

# 2010 MicroISV Pain Point Survey Results

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## Abstract

A common mantra of the *microISV*, or software micropreneur, is to “find and solve the customer’s pain points.” This key ingredient in building a successful software product operates hand in hand with learning about and implementing sound business practices that support the construction, sale, and support of the product. While many microISVs have mastered the art of software construction, few have mastered the art of running a business.

MicroISVs face many of the same challenges as Fortune 500 companies, traditional small businesses, and software startups. However, these micropreneurs choose to tackle these obstacles with limited funds and minimal help. This has led to evolution of pain points specific to the microISV industry.

The microISV Research Alliance was founded in 2010 at Auburn University in an attempt to identify these pain points and, subsequently, direct academic research along a path toward solving some of these pains. To accomplish this goal, the annual microISV Pain Point survey was launched.

The purpose of this article is to share the findings of the 2010 survey. Although some of the challenges experienced by micropreneurs can only be solved by hard work and painful experience, we believe that increasing the awareness of these pains may lead to new discussions, products, or technologies that directly address these issues.

For a full copy of the survey questions and anonymized results, send a request to [survey@microisvresearch.org](mailto:survey@microisvresearch.org).

**Keywords:** microISV, challenges, business, operations, pain point, survey, micropreneur

## Background

### *What is a MicroISV?*

In September of 2004, Eric Sink coined the term microISV to refer to one-person companies that create and sell software products.<sup>1</sup> In the years since, the self-styled microISV community has refined the definition to include very small companies (10 or fewer employees) and to exclude funded startups.<sup>2</sup>

The hallmark of a microISV is typically the niche market, with a total market value of less than a million dollars. While this significantly caps growth potential, it also limits the possibility of larger corporations entering and dominating the market.

MicroISVs share many attributes with other types of companies, such as independent contractors, consulting firms, in-house IT departments, and small-to-medium sized businesses. However, microISVs tend to focus on either a shrink-wrap product or Software as a Service (SaaS).

## Pain Point Survey

### *Purpose*

Despite the potential for limited outside interaction, the members of the microISV industry are a strongly social group, as evidenced by several highly active forums and industry groups, including the Association of Software Professionals, the Stack Overflow site, the Joel on Software forums, etc. The community is also very open about sharing experiences, tools, and techniques to promote success among fellow microISV operators.

However, much of the contemporary wisdom is, arguably, of limited value outside a particular niche. Although this aspect has led to the creations of new businesses, such as the Micropreneur Academy, which attempt to formalize the topics and advice into a structured curriculum, the foundation for giving the advice remains anecdotal.

The Pain Point survey is the initial step in building a program of academic research into success factors for microISV operations. The survey is intended to target problems in much the same manner as a new business venture; identifying pain points within the industry should, logically, lead to areas for which anecdotal wisdom is either lacking or incorrect.

### *How the Survey was Conducted*

The pain point survey is divided into three parts. Part 1 contains a few demographic questions to help categorize the respondents. Part 2 of the survey asks the respondents to select one or more topical areas – such as technical support, marketing, globalization, etc. – that they felt were pain points from the last year or were expected pain points for the coming year. Respondents were also asked which of these topical areas they expected to spend money in to alleviate pain points. Part 3 of the survey asked the respondents to give a brief, free-text description of their most significant pain point from the last year. A complete listing of the questions and topics can be found in the attachment at the end of this article. To encourage full participation, all sections and questions were optional and could be skipped.

The survey was advertised throughout the microISV community and anyone wishing to take the survey was directed to the microISV Alliance website. In order to participate in the survey, respondents were required to provide a valid email address, which theoretically, cut down on casual survey takers.

The survey period ran from July 30, 2010 to August 21, 2010, for a total of 22 days. During that period, occasional blog posts and forum messages were made to further encourage participation.

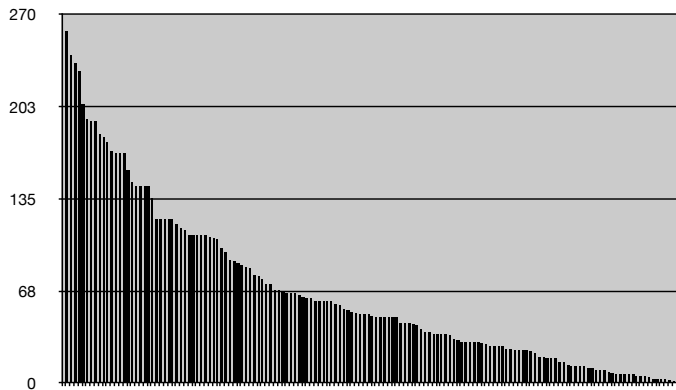
### *Respondents*

When the survey closed on August 21st, a total of 179 people had registered for the survey. A total of 152 respondents had completed the survey and only those responses are included in the final analysis. The twenty-seven people who did not complete the survey – they either did not respond to the email or did not move past the first few pages – were deemed incomplete and ignored.

### Age of the Business

The average age of the respondent's microISV is about five and one half years (~68 months), whereas the median age is about four years (~49 months). A quick review of the individual responses shows that twenty-eight respondents have passed the decade mark, whereas the same number haven't made it through their first year. Removing the one obvious outlier (31 years in operation) drops the average age by just two months to a sixty-six month average.

The following graph shows the distribution of microISV ages for all respondents. As you can see, the respondents are nicely distributed across the range between new (1 month) and established (20 years).



### Profitability

A total of 101 respondents (~66%) indicated their microISV was profitable. Thirty-two respondents (~21%) indicated their microISV was not profitable. Nineteen respondents (~12%) either did not know or were break-even.

Cross-referencing the age of the business with their responses about profitability show that, not surprisingly, the profitable microISVs are, on average, two years older (~25 months).

### Sole Source of Income

In terms of income, about 44% of the respondents are relying exclusively on their microISV. About 53% of the respondents have another source of income outside their microISV. A small handful of respondents chose not to answer the question.

The survey did not ask if the decision to rely on the microISV as the sole source of income was voluntary or not. Nor did it ask if a day job, spouse, or capital investment was the other source income. Also, given the state of the U.S. and world economy at the time of the survey, it is possible that many of the respondents may have been involuntarily moved into their microISV by downsizing or layoffs.

### Number of Products

Lastly, the responses showed that many survey respondents had more than a one or two products in their portfolio. About forty percent of the respondents had just a single product, whereas ten percent of the respondents had yet to launch a product. Interestingly, half the respondents had more than one product, with the majority (25%) falling in the three-to-five range.

Not surprisingly, the average age of the microISV increased in proportion to the number of products. What is surprising is that the average age of microISVs with zero products is 24 months.

Surprisingly, three microISVs of age 5, 5, and 11 years, indicated they produced no products. Discounting these three companies changes the average to 8 months.

### Software Process

The last demographic question focused on software process: *Which software development philosophy most closely matches your personal software process within your microISV?* Not surprisingly, the answers crossed the spectrum of development processes. Only a few of the choices offered were left unselected. The following table shows the numeric results.

Software Process	#	%
Iterative	40	26%
Code and Fix	32	21%
Agile	24	16%
Don't Need	14	9%
Design-Driven Development	10	7%
Cowboy	7	5%
Rapid Application Development	5	3%
Other	5	3%
Lean	5	3%
Extreme Programming	3	2%
JAD	3	2%
SCRUM	2	1%
TDD	1	1%
Waterfall	1	1%
Unified	0	0%
RUP	0	0%
Spiral	0	0%

If we informally group the responses by process weight you'll see an interesting take on the data. Not surprisingly, over half the respondents (~61%) use an agile process. About a third (~36%) indicate they use little or no process. Interestingly, four respondents indicated they use a formal process such as waterfall or JAD.

Software Process Category	#	%
No Process/Light Weight	53	36%
Agile/Medium Weight	90	61%
Formal/Heavy Weight	4	3%

### Survivor Bias

Reviewing the responses reveals an average microISV age of about 5.5 years (~68 months) and a median age of 4 years (~49 months). This implies a large percentage of the respondents have either crossed the chasm or really enjoy their hobby, increasing the chance that the responses provided focus on the "survivors" in the industry, rather than the struggling newcomers.

Obviously, this could change the focus of the survey's pain points from "new and just figuring this out" to "how to grow my business."

## Survey Results

### Top Pain Points

The following table shows the total votes cast by survey respondents for the top ten “pain points” with regard to pains experienced in the **last 12 months** (mid-2009 to mid-2010). Two aspects stand out. First, the top item, “Pricing Model(s),” tops the list by a margin of 5% over the second place pain point. Second, the second and third pain points both relate to *time management*.

Top Ten Pains (last 12 months)	#	%
Pricing Model(s)	69	45%
Allotting Time for Blogging	61	40%
Time Management	56	37%
Adwords	56	37%
Testing (Unit, System, Automated, Continuous, etc.)	56	37%
SEO	54	36%
Research & Development	54	36%
Payment Processing	52	34%
Software Quality (Quality Assurance, Quality Control, etc.)	49	32%
Marketing Campaign Materials Development/Design	48	32%

The following table lists the top ten pain points expected for the **next 12 months** (mid-2010 to mid-2011). Note that pricing models remained the top choice. Also note that sales and marketing-related topics have moved up the list, bumping off time management, R&D, software quality, and payment processing. This reinforces the notion that many micropreneurs naively assume marketing is a follow-on activity to product development.

Top Ten Pains (next 12 months)	#	%
Pricing Model(s)	65	43%
Adwords	64	42%
Allotting Time for Blogging	64	42%
Marketing Campaign Materials Development/Design	63	41%
SEO	62	41%
Identifying Search Terms (For SEO and/or Adwords)	54	36%
Community Building	54	36%
Web Site Design	52	34%
Testing (Unit, System, Automated, Continuous, etc.)	50	33%
Marketing	50	33%

Lastly, the following table lists the top ten pain points that the microISV operators plan to purchase solutions or consulting to address. The theme here is obvious: microISV operators are only willing to spend money on those things that are beyond their capabilities, such as payment processing, web hosting, and graphic design. Only half the items in this list are reflected in the previous two lists.

Another notable aspect of the responses is the steep drop in number of votes for these categories. While respondents voted in the 50-70% range for certain pain points, a significantly smaller percent express a desire to actually spend money on solutions to these issues.

Top Ten Pains (purchase solutions)	#	%
Graphic Design	54	36%
Payment Processing	32	21%
Web Site Design	30	20%
Virtual Private Server (VPS)	23	15%
Software Components	22	14%
Marketing Campaign Materials Development/Design	19	13%
Bookkeeping/Accounting	19	13%

SEO	18	12%
Shared Hosting	16	11%
Marketing	15	10%

Although it not the purpose of the survey or this article to make definitive statements about what microISVs should or shouldn't do, there is one point that can be made about the traditional wisdom of the industry.

Many bloggers in the microISV industry are promoting the idea of outsourcing<sup>3</sup>, either through virtual assistants or specialists. On the surface, the logic behind this assertion is sound, since it is unlikely that a single person can perform all the tasks required to run a business. It follows that there should be a correlation between “successful” microISVs and outsourcing. And this appears to be the case.

Whereas the average time in business of all respondents is 68 months, the average of respondents who indicated a willingness to solve pain points by purchasing solutions is 74 months. This statistic is based on the average time in business of microISVs who indicated they would be purchasing solutions in the next twelve months.

Of course, it's entirely possible that older microISVs are more financially successful and, therefore, more able to purchase solutions, whereas new microISVs are still in the bootstrapping phase.

### Word Usage

One of the more interesting aspects of the survey results is found in analyzing the words and phrases used by the respondents in the free text answers. To place the following numbers in context, it should be noted that the respondents were quite willing to share their thoughts in detail. Of the 152 respondents, only ten respondents chose not to “briefly describe their major pain.” Furthermore, they used an average of twenty words, for a total of 2917 words from all respondents.

The word *time* tops the list with sixty-one references. The word *product/products* came in a distant second with forty-six uses. And, although the category of Sales and Marketing topped the list of topics, only fifty-seven people mentioned *market*, *marketing* or *sales*. Most interesting is the fact that *price* and *pricing* were only mentioned five times, despite topping the list of pain points.

Frequency of Word Usage	
Time	61
Product/Products	46
Marketing/Market	36
Sales	21
Customer/Customers/Users	19
Software	14
Development	14
Support	13
SEO	9
Features	5
Pricing/Price	5

## Speculation

Again, the purpose of this article is not to make definitive statements about the best behavior of microISVs. However, a little speculation about how to handle the top pain point – pricing models and time management – is in order.

### *Building a Pricing Model*

Developing pricing models is difficult, at best, regardless of the industry or product. The only commonly applicable answers to the problem are research, trial-and-error, and experience. Research into the theory and practice of pricing models and product positions provides a concrete starting point for constructing a pricing model. Research into the models of competitors and complementary products expands the foundation.

Once you have a solid foundation for creating a pricing model for your own product, your only option is to begin testing the model. Testing your model will slowly build – upon your theoretical foundation – a layer of experience from which you will begin to make informed choices. Testing your pricing model may take the form of surveys, forum postings, or A/B testing.

### *Time Management*

Time management is a broad and nebulous topic, at best. It may cover the full-time employee working nights and weekends on his or her microISV, who has difficulty juggling microISV time with family time. It may cover someone who's finally quit their job to commit themselves full-time to the microISV and doesn't know how to properly fill an eight-hour day without a manager. Or, it may cover the microISV owner who's finally made big and is having trouble handling the success.

Despite all the various forms the time management problem may take, the solution to the issue, at the core, is personal development. Learning the skills and discipline necessary to manage one's time lays the foundation for overcoming the problem. These skills include getting organized, setting and prioritizing goals, then managing your time. Discipline allows you to adhere to your goals and make changes as necessary.

Bookstores and libraries are filled with a hundreds of books on the topic of time management. The Internet also contains a myriad of articles and sites devoted to the practice. The key starts with personal development.

### *Purchasing Solutions*

Strangely enough, a minority of microISVs seem interested in purchasing solutions to solve problems, outside the necessary tasks such as web hosting and payment processing. Perhaps this relates to the bootstrapped nature of the microISV. Perhaps the microISV owners haven't taken the time to consider what activities could be profitably outsourced.

For example, a microISV founder has a limited number of hours per day to work on the business. Almost certainly, there are more activities that need to be completed than he or she has time for each day. Therefore, some number of activities will be postponed either temporarily or indefinitely. Could the microISV benefit from outsourcing these activities? The answer to the question lies in knowing the cost and value of the activity.

If an activity costs the microISV operator eight hours of effort, but could be outsourced for \$80, then is it in the best interest of the microISV to outsource it? The answer depends of the value of the microISV operator's time. In other words, is the microISV operator's time worth more or less than \$10 per hour? If the answer is more, say \$20 per hour, then the task could be profitably outsourced.

## Conclusion

The annual microISV pain point survey is designed to identify and increase awareness of common issues facing microISV operators. While these issues are not unique to the industry, the solutions might be. Therefore, we wish to encourage the industry as a whole to openly discuss the issues and possible solutions. Forums – such as the Business of Software, Stack Overflow, (Discuss) Joel on Software, and the Association of Software Professionals – are an excellent place to begin the discussion, share ideas, and perhaps work toward building a stronger industry.

If you have ideas or thoughts about the 2011 survey or for a full copy of the survey questions and anonymized results, send an email to [survey@microisvresearch.org](mailto:survey@microisvresearch.org).

## Survey Questions

The following is a summary of the pertinent questions from the 2010 survey.

### Demographics

The following demographic-based questions are designed to help categorize the respondents without compromising their anonymity.

*How many years and months has your microISV been in operation?*

*Considering just the last 12 months, has your microISV yielded a... Profit, Loss, No gain/loss, or Unknown*

*Is your microISV your primary source of income?*

*Within the last 12 months, how many products/services has your microISV made available for sale/use? This includes currently available products released more than 12 months ago and products which have been retired within the last 12 months.*

*Which software development philosophy most closely matches your personal software process within your microISV? (I don't need a process, Agile, Code and Fix, Cowboy Coding, Design-Driven Development, Extreme Programming, Iterative and Incremental, Joint Application Design/Development, Lean Software Development, Rapid Application Development, Rational Unified Process, Scrum, Spiral Model, Test-Driven Development, Unified Process, Waterfall Model)*

### General

The following two questions are designed to work around the limitations of the pre-defined topic list.

*Briefly describe the single most difficult pain point you have experienced in the last 12 months of operating your microISV.*

*If you could direct the research efforts of a university, what areas or topics, relating to the microISV community, would you have investigated?*

### Pain Point Topics

A three-part question presents the respondent with a list of eighty-five topics, covering the spectrum of technical and business operations. The respondent may select one or more topics for each part of the question: past, future, or monetary.

*Select from the following list all topics which you personally...*

*(1) struggled with during the last 12 months,*

*(2) expect to struggle with during the next 12 months,*

*(3) plan to purchase third-party solutions or consulting to solve problems with during the next 12 months of operating your microISV.*

The topic list includes:

	Topic	
Software Development & Quality	Research & Development	
	Developing/Maintaining a Development Process	
	IDE Selection	
	Version Control	
	Automated Build Tools	
	Globalization	
	Selecting a Release Point	
	Internal Documentation	
	Hardware Issues	
	Software Quality (Quality Assurance, Quality Control, etc.)	
	Testing (Unit, System, Automated, Continuous, etc.)	
	Identifying Defects	
	Tracking Defects	
	Fixing Defects	
	Code Commenting	
	Beta Testers	
	Scope Creep	
	Installer Tools	
	Automated Release Builds	
	Release Packaging	
	Writing Help Files	
	Writing User Documentation	
	PAD Files	
	Sales & Marketing	Payment Processing
		Cart Abandonment
		Affiliate Programs
		Third-Party Integration
		Technical Support
Bookkeeping/Accounting		
Client Issue Submission/Tracking		
Pricing Model(s)		
Promotions		
Marketing Campaign Materials Development/Design		
Target Market Identification		
Adwords		
Identifying Search Terms (For SEO and/or Adwords)		
Web Site Design		
Web Site Development		
SEO		
Getting Picked Up by Search Engines		
A/B Testing		
Content Management System(s)		
Allotting Time for Blogging		
Blog Topic Selection		
Developing a Writing Style/Tone for My Blog		
Social Media (Newsletters, RSS, Twitter, Blogging, etc.)		
Contact Management		
Conflict Resolution		
Community Building		
Hosting		Shared Hosting
		Virtual Private Server (VPS)
	Rack Space	
	Security Certificates	
	Bandwidth	
	Uptime	
	Security	
Planning & Legal	Product Ideas	
	Business Plan	
	Business Model Selection (B2B, B2C, etc.)	
	Platform Selection (PC, Mac, Web, Mobile, 32/64-bit, etc.)	
	Feature Selection	
	Funding	
	Risk Management	
	Identification of Accounting Processes	
	Tax Issues	
	Time Management	
	Product Licensing Definition (i.e. - EULA)	
	Privacy Policy Definition	
	Open Source Integration (i.e. - GPL, GPL V2, etc.)	
	Copyright	
	Non-Disclosures	
	Conflict(s) of Interest with Your Day Job	
	Selling The Business	
	Piracy	
	Developing Anti-Piracy Measures	
	Software Activation Methods	
Outsourcing	Data Security	
	Software Components	
	Graphic Design	
	Legal	
	Technical Writing	
	Accounting/Finance	
	Sales	
Marketing		
Globalization		

## **Glossary of Terms and Phrases**

Pain Point - “a level of difficulty sufficient to motivate someone to seek a solution or an alternative; a problem or difficulty” ([http://www.doubletongued.org/index.php/dictionary/pain\\_point/](http://www.doubletongued.org/index.php/dictionary/pain_point/)). The ability to solve a pain point is typically used as justification for founding a new microISV or microISV product.

MicroISV - a small (under 10 person) or one-person software company.

Micropreneur - An entrepreneur who operates on the level of a one-person or very small business.

Shrink-Wrap Product - software on CD-ROMs that are boxed and shrink-wrapped and sold in stores (implying a widely supported standard platform).<sup>4</sup>

Software as a Service (SaaS) - A model of delivering software via a subscription service, using a web-based platform. Such software resides on centralized servers owned by the software provider, not the client.

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## **References**

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<sup>1</sup> [http://www.ericSink.com/bos/Micro\\_ISV.html](http://www.ericSink.com/bos/Micro_ISV.html)

<sup>2</sup> [http://en.wikipedia.org/wiki/Micro\\_ISV](http://en.wikipedia.org/wiki/Micro_ISV)

<sup>3</sup> <http://www.kalzumeus.com/2010/11/16/getting-a-new-product-off-the-ground-part-two/>

<sup>4</sup> <http://wordnetweb.princeton.edu/perl/webwn?s=shrink-wrapped%20software>