## HOW ENTREPRENEURS CHOOSE AND USE

# Accounting Information Systems

### It isn't what you think.

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mall businesses are big in the U.S. Although the majority of companies are primarily small businesses, most research has studied large multinational companies. From high-tech to franchises, small businesses remain important entities in the U.S. and other nations.

These entrepreneurs can't afford to hire a big accounting firm to give consulting advice, audit their financials, or close their books, but they need updated, accurate, and timely accounting information to survive. That's why they rely on accounting information systems (AIS) for day-to-day management decisions. We wanted to find out how they select a system, and, to our surprise, it isn't all about cost. First, we'll briefly explain the research that's already been done on AIS for small businesses and then explain the results of our study.

In 1999, James Thong determined business size was the most significant organizational characteristic when entrepreneurs selected accounting information systems. Although his research touched on decision-making variables that explained why entrepreneurs used AIS, Thong didn't mention specific software the small businesses were using.

Another study, which Falconer Mitchell, Gavin Reid, and Julia Smith conducted in 1998, linked the use of management accounting information to the success or failure of small and medium enterprises (SMEs). In addition, they noted that, because of the large numbers of small businesses, these SMEs continue to be a vital and extremely important part of the business environment.

These articles answer important research questions, but research still needs to be conducted on the specific AIS software that small business owners use, and that's what our survey aims to do. Small businesses can choose from a variety of AIS software packages that meet the needs of many diverse industries, but entrepreneurs usually don't have the time to research all the options. Our research provides the small business owner a look at what

AIS software their counterparts use—and why. After all, entrepreneurs often only have salespeople from the various software companies giving them advice on what software to buy, according to the "Entrepreneur's Guide to Software" by C.J. Goldberg.

To provide entrepreneurs as much helpful information as possible, we studied the type of software various small businesses use and how they use it. In addition, we asked participants what factors influenced them the most and if they were satisfied with the software. The study tested the following two hypotheses:

**Hypothesis 1:** Satisfaction with accounting software does not depend on brand.

**Hypothesis 2:** Satisfaction with employee software skills does not depend on the type of business (sole proprietorship, partnership, or corporation).

We also wanted to find out if satisfaction is related to factors such as type of business, form of ownership, and demographic variables including gender, age, and race. In addition, we asked questions to find out whether entrepreneurs use one or more AIS software packages and why they selected more than one product. We also wanted to know what these small business owners would like to see improved.

Using the U.S. Small Business Administration's Pro-Net database, we selected 175 e-mail addresses of small business owners across the U.S. who had fewer than 500 employees. For demographic data, we developed the survey questionnaire using standard U.S. Census criteria, such as race and age. We compiled and analyzed the data using SPSS (originally, Statistical Package for the Social Sciences) for statistics.

Seventy-five business owners returned the survey, and 64 responses, or 37%, were usable. The first request saw 30% of the questionnaires returned, while the second and third requests resulted in another 7%.

### THE RESPONDENTS AND OVERALL FINDINGS

Before we discuss the findings, we'll provide a snapshot look at the companies that responded.

Nearly two-thirds of the respondents were either S-Chapters or S-Corporations. Since nationally nearly 90% of businesses are sole proprietorships, this result suggested we contacted more sophisticated businesses. These results may relate to the business owners' use of accounting information systems and e-business, which also caused the entrepreneurs to be listed on the SBA Pro-Net database. Nearly half had been in business for more than five years, and 69% are in the service industry.



Software	# of Respondents
QuickBooks	41
Excel	16
One-Write	8
Access	5
DacEasy and Simply Accounting	2

These businesses were truly micro businesses, with two-thirds employing nine or fewer people. The age of the respondents was typical for small business owners: 70% were between the ages of 35 and 54. To no surprise, 52% were female. According to the U.S. Small Business Administration, women are starting new businesses at a rate four times that of their male counterparts. We were surprised, however, to have a significant response from minority business owners at 77%, which is much higher than their representation as small business owners.

Table 2: REASONS FOR SELECTING
AIS SOFTWARE

Reason	Mean
Recommended by Business Counselor or Consultant	4.131
Recommended by Another Business Owner	3.419
Recommended by Accountant or CPA	3.164
Cost	2.565
Ease of Use	1.753

### Table 3: SATISFACTION WITH CURRENT SOFTWARE

Level of Satisfaction	Percent
Very Satisfied	54
Somewhat Satisfied	27
Neither Satisfied nor Dissatisfied	13
Somewhat Dissatisfied	6

So what did this group tell us? As far as the software they use, QuickBooks topped the list at 41 companies, with Excel in second at 16. Because they may use more than one type, responses in Table 1 total more than 100%. One respondent wrote in the software called Deltek.

Although we thought cost would be a major factor, Table 2 indicates this isn't the case. In fact, cost ranked fourth as a major factor. The highest-ranking reason was recommended by business counselor or consultant, followed by recommended by another business owner, and, finally, recommended by accountant or CPA. These results might also suggest a new marketing tactic for software companies to use—advertise to consultants and business counselors, and maybe offer cash for referrals.

### SATISFACTION

We asked respondents to indicate how satisfied they are with their current software, and the results are shown in Table 3. As only slightly more than half are very satisfied, this might suggest an opportunity for software companies to win over new customers based on ease of use or additional features. So was satisfaction related to brand or form of business ownership?

We couldn't prove the first hypothesis (satisfaction does not depend on brand of accounting software package) because the substantial number of brands reported resulted in a wide dispersion of small numbers. But a visual examination of higher-reported brands, such as QuickBooks and Excel, suggest that those users might have higher satisfaction levels.

Next, we compared the form of business ownership and satisfaction with accounting software. Hypothesis 2 stated that there wouldn't be a significant difference in satisfaction levels based on the form of business ownership, and this was proven true.

We then examined the remaining data and found some

interesting results. We cross-tabulated reasons for selecting software and satisfaction and found they weren't related. We analyzed all probabilities and measured significance at the 95% confidence level. Other areas where we found no relationships to satisfaction levels include type of business, how long in business, and demographic variables including gender, age, and race.

We also asked the business owners if they use more than one AIS software package. Only 25% fell into this group, and they offered various reasons for using more than one:

- "I use QuickBooks to track jobs, generate invoices and estimates. I use Quicken to track checking info, credit card accounts, etc."
- ◆ "There are some occasions in which Excel must be used to coincide with other vendors' accounting systems, [but] for all billing, proposal, and payment transactions, QuickBooks has been sufficient in meeting our critical accounting needs."
- "We use two types as a double check." Two respondents indicated that they use two packages for this reason, which might suggest a lack of confidence in the software.

Other responses included "flexibility," "we utilize our deployed employees to report back trip reports and travel and payroll," and "because my clients used different programs and I help them with their programs."

### IMPROVEMENTS AND EMPLOYEE SKILLS

Several respondents suggested improvements they would like to see in their accounting software. More user-friendly was noted five times. Making the software more user-friendly could be critical since many small businesses can't afford to hire trained accounting personnel and often will rely on clerical staff or themselves to make the software entries. Respondents also suggested better cash flow information, ability to generate reports under a different job classification for Workers' Compensation, and better inventory control of raw materials without a link to finished goods. Other specific suggestions included:

- "Needs to be easier to make updates or changes, especially on invoices."
  - "Multiple Windows operations at the same time."
- ◆ "Ability to e-mail statements, invoices, etc., in Acrobat format."
- "I would like to put my own logo on the invoices within the software rather than use the Word document."
  - "Make it easier to use and more foolproof."

Most owners didn't respond to the question about newly hired accounting and management team members and their AIS skills, but a few commented on skills they would like to see new hires possess:

- "I think they should at least understand basic accounting principles. Software skills are not important, but basic computer skills are a must."
  - "Just basic accounting skills."
  - ◆ "QuickBooks."
- ◆ "Fundamental accounting/bookkeeping skills for integrating project accounting."
- "Thorough knowledge of accounting practices and how software functions...[and] knowledge of our business operations."

Although few respondents replied to this question, basic accounting and basic computer skills are clearly important. The low number of responses may be due to the fact that, in many small businesses, the owner does much of the accounting work. Only three wanted specific knowledge of accounting software packages such as Lotus, Oracle, or QuickBooks, but eight responses referred to knowledge of basic accounting skills.

The common theme here is the need for employees to have basic accounting skills. This may suggest that employers aren't hiring employees with training or coursework in accounting, possibly to save money, or that there may be a greater need for accounting technicians. Training consultants, business development agencies, and others may see this as an opportunity for providing training programs for small businesses.

#### IMPLICATIONS FOR BUSINESS AND EDUCATORS

There may or may not be some connection between software brand and satisfaction level, and the sample size didn't yield results with a high level of probability. As satisfaction levels and reasons for selecting software don't appear to depend on size of business, software distributors wouldn't have to alter marketing efforts based on these criteria. Findings also suggest opportunities for businesses to provide training to existing employees on how to use software and basic accounting knowledge. What's more, small business owners need to make clear to potential new hires the skill set necessary to succeed in their firm.

Finally, as many respondents reported using more than one accounting software package, they may lack confidence in the package they're using. This may provide software vendors an opportunity to market their product as "the only accounting software package you will ever

need." But businesses can only take advantage of this potential opportunity after fully studying small business owners' attitudes toward accounting software.

Educators should also be cognizant of employee requirements of small business owners. Many respondents were more concerned with strong accounting software skills and only required a basic understanding of accounting. This suggests that those institutions that provide paraprofessional courses can retrofit their curricula to better meet the needs of small business owners. In addition, more research could better identify satisfaction levels by brand (Excel, Lotus, Access, etc.) and might also result in findings that could be useful to entrepreneurs and to accounting educators as well.

Finally, results from analyzing demographic data tended to differ from data in the SBA database. Age and gender of business owner, as well gender and revenues, for example, could be studied further to determine whether change is happening. As statistical analysis yielded inconclusive results in several areas, further study might also uncover additional key information useful to educators, small business owners, and software vendors.

#### CHOICES BASED ON EASE OF USE

Once more, the results of this study suggest that small business owners don't base their AIS software choices entirely on cost. Instead, entrepreneurs overwhelmingly chose software packages that they found easier to use, and they were heavily influenced by consultants and business counselors. Some even use more than one AIS software package. Comments also suggest that many software packages don't completely meet their accounting needs, and, not surprisingly, call for improvements in what's available. Further research may provide additional information from those small business owners who didn't respond to the survey, but researchers are likely to find obtaining a significant number of responses an increasing challenge.

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