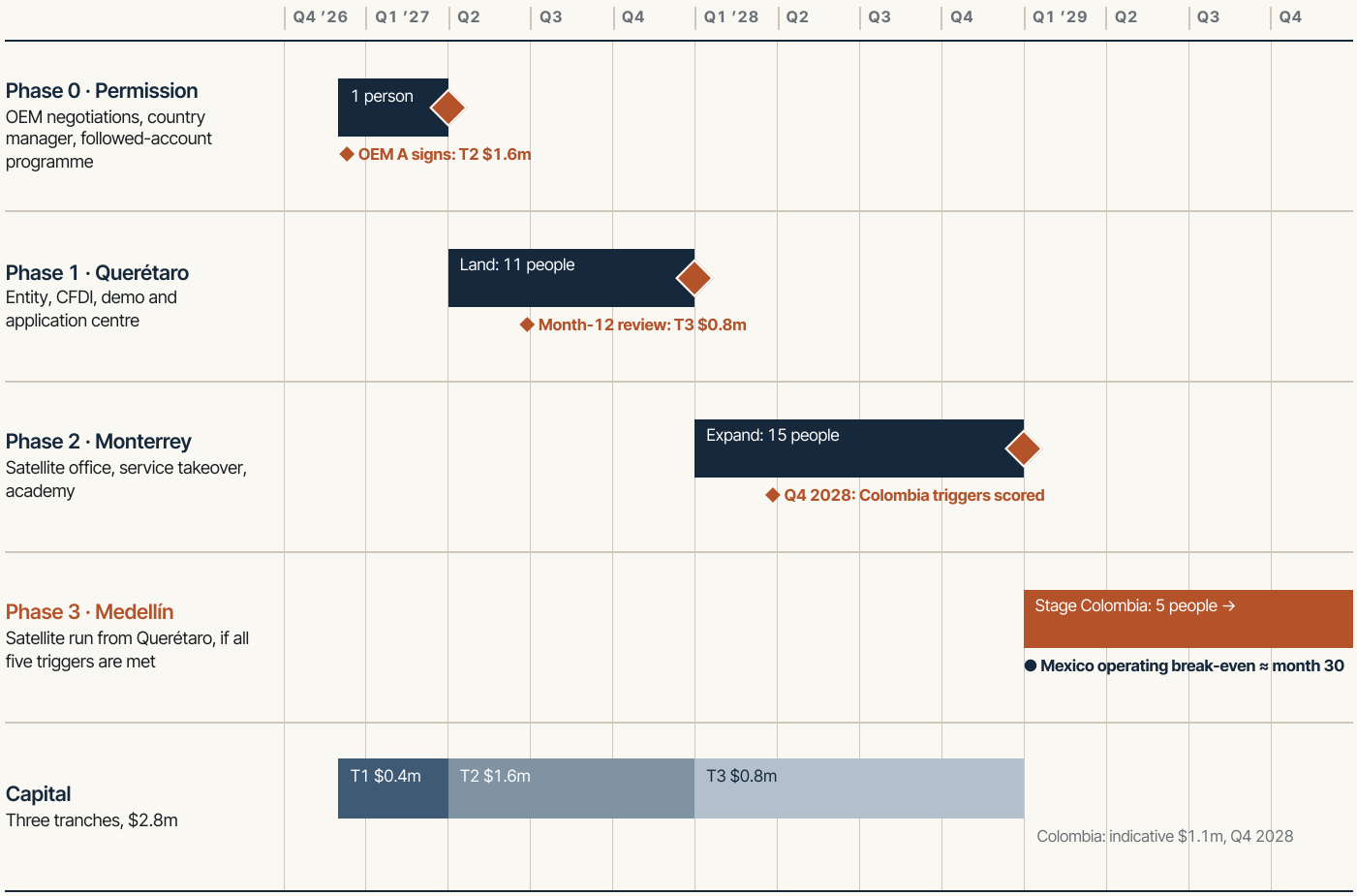
Bogotá is the larger market and is covered by field sales from Medellín. The Medellín office is a satellite run from Querétaro, sharing application engineers and OEM rights.

PHASE	WHEN	WHAT GETS STOOD UP	HEADCOUNT	GATE TO THE NEXT PHASE
0. Permission	Dec 2026 to Mar 2027	Board approval. Country manager hired. Negotiation of Mexico territory addenda with Partner OEM A, Partner OEM B and our CAD Partner. Legal and tax design. Followed-account programme launched from San Antonio and San Diego.	**1**	**Signed Mexico territory addendum from Partner OEM A.** Releases tranche 2.
1. Land: Querétaro	Apr to Dec 2027	Entity (S. de R.L. de C.V.), SAT registration and CFDI invoicing. Querétaro office with demo and application centre (industrial polymer, professional resin, scanning; no metal). Two application engineers seeded from the US team (Applications Engineering, Mei-Ling Tran). Tijuana served from San Diego.	**11**	Month-12 review: 2027 revenue at or near $2.5m; at least 20 followed plants buying. Releases tranche 3.
2. Expand: Monterrey	2028	Monterrey satellite (sales plus two field engineers). Consumer-goods and tooling programme. Service takeover of machines already in followed plants. Training academy.	**15**	Colombia triggers scored for the board in Q4 2028.
3. Stage Colombia; deepen Mexico	2029 onward	Medellín satellite (S.A.S. entity, compact demo centre, five people), run from Querétaro. In Mexico: operating break-even around month 30; a metal line in Querétaro considered for 2030 if aerospace demand is proven.	**MX 18** **CO 5**	Annual plan review.

Headcount at year end.

SAMPLE WORK · Illustrative plan

EXHIBIT 16 Staged entry timeline: every phase ends at a gate, and capital follows the gates



Phases from the plan table; quarters Q4 2026 to Q4 2029. Diamonds mark the gates; the circle marks Mexico's operating break-even (mid-2029).

SAMPLE WORK · Illustrative plan

THE FIVE COLOMBIA TRIGGERS

All five must be met at the Q4 2028 review.

Public tenders are capped at under 20% of the Colombia plan; a tender is never a launch trigger.

- ☐ **Mexico trailing-12-month revenue** at or above $5.0m, with recurring share at or above 40%.
- ☐ **Mexico gross margin** at or above 27%, and monthly operating break-even forecast inside month 30.
- ☐ **Partner OEM A grants Colombia** (Andean) territory in writing.
- ☐ **Financing in the offer:** a leasing partner signed in Colombia, or the policy rate at or below 10%.
- ☐ **At least three anchor accounts** or letters of intent in Medellín or Bogotá.

MONTH-12 REVIEW

Releases tranche 3 ($0.8m) when 2027 revenue is at or near **$2.5m** and at least **20 followed plants** are buying.

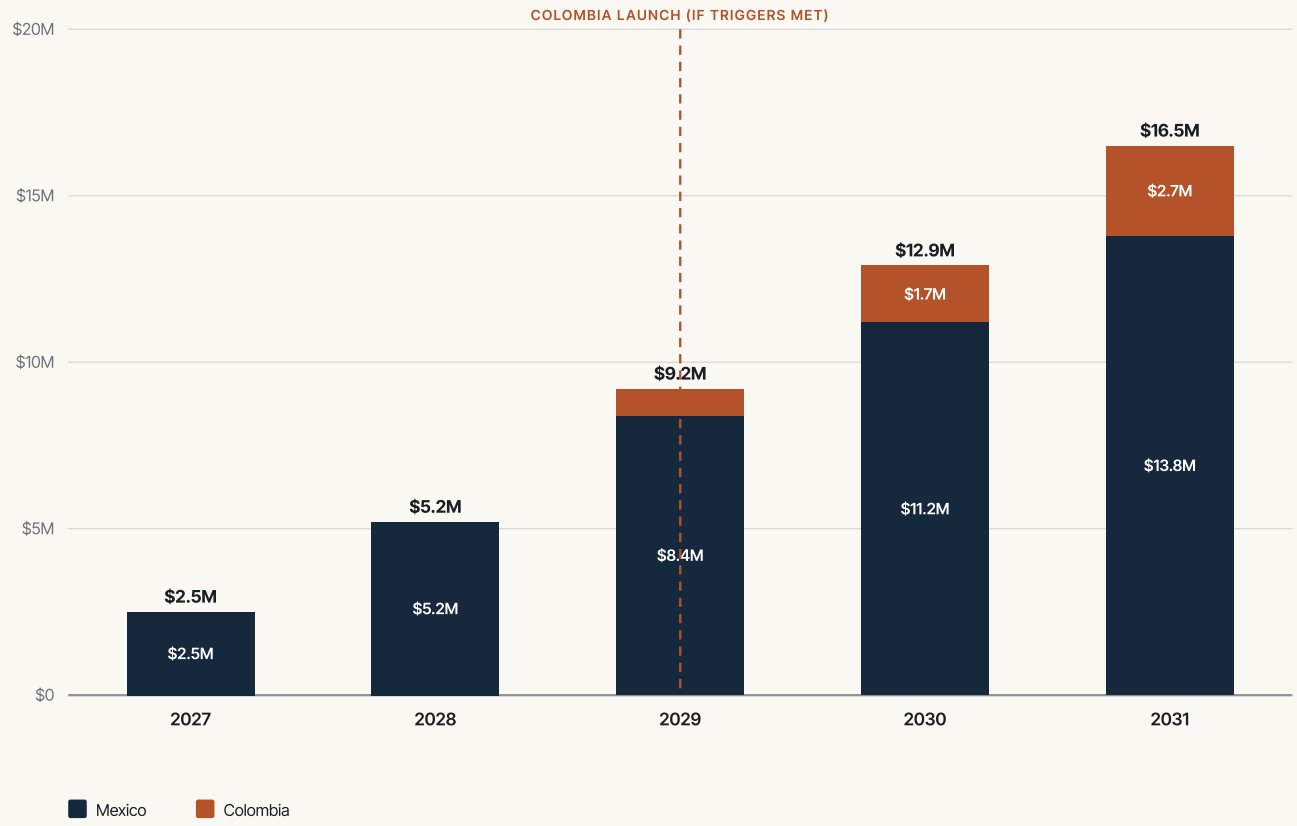
Q4 2028 REVIEW

All five triggers scored. An indicative Colombia envelope of **$1.1m** (peak funding $0.93m plus $0.17m contingency) returns to the board.

NOT BEFORE PHASE 3

No metal systems in the Mexico plan before Phase 3; a Querétaro metal line is considered for 2030 only if aerospace demand is proven.

EXHIBIT 17 $16.5m of new revenue by 2031, 84% of it from Mexico



Revenue by country, 2027–2031 (US$). Totals: $2.5M · $5.2M · $9.2M · $12.9M · $16.5M. Colombia enters in 2029 only if the five triggers are met. **SAMPLE WORK · Illustrative figures**

THE ECONOMICS OF EACH STAGE · MEXICO ($M)

	2027	2028	2029	2030	2031
Revenue	2.5	5.2	8.4	11.2	13.8
Gross margin	25.2%	26.9%	28.9%	30.0%	31.0%
Gross profit	0.63	1.40	2.43	3.36	4.28
Operating cost	1.55	1.85	2.15	2.45	2.75
Operating result	−0.92	−0.45	**+0.28**	**+0.91**	**+1.53**
Cumulative cash after $1.18m setup and working capital in 2027	−2.10	**−2.55**	−2.27	−1.36	**+0.17**
Headcount (year end)	11	15	18	20	22

Calendar years; month 1 = January 2027. Setup and working capital $1.18m = entity 0.08 + demo and application centre 0.70 + working capital 0.40. **SAMPLE WORK**

Month 30

Operating break-even (mid-2029)

$2.55m

Peak funding, end of 2028

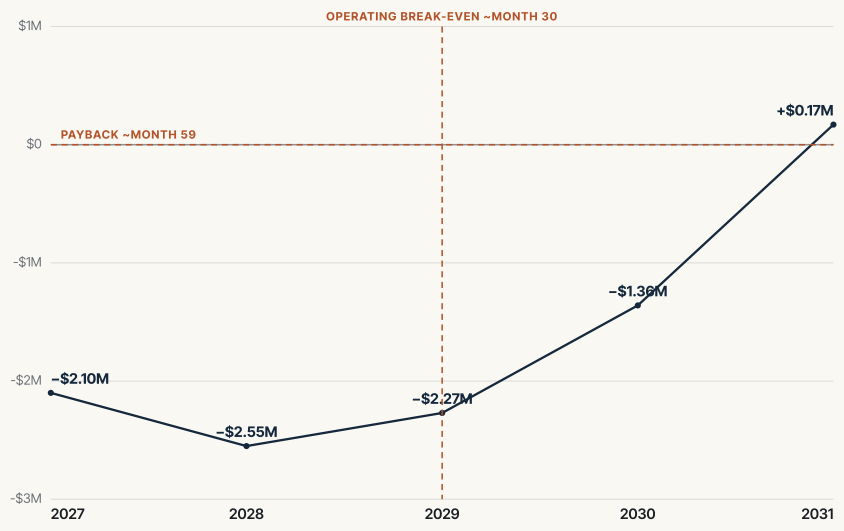
Month 59

Cumulative cash payback (late 2031)

4.8%

Mexico's share of a $287.3m serviceable market by 2031

EXHIBIT 18 Peak funding $2.55m at end-2028; paid back around month 59



Mexico cumulative cash position, year end (US$). SAMPLE WORK

The trough is the end of 2028: $2.55m, the number the board envelope is built on.

Operating losses of $0.92m in 2027 and $0.45m in 2028, on top of $1.18m of setup and working capital. From mid-2029 the business earns its way back, crossing zero in late 2031.

Colombia, staged

Month 1 = January 2029. A Medellín satellite run from Querétaro. Setup $0.50m = entity (S.A.S.) 0.05 + Medellín demo and application centre 0.30 + working capital 0.15.

COLOMBIA ($M)	2029	2030	2031	2032	2033
Revenue	0.8	1.7	2.7	3.6	4.4
Gross margin	26%	28%	30%	31%	32%
Gross profit	0.21	0.48	0.81	1.12	1.41
Operating cost	0.50	0.62	0.72	0.80	0.88
Operating result	−0.29	−0.14	**+0.09**	**+0.32**	**+0.53**
Cumulative cash after $0.50m setup in 2029	−0.79	**−0.93**	−0.84	−0.52	**+0.01**
Headcount (year end)	5	6	7	7	8

Staged from Mexico, Colombia pays back on about the same clock as Mexico at a fifth of the scale. SAMPLE WORK

Month 31
Colombia operating break-even

$0.93m
Peak funding

Month 60
Payback

≈$1.0m
A year of full country overhead if entered first and alone, against $0.58m of Year-3 gross profit

COMBINED REVENUE ($M)

	2027	2028	2029	2030	2031
Mexico	2.5	5.2	8.4	11.2	13.8
Colombia	0.0	0.0	0.8	1.7	2.7
Total	**2.5**	**5.2**	**9.2**	**12.9**	**16.5**

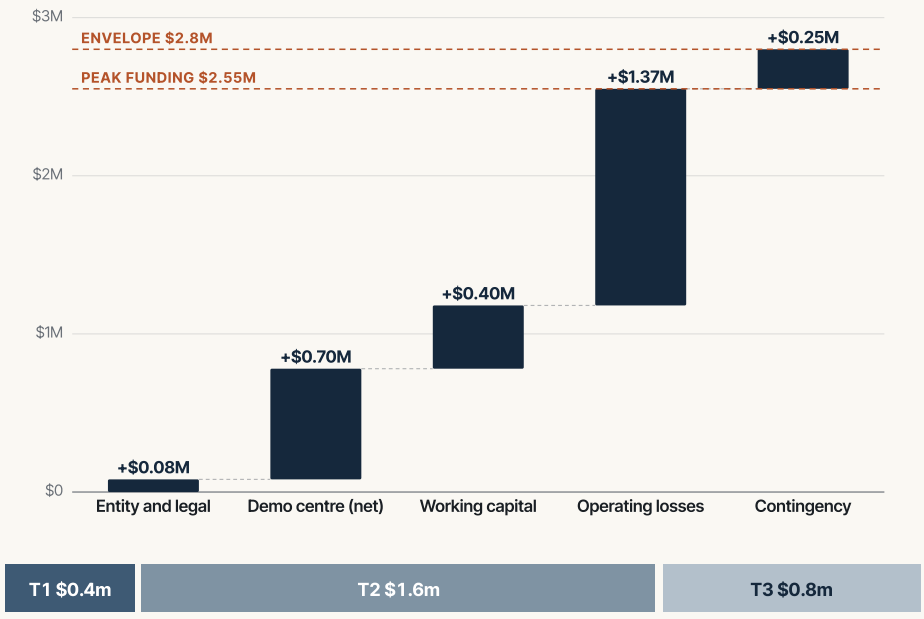
Mexico is 84% of 2031 combined revenue (13.8 ÷ 16.5). SAMPLE WORK

13 THE ASK

The envelope is built by the finance team under Karen Lindqvist, Chief Financial Officer, from the plan figures in Section 12.

Approve a $2.8m Mexico envelope in three gated tranches; Colombia returns to this board in Q4 2028 with its triggers scored.

EXHIBIT 19 $2.55m peak funding plus $0.25m contingency: a $2.8m envelope



Mexico entry investment, build to the $2.8M envelope (US$): 0.08 + 0.70 + 0.40 + 1.37 = 2.55; + 0.25 = 2.80. Strip: the three tranches, drawn to scale. SAMPLE WORK

USE OF FUNDS ($M)

Entity, legal and tax setup	0.08
Querétaro demo and application centre, net of OEM demo-unit support ($0.95m gross less $0.25m)	0.70
Working capital: spares, materials stock, receivables	0.40
Operating losses to break-even (2027 and 2028)	1.37
Peak funding	**2.55**
Contingency	0.25
Envelope	**2.80**

TRANCHE	RELEASED ON	$M
1	**Board approval:** country manager, OEM negotiations, legal and tax design	**0.4**
2	**Signed Mexico territory addendum from Partner OEM A:** entity, Querétaro centre, hires	**1.6**
3	**Month-12 review against plan:** Monterrey satellite, working capital	**0.8**
	Total	**2.8**

DECISIONS REQUESTED OF THE BOARD

1

Approve Mexico entry from Querétaro and the **$2.8m envelope** on the tranche schedule above.

2

Authorize management to negotiate Mexico territory rights with Partner OEM A, Partner OEM B and our CAD Partner.

3

Endorse the five Colombia triggers as the basis for a Q4 2028 decision on an indicative **$1.1m** Colombia envelope. No Colombia capital is committed today.

APPENDIX A

How the sample numbers were built

1. **Additive TAM.** Country share of the global additive market (2025: US$24.2bn, Wohlers 2026 [1]), grown at 10.9% to an estimated $26.8bn for 2026. Mexico set at about 1.3% ($350m), below its weight in world manufacturing because much prototyping for Mexican plants happens at foreign headquarters. Colombia set at 0.20 times Mexico ($70.0m), reasoned from relative economy size, manufacturing share of GDP (about 10.1% in Colombia) and the lift from dental, education and consumer goods.
2. **Addressable.** 54% of additive TAM: the global split of systems, materials and software (52%), adjusted up for markets with thin service-bureau segments. Third-party print services excluded.
3. **Design-software TAM and contestable share.** CAD/CAM/CAE spend set at $220m (Mexico) and $44.0m (Colombia, 0.20 times). Contestable share excludes enterprise licences bought direct from vendors or at foreign headquarters: 40% in Mexico, 50% in Colombia, which has fewer large direct accounts.
4. **SAM.** Bottom-up by industry: each industry's addressable spend multiplied by our corridor coverage, then summed (Section 6 tables).
5. **Growth.** Additive 13% (Mexico) and 11% (Colombia); design software 9% and 8%. Applied as compound annual rates from 2026.
6. **SOM.** Year-3 share of SAM: Mexico 4.0% additive, 3.0% software; Colombia 4.5% and 3.5% if entered first, 5.0% and 4.0% if staged from Mexico. A trade reader would treat more than 6% in three years as naive.
7. **Economics.** Margin by line: hardware 22%, materials 33%, service and training 50%, software 25%. Entry costs, headcount and break-even set inside the ranges typical for a mid-size reseller entering a new country.
8. **Rounding.** Totals are the sum of the rounded parts shown.

GROWTH FACTORS USED

POOL	CAGR	3 YEARS	5 YEARS
Mexico additive	13%	1.4429	1.8424
Colombia additive	11%	1.3676	1.6851
Mexico design software	9%	1.2950	1.5386
Colombia design software	8%	1.2597	1.4693

YEAR-3 REVENUE, THREE CASES ($M)

CASE	ADDITIVE	SOFTWARE	YEAR 3
Mexico, entered 2027	4.0% × 158.7 = 6.3	3.0% × 71.2 = 2.1	**8.4**
Colombia, entered first 2027	4.5% × 30.4 = 1.4	3.5% × 16.4 = 0.6	**2.0**
Colombia, staged 2029	5.0% × 37.4 = 1.9	4.0% × 19.1 = 0.8	**2.7**

WHAT THIS SAMPLE CANNOT SAY

It does not replace interviews with customers in either country, written terms from the OEMs, or a tariff classification of each product line.

A real study would carry all three before capital is released, which is why the plan's first gate is the OEM's signature.

THE SIZING LADDER IN FULL ($M)

STEP	MX ADDITIVE	MX SOFTWARE	MX COMBINED	CO ADDITIVE	CO SOFTWARE	CO COMBINED
TAM 2026	350	220	570	70.0	44.0	114.0
Addressable / contestable 2026	189	88	277	37.8	22.0	59.8
SAM 2026	110	55	**165**	22.2	13.0	**35.2**
TAM 2029	505.0	284.9	–	95.7	55.4	–
SAM 2029	158.7	71.2	**229.9**	30.4	16.4	**46.8**
SAM 2031	202.7	84.6	**287.3**	37.4	19.1	**56.5**

Combined SAM, Colombia ÷ Mexico: 0.21 (2026), 0.20 (2029), 0.20 (2031).

SAMPLE WORK · Illustrative figures

APPENDIX B

Sources for the real context

Numbered notes in the text link here. Each source is a live link; the facts were read as published in 2025–2026 and carry no figure of this study's own.

1. ASTM International / Wohlers Associates, Wohlers Report 2026 press release. astm.org/news/press-releases/wohlers-report-2026
2. Tetakawi, IMMEX figures citing INEGI (July 2026) and the Economy Ministry; medical-device overview; USMCA review and FDI. What is a maquiladora · Medical-device manufacturing · The USMCA 2026 review
3. Prodensa, Mexican automotive industry report 2026 (INEGI RAIAVL). prodensa.com
4. American Industries Group, aerospace clusters; IMMEX programme. Aerospace clusters · The IMMEX programme
5. MexicoNow, Querétaro aerospace; IMMEX employment. Querétaro aerospace · IMMEX employment
6. Greenberg Traurig, Plan México fiscal stimulus decree (DOF 21 Jan 2025). gtlaw.com
7. USTR, statement on the USMCA joint review, July 2026. ustr.gov
8. Foley & Lardner, Mexico's January 2026 tariff increases. foley.com
9. Banco de México, SIE exchange-rate tables. banxico.org.mx
10. 3D Printing Journal, "The 3D Printing World Guide: Mexico", February 2025. 3dprintingjournal.com
11. Trading Economics, Colombia currency, policy rate and inflation; manufacturing share of GDP (World Bank). tradingeconomics.com
12. FEWS NET, Colombia special report, April 2026. fews.net
13. US Congressional Research Service, Colombia's 2026 elections. congress.gov
14. Alegra, taxation of imports in Colombia. blog.alegra.com
15. SENA, Tecnoparque Medellín. repositorio.sena.edu.co
16. Ruta N Medellín. rutanmedellin.org
17. Colombiaplast, 3DFest. colombiaplast.org

THE PUBLIC FACTS THE STUDY LEANS ON HARDEST

Global additive revenue, 2025	**US$24.2bn, +10.9%**	1
Global mix: services · systems · materials · software	**48 · 26 · 20 · 6%**	1
IMMEX establishments · employment, July 2026	**6,516 · ≈3.18m**	2
Mexico light-vehicle production, 2025	**3.95m units**	3
Mexico aerospace: firms, clusters	**≈400, five**	4
Mexico manufacturing FDI, H1 2026	**US$13.5bn, +9.3%**	2
Plan México first-year deduction, 2027–2030	**35–89%**	6
USMCA	**Not renewed 1 Jul 2026; in force**	7
Colombia policy rate · inflation, Sept 2026	**12.25% · 6.29%**	11
Colombia IVA on imports	**19%**	14

Balcones TECHNICAL SYSTEMS

Leadership report · November 2026
Mexico first. Colombia second.

COLOPHON

Balcones Technical Systems, its leadership team (Daniel Escobedo, Karen Lindqvist, Marcus Bell, Mei-Ling Tran) and its figures are invented for this sample. Market context from the public sources above, read as published in 2025–2026. All market sizes, shares, costs and financial projections are illustrative estimates made for this sample. Photographs are illustrative.

SAMPLE WORK

The company, people and all sizing, share and financial figures in this study are illustrative and invented for demonstration. Market context (trade, industry and policy facts) is drawn from public sources named in the notes.