



RAVENFLOW

2010 ASPE-SDLC, Ravenflow & IIBA Business Analyst Salary Survey

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2010 ASPE-SDLC, Ravenflow & IIBA

Business Analyst Salary Survey

Developed Jointly by ASPE-SDLC, Ravenflow & IIBA
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2010 BA Salary Survey Report

Introduction

Welcome to the 2nd annual Business Analysis Salary Survey. More than 4,100 Software/System Development Life Cycle (SDLC) professionals around the world completed the survey in August and September of 2010. This white paper presents the findings from the survey, and compares the findings to results from the 2009 BA Salary Survey, from 2009.

The sponsors of this year's survey were ASPE-SDLC, Ravenflow and The International Institute of Business Analysis (IIBA).

ASPE-SDLC is the systems/software development life cycle training brand of ASPE Inc. focused on providing real-world, hands-on training for professionals employed by enterprise corporations. It is also the largest provider of public business analysis courses in North America. For more information go to www.aspe-sdlc.com.

Ravenflow is the leader in requirements definition software with their Raven product. Raven empowers Business Analysts to dramatically transform the way they elicit, specify and validate stakeholder requirements, so projects can be delivered faster, at less cost, and with greater use. For more information go to www.ravenflow.com

IIBA® is the independent non-profit professional association serving the growing field of Business Analysis. Whatever your role—requirements management, systems analysis, business analysis, requirements analysis, project management, or consulting—IIBA® can help you do your job better. For more information go to www.theiiba.org.

The information is presented in four sections. The first section reviews basic demographic data collected. The second section covers demographic information specifically related to BA work. The third section breaks out salary and reports on how respondents feel toward their salary and role in the future. The fourth section provides a salary analysis, taking demographic data gathered and showing how it impacts salary (both positively and negatively). There are several interesting results presented in this last section.

Points of Interest

Before we get to into the depth of the data, let's throw out some quick goodies. In the United States the average salary for business analysts was \$82,493. In 2009 we reported the median salary, not the mean (average). The median was within the \$71k to \$80K range, so we show a slight increase in salary from 2009. Since we tightened our data analysis for the 2010 salary report, we are able to provide a specific average salary number. This salary is more than \$40K more than the median household income in the US, but it is slightly less than the average salary reported in the 2010 PM salary survey. It is significantly less than the average salary reported in the 2009 Agile salary survey.

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If salary is up between 2009 and 2010, how does that affect the outlook for the future? About 57% of respondents reported receiving a salary increase in 2009. In our 2009 edition, only 47.7% of respondents thought they would get a raise, so a number of professionals received a pleasant surprise in 2009. As for outlook for 2010, a whopping two-thirds of respondents in both the US and internationally believe they will receive a salary increase in 2010. The salary data paints a very positive outlook for 2010, which we will dig into deeper in the salary report and salary analysis sections coming up later in this white paper.

Basic Demographics

The 2010 edition of this survey went out to an international audience, while the 2009 edition went out to just a North American audience. The expanded audience will allow us to report both US-based findings, as well as international findings, which we refer to as the “Rest of the World”.

Just fewer than 56% of the respondents were from the United States – the largest number of respondents from any one country. The top six remaining countries were Canada with 12.3%, Australia with 4.1%, Great Britain with 2.3%, India with 2%, New Zealand with 1.8% and South Africa with 1.8%. In total we received responses from 63 countries.

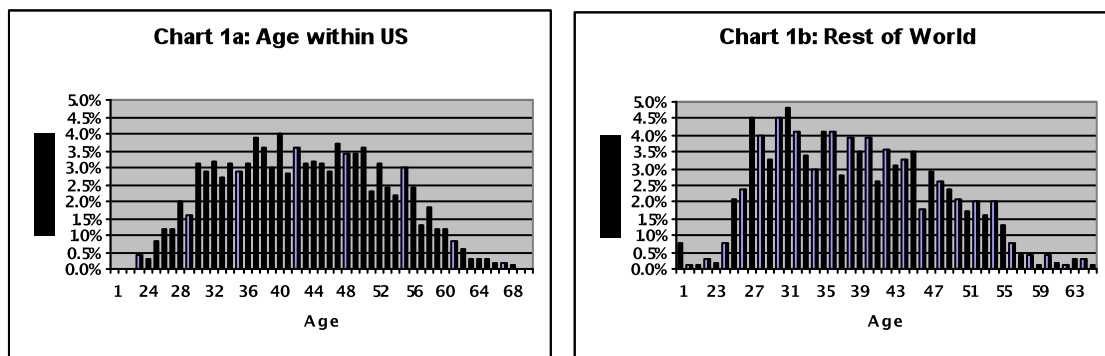
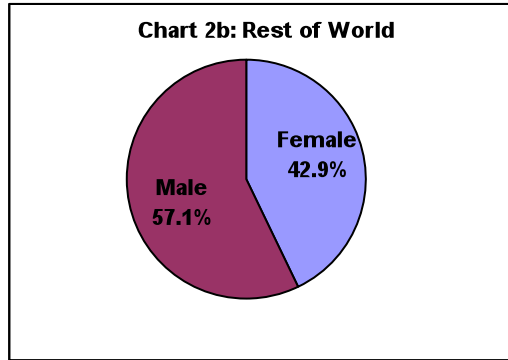
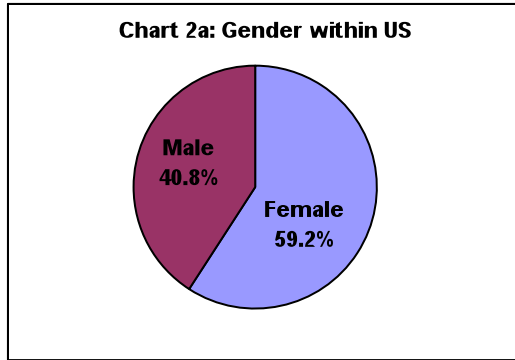


Chart 1a and 1b show the age breakout in the US, as well as the age breakout for the rest of the world. There are no major differences in age between the two regions. The average age worldwide for a business analyst professional is 41.3 years old. For the US it was 42.9 and for the rest of the world it was 38.3. In 2009 the median age was in the 40-49 age bracket and the majority of respondents were 40 years or older (61.45%).

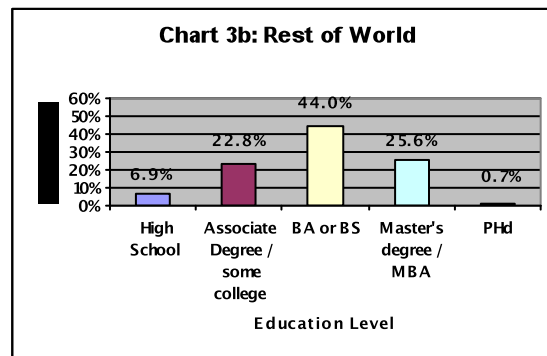
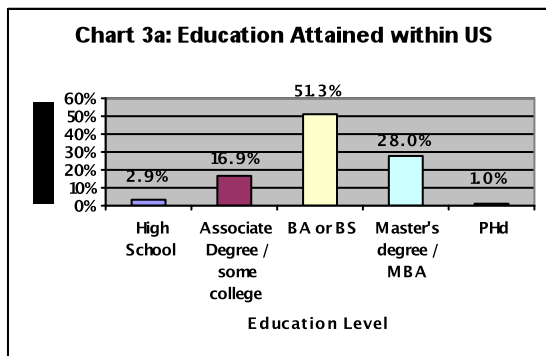
The surprising point of interest in this result is age clumping. The vast majority of respondents are between 30 and 60 years old. The bottom drops out very quickly on either side of that range. It looks like you need experience to be a practicing professional in the BA area, and after a certain period of time professionals in this profession either retire or move into a different business or operational position.

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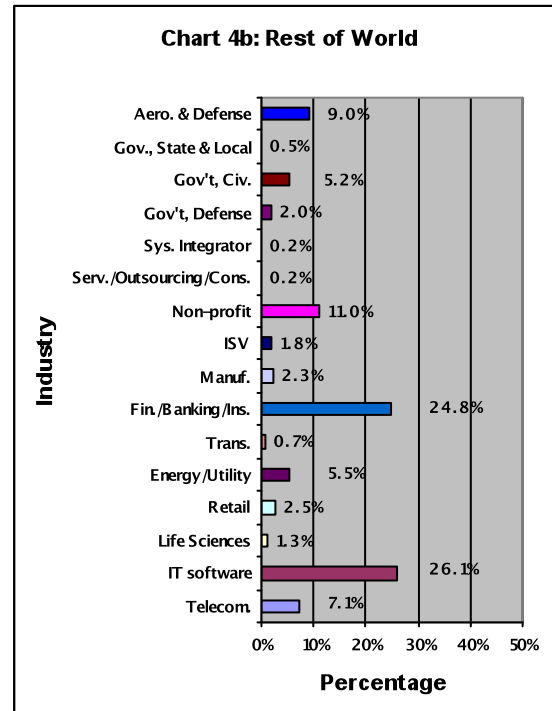
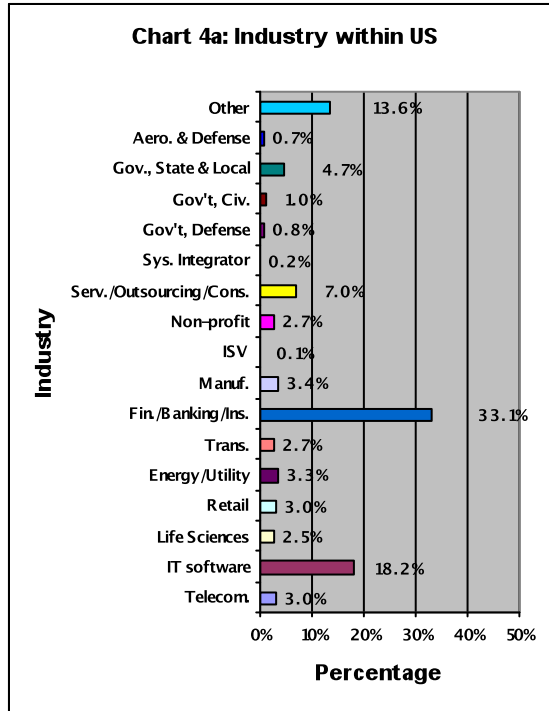
We made sure to collect data on gender in this salary report because based on previous salary findings; gender has a big impact on salary. In 2009 we reported that a sizable majority of practicing BA professionals in North America were women with 56.7%. This data held based on the findings for 2010.

Chart 2a shows gender within the US. In the United States 59.2% of responders were female. Chart 2b shows gender within the rest of the world. This data differs significantly, with women being the minority of respondents at only 42.9%. The international response data for gender is actually consistent with what we found in both the 2010 PM and 2009 Agile salary surveys. Both showed that internationally male respondents were the vast majority but the US data showed major inroads in both areas by females. Males were still the majority group, just not as big a majority as seen internationally. As with all the previous surveys, gender has a big impact on salary.



In 2009 more than 75% of respondents held at least a BA, BS or higher. This held pretty consistent with 2010 responses as well. Both Charts 3a and 3b show very similar results. In the US more than 80% of respondents hold at least a BA or BS. Internationally the number is 70%. The only significant difference is international respondents as a percentage held more associates or high school degrees and less BA or BS degrees compared to US respondents. Education level does impact salary and that will be presented in the salary analysis section.

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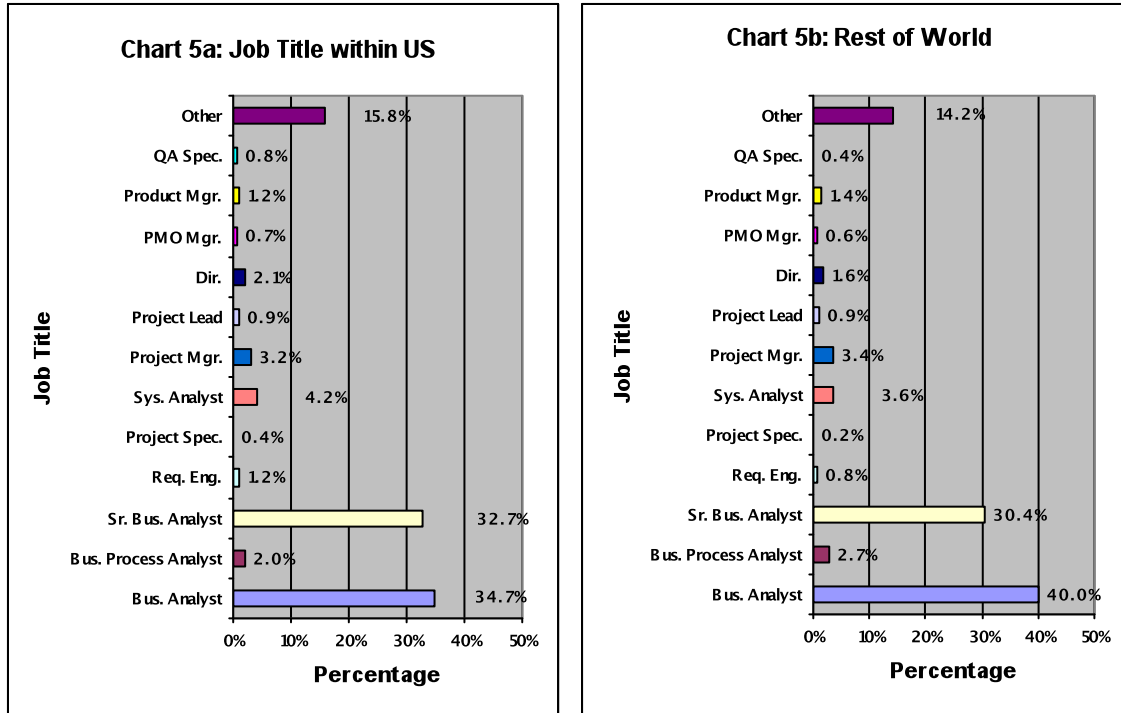


Surprisingly the industry question proved to be very important, both from the trend data it provides and with regard to salary impact. On the previous page, Chart 4a details the industry breakout for the US showing the overwhelmingly largest sector was finance/banking/insurance by more than 15%. Our assumption was the response to this question would be pretty much equal. When you pull out IT software and finance/banking/insurance (which makes up more than 50% of where respondents reported working), everything was pretty much equal.

Next to Chart 4a on the previous page, Chart 4b shows the international breakout. IT software was the largest area but not by such a large factor as finance/banking/insurance was in the US. There are also a couple other sectors that jump out, including telecom, outsourcing, energy and government.

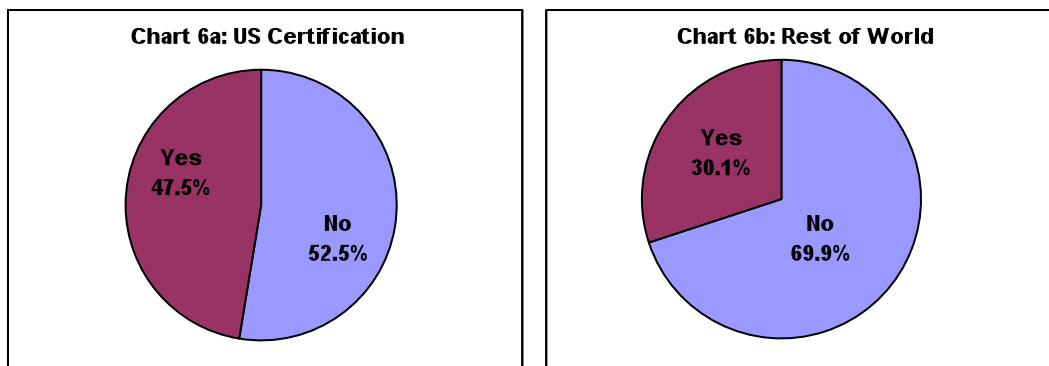
The US results confirm what we see in our classrooms, where we see a large number of students from the finance/banking/insurance industry. However, we do not see the skewed ratio as shown in this response. Later on, we will detail industry impact on salary.

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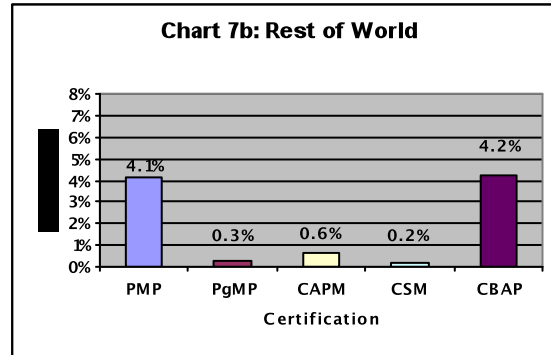
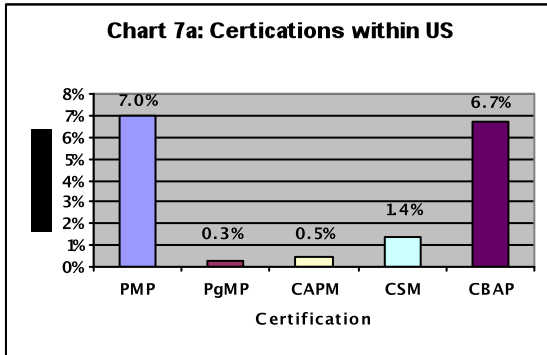
There is no surprise with this result for either the US or internationally. More than 65% of respondents in both regions were either a business analyst or senior business analyst. This feedback provides a higher level of confidence in the relevance of the data collect for business analyst professionals.

BA Specific Demographics

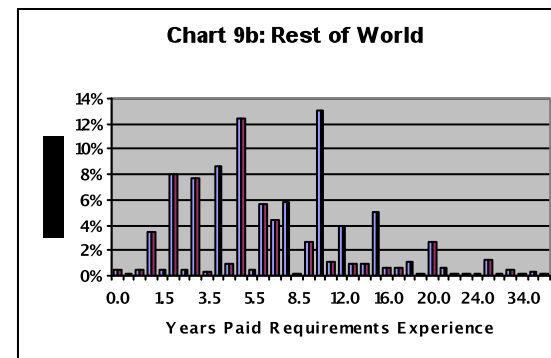
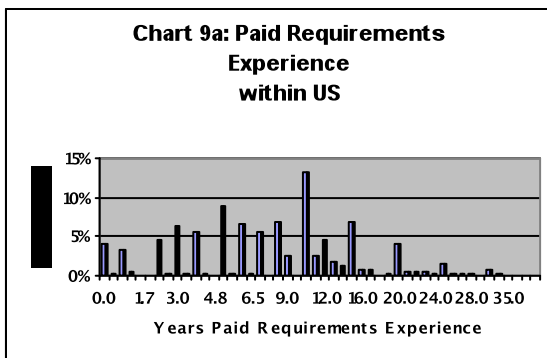
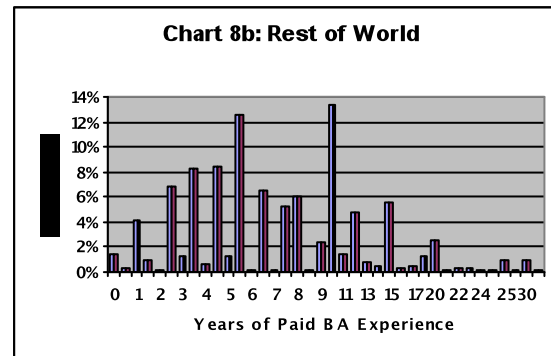
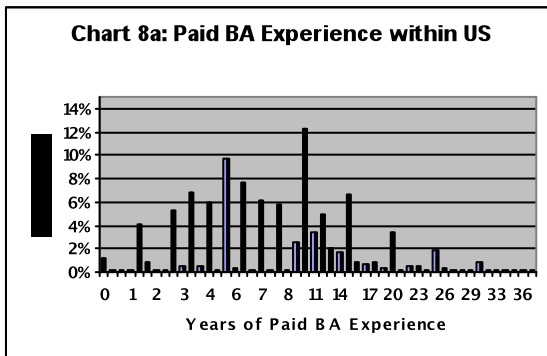


Charts 6a and 6b document certification holders in the US and internationally. Just more than 50% of respondents in the US hold no certification. For the rest of the world, 70% of respondents hold no certifications. This was very surprising given the software/system development life cycle (SDLC) interest in certification as a tool to support the hiring process.

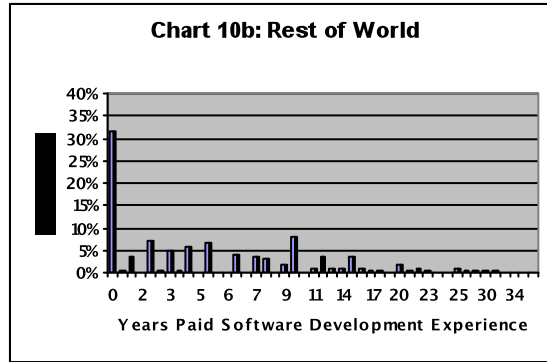
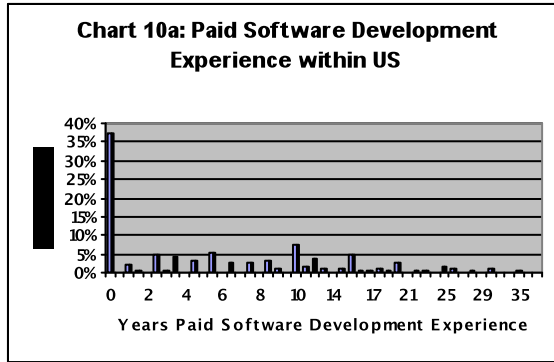
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Charts 7a and 7b break out the following certifications: PMP (Project Management Professional), PgMP (Program Management Professional), CAPM (Certified Associate in Project Management), CSM (Certified Scrum Master) and most importantly CBAP (Certified Business Analysis Professional). The data shows currently out of these top certifications only the PMP and CBAP have some penetration. Based on the response related to holding a certification, it looks like there are other certifications and certificates outside the five reported on that are held by responding professionals. We did not collect data that would tell us the make up of those other certifications and certificates.

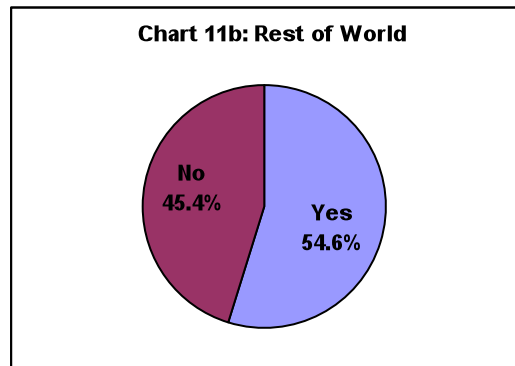
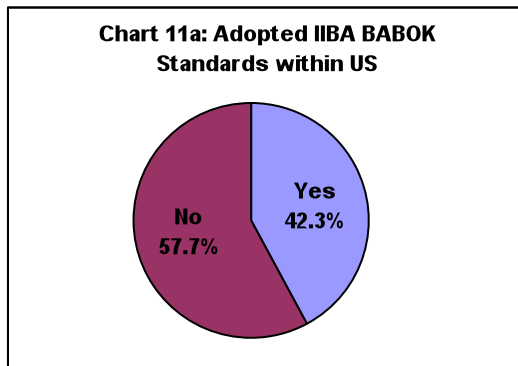


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On average, respondents had 8.9 years of BA experience in the US and 7.5 years internationally. This is very similar to requirements experience where the average respondents in the US had 9.0 years of experience and 7.7 years internationally. The trend in amount of experience was very similar across both BA and requirements experience, which could mean that respondents felt BA experience and requirements experience are basically the same.

Not so surprising was that the average amount of software development experience in the US was 6.4 years and 5.9 years internationally. This mainly has to do with the number of people who reported no years of software development experience – almost eight times as much as reported no years of BA or Requirements experience. This was not surprising to us because subjective feedback from our classes showed BA work happens outside software as well as within software, and this data confirms that feedback. All three paid experience categories have a positive impact on salary, which will be documented later in this paper.

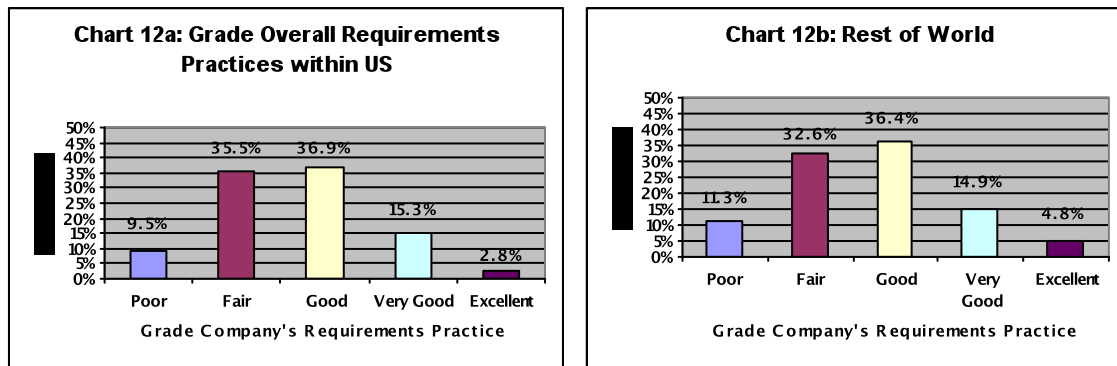


There is no salary impact associated with adoption of IIBA standards, but the data was surprising when compared with the data on CBAP certification when you compare the US and the rest of the world. Although the CBAP certification had a relatively low adoption among respondents, in comparison, the IIBA Business Analyst Body of Knowledge (BABOK) standards have significant penetration. Although less than 10% of respondents have earned their CBAP in the US, more than 40% have adopted the IIBA standards.

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For the rest of the world, more than 50% of respondents have adopted the standard. This is a great trend for long term growth of the BA roll as a standard practice, and will ultimately help drive the increase of CBAP professionals.

Comparing these finding to last year's survey, there is a positive trend. Respondents last year showed only a 30% adoption of IIBA standards. So this is a 75% increase in adoption of IIBA BABOK standards. Statistically speaking some of this increase can be caused by the type of responder driven to the survey from one of the sponsors, the IIBA. But first of all this is speculation. Second, even if it has some statistical relevance, it would not cause such a drastic increase. We are confident that a good portion of the increase in IIBA standard use is based on increased awareness and positive results of using these practices.

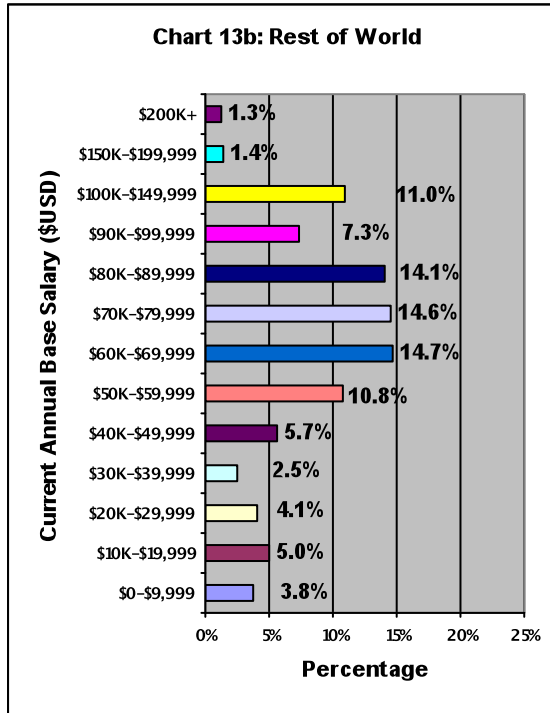
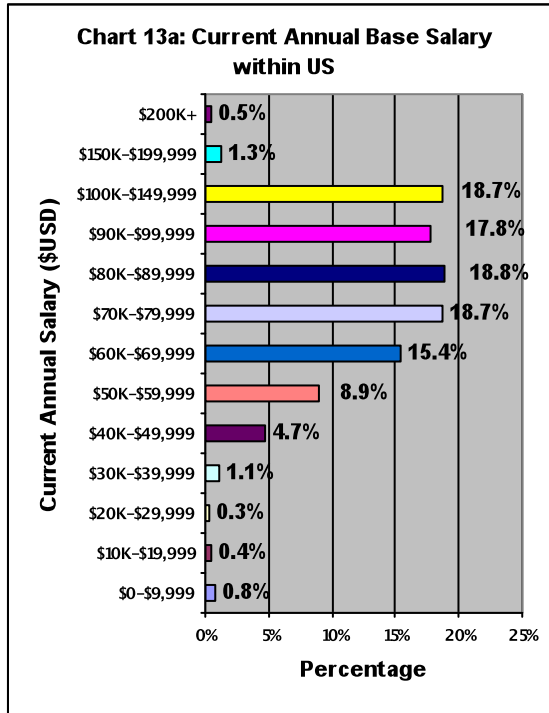


On the previous page, Chart 12a and 12b were a subjective question allowing respondents to judge their requirements practice. In the PM salary survey for 2010 we asked the same question and saw similar results. In general, the vast majority of respondents reviewed their PM practices as just good or worse. The same is true in the BA survey. More than 80% of respondents reviewed their BA practices as good or worse.

Although we did not compare this question with salary, we did in the PM salary survey and saw a marked increase in salary with each higher stage of quality a respondent judged their practices. We are not reporting that is the case here, but we would speculate that it is similar.

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Salary Report



We introduced this data in the “Points of Interest” segment of this paper. In a nutshell, the BA position is a well-paid, white-collar function with an average salary more than double the US average household income. In the US the average respondents’ base salary is \$82,493, while in the rest of the world the average base salary is \$70,237.

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Chart 14: Base Salaries by Industry and Gender (US and Rest of World)

USA			Rest of World		
Industry	Gender		Industry	Gender	
	Female	Male		Female	Male
	Current Base Salary			Current Base Salary	
Telecommunications	\$61,620	\$65,698	Telecommunications	\$81,760	\$92,757
IT Software	\$53,811	\$53,215	IT Software	\$79,673	\$84,371
Lice Sciences	\$70,000	\$60,647	Lice Sciences	\$93,000	\$98,859
Retail	\$81,556	\$68,528	Retail	\$74,894	\$89,136
Energy/Utility	\$76,033	\$84,983	Energy/Utility	\$88,359	\$91,974
Transportation	\$78,000	\$66,800	Transportation	\$78,359	\$85,466
Finance/Banking/Insurance	\$71,119	\$75,718	Finance/Banking/Insurance	\$77,446	\$81,103
Manufacturing	\$74,500	\$68,375	Manufacturing	\$86,712	\$89,633
ISV			ISV	\$58,500	\$110,000
Non-profit	\$69,500	\$58,562	Non-profit	\$73,639	\$68,413
Services/Outsourcing/Consulting	\$73,825	\$78,041	Services/Outsourcing/Consulting	\$87,971	\$91,984
Systems Integrator		\$95,500	Systems Integrator	\$84,000	\$95,400
Government, Defense		\$104,000	Government, Defense	\$73,488	\$97,700
Government, Civilian	\$53,727	\$73,300	Government, Civilian	\$102,937	\$93,960
Government, State and Local	\$67,605	\$70,384	Government, State and Local	\$71,301	\$75,395
Aerospace and Defense		\$65,000	Aerospace and Defense	\$78,714	\$75,667
Other	\$76,856	\$68,007	Other	\$79,495	\$85,198

One of the findings from this survey is that industry and gender have a significant impact on salary. We will break that impact out into specific dollar figures in the salary analysis section of this paper. Because of its significance we have included chart 14, which breaks down salary by industry and compares it with gender for both the US and the rest of the world.

We report later that in aggregate, when holding everything else equal, gender has an impact in salary. But as this chart shows, there are some industries in both the US and the rest of the world in which women make more than men. This chart does not hold everything else equal so there could be an unequal distribution of experience levels, certification levels, age, and education level (all powerful components that impact salary). But again this chart can give an indication of both hot industries and industries that are less discriminatory.

Also part of the “Points of Interest” section was the 2009 salary increase. We compared it to what people were expecting for a salary increase in last year’s survey.

- In the US about 56% of respondents received a raise in 2009
- In the rest of the world about 56% of respondents received a raise in 2009
- In comparison, only 47% of respondents in last years survey felt they would get a raise in 2009
- This doesn’t compare well with the percentage of professionals who received increases in last year’s survey. More than 65% of respondents in last year’s survey received a salary increase for 2008. But we believe this is not a great comparison because most of 2008 was before the main impact of the recession and all of 2009 was smack in the middle of the recessionary impact.

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This data is the starting point for what will be very positive reporting on salary trends. It looks like although employment rates are NOT rising, those who are employed are being taken care of with raises.

Size of salary increase in 2009

- The average salary increase in the US was 3.9%
- The average salary increase in the rest of the world was 7.2%
- For the US, the data compares similarly to what was reported in last year's report for expected increases. More than 71% of those expecting a salary increase thought it would be between 1-4%
- Also for the US, the data compares similarly to what was reported as percentage of salary increase for 2008. 67% of respondents who reported getting a salary increase for 2008 received an increase of between 1-4%

Do you expect a salary increase in 2010? Major difference in expectations this year verses last year.

- Almost 70% of respondents from the US expect they will receive a salary increase in 2010
- Almost 70% of respondents from the rest of the world expect they will receive a salary increase in 2010
- As reported, comparing this to salary expectations last year is where you can see the dramatic difference in expectations. Last year in the middle of the recession impact only 47% of respondents thought they would get a future raise, whereas more than 70% feel they will get a raise in the future

Bonus received in 2009

We use bonus as a measure to show short-term economic trends because bonuses can be changed much more easily and rapidly than salary. When comparing the trends from last year's survey to this year's, you can see this effect.

- In last year's survey more than 55% of respondents received a bonus in 2008
- In this year's survey just more than 20% of respondents in both the US and the Rest of the world received a bonus.
- This major shift shows just how dramatic the economic fall out was in 2009. Although more people received raises than was anticipated, their bonus income was turned off
- For those who received a bonus, the average amount was 8% of salary in the US and 8.5% of salary for the rest of the world. This compares similarly to what was reported in last year's survey

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Expected bonus in 2010

In this year's survey only 20% of respondents received a bonus in 2009. But based on these results it looks like that number will come back to 2008 levels based.

- Both in the US and the rest of the world 50% of respondents believe they will receive a bonus in 2010
- Both in the US and the rest of the world respondents believe their bonus will be 9.1% of their salary on average
- As reported in last year's survey 55% of respondents reported receiving a bonus

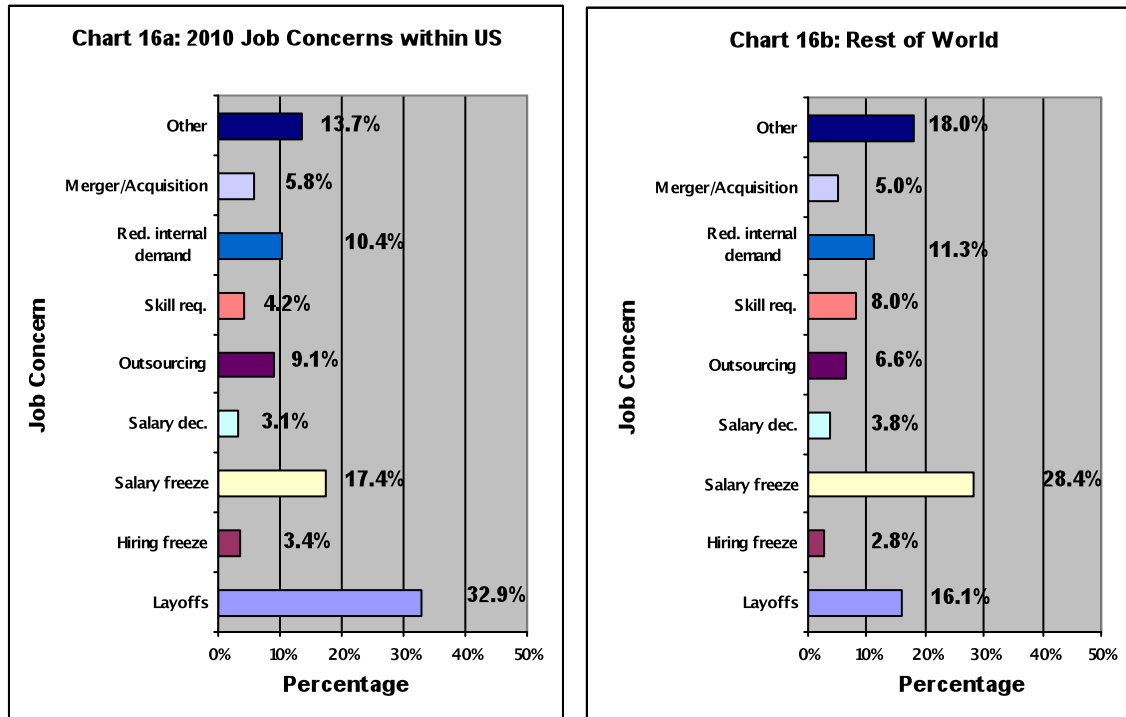
Chart 15: Salary Increase by Industry (US and Rest of World)

USA					
Industry	Received Salary Increase in 2009?		Industry	Expect Salary Increase in 2010?	
	Yes	No		Yes	No
	Row %	Row %		Row %	Row %
Telecommunications	64.8%	35.2%	Telecommunications	68.5%	31.5%
IT Software	49.5%	50.5%	IT Software	63.1%	36.9%
Lice Sciences	58.0%	42.0%	Lice Sciences	72.5%	27.5%
Retail	54.7%	45.3%	Retail	81.5%	18.5%
Energy/Utility	67.9%	32.1%	Energy/Utility	78.6%	21.4%
Transportation	54.2%	45.8%	Transportation	80.9%	19.1%
Finance/Banking/Insurance	68.2%	31.8%	Finance/Banking/Insurance	76.9%	23.1%
Manufacturing	52.5%	47.5%	Manufacturing	65.5%	34.5%
Non-profit	55.1%	44.9%	Non-profit	75.5%	24.5%
Services/Outsourcing/Consulting	43.6%	56.4%	Services/Outsourcing/Consulting	54.9%	45.1%
Systems Integrator	25.0%	75.0%	Systems Integrator	75.0%	25.0%
Government, Defense	46.2%	53.8%	Government, Defense	61.5%	38.5%
Government, Civilian	87.5%	12.5%	Government, Civilian	62.5%	37.5%
Government, State and Local	31.4%	68.6%	Government, State and Local	26.7%	73.3%
Aerospace and Defense	72.7%	27.3%	Aerospace and Defense	75.0%	25.0%
Other	52.5%	47.5%	Other	69.2%	30.8%
Rest of World					
Industry	Received Salary Increase in 2009?		Industry	Expect Salary Increase in 2010?	
	Yes	No		Yes	No
	Row %	Row %		Row %	Row %
Telecommunications	50.0%	50.0%	Telecommunications	59.7%	40.3%
IT Software	47.5%	52.5%	IT Software	69.4%	30.6%
Lice Sciences	100.0%		Lice Sciences	90.9%	9.1%
Retail	56.5%	43.5%	Retail	73.9%	26.1%
Energy/Utility	71.4%	28.6%	Energy/Utility	80.4%	19.6%
Transportation	50.0%	50.0%	Transportation	50.0%	50.0%
Finance/Banking/Insurance	66.9%	33.1%	Finance/Banking/Insurance	77.5%	22.5%
Manufacturing	45.0%	55.0%	Manufacturing	73.7%	26.3%
Non-profit	61.1%	38.9%	Non-profit	50.0%	50.0%
Services/Outsourcing/Consulting	39.6%	60.4%	Services/Outsourcing/Consulting	52.9%	47.1%
Systems Integrator		100.0%	Systems Integrator		100.0%
Government, Defense	100.0%		Government, Defense	50.0%	50.0%
Government, Civilian	52.6%	47.4%	Government, Civilian	52.6%	47.4%
Government, State and Local	59.6%	40.4%	Government, State and Local	61.7%	38.3%
Aerospace and Defense	50.0%	50.0%	Aerospace and Defense	50.0%	50.0%
Other	63.2%	36.8%	Other	68.6%	31.4%

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On the previous page, Chart 15 takes a graphical look at the data we just reported on but breaks it down by industry, giving you the opportunity to look at trends in your own specific segment.

Salary and Job concerns



One of the biggest concerns in last year's survey was salary freeze. The data held up as approximately 40% of respondents said they had their salary frozen in this year's survey, which matches up logically based on 56% of professionals who said they received a raise (meaning around 4% are not too sure about their salary). Of the professionals who said their salary was frozen, the average length of time of the freeze was 20 months.

In 2010, about 45% of respondents still have concerns about their salary or role. Those concerns are documented on Charts 16a and 16b that cover concerns for both the US and the rest of the world. In the US, possible layoffs were the largest concern, where last year it was salary freeze. Compared to last year's survey, layoffs as a concern jumped from 25% to 35%. In the rest of the world the biggest concern was salary freeze and coming in much further behind was fear of layoffs. This makes sense considering layoffs are more easily accomplished in the US than any other developed nation.

In general, when compared to last year's results, the data shows an amazing turnaround in economic optimism, especially with regard to the expected raise and bonus outlook for 2010. Overall salaries were up in 2009 from 2008. Expected salary and bonus increases for 2010 are up from 2009, and overall fear for both job security and salary for 2010 is down. It is a very good time to be a business analyst or doing business analysis work.

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Salary Analysis

The key in this analysis is to show you which types of variables were identified most with higher salaries. Our statistical analysis partner uses multiple regressions to build an understanding of which things are better predictors of an individual's salary. In the following analysis, the key piece to understand is that while holding everything else equal, the variable in question makes "x" impact. In general the biggest predictors of salary are where respondents live, their amount of work experience, their gender and the industry they work in. While we analyzed all the variables we presented in this paper including both general and BA specific demographics, the following subset were found to be the strongest predictors. Remember, each predictor is based on holding everything else equal except the variable being discussed:

- Age: For every year of age, salary increases by \$380.17
- Gender: Being a male increases salary by \$3,933.21

We looked at gender salary differences in last year's survey as well. Based on how we gathered the data last year, we found that the gender impact was 7%. On average, last year women earned 7% less than men holding everything else equal. Similar to last year, there is no reasonable explanation for this finding except discriminatory practices. The only positive in this is if you take average salary as around \$77K last year that would mean the negative difference has gotten smaller between this year and last year. Also as reported last year, even though more women perform BA work than men in the US, they are still paid less.

- Geography: If you live in the US, you make \$9,486.92 more those in the rest of the world
- BA Experience: For every year of BA experience, holding everything else equal, salary increases by \$923.37 (this predictor can add up quickly)
- Software Development Experience: For every year of software development experience, you make \$220.74 more (not as strong a predictor as BA experience)
- Requirements Experience: For every year of paid requirements experience, you make \$289.66 more

Interestingly, the amount of paid requirements experience and paid BA experience was the same on average. The impact on salary from paid BA experience was much larger. Our initial analysis, based on the amount of time answer linearly, was that paid BA experience and paid requirements experience was the same. Based on this analysis they must be deemed different, with paid BA experience being more valuable. What that difference is can't be seen in the data we collected.

- Education: With every year of post secondary education, you make \$765.34 more

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This was also seen with last year's survey. There was a huge leap in salary between no post-secondary education and some. Since we were able to come up with a much more specific number this year for education salary lift, it helps quantify the tremendous impact education has in this market. It has just about the same impact as specific professional experience.

- PMP Certification: PMPs earn \$7,152.40 more. This is a large number in aggregate, but experience outpaces after seven years. Keep in mind this is a one-time impact, so this lift is regardless of how much experience
- CBAP Certification: CBAPs earn \$7,174.40 more (A bit more than if you had a PMP)

In comparison to last year's survey, the findings are very similar, in that certification has a very strong impact on salary. Last year we determined the impact to be 10%, while this year we came up with a specific number based on how we collected the data. Based on the average salary number from last year the impact is a bit smaller this year.

- Working in Software IT has a negative \$5,058.13 impact on salary, very interesting result as it was assumed working in software would have a positive impact
- Working for the government has a negative \$9,083.74 impact on salary. This is the largest negative impact after living outside the US. This finding was assumed as traditionally government pays less but provides more security
- Working in the services/outsourcing/consulting industry sector has a positive impact of \$3,983.59 on salary
- Working in Energy / Utility industry sector has a positive impact of \$9,434.17 (one of the largest one-time positive impacts on salary)
- The biggest upside to salary found is working in the life sciences industry. Professionals in this sector make \$11,814.00 more

Overall we are still very concerned about the salary differences between men and women in the BA profession, even though it is good to see the difference has declined in the past year. Statistically speaking, as we increase the sample size (we doubled the number of respondents between last year's and this year's survey) we might see this trend go away. Unfortunately, we do not believe that will happen. On the positive side, we have been able to show you some very concrete variables that positively impact salary including: **certification, education, experience, and industry sector**. These are all factors well within your control. Knowing the impact of these factors can help you make career plans for the coming year.

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Summary

The business analyst position and professionals doing BA work can feel very good about their professional choice. Even during a very difficult economic period, salaries have increased and professional growth is available. There is significant positive outlook for 2010 and beyond as the uncertainty seen in last year's results has been wiped away with positive optimism seen in this year's survey.

Although this is not an entry-level position, there is a path for economic growth with a professional gains experience, increasing education, and gaining industry certification. Meaning you, as a professional, in this space have a roadmap you can follow to increase the return you get on your work. We were also excited to see that it isn't all about software. The best returns come from business analysis professionals practicing outside of software IT.

Finally we would like to thank all the individuals who participated in the survey. We look forward to conducting this survey again in 2011.

If you have any specific question about the report or the data presented feel free to contact dmantica@aspeinc.com.