



# > ANALYST DAY

proto labs®

DECEMBER 2017

These slides and accompanying oral presentation contain forward-looking statements. These statements relate to future events or to future financial performance and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by these forward-looking statements. In some cases, you can identify forward-looking statements by the use of words such as “may,” “could,” “expect,” “intend,” “plan,” “seek,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond our control and that could materially affect actual results, levels of activity, performance, or achievements.

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## > AGENDA

**We Are Evolving**  
**Competitive Advantage**  
**Expanding Service Offering**  
**Maintaining Consistent Growth**  
**Financial Overview**

**Vicki Holt**  
**Rich Baker**  
**Rob Bodor**  
**David Fein**  
**John Way**

**President and CEO**  
**Chief Technology Officer**  
**VP/GM Americas**  
**Chief Revenue Officer**  
**Chief Financial Officer**

> WE ARE THE

WORLD'S  
LARGEST  
AND  
FASTEST  
DIGITAL  
MANUFACTURER

proto labs®





A wide-angle photograph of a large industrial manufacturing facility. The space is filled with various pieces of machinery, including what appears to be a large lathe or mill on the right labeled 'TOSHIBA MACHINE'. The floor is polished and reflects the overhead lights. In the foreground, a person is blurred, suggesting movement. The background shows more equipment and workers, creating a sense of a busy, active production environment. The lighting is a mix of cool blues and warm whites from the industrial fixtures.

> HELPING COMPANIES ACCELERATE  
PRODUCT DEVELOPMENT, REDUCE RISK,  
AND OPTIMIZE SUPPLY CHAINS BY  
PROVIDING QUALITY PROTOTYPING AND ON-  
DEMAND MANUFACTURING SERVICES AT  
UNPRECEDENTED SPEEDS



> THE WORLD OF MANUFACTURING IS  
EVOLVING AND SO IS PROTO LABS



## > THE INDUSTRIAL REVOLUTIONS



INDUSTRIAL REVOLUTION

# 1.0

Water and steam power is used to create mechanical production facilities.



1784:

First mechanical loom



INDUSTRIAL REVOLUTION

# 2.0

Electricity lets us create a division of labor and mass production.



1870:

First assembly line



INDUSTRIAL REVOLUTION

# 3.0

IT systems automate production lines further.



1969:

Programmable logic control

# INDUSTRIAL REVOLUTION

# 4.0

TODAY



**DIGITIZING THE FRONT-END OF MANUFACTURING IS UNLOCKING NEW OPPORTUNITIES IN ITERATIVE DESIGN AND DEVELOPMENT, PROTOTYPING, AND ON-DEMAND CUSTOM MANUFACTURING.**



Additional background

# THREE MEGATRENDS DISRUPTING PRODUCT GROWTH MODELS

## > SHORTER PRODUCT LIFECYCLES

50%

of annual company revenues are derived from **new products** launched within the **past three years**, suggesting **long-term product 'cash cows' are becoming a thing of the past.**

Source: The product life cycle is in decline, Supply Chain Digital

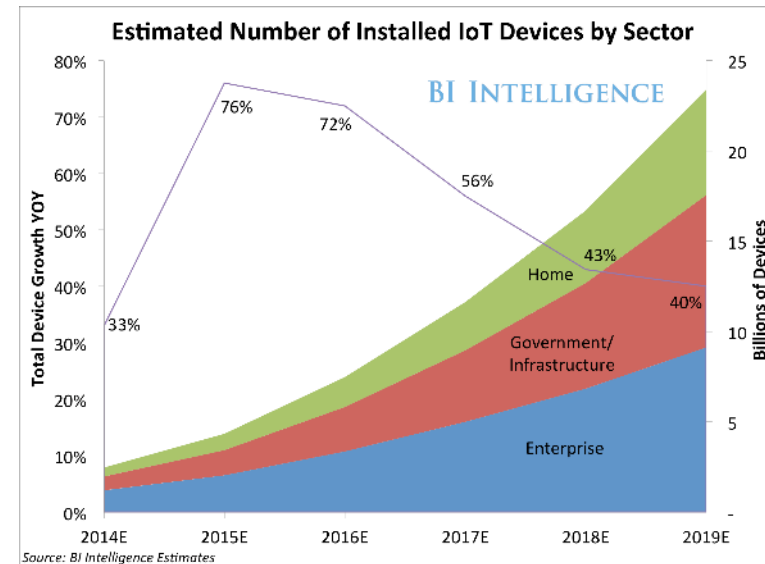
- Beat competitors to market, and to market again, and again
- Keep up with the rate of innovation
- Respond to consumer demand
- Ramp quickly





## > INTERNET OF THINGS

- Key lever for expanding to new markets or developing new product offerings
- Engine for growth for companies that can successfully launch these types of products
- **25 billion IoT devices** in the field by end of 2019



**75%** of new cars will have built-in IoT connectivity by 2020

**60%** of global manufacturers use data recorded from connected devices to analyze processes and identify optimization

**15%** productivity increase in delivery and supply chain performance

Sources: BI Intelligence Internet of Things 2017 Report, IDC & SAP



## > PERSONALIZATION & MASS CUSTOMIZATION



**\$800B**

Over the next five years in three sectors alone – retail, health care, and financial services – personalization will push a shift of some \$800 billion to the 15% of companies that get it right

Source: Boston Consulting Group 2017 Profiting from Personalization Report

Personalized products create opportunities for entirely new revenue streams, customer retention, and competitive differentiation



## > THE CHALLENGE FACING COMPANIES TODAY

Consistently growing revenues and earnings in this dynamic landscape

77%

of senior executives cited **innovation** and **product development** as one of their top three strategic priorities.

Source: The Most Innovative Companies 2013, BCG Perspectives

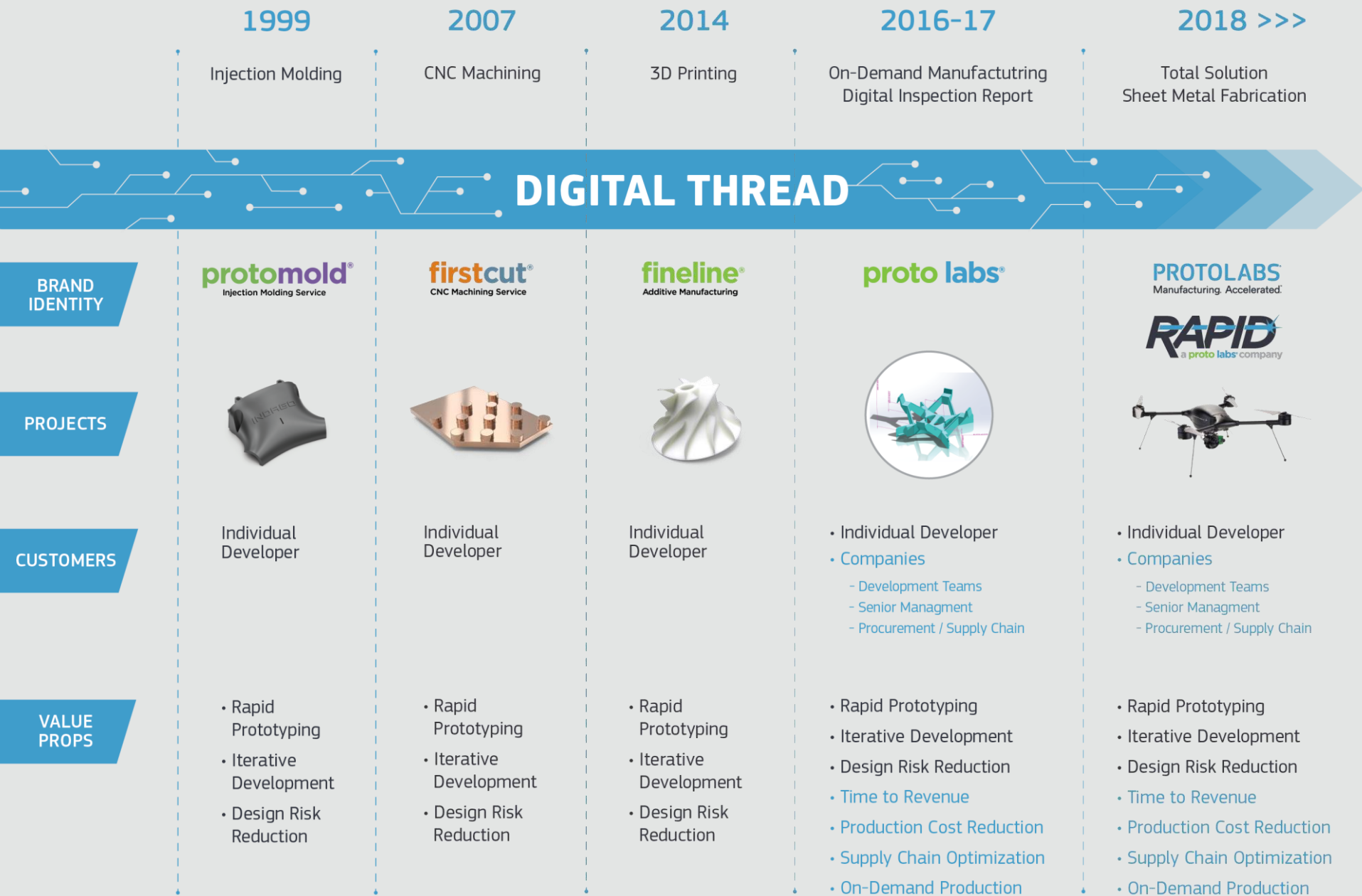
Kim Wagner, Eugene Foo, Hadi Zablit and Andrew Taylor

**Proto Labs enables our customers to effectively compete and excel in this evolving market**

## > HELPING COMPANIES GET THEIR PRODUCTS TO MARKET

- More than just prototyping
- Our Customers Use us in a Variety of Ways
  - Shortening product development cycles
    - Accelerate Innovation
    - Reduce overall R&D cost by leveraging resources more effectively
    - Reduce risk in end products by iterating quickly and testing
  - Initial production to get products to market ahead of competitors
    - Speed to Revenue
  - Cost effective low volume production
    - Reduces risk if market adoption is uncertain
    - Long term solution if annual quantities are low
    - Reduce supply chain risk

# THE EVOLUTION OF PROTO LABS





> RAPID PROTOTYPING AND ON-DEMAND PRODUCTION IN AS FAST AS 1 DAY

**+\$380M**

Pro Forma Revenue (2017)

**+2,000**

Employees

**+35,000**

Product Developers Served (2017)



**12**

Manufacturing  
Locations

**+1000**

Mills, Lathes,  
Presses, 3D Printers

**+4,000,000**

CAD Files Uploaded

INCREASE SPEED TO MARKET | REDUCE COSTS | OPTIMIZE SUPPLY CHAIN

## CASUAL

# EMPOWERED

## CUSTOMER-FOCUSED

## INVOLVED

## COLLABORATIVE

## ADAPTABLE

# INNOVATIVE

## EFFICIENT

## KNOWLEDGEABLE

## BALANCED

INVOLE

## TRUSTING COLLA

# PERFORMANCE-DRIVE

# STING COLI

## LABORATIVE PER

## ANCE-DRIVEN I

# EMPOWERED KNOWLEDGE

# HUMBLE

## ADAPTABLE

## SAFETY-MINDED

## RESOURCEFUL

## BALANCED

## TEAM-ORIENTED

PROUD

## TRANSPARENT

# TRUSTING

**proto labs®**



## > EVOLVING OUR APPROACH TO MEET CUSTOMER DEMANDS

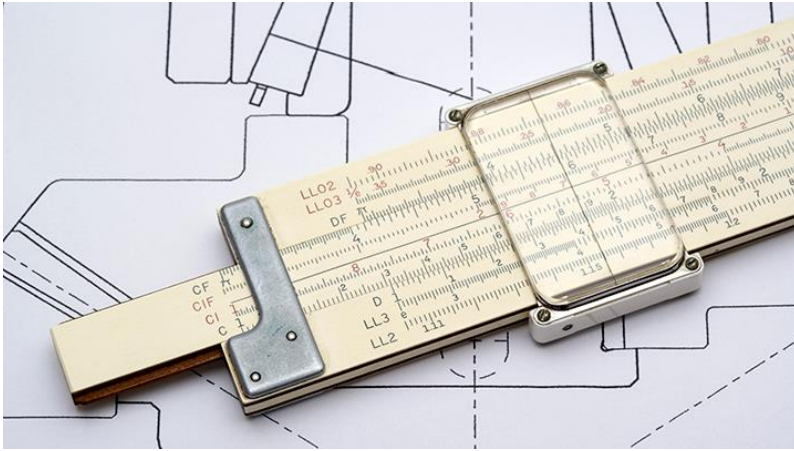
- Investing in services and capabilities to become more of a total solution
- Leveraging our technology and approach to enhance our capabilities to address underserved markets
- Building our customer relationships to become a strategic partner

A close-up, low-angle shot of a complex industrial machine, likely a semiconductor wafer fab. The machine is dark and metallic, with various components like pipes, valves, and structural frames visible. A bright, warm orange light illuminates the scene from the right, creating strong highlights and deep shadows. In the foreground, several circular components, possibly wafer carriers or parts, are resting on a dark surface. A green arrow points to the right, positioned to the left of the text.

> COMPETITIVE ADVANTAGE



## &gt; OLD FACTORY



## &gt; NEW FACTORY



MASSIVE DISRUPTION AND CHANGE driven by digitalization, the internet, new business models, and technology.

The left side of the slide features a series of light gray, stylized circuit traces. These lines are of varying thicknesses and some terminate in small circles, resembling a printed circuit board layout. A thicker, dark gray line runs horizontally across the middle of the left side, then curves downwards and to the right, ending in a small circle that acts as a connector point for the text below.

# THE DIGITAL THREAD

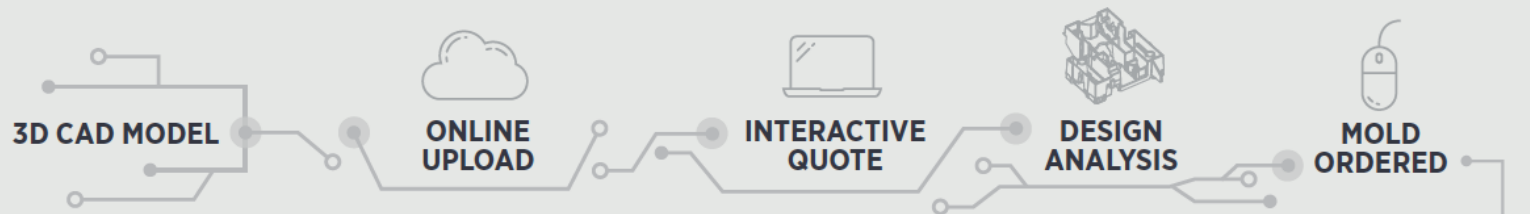
Integrates advanced software  
and technology throughout  
the manufacturing process



## > DIGITAL DIFFERENTIATION

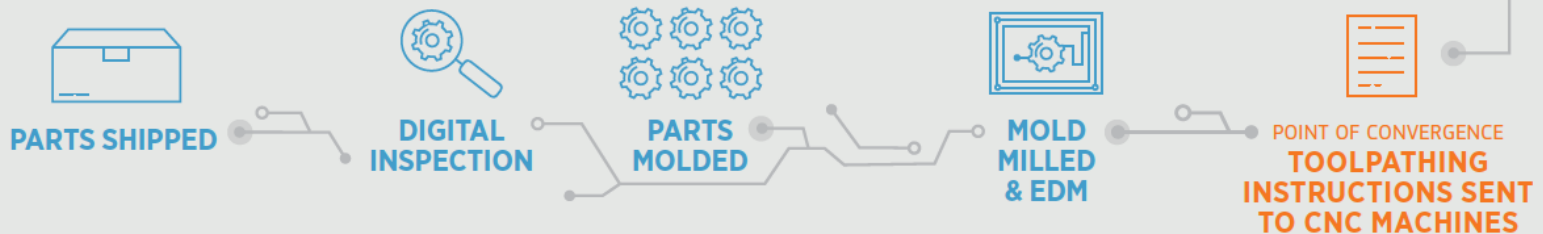
### PRE-PRODUCTION

At Proto Labs, 3D CAD models can be uploaded online at any time. An interactive quote is then sent within hours that contains automated design for manufacturability feedback.



### PRODUCTION

Once a 3D CAD model is ready, the digital thread continues to the production floor where parts are molded, inspected, and shipped in 15 days or less.



## &gt; AUTOMATION

CAD analysis



Design feedback



Ordering



Production

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**CUSTOM PARTS IN  
AS FAST AS 24 HOURS**



# > AUTOMATED QUOTING SOFTWARE

Interactive quotes  
within hours

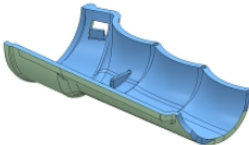
Cost estimates with  
real-time pricing updates

Free design for  
manufacturability (DFM)  
feedback

## ProtoQuote®

**Injection Molding Quote**

Prepared for: **ABC Design Co**  
 Process: **Plastic Injection Molding**  
 Quote Number: **173644**  
 Quote Date: **10/6/2017**  
 Part Name: **Sample Part**  
 Extents: **2.987 in x 1.596 in x 0.733 in**



Thank you for the opportunity to quote your parts. We look forward to working with you on this project. If you have any questions, please contact us at 877.479.3680.

### 1 Confirm or Modify Specifications and Review Pricing

Cavities:	1 cavity
A-side (green) finish:	PM-F1 (Low-cosmetic - most toolmarks removed)
B-side (blue) finish:	PM-F0 (Non-cosmetic - finish to Protomold discretion)
Tooling Price: \$2,175.00	
Sample Quantity:	35
Sample Parts 35 @ \$2.82: \$98.70	
Material:	PBT, Black (Crastin S600F20 BK851 (same as S610))
Change Material Color The selected material is not compatible with added colorants	
Manufacturing Time:	Sample parts ship in 15 business days (standard price)

**Total USD: \$2,273.70**



## > DIFFERENTIATED BY DFM ANALYSIS

Reviews part geometry and highlights any manufacturing issues

Optimizes part design before any actual production begins

**② Manufacturability Analysis (3D View)** [View in 2D](#)

**REQUIRED CHANGES (3)** **MOLDABILITY ADVISORY (7)** **OTHER INFO (2)**

The following illustrations indicate changes to the model which are required for compatibility with our injection molding process.

**Required Changes:**

1. Undercut
2. Minimum thickness
3. Minimum thickness

**Undercut**

Faces shown in red have undercut portions. Blue lines (if any) indicate undercut regions. We are unable to produce these undercuts with our current process. For details, clarification, options, or alternatives, please contact a Customer Service Engineer at [customerservice@protolabs.com](mailto:customerservice@protolabs.com) or 877.479.3680.

An updated file is needed to make this part.

Transparency

Highlight Issues ☐ Off ☒ On

10 mm

[View as a 3D PDF](#) rotate zoom pan [Problems with the 3D Viewer?](#)

# > DEVELOPMENT PHASE: DESIGN AND REQUEST FOR QUOTE (RFQ)

Issue /  
Concern

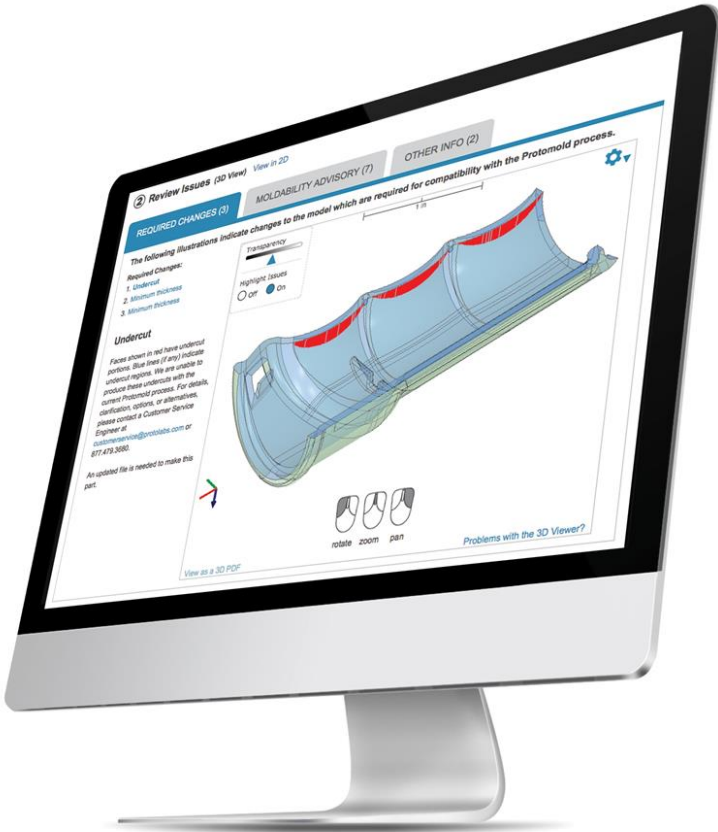
Requesting quotes, a non-value add activity, often takes weeks for each component, greatly delaying the development process.

Solution

Digitalization of quoting provides actual cost and design-for-manufacturability (DFM) feedback within hours.

Impact /  
Benefit

The ability to get nearly instant pricing and DFM feedback means designs can be iterated and optimized more rapidly, reducing risk later in the later stages of production.



# Case Study: **LOCKHEED MARTIN**

“This was an iterative design approach that was accelerated because of the quick turnaround of the quoting system. By using this process, I was able to **better learn what was expected** and what was **possible for moldability**. I was then able to think through how I would need to modify other parts and do so with **less iteration** because of what I had **learned from the DFM** analysis in the quotes.”

*–Miguel Perez, Engineer, Lockheed Martin’s Procerus subsidiary*





A wide-angle photograph of a large industrial manufacturing facility. The space is filled with rows of industrial machinery, primarily CNC machines, arranged in long aisles. The ceiling is high with exposed steel trusses and numerous fluorescent lights. The floor is polished and reflects the overhead lights. A large, semi-transparent yellow graphic element, consisting of two overlapping triangles, is positioned diagonally across the center of the image, serving as a background for the main text.

# > MASSIVE MANUFACTURING SCALE

INJECTION MOLDING | CNC MACHINING | 3D PRINTING | SHEET METAL

## > DIGITAL MANUFACTURING REDUCES TIME AND COST

Different use cases leveraging our market differentiation

### PROTOTYPING



Speed to Market



Design Risk



Number of design iterations



Speed to test prototype



Productivity of R&D Spend

### LOW-VOLUME PRODUCTION



Supply Chain Risk



Inventories



Ability to manage volatile demand



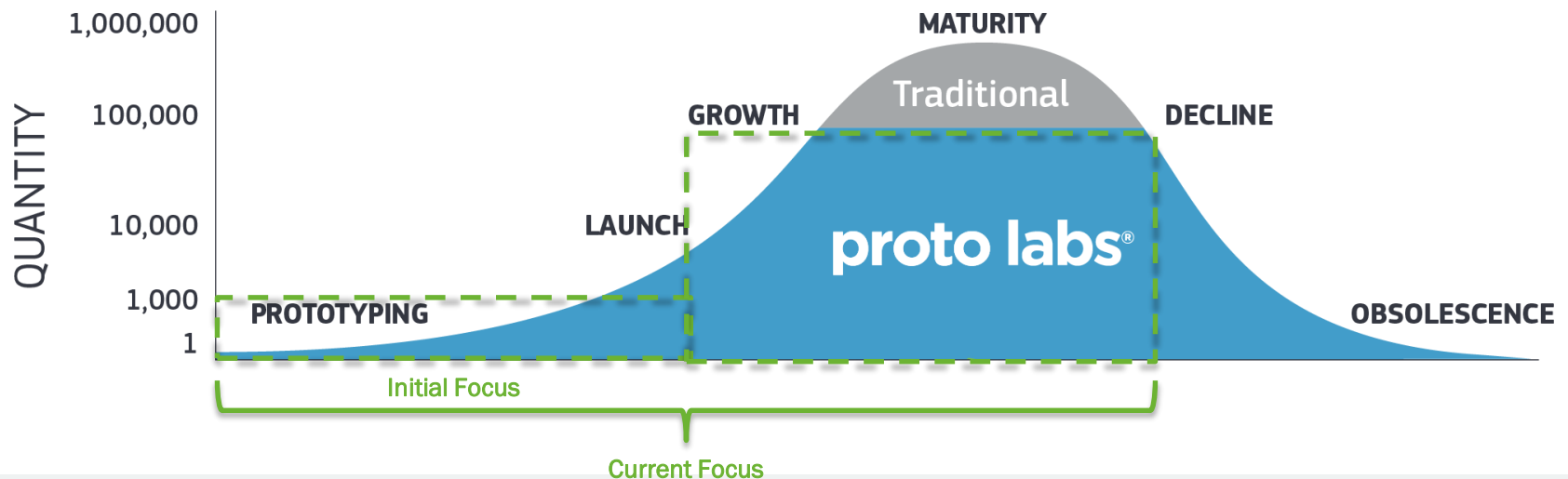
Lead Time



Total Production Cost of Low-Volume Products

## > DIGITAL MANUFACTURING

On-demand, web-enabled digital manufacturer serving our customers through out their product life cycle at world class speed

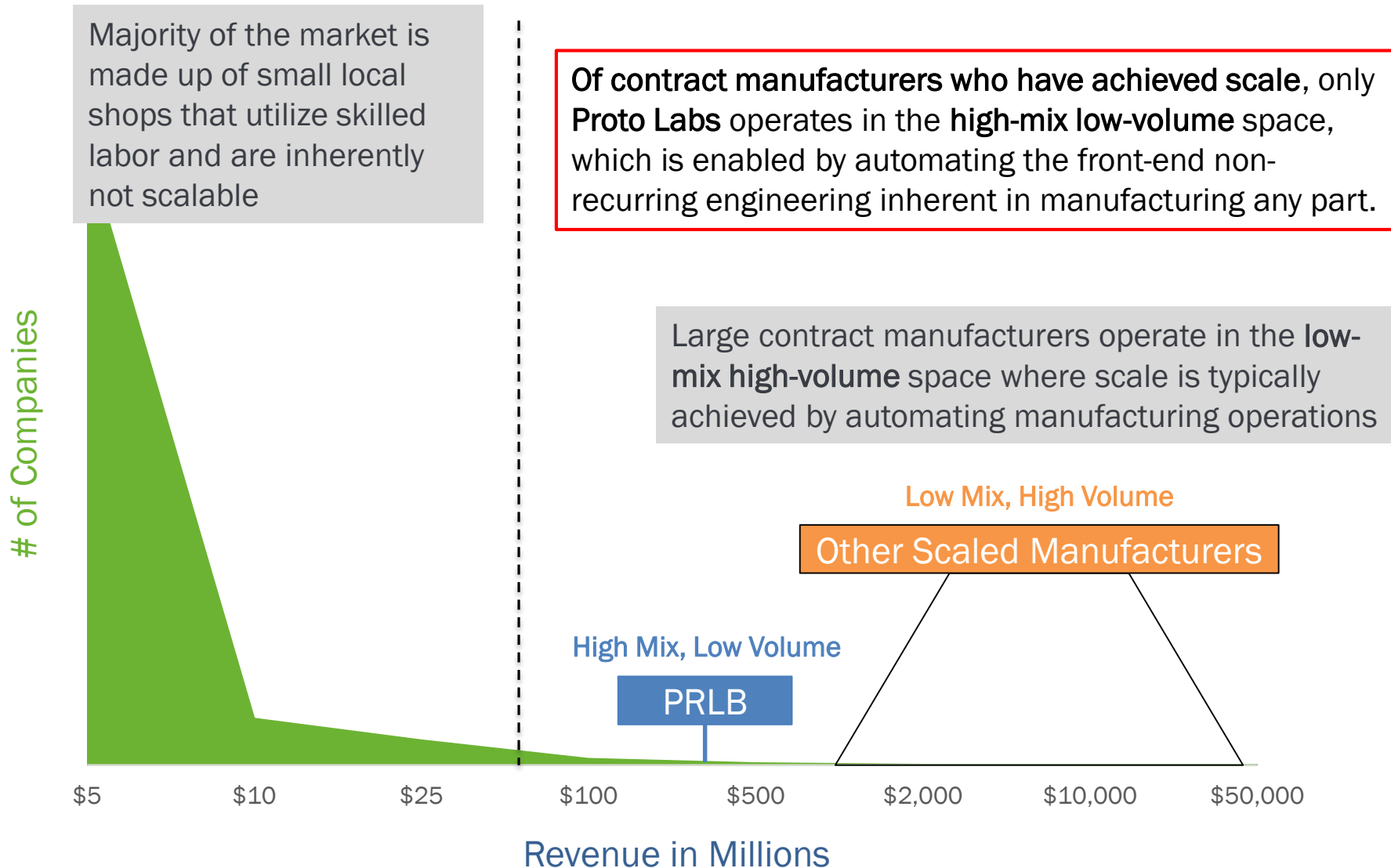


### BENEFITS

- Pay-as-you-go with virtual inventory and large capacity
- Scale from prototyping to production easily
- Manage demand volatility

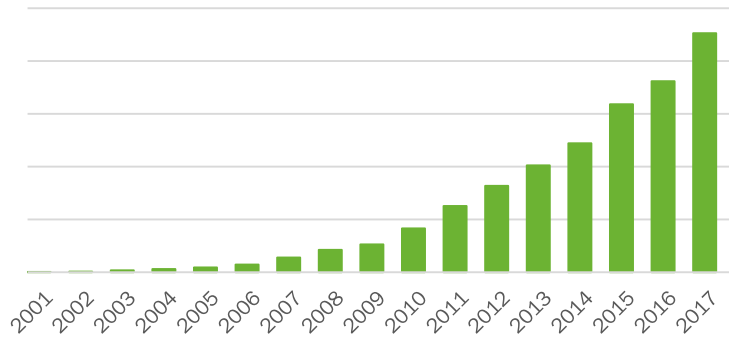


## > CONTRACT MANUFACTURING LANDSCAPE

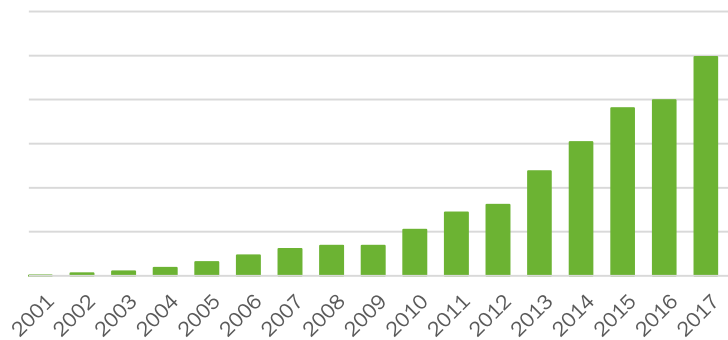


## > OUR DIGITAL MANUFACTURING MODEL ENABLES PROTO LABS' SCALABILITY

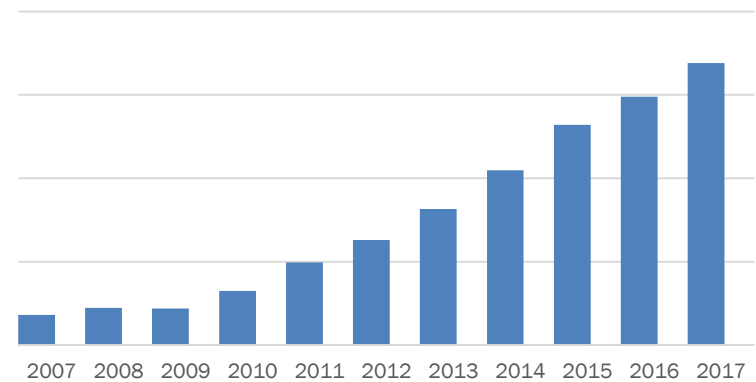
### Uploads



### Parts



### Revenue



# > STRONG COMPETITIVE POSITION

Unmatched ability to produce low volumes efficiently and cost effectively

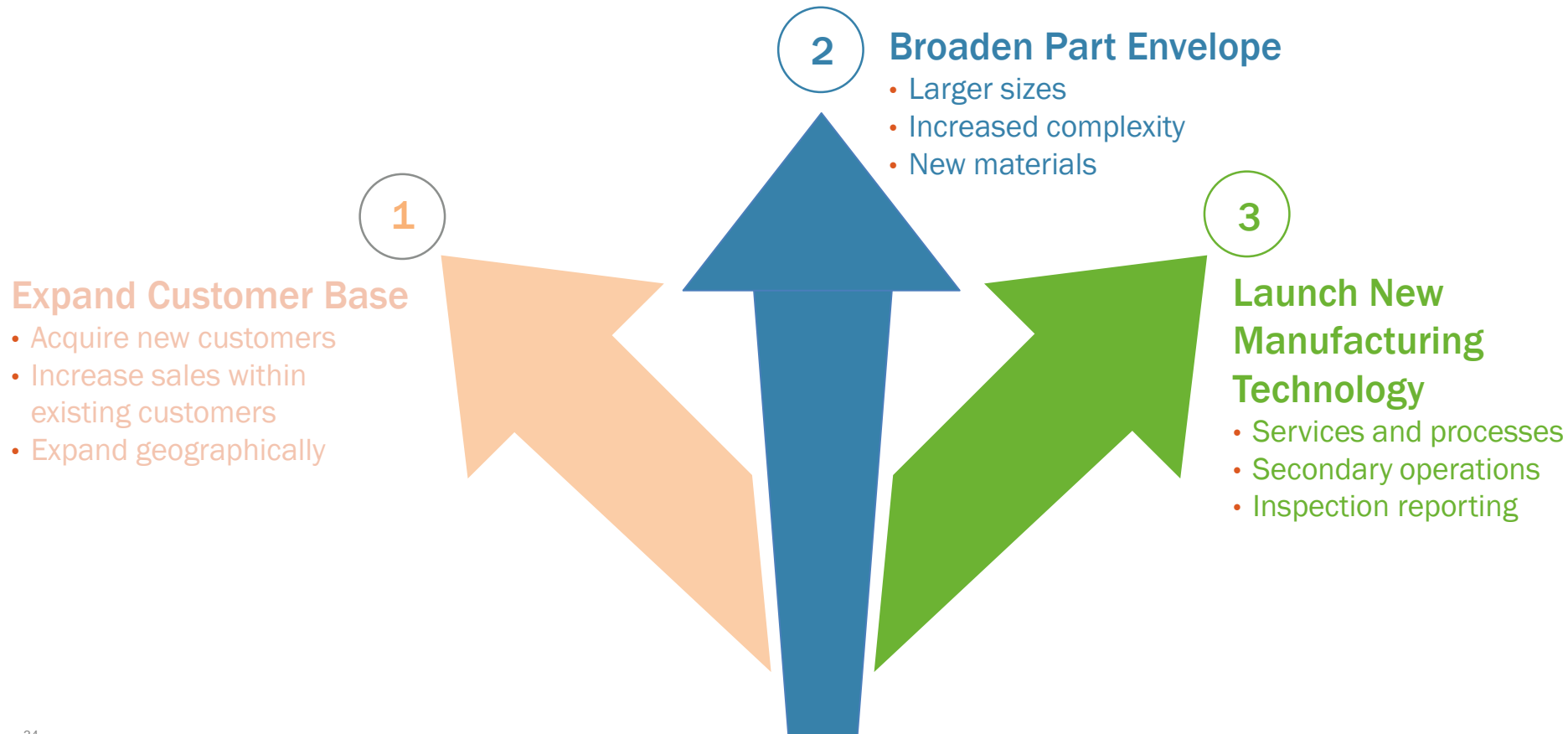
	Digital Front End	Digital Manufacturing (Fast/custom/low volume)	Transparent Quality System	Breadth of Services	Full Specifications
proto labs®					 → 
Digital Brokers					
1 Service Fast / Low Volume					
Traditional Full Service					
Small Individually Owned Job Shop					
High Volume Contract Manufacturer					



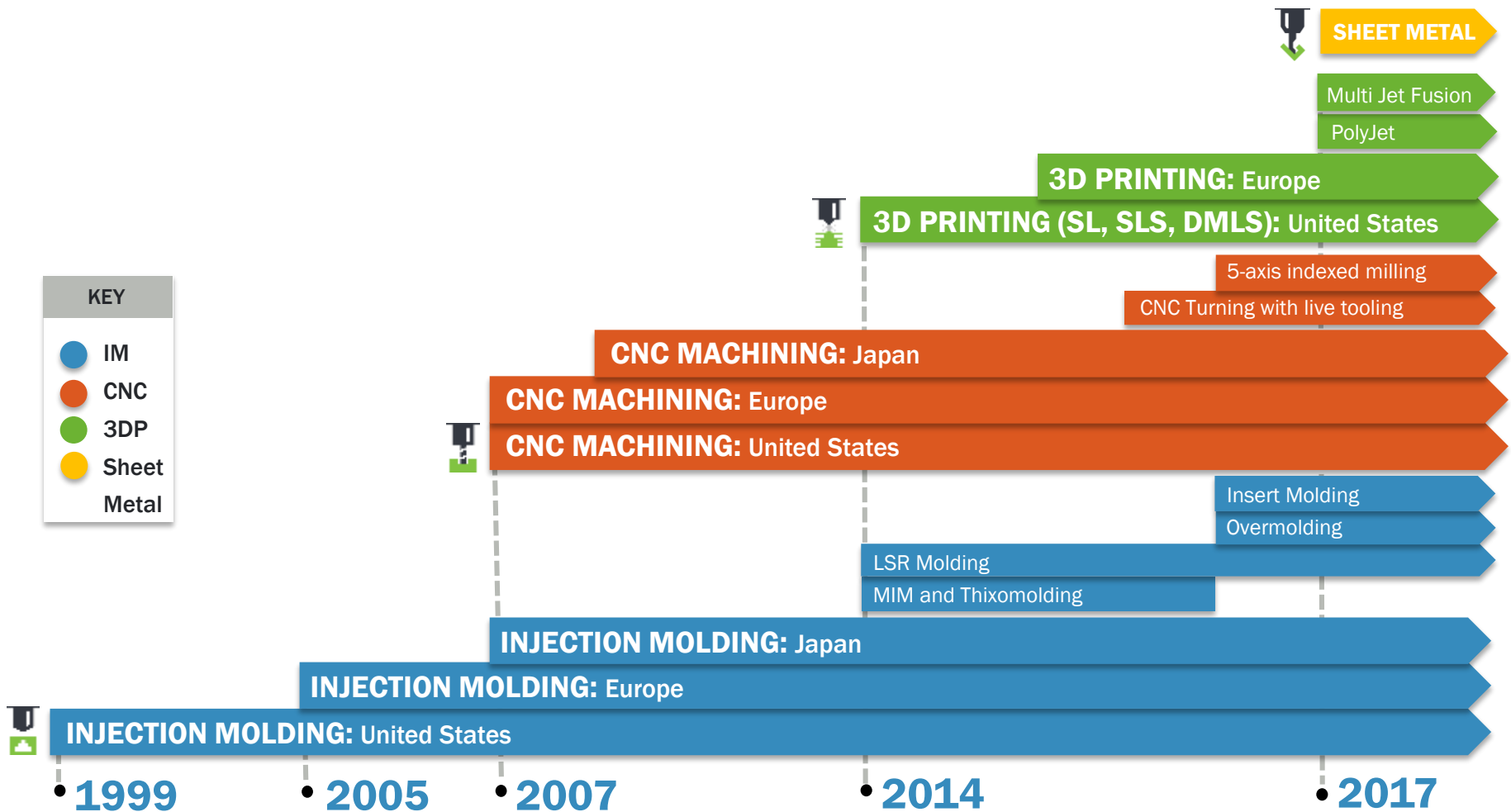
## > GROWTH STRATEGIES

Focus on the needs of our customers to help get their products to market as efficiently and cost effectively as possible

- Broadening the part envelope increases our competitive position
- Leveraging our technology to increase in the serviceable market



## > ENVELOPE EXPANSION FOCUSED ON CUSTOMER



## > R&D INVESTMENT ENABLES ENVELOPE EXPANSION



### Materials

- Flexible TPEs and TPUs
- High-temperature PEEK and PEI
- Brass and copper
- 3D-printed metals
- Elastomeric photopolymers

### Part Size

- Larger part geometries
- Efficiencies in producing parts
- **Improved precision and tolerance**
- Large-format industrial 3D printer

### Quoting Engine

- Automated quoting within hours for machining and molding
- Instant quoting for 3D printing
- Interactive design feedback
- Proto Labs Proposed Revisions

### Complex Manufacturing

- Pickouts
- Side-action cams
- Hand-loaded inserts
- Sliding Shutoffs
- Multi-cavity molding
- Turning with live tooling
- 5-axis indexed milling
- **Multiple 3D printing technologies**



## > Summary

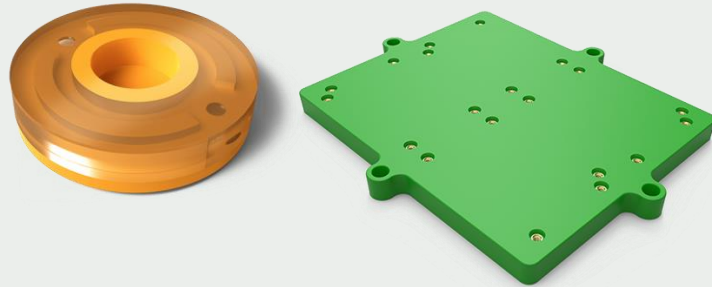
- Continue to build Proto Labs competitive advantage with our adaptable, integrated and scalable systems
- Investing in services and capabilities to become more of a total solution
- Evolve our technology and offerings to address underserved markets

1

> EXPANDING SERVICE OFFERING



## INJECTION MOLDING



## CNC MACHINING



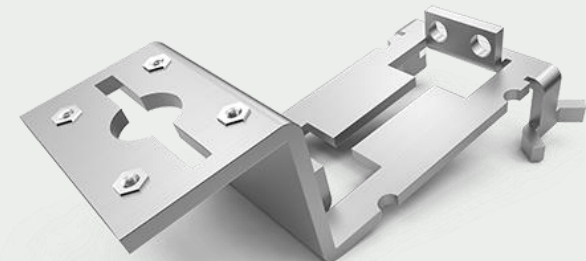
# ONE PARTNER // FOUR SERVICES



## 3D PRINTING



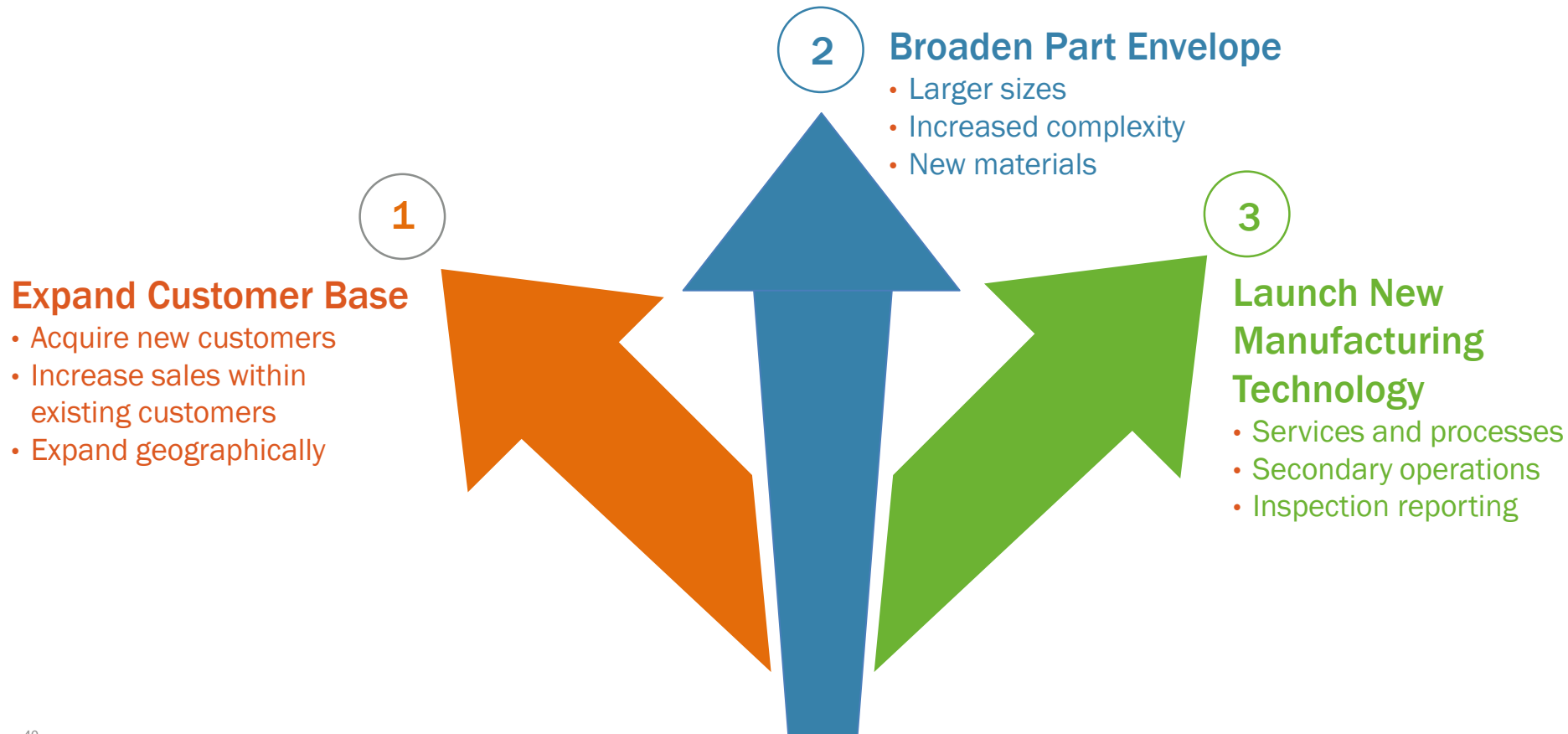
## SHEET METAL





## > OUR CAPABILITIES DRIVE OUR GROWTH

- Continuously expand our existing capabilities
- Leverage our capabilities to address underserved markets
- Address customer needs as we add manufacturing technologies



## > EXPAND SERVICES WITH RAPID MANUFACTURING ACQUISITION

### CLEAR FIT

- Natural disposition to speed
- Extends services to include sheet metal
  - Approximately 75% of our customers purchase sheet metal parts
- Broadens the CNC manufacturing offering
  - Expanded envelope (size, tolerance, etc)
  - Secondary operations (anodizing, inspection, powder coating, etc.)



**CONTINUE TO EXPAND TO DELIVER A TOTAL SOLUTION TO OUR CUSTOMERS**

Rapid's team of 300+ employees delivers sheet metal and CNC machined parts in days, not weeks.

## > SHEET METAL MARKET

### Customer Profile

Rapid and Proto Labs share the same type of customer, across all major manufacturing industries, with significant penetration opportunity

Fewer than 3% of Proto Labs customer contacts have done business with RAPID

Fewer than 30% of RAPID customer contacts have done business with Proto Labs

### Operational Improvement Plans

Add Capacity

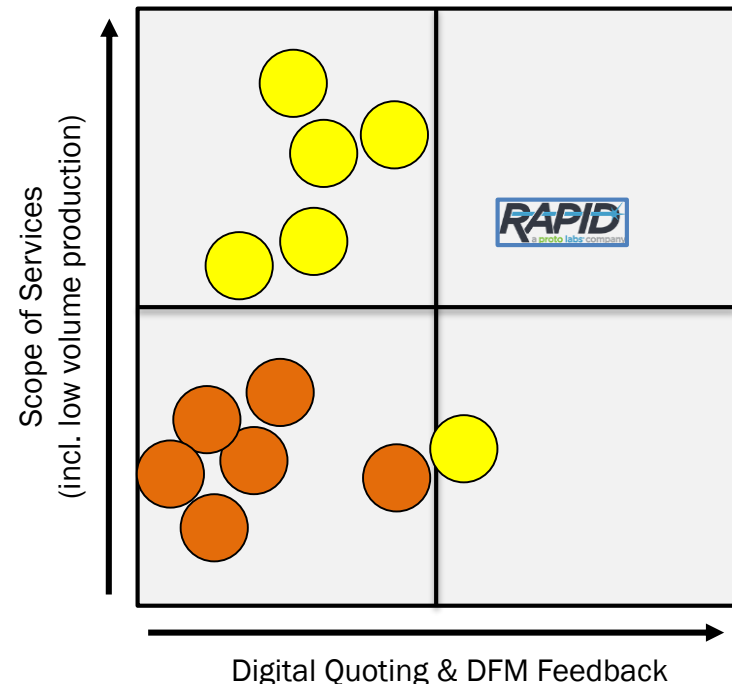
- Increase factory staffing and working hours
- Add equipment to eliminate existing bottlenecks
- Add production lines

Reduce Lead Times & Improve Scalability

- Increase automation of manufacturing processes
- Re-configure production lines implement lean production methods via Proto Excellence

### Competitive Landscape

A independent study found RAPID to be the leading prototype and low-volume digital manufacturer in the global sheet metal market



## > LEVERAGING CAPABILITIES TO MEET MARKET DEMAND

- Prototyping
  - Foundation of Proto Labs
  - Allows customers to rethink their product development process and shorten the cycle
- On Demand Manufacturing
  - Continues to be an underserved segment of the market
  - We are leveraging our capabilities to capitalize the market opportunities
- Expanding our capabilities by adding services and broadening our part envelope allows us to
  - Serve more of our customers needs
  - Increase our relevance to our customers enabling more strategic relationships



## > DEVELOPMENT PHASE: PROTOTYPING

### Issue / Concern

Too often, **prototypes** are imperfect proxies for the final production components.

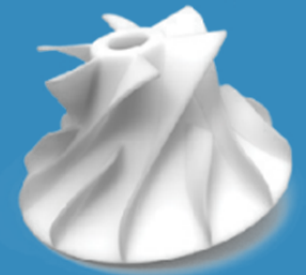
- Material offerings in 3DP are limited
- Traditional manufacturing is too expensive and time-consuming

### Solution

Digital manufacturing enables affordable and responsive prototyping and short run production, making it viable to **prototype in the final production process**.

### Impact / Benefit

Fast inexpensive prototyping improves design, accelerates testing, and **reduces cost, risk, and time to market** for any product type.



# Case Study: **TRW** Automotive

“In general, there’s probably 15 or 20 parts that make up a clock spring assembly. If at least half of those need to be prototyped, multiply that times each iteration that we do, and it adds up pretty quick.”

–Rick Bowes, Designer, TRW Automotive



## > ON-DEMAND MANUFACTURING

### Issue / Concern

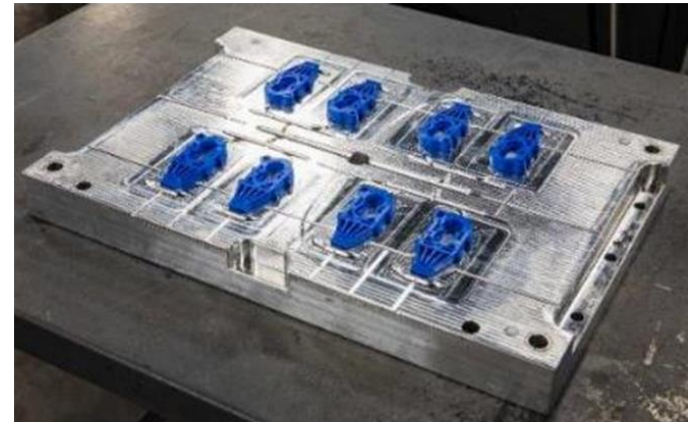
Uncertain demand often leads to under-ordering which causes stock-outs or over-ordering which leads to excess inventory.

### Solution

Ordering from an **on-demand manufacturer** allows customers to get parts quickly and without any minimum order quantities.

### Impact / Benefit

Ordering only the parts needed with fast lead times maximizes customer satisfaction while **eliminating stock-outs and excess inventory.**



With multi-cavity tools, even high quantity runs are possible if there is concern for sudden spikes in demand

## Case Study:



“...We didn’t want to have thousands of parts just sitting around in case Underwriters Laboratory wanted us to change something in the design.”

– Taylor Santore, Mechanical Engineer and Project Lead, Atom Power





## > DIGITAL INSPECTION

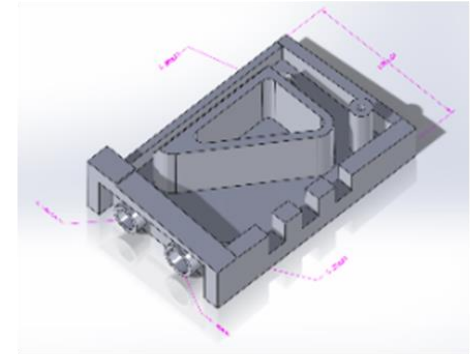
### Issue / Concern

Inspection reports to fulfill FAI requirements can add excess time and money to the development process.

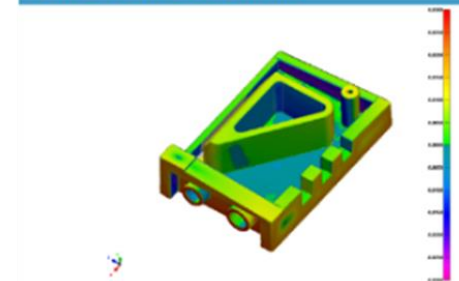
### Solution & Benefit

- Digital inspection reports that utilize PMI data and a high-speed digital 3D scanner to measure critical dimensions, include a visual aid and color mapping
- Expedite the supply chain by providing measurement verification quickly

PMI DATA



INSPECTION COLOR MAP



## > POWER OF COMBINED SERVICES

How does expanding our services to become more of a total solution evolve our customer's perceptions of us?

Proto Labs is.....

Fast, easy to use, on-line supplier of parts

Use cases:

- Send individual parts
- A portion of the solution for my product
- Valuable for prototyping
- Valuable in an emergency

.... and Proto Labs is also

Partner that brings value in design validation and production

Use cases:

- Send sub-assemblies or entire products
- Total Solution
- Valuable for prototyping and production
- Integrated into product development and supply chain process

## Case Study: Large Consumer Electronics Company

- Used all 4 services
  - Sheet Metal
  - 3D Printing
  - Injection Molding
  - CNC Machining
- Delivered a more complete solution with Proto Labs speed
- Server racks to house drivers that could be easily removed



## > EXPANDING SERVICE OFFERINGS

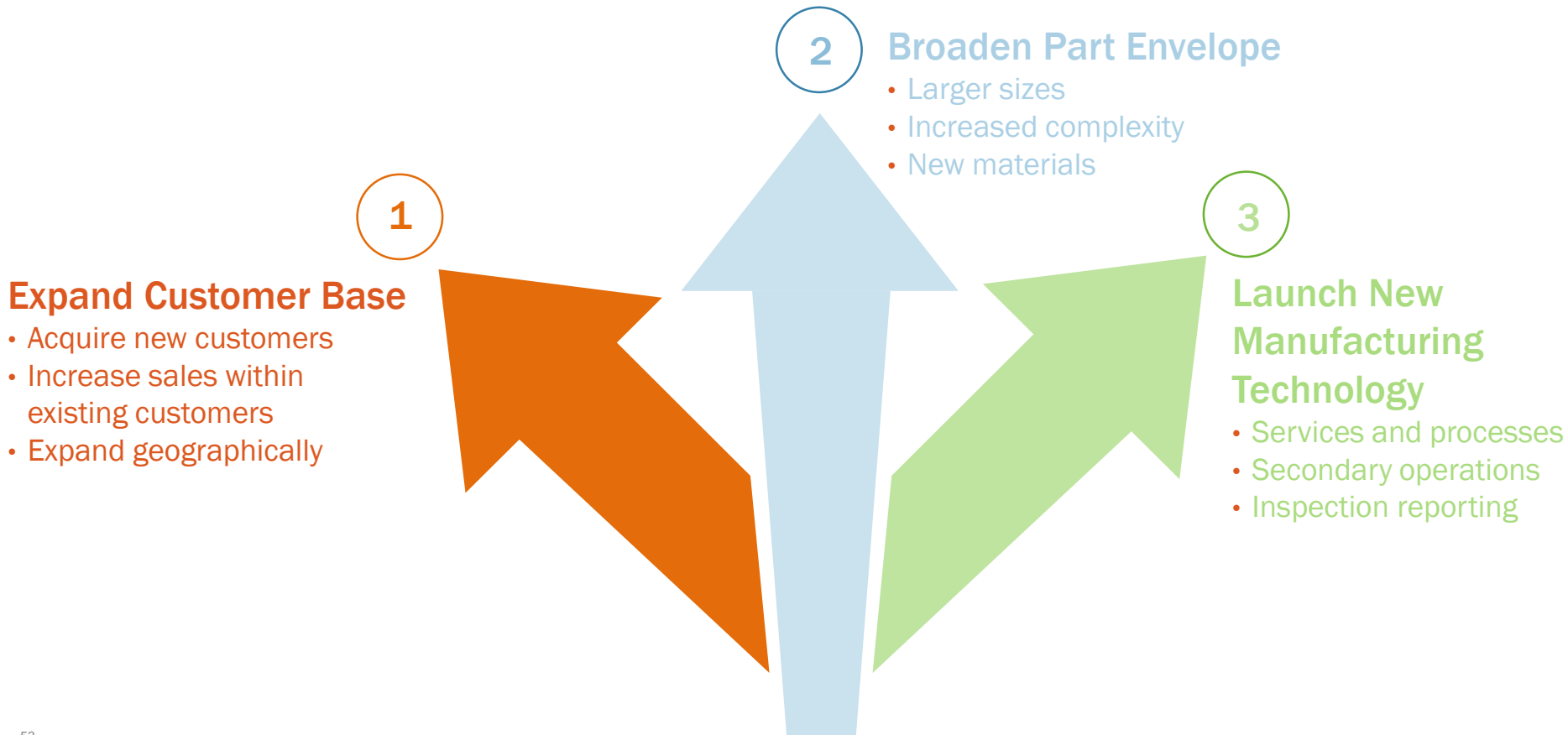
- Investing in services and capabilities to become more of a total solution
- Leveraging our technology and approach to enhance our capabilities to address underserved markets
- We will continue to evolve with our customers' needs



> MAINTAINING CONSISTENT GROWTH

## > OUR CAPABILITIES DRIVE OUR GROWTH

- Expanding capabilities allows us to meet more of our customers needs
- Establish deeper relationships to be a flexible manufacturing solutions provider



# > SALES AND MARKETING - PAST

## Marketing Engine





- Drive new **Individual Developers** to website

## Developer



- Engineer with limited options to get prototypes quickly

## Website

INJECTION MOLDING	CNC MACHINING
 <p>25 to 10,000+ parts shipped in 1 to 15 days.</p>	 <p>1 to 200+ parts shipped in 1 to 3 days.</p>

- Allows individual developer to order parts in self service model

Focused on capturing transactions via the internet in a low touch model.  
Minimize contact with customer

## Inside Sales Rep



- Provide assistance to developers to complete their part orders when needed

# > SALES AND MARKETING - PRESENT

## Marketing Engine



- Educating **customers** on our services
- Accentuate value propositions to certain **industries**



## Account Manager



Proactively understanding **customer** projects  
 Focused on **customers** whose needs align  
 with our value proposition

## Developer



- Engineer with limited options to get prototypes quickly



## Company



- Development Teams
- Management
- Procurement / Supply Chain

## Website

Start your quote request:

3D PRINTING	CNC MACHINING
	
1 to 50+ parts shipped in 1 to 7 days.	1 to 200+ parts shipped in 1 to 3 days.
INJECTION MOLDING	OVERMOLDING & INSERT MOLDING
	
25 to 10,000+ parts shipped in 1 to 15 days.	25 to 10,000+ parts shipped in 15 days.

- Allows individual developer to order parts in self service model
- Enhanced E Com Platform
- Expanded Service Capability



## > SALES AND MARKETING

- Recent Investments
  - Improved manager to seller ratio
  - Changed Sales compensation (new customers → focused account base)
  - Developed a documented sales process and implemented training
  - Added Strategic Sales Leadership
  - Opportunity Profiling
    - Focus sellers on opportunities from the highest potential customers
    - Improves sales efficiency



## > SALES AND MARKETING

- Continued Evolution
  - Continue to enhance the experience and the efficiency of low touch opportunities
    - E-Commerce for customer to seamlessly upload and order all services
    - Decrease sales team involvement in low touch opportunities
  - Increase focus of sales team on customers where our value proposition resonates
    - Align sellers with highest opportunity customers using data and analytics
    - Become integrated with the product life cycle of these customers products

## > CUSTOMER RELATIONSHIP

- Abbott finds a strong partnership with Proto Labs through the following
  - Helping Abbott deliver products to the market ahead of the competition
  - Abundant available resources to provide rapid communication on projects
  - Consistent on-time delivery to ensure project deadlines are met
  - Strong customer service commitment and response to resolve any quality issues



## > DIVERSE CUSTOMER BASE

- We serve all manufacturing industry verticals
- Each industry has unique needs and uses Proto Labs differently
- We are combining tailored solutions with a go to market approach to serve an expanding customer base



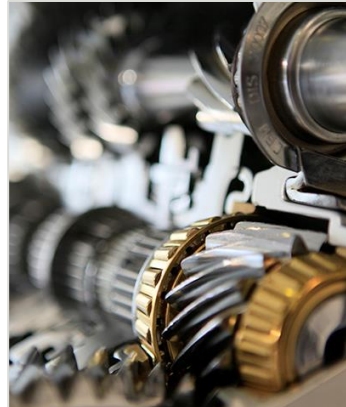
### Medical + Health Care

15-20%



### Computer Electronics

10-15%



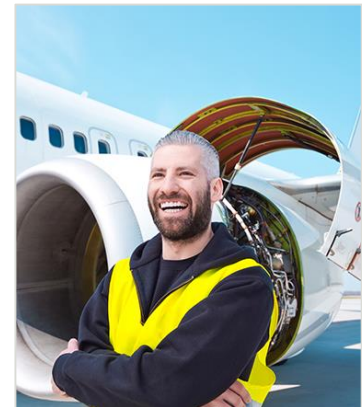
### Industrial Machinery + Equipment

5-10%



### Automotive

5-10%



### Aerospace

5-10%



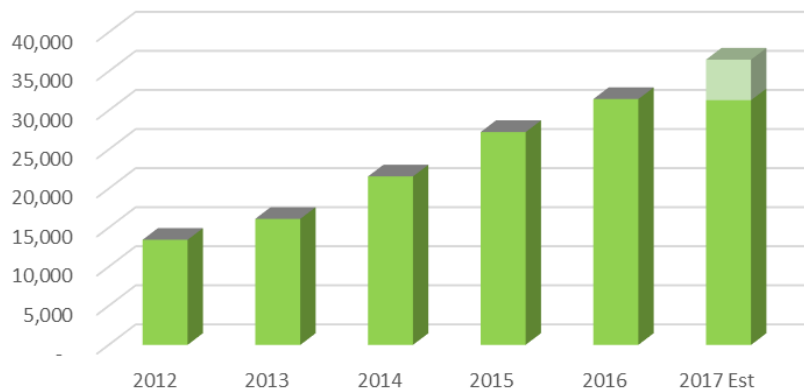
## > SALES AND MARKETING – CONTINUING TO EVOLVE

We have experienced strong growth by focusing on individual product developers

- We will continue this growth fueled by our enhanced capabilities and underlying market needs

- Increasing opportunity to provide solution to underserved customers by leveraging our capabilities
  - Focus on projects vs individual parts with expanded service offerings
  - Provide On Demand Manufacturing to fulfill customer's low volume production needs

Product Developers Served

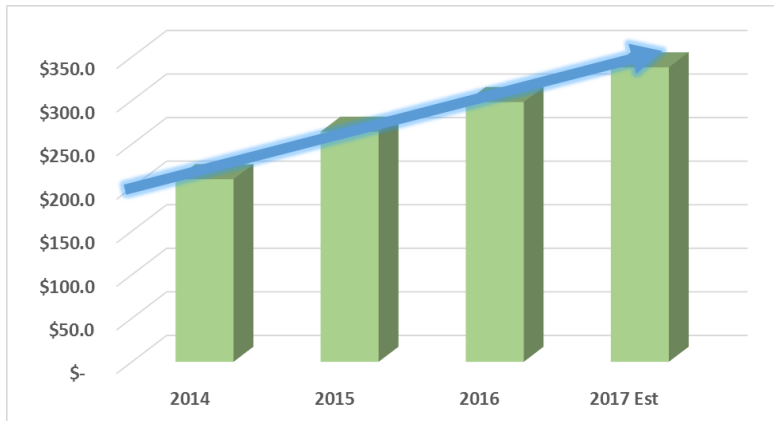


- Evolving go to Market Approach
  - Serve Product Developers + Companies
  - Transition from Supplier of Prototype Parts → Flexible Manufacturing Solutions Provider

## > FINANCIAL OVERVIEW

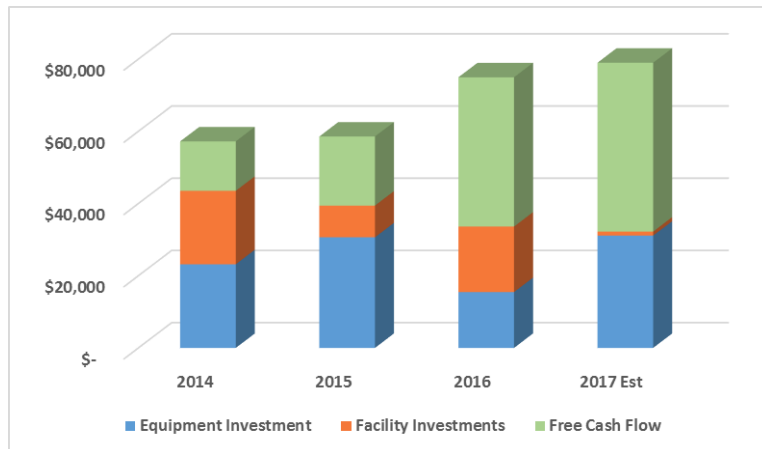
## > UNMATCHED FINANCIAL PERFORMANCE

### Revenue Growth – 17.3% CAGR (est)



- Strong revenue growth
- Consistent Gross Margins in excess of 56%
- Invested over \$100 million in R&D since 2012
- Reliable cash generation
- Strong Balance Sheet

### Operating Cash Flow – 1.5x Net Income (est)



- ~\$120 million in cash and investments
- Minimal Working Capital ~\$27 million (excl cash & short-term investments)

## > RAPID ACQUISITION

- Estimated 2017 revenue of \$45 million and EBITDA of \$10 million
- Purchase price of \$120 million (\$110 million cash, \$10 million stock)
  - Established line of credit for financial flexibility
  - Goodwill associated with transaction is tax deductible resulting in \$30+ million future cash tax benefit (pending tax reform)
- Transaction will be at least \$.10 per share accretive to earnings in 2018
  - Current Rapid business is dilutive to margins, but accretive to earnings
  - 2018 focus will be on adding scale and integration activities to capture future growth opportunities
  - Key Assumptions:
    - Rapid operating margins currently in low to mid teens
    - Integration activities and investment in scale estimated at \$.02 - \$.04 / share
    - ~\$.03 /share impact of financing (lower investment income + interest expense)

## > Q4 2017 GUIDANCE

- Guidance provided on October 26, 2017
  - Revenue of \$85M - \$90M
  - Non-GAAP EPS of \$.52 - \$.58
- Rapid Manufacturing transaction closed on November 30, 2017
  - Rapid's month of December will be included in our Q4 results
- Q4 Guidance updated for the inclusion of Rapid results
  - Revenue of \$89M - \$94M
  - Non-GAAP EPS of \$.53 - \$.59

See appendix for reconciliation of GAAP to Non-GAAP figures



## > 2017 HIGHLIGHTS

- 2017 projected utilizing Q4 Guidance provided on the previous page
- Projected revenue growth of ~15%
- Strong and consistent margins
  - Projecting gross margins of ~56%
  - Projecting non-GAAP operating margins of ~24%
- Strong growth in product developers served of 18% through Q3
- Non-GAAP Earnings per Dilutive Share of \$2.09 - \$2.15
  - Mid-point of guidance up 18% from \$1.79 in 2016
- Generating operating cash flow at an estimated 1.5x net income

See appendix for reconciliation of GAAP to Non-GAAP figures

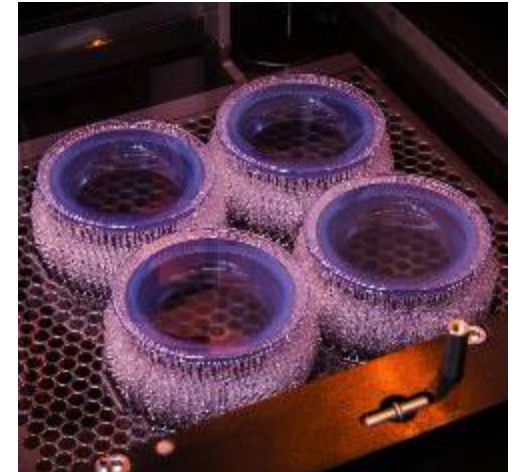
## > CAPITAL ALLOCATION

### Invest in Equipment and Facilities for Growth and Scale

- 1,000+ machines manufacturing customer parts
- High ROI with equipment payback generally under one year
- Approaching 1,000,000 sq. ft. to support operations

### Invest in R&D for Service and Envelope Expansions

- Commitment to R&D investment to expand our Digital Model
- Continuous process resulting in expansion of all services



### Strategic Acquisitions

- FineLine (April 2014) to launch 3D printing service
- Alphaform (October 2015) expanded 3D printing to Europe
- Rapid Manufacturing (December 2017) to launch sheet metal fabrication service and expand CNC capabilities

### Return Capital to Shareholders

- Initiated \$50M Stock Repurchase program (February 2017)

## > LONG TERM FINANCIAL OBJECTIVES

### 1. Drive Revenue Growth

Focus on Customer needs

Expand capabilities to capture market share

### 2. Grow Earnings

Invest in Growth

Continue to Invest in R&D to expand capabilities

Invest Scalable Internal Systems

Drive efficiencies through our Proto Excellence program

Leverage Fixed Cost Base

### 3. Continue Strong Cash Generation

## > 2018 GUIDANCE

Revenue (millions)	\$425 - \$450
Revenue Growth	25-31%
Non-GAAP Operating Income %	22-23%
Non-GAAP Earnings Per Share	\$2.40-\$2.60

See appendix for reconciliation of GAAP to Non-GAAP figures  
Guidance does not reflect any impact of potential tax reform



A wide-angle photograph of a large industrial manufacturing facility. The space is filled with various pieces of machinery, including what appears to be a large Toshiba machine on the right. The floor is polished and reflects the overhead lights. In the foreground, a person is walking, slightly out of focus. The background shows more equipment and workers, creating a sense of a busy, active environment. The lighting is bright and even, highlighting the scale of the facility.

> HELPING COMPANIES ACCELERATE  
PRODUCT DEVELOPMENT, REDUCE RISK,  
AND OPTIMIZE SUPPLY CHAINS BY  
PROVIDING QUALITY PROTOTYPING AND ON-  
DEMAND MANUFACTURING SERVICES AT  
UNPRECEDENTED SPEEDS



## > SUMMARY

- The leader in Digital Manufacturing
  - Proprietary technology: strong barrier to entry
  - Unmatched scale
- Continue to evolve to expand our growth opportunity
- Unmatched financial performance
  - Consistent, strong revenue growth
  - Very strong margins
  - Strong and consistent cash generation

THANK YOU!

**proto labs®**



# > PRESENTERS

**proto labs®**

DECEMBER 2017

## > Vicki Holt – President and Chief Executive Officer



Ms. Holt has been our President and Chief Executive Officer since February 2014. Prior to joining us, Ms. Holt served as President and Chief Executive Officer of Spartech Corporation, a leading producer of plastic sheet, compounds and packaging products, from September 2010 until Spartech was purchased by PolyOne Corporation in March 2013. Prior to Spartech, Ms. Holt worked at PPG Industries, a leading coatings and specialty products company, serving as Senior Vice President, Glass and Fiber Glass, from May 2005 until September 2010. Ms. Holt also is a member of the board of directors of Waste Management, Inc.



## > Rich Baker – Chief Technology Officer



Dr. Baker joined Protolabs as CTO in May of 2016. Prior to joining that, Rich served as CTO at PaR Systems, a robotics and specialty machine tool builder. From 2005 to 2014 he held multiple positions at MTS Systems including General manager of the Test Division, CTO, VP of Engineering and Operations. MTS was a leader in mechanical testing and simulation systems for automotive, aerospace, medical, civil-seismic and general research. Prior to MTS he was VP of Technology for Rohm and Haas Electronic Materials business from 1999 to 2005.



## > Robert Bodor – Vice President/GM Americas



Dr. Bodor has lead the Americas since January 2015. From July 2013 to January 2015 Rob served as the Chief Technology Officer. Rob started at Proto Labs in 2012 as Director of Business Development. Prior to joining Proto Labs, Rob held several roles at Honeywell, most recently leading SaaS business offerings for Honeywell's Life Safety Division. He also spent 4 years with McKinsey & Company, advising Fortune 500 companies in the high technology, industrial, and medical sectors, and has been on the executive team of 2 early-stage companies in the Twin Cities. Rob holds BS, MS, and Ph.D. degrees in Engineering and Computer Science from the University of Minnesota.

## > David Fein – Chief Revenue Officer



Mr. Fein joined Protolabs as CRO in December of 2016. David spent 16 years with California-based semiconductor company, PMC-Sierra. As Executive Vice President Global Sales, he helped establish the company's international sales strategy, which contributed to an annual revenue of more than \$500 million. Following the completion of the sale of PMC-Sierra to a strategic buyer in January 2016, David began working with SKTA Innopartners to accelerate core technology startups, an area Proto Labs is well versed in.

## > John Way– Chief Financial Officer



Mr. Way has served as our Chief Financial Officer since December 2014. Most recently and since 2013, John served as Chief Financial Officer of Univita Health, Inc., a privately held home healthcare service provider. From 2012 until 2013, John served as Chief Financial Officer of Virtual Radiologic Corporation, a private equity backed technology-enabled provider of remote radiology services. From 2002 to 2012, John was with UnitedHealth Group, Inc., with his most recent position being Chief Financial Officer of Optum Collaborative Care, a position he held from 2010 until leaving UnitedHealth in 2012.





# > GAAP TO NON-GAAP RECONCILIATION

## > GAAP to NON-GAAP RECONCILIATION

\$'s in thousands Except Earnings per Share	Nine Months Ended September 30, 2017	Three Months Ended December 31, 2017	Twelve Months Ended December 31, 2017	Twelve Months Ended December 31, 2018
Revenue	\$250,312	\$89,000-\$94,000	\$339,000-\$344,000	\$425,000-\$450,000
GAAP operating income as a % of revenue	21.4%	20.0-21.5%	21.0%-21.5%	20-21%
Add back:				
Stock-based compensation expense	2.5%	2.5%	2.5%	~2.5%
Amortization expense	0.2%	0.1%	0.1%	0.3%-0.4%
Transaction Costs	0.0%	1.0%	0.3%	0.0%
Non-GAAP operating income as a % of revenue	24.0%	24-25%	~24%	22-23%
GAAP net income per diluted share	\$1.40	\$0.45-\$0.51	\$1.85-\$1.91	\$2.09-\$2.28
Add back:				
Stock-based compensation expense	0.23	0.08	0.31	0.37-0.40
Amortization expense	0.01	0.01	0.02	0.05-0.07
Unrealized loss (gain) on foreign currency	(0.00)	-	(0.00)	-
Transaction Costs	-	0.03	0.03	-
Legal Settlement	(0.02)	-	(0.02)	-
Total adjustments	0.23	0.12	0.34	0.42-0.47
Income tax benefits on adjustments	(0.07)	(0.04)	(0.11)	(0.13)-(0.15)
Non-GAAP net income per dilutive share	\$1.56	\$0.53-\$0.59	\$2.09-\$2.15	\$2.40-\$2.60
Shares used to compute non-GAAP net income per share:				
Dilutive Shares	26,716,553	26,900,000	26,760,000	27,000,000