Spreadsheet Engineering Research Project (SERP)
Tuck School of Business at Dartmouth College

Results of On-line Survey of Spreadsheet Usage

The following table presents the cumulative results of on-line surveys conducted through the auspices of seven organizations during 2005 and 2006. These survey results, from nearly 1600 respondents, are the subject of several research analyses currently being carried out by SERP. Papers and other publications on this research will be posted on the website as they are produced. Please contact SERP researchers for more information.

SURVEY ON SPREADSHEET USAGE							
		ALL SURVEYs - March '06					
		(based on 1597 responses in seven surveys received by March 10, 2006)					
Spreadsheet Usage							
			#			%	
1. Please check the types of software you use in your job.							
	a.	Microsoft Excel	1586			99.3%	
	b.	Quattro Pro	24			1.5%	
	b.	Lotus 1-2-3	39			2.4%	
	c.	Microsoft Access	514			32.2%	
	d.	Visual Basic for Applications (VBA)	399			25.0%	
	e.	Oracle database	138			8.6%	
	f.	IBM database	29			1.8%	
	g.	Other	191			12.0%	
2. Level of importance spreadsheets have in your job.							
	a.	Unimportant	23			1.4%	
	b.	Moderately important	253			15.9%	
	c.	Very important	536			33.6%	
	d.	Critical	781			49.0%	
3. Please classify your experience with spreadsheets.							
	a.	Little or no experience	11			0.7%	
	b.	Some experience; still a beginner	101			6.4%	
	c.	Extensive experience; some expertise	853			53.6%	
	d.	Very experienced; high expertise.	625			39.3%	

4. Type(s) of training have you had using spreadsheets.							
	a.	None	281			17.6%	
	b.	Formal classroom instruction	602			37.7%	
	c.	Occasional informal training sessions	467			29.2%	
	d.	Books and manuals	856			53.6%	
	e.	Demonstrations from colleagues	835			52.3%	
5. When working with spreadsheets, you typically work:							
	a.	By yourself	1289			81.1%	
	b.	In a team of 2 or 3	259			16.3%	
	c.	In a larger team (4 or more)	42			2.6%	
6. Approximate percent of time spent with spreadsheets in your job.							
	a.	0-25%	712			44.7%	
	b.	26-50%	484			30.4%	
	c.	51-75%	284			17.8%	
	d.	76-100%	114			7.2%	
7. Main purposes of spreadsheets you use .							
	a.	Maintaining lists (e.g. names and addresses)	399			25.0%	
	b.	Tracking data (e.g. budgets, sales, inventories)	753			47.2%	
	c.	Analyzing data (e.g. financial, operational)	1399			87.6%	
	d.	Determining trends and making projections	875			54.8%	
	e.	Evaluating alternatives	907			56.8%	
	f.	Other	194			12.1%	
8. Techniques used in your spreadsheets.							
	a.	Statistical analysis	963			60.3%	
	b.	Optimization (e.g. Solver, What's Best)	748			46.8%	
	c.	Simulation (e.g. Crystal Ball, @Risk)	489			30.6%	
	d.	None of the above	413			25.9%	

9. How often each of the following specific spreadsheets tools are used:

		Never	Rarely	Occasional	Frequent	Every Day
a.	Goal Seek Tool	526	321	409	264	29
		34.0%	20.7%	26.4%	17.0%	1.9%
b.	LOOKUP Functions	271	243	426	434	196
		17.3%	15.5%	27.1%	27.6%	12.5%
c.	Pivot Tables	394	366	366	306	131
		25.2%	23.4%	23.4%	19.6%	8.4%
d.	Conditional formatting	314	249	419	466	110
		20.2%	16.0%	26.9%	29.9%	7.1%
e.	IF Function	146	137	284	595	401
		9.3%	8.8%	18.2%	38.1%	25.7%
f.	Formula Auditing Tools	393	294	317	340	206
		25.4%	19.0%	20.5%	21.9%	13.3%
g.	Chart Wizard	162	200	383	618	199
		10.4%	12.8%	24.5%	39.6%	12.7%
h.	Function Wizard	217	242	417	504	85
		14.8%	16.5%	28.5%	34.4%	5.8%
i.	Solver	491	356	339	284	76
		31.8%	23.0%	21.9%	18.4%	4.9%
j.	Financial Functions (e.g. NPV, IRR, PMT)	250	302	369	458	188
		16.0%	19.3%	23.5%	29.2%	12.0%
k.	Find/Replace	158	254	413	488	244
		10.1%	16.3%	26.5%	31.3%	15.7%
l.	Macros	300	418	343	289	210
		19.2%	26.8%	22.0%	18.5%	13.5%
m.	Data Table Tool	423	407	371	276	72
		27.3%	26.3%	24.0%	17.8%	4.6%
n.	Data Sort Tool	110	158	404	653	226
		7.1%	10.2%	26.0%	42.1%	14.6%

10.	Number of different spreadsheets you normally use per week.			
	a.	0-1	93	5.8%
	b.	2-5	640	40.2%
	c.	6-10	408	25.6%
	d.	more than 10	450	28.3%
11.	Those who report to you use spreadsheets to develop recommendations.			
	a.	Yes	895	56.5%
	b.	No	161	10.2%
	c.	Not applicable	492	31.0%
	d.	Don't know	37	2.3%
12.	Creator of spreadsheets in your work.			
	a.	Yes	1467	92.7%
	b.	No (if no go to questions 22)	116	7.3%

Spreadsheet Creation

13.	Create spreadsheets from scratch			
	a.	Always	539	36.3%
	b.	Sometimes	922	62.1%
	c.	Never	23	1.5%
14.	Percentage of work time devoted to spreadsheet creation.			
	a.	0%	7	0.5%
	b.	1-10%	707	47.6%
	c.	11-20%	385	25.9%
	d.	21-30%	173	11.7%
	e.	31-40%	76	5.1%
	f.	41-50%	72	4.9%
	g.	More than 50%	64	4.3%

15.	Division of spreadsheet models into separate, integrated modules.		
a.	Never	62	4.2%
b.	Sometimes	483	32.7%
c.	Usually	629	42.6%
d.	Always	301	20.4%
16.	Size of models normally created.		
a.	under 100 cells	127	8.6%
b.	101 to 1000 cells	624	42.4%
c.	1001 to 10,000 cells	471	32.0%
d.	10,001 to 100,000 cells	184	12.5%
e.	over 100,000 cells	66	4.5%
17.	How often you separate all data inputs form the formulas in your spreadsheet.		
a.	Never	77	5.2%
b.	Sometimes	457	31.1%
c.	Usually	608	41.4%
d.	Always	327	22.3%
18.	Typical first step in creating a spreadsheet.		
a.	Borrow a design from another spreadsheet	335	22.8%
b.	Sketch the spreadsheet on paper	256	17.4%
c.	Write the fundamental relationships using algebra	85	5.8%
d.	Enter the data and formulas directly into a computer	717	48.7%
e.	Other	78	5.3%
19.	Frequency of usage of systems development methodologies (e.g. SDLC, RAD)		
a.	Always	15	1.0%
b.	Sometimes	112	7.6%
c.	Never	1343	91.4%

20.	Best description of your work in creating spreadsheets.			
	a.	Work independently	1140	77.3%
	b.	Seek advice from another person(s)	116	7.9%
	c.	Work with a peer group	85	5.8%
	d.	Work with a project team	133	9.0%
21.	Other people normally use the spreadsheets you create.			
	a.	No, my spreadsheets are for my personal use.	169	11.5%
	b.	My spreadsheets are shared with one or two others	619	42.0%
	c.	My spreadsheets are used by a number of people.	456	30.9%
	d.	My spreadsheets often become permanent assets.	231	15.7%

Spreadsheet Testing

22.	Testing of spreadsheet models that you or others create.			
	a.	Never, (if never, go to questions 25)	271	17.1%
	b.	Sometimes	505	31.9%
	c.	Usually	422	26.7%
	d.	Always	383	24.2%
23.	Which of the following methods used to test spreadsheets.			
	a.	Test extreme case	733	45.9%
	b.	Use a calculator to check selected cells	613	38.4%
	c.	Display all formulas	290	18.2%
	d.	Examine formulas individually	729	45.6%
	e.	use Go To - Special	100	6.3%
	f.	Test performance for plausibility	693	43.4%
	g.	Error Checking option	163	10.2%
	h.	Formula Auditing Toolbar	447	28.0%
	i.	Use common sense	1076	67.4%
	j.	Other tools:	121	7.6%

24. Percentage of time (approximate) devoted to spreadsheet testing.

a.	0%	56	4.2%
b.	1-10%	1051	78.3%
c.	11-20%	156	11.6%
d.	21-30%	53	3.9%
e.	31-40%	11	0.8%
f.	41-50%	10	0.7%
g.	more than 50%	5	0.4%

Spreadsheet Documentation

25. Documentation of spreadsheets (within spreadsheets or in separate document)

a.	Never (If never, go to question 28)	278	17.7%
b.	Sometimes	780	49.5%
c.	Usually	404	25.7%
d.	Always	113	7.2%

26. Techniques used to document spreadsheets.

a.	Text in spreadsheet	1019	63.8%
b.	Cell Comments	955	59.8%
c.	Documentation sheet in workbook	463	29.0%
d.	Separate document	291	18.2%
e.	None of the above	29	1.8%

27. Percentage of work time devoted to spreadsheet documentation.

a.	0%	1172	88.1%
b.	1-10%	125	9.4%
c.	11-20%	21	1.6%
d.	21-30%	6	0.5%
e.	31-40%	5	0.4%
f.	41-50%	2	0.2%
g.	More than 50%	0	0.0%

Spreadsheet Implementation/Use

28. Hours per week of your time normally spent in using a typical spreadsheet.

a.	0-1	278	17.7%
b.	1-3	567	36.2%
c.	3-5	307	19.6%
d.	5-10	245	15.6%
e.	10-20	115	7.3%
f.	over 20	55	3.5%

29. Number of other users for a typical spreadsheet you use.

a.	None	211	13.5%
b.	1 other person	295	18.8%
c.	2-5 other people	782	49.9%
d.	6-10 other people	138	8.8%
e.	more than 10 other people	140	8.9%

30. Frequency of usage of a typical spreadsheet after first use.

a.	daily	220	14.1%
b.	once or twice a per week	724	46.4%
c.	monthly	401	25.7%
d.	quarterly	122	7.8%
e.	annually	32	2.1%
f.	less than once a year	60	3.8%

Spreadsheet Sharing

31. Ways in which you share your spreadsheets.

a.	I rarely share any part of a spreadsheet	157	9.8%
b.	I provide a summary of results	608	38.1%
c.	I provide parts of the spreadsheet	428	26.8%
d.	I share the entire model	1080	67.6%

32. Frequency of sharing this kind of information with others.

a.	daily	295	19.1%
b.	weekly	577	37.3%
c.	monthly	447	28.9%
d.	quarterly	126	8.1%
e.	annually	31	2.0%
f.	less than once a year	71	4.6%

33. Type of protection normally used for these spreadsheet models when shared.

a.	None	998	62.5%
b.	Password protection	382	23.9%
c.	Cell protection	395	24.7%
d.	Data validation	208	13.0%
e.	Other	81	5.1%

34. Method used to ensure version control when models are shared with others.

a.	No control	490	30.7%
b.	Save the date	615	38.5%
c.	Save with version number	674	42.2%
d.	Save with user name	171	10.7%
e.	Other	97	6.1%

Spreadsheet Modification

35. Average lifetime of major spreadsheet models you use, including refinements.

a.	One week	61	3.9%
b.	Few weeks or months	624	40.1%
c.	A year or two	574	36.8%
d.	More than two years	299	19.2%

36. Person modifying or refining these models over time.

a.	The original developer	1172	73.4%
b.	A new developer	337	21.1%
c.	Users	537	33.6%

Spreadsheet Archiving

37. Method used to back up a spreadsheet after saving it.

a.	Not applicable; no back-up	217	13.6%
b.	Back-up to a diskette or a separate drive	451	28.2%
c.	Back-up to a main server	993	62.2%
d.	Other	93	5.8%

38. Information recorded when archived spreadsheets are catalogued.

a.	I do not catalog	950	59.5%
b.	Creator	213	13.3%
c.	Version	322	20.2%
d.	Title	454	28.4%
e.	Date	455	28.5%
f.	Department	86	5.4%

39. Archived spreadsheets serve as reference base for subsequent creators /users.

a.	Seldom, if ever	623	40.4%
b.	Occasionally	591	38.3%
c.	Frequently	195	12.6%
d.	Don't know	134	8.7%

40. Frequency of using archived spreadsheets.

a.	Selfdom, if ever	684	44.6%
b.	Occasionally	705	46.0%
c.	Frequently	145	9.5%

41. Specific problems encountered with the creation or use of spreadsheets.

Note: This is an open-ended question not included in this summary

42. Practices particularly helpful to you in improving the quality/use of spreadsheets

Note: This is an open-ended question not included in this summary

Training

43.	Types of training in spreadsheets made available by your organization.			
	a.	None	660	41.3%
	b.	In-house training	616	38.6%
	c.	Training by external party	324	20.3%
	d.	One basic session is available	69	4.3%
	e.	Several sessions, incl. advanced topics, are available	227	14.2%
	f.	Spreadsheet specialist who assists designers/users	81	5.1%
	g.	Other	82	5.1%
44.	Topics covered in the training program offered to you.			
	a.	Basic spreadsheet techniques (for example, copy and past, simple formulas)	659	41.3%
	b.	Advanced spreadsheet techniques (e.g. use of built-in functions, conditional formatting	613	38.4%
	c.	Data analysis (sorting, filter, pivot tables)	472	29.6%
	d.	Use of specialized add-ins and other tools	287	18.0%
	e.	Macros	225	14.1%
	f.	Other	109	6.8%
45.	Number of days of training offered to you each year.			
	a.	None	736	52.1%
	b.	1 or 2 days	365	25.8%
	c.	3 to 5 days	158	11.2%
	d.	More than 5 days	155	11.0%
46.	Number of days of training you use each year.			
	a.	None	1044	73.0%
	b.	1 or 2 days	248	17.3%
	c.	3 to 5 days	67	4.7%
	d.	More than 5 days	71	5.0%

47. The biggest impediments to your participation in company-sponsored training.

a.	Not enough time	564	35.3%
b.	High cost	137	8.6%
c.	Poor quality of training	143	9.0%
d.	Lack of personal interest	136	8.5%
e.	Lack of support from management	121	7.6%
f.	Not applicable	627	39.3%

48. Incentives offered to you for organization-sponsored training.

a.	None	633	39.6%
b.	Organization pays cost of training	407	25.5%
c.	Organization provides paid time off	135	8.5%
d.	Training is a prerequisite for promotion	23	1.4%
e.	Not applicable	386	24.2%

49. Probability of participating in training, if made available in your organization.

a.	Probably not	286	20.6%
b.	Perhaps	430	30.9%
c.	Definitely	276	19.8%
d.	Not applicable	399	28.7%

Standards and Policies

50. Organization has standards or polices for spreadsheets.

a.	No standards	1023	66.4%
b.	No written standards, only informal guidelines	362	23.5%
c.	Basic written standards	103	6.7%
d.	Detailed written guidelines and protocols	53	3.4%

51. Standards and polices are followed in your organization.

a.	Seldom	179	16.1%
b.	Usually	320	28.8%
c.	Always	67	6.0%
d.	Don't know	546	49.1%

52. Impediments to following the standards offered by your organization.

a.	No impediments	339	21.2%
b.	Too stringent	24	1.5%
c.	Lack of spreadsheet knowledge	126	7.9%
d.	No incentives	103	6.4%
e.	No enforcement	183	11.5%
f.	Others do not follow the standards	95	5.9%
g.	I don't understand the standards	30	1.9%
h.	Not applicable	705	44.1%

Risk Management

53. Importance of spreadsheets to your organization as a whole.

a.	Unimportant	51	3.3%
b.	Moderately important	406	26.3%
c.	Very important	589	38.2%
d.	Critical	495	32.1%

54. Level of risk spreadsheets pose in your organization.

a.	High risk	252	16.6%
b.	Medium risk	580	38.3%
c.	Low risk	553	36.5%
d.	No risk	130	8.6%

55. Awareness of your organization of the risk of spreadsheets

a.	Full awareness	294	19.5%
b.	Some awareness	819	54.2%
c.	No awareness	397	26.3%

56. Awareness of spreadsheet risk in your organization since SOX legislation

a.	Yes	196	12.9%
b.	No	541	35.6%
c.	Don't know	783	51.5%

57.	Strategies in place in your organization to mitigate the risk from spreadsheets.			
	a.	Yes	284	18.7%
	b.	No	601	39.6%
	c.	Don't know	632	41.7%
58.	Person in organization responsible for managing the risks from spreadsheets.			
	a.	The developer	297	19.9%
	b.	The user	231	15.4%
	c.	The manager	162	10.8%
	d.	Don't know	711	47.5%
	e.	Other	95	6.4%
59.	Spreadsheet audit packages used in your organization.			
	a.	Yes	44	2.9%
	b.	No	1211	80.0%
	c.	Don't know	259	17.1%

Personal Information

60.	Your gender			
	a.	Male	1293	83.3%
	b.	Female	260	16.7%
61.	Your age			
	a.	20-30	213	13.7%
	b.	31-40	601	38.5%
	c.	41-50	408	26.2%
	d.	51-60	230	14.7%
	e.	Over 60	108	6.9%
62.	Your highest level of education			
	a.	High School	57	3.7%
	b.	Undergraduate	177	11.4%
	c.	Masters	1153	74.1%
	d.	Ph.D.	169	10.9%

63.	Your position in your organization			
	a.	Non-manager	378	23.7%
	b.	Supervisor or manager	502	31.4%
	c.	Executive	516	32.3%
	d.	Other	196	12.3%
64.	Your organization would best be categorized as -			
	a.	Government	30	2.0%
	b.	Manufacturing	291	19.1%
	c.	Service (e.g. banking, retail, consulting)	709	46.6%
	d.	Agriculture and natural resources	69	4.5%
	e.	Education	121	8.0%
	f.	Health/medicine	46	3.0%
	g.	Other Non-Profit	34	2.2%
	h.	Other	221	14.5%
65.	Number of employees in your organization			
	a.	1-10	234	15.2%
	b.	11-50	177	11.5%
	c.	51-100	95	6.2%
	d.	101-500	201	13.0%
	e.	501-1000	108	7.0%
	f.	Over 1000	727	47.1%
66.	Functional area of your job.			
	a.	Sales	54	3.6%
	b.	Marketing	164	10.9%
	c.	Operations/Manufacturing	142	9.5%
	d.	Distribution	12	0.8%
	e.	Engineering	135	9.0%
	f.	Research	162	10.8%
	g.	Finance	454	30.2%
	h.	Human Resources	20	1.3%
	i.	Other	358	23.9%

67. Number of people reporting directly to you.

a.	None	646	41.7%
b.	1-2	347	22.4%
c.	3-5	263	17.0%
d.	6-10	180	11.6%
e.	11-50	86	5.5%
f.	More than 50	29	1.9%