

Example 4: How Software Risk Master (SRM) Evaluates Unpaid Overtime and Industry Work Norms						
		Java Language for all 3 Cases				
		1000 function points for all 3 Cases				
		\$10,000 per month for all 3 Cases				
		Iterative development for all 3 Cases				
		Industry norms for work hours, unpaid overtime				
		2017 is the 30th anniversary of IFPUG function point metrics				
		State government	Commercial Bank	Tech Startup		
Monthly work hours		117	135	191		Industry work hours vary widely
Team experience level		Below average	Average	Expert		Team experience varies widely
Application complexity		Average	Average	Average		Complexity varies widely
Unpaid overtime hours		0.00	6.00	16.00		Unpaid overtime varies widely
Total monthly work hours		117.00	141.00	207.00		Total work hours vary widely
Software team size		7.00	6.50	6.00		Team size reflects experience

Table 1: U.S. Industry Ranges of Work Hours and Unpaid Hours per Month							
			Software	Software	Software	Percent	
			Work	Unpaid	total	of	
			hours	overtime	hours	Average	
	U.S. Industry segments		per month	per month	per month	Work hrs.	
1	Startup technology companies		191.67	16.00	207.67	150.48%	
2	Technology companies		175.00	14.00	189.00	136.96%	
3	Computer games		165.00	8.00	173.00	125.36%	
4	Open source		160.42	8.00	168.42	122.04%	
5	Web/cloud		150.00	8.00	158.00	114.49%	
6	Bioengineering/medicine		147.50	10.00	157.50	114.13%	
7	Fixed-price contracts		138.28	12.00	150.28	108.90%	
8	Management consulting		142.00	8.00	150.00	108.70%	
9	Outsource contractors		140.13	8.00	148.13	107.34%	
10	Manufacturing		136.44	6.00	142.44	103.22%	
11	Finance/insurance		134.59	6.00	140.59	101.88%	
12	Telecom		134.59	6.00	140.59	101.88%	
13	Entertainment		132.75	6.00	138.75	100.54%	
14	U.S. Average		132.00	6.00	138.00	100.00%	
15	Wholesale/retail		131.00	6.00	137.00	99.28%	
16	Health care		130.00	4.00	134.00	97.10%	
17	Avionics		129.06	4.00	133.06	96.42%	
18	Energy		127.29	4.00	131.29	95.14%	
19	Profit-center projects		125.38	4.00	129.38	93.75%	
20	Time & material contracts		129.06	0.00	129.06	93.52%	
21	Education		123.53	2.00	125.53	90.96%	
22	Federal government		123.53	0.00	123.53	89.52%	
23	Cost-center projects		119.84	2.00	121.84	88.29%	

24	Defense		121.69	0.00	121.69	88.18%	
25	State/local government		117.26	0.00	117.26	84.97%	
	Average		142.61	7.20	149.81	108.56%	