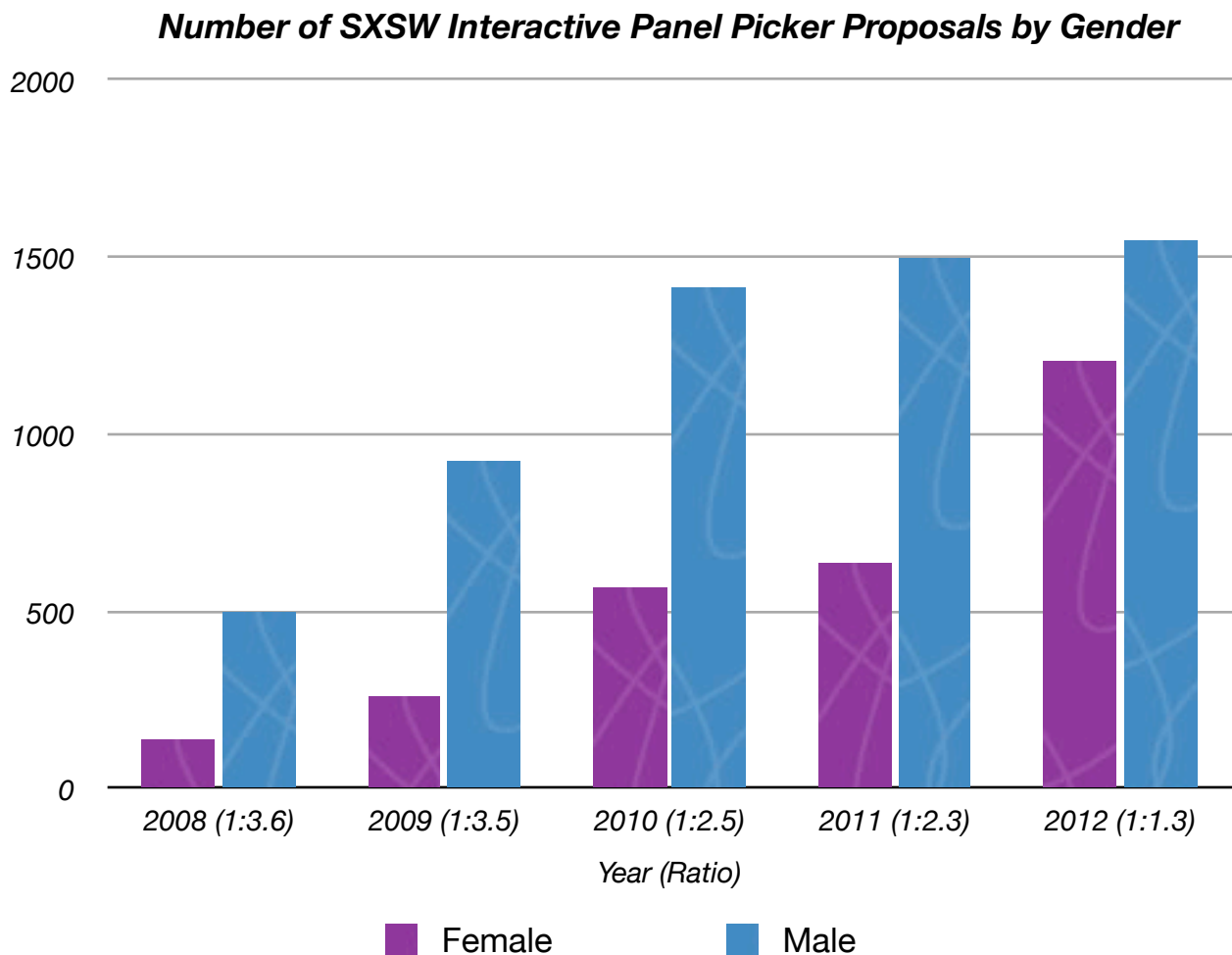


# Changing the Ratio at SXSW

Emma Persky

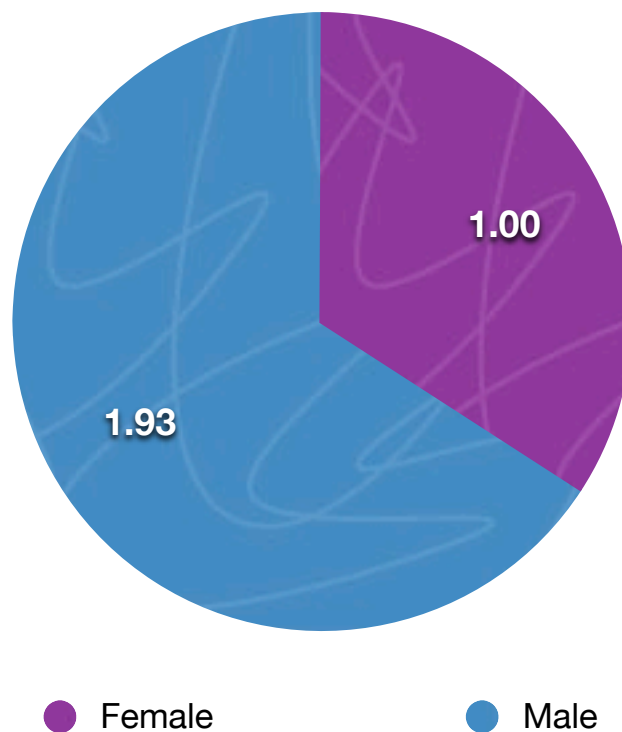
Not many conferences publish quite as much raw data about the session proposals submitted to them as SXSW. The SXSW Panel Picker is one of the few sources of such information available on the web, and contains data going back to 2008 (for the Interactive portion of the conference). The number of women involved in, and highlighted at technology conferences has been a topic of recent discussion, and this report examines what effect this has had on SXSW.

## 1. Changing The Ratio



The number of women submitting proposals to the SXSW Interactive Panel Picker has increased 8 times over the last 5 years, from just 140 in 2008 to over 1200 this year. That represents a mean growth rate of 76% year on year, with a peak rate of over 100% growth from 2009 to 2010. Simultaneously, the number of men submitting proposals has experienced a mean growth rate of 37%. Female involvement in the Panel Picker process has increased steadily since 2008, whereas the growth of male submitted proposals has leveled off<sup>1</sup>.

### Ratio of Female to Male Proposed Panelists to SXSWi 2012

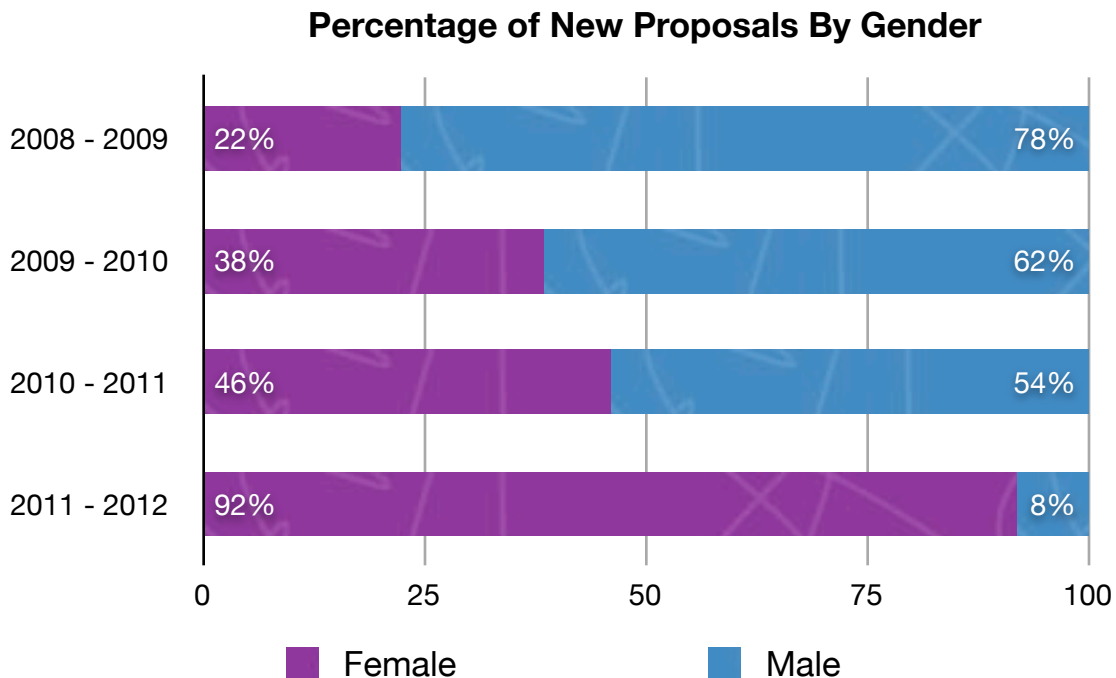


SXSW Interactive is made of up a number of different session formats, including panels, comprised of an organizer and up to 5 speakers. Panels in 2012 make up just 35% of all submissions to the Panel Picker, but warrant further investigation as panelists contribute as high as 65% of all speakers

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<sup>1</sup> Despite the huge growth in attendance at SXSW Interactive 2011, it was a slow year for proposals, as growth across the board (from men and women) slowed to less than 10%, where as it had been running at around 80%. It returned to 26% this year. Although there is no evidence to support this hypothesis, it seems likely that this is in some way related to the financial conditions of the time.

attending. In 2012 the ratio of proposed female to male panelists is 1:1.93 which is significantly lower than the 1:1.3 ratio of session organizers.

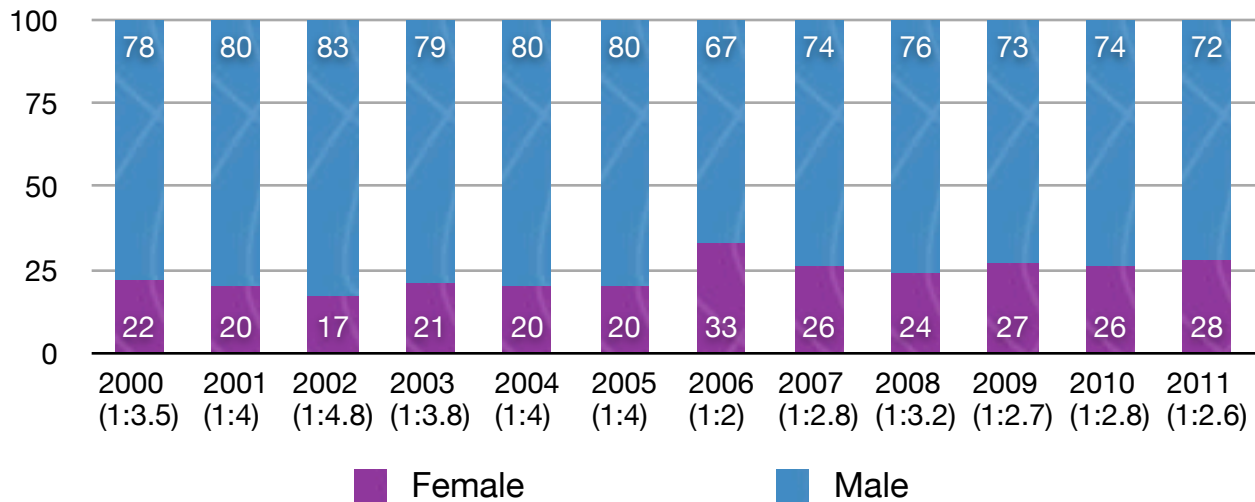


The SXSW Interactive Panel Picker contains more and more submissions each year, affording potential attendees greater choice and direction over the conference. This growth has been increasingly driven by sessions proposed by women, and this year as much as 92%<sup>2</sup> of the increase in proposed sessions comes from women. To date, this growth in female-submitted sessions has not made it through to the final line up, where the percentage of female speakers remains consistently between 17% and 33% over the past 10 years. It's unclear from the available data how this occurs, although it should be noted that 70% of the final line up at SXSW is curated by the organizers and their advisers, as noted in the introductory note to the Panel Picker.

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<sup>2</sup> In 2012 a lower than average proportion of names were gender identified, although as explained in Appendix B, this should not significantly skew this result.

## Ratio of Female - Male Speakers at SXSW Interactive



While the ratio of female-proposed sessions has increased from 1:3.6 to greater than 1:1.3, the same can not be said for the final line up where the ratio of women has remained around the 1:3 mark for the last 10 years.

## 2. What are we talking about

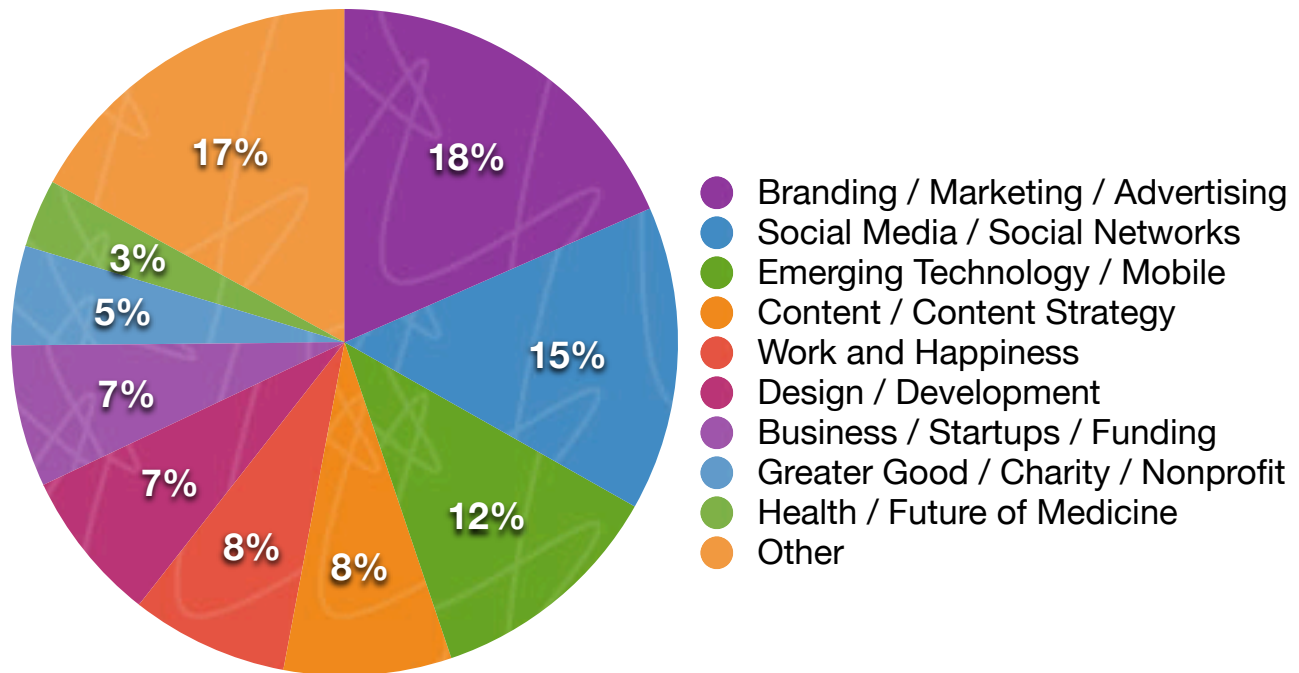
The number of unique proposals which mention the words Women, Female, or Gender <sup>3</sup> at least once in the full text description has increased from 0.5% of all proposals in 2008 to almost 5% this year, another order of magnitude growth for women at SXSW Interactive. It is clear from the data that there is a great desire to talk about women and their role in this industry. It is not, however, expected that parity around this particular metric will be achieved.

With the sheer volume of submissions from women there is now a significant presence in all of the SXSW Interactive categories. Apart from "Design / Development" and "Work and Happiness" the top 7 categories were in the same order for both men and women (the former being lower for women, and the later higher, although both remain in male and female

<sup>3</sup> Sex was not included in this list as there are talks at SXSW about sex (vb.) not sex (adj.) which is of less interest to this discussion.

top 7). The remaining top 5 categories have a strong correlation between female and male submissions, with a mean relative difference of just under 1%.

**Subject Matter For Panel Submissions by Women**



Taking into account the 1:1.3 ratio of female-to-male driven submissions, Women take the lead in “Work and Happiness” by submitting almost 20% more proposals than men, whereas in “Design / Development” men submitted almost 30% more proposals. The most heavily female-dominated category is “Global / International Issues” where women submitted 27% more proposals than men. Other categories do not have enough submissions to make their differences significant.

By analyzing the tags used in submissions we can determine the types of topics that women are talking about, men are talking about, and those topics both men and women are talking about. The data is both normalized to take into account the ratio of 1:1.3 female to male submissions, and weighted towards more frequently used tags in each column<sup>4</sup>

<sup>4</sup> Specifically tags used less than 20 times across the entire dataset are ignored here.

Female Dominant	Gender Neutral	Male Dominant
Women	Content	Mobile
Marketing	User Experience	Design
Social Media	Community	Web Development
Education	Journalism	Gamification
Branding	Facebook	Startups

There is a strong social (not just social media, but in the wider sense) component trend from women, vs a product one from men. The topics that both men and women have proposed in greater parity are more varied (as to be expected) but seem to slant towards the social web, with the notable exception of User Experience.

### Conclusions

The number of women submitting to the SXSW Interactive Panel Picker is increasing consistently, and the categories women are proposing submissions in cover the entire spectrum of topics. Specifically, it should be noted with the exception of "Design / Development" and "Work and Happiness" female submissions to categories are in ratios consistent with men.

The increase in total proposed panels is being driven by women, however, as of 2011 this has not yet presented itself with an increase in female speakers, which currently sits in the 20 - 30% region as it has for over 10 years.

## **Key Points**

Female-proposed submissions to the SXSW Panel Picker has increased steadily for the last 5 years, and is at 43% for 2012.

Women are submitting proposals in similar proportions to men across all of the SXSW Categories.

The rapid growth in submissions to the SXSW Panel Picker is being driven by women, who made up as much as 92% of the increase in 2012.

The percentage of female speakers at SXSW has averaged 24% over the last 10 years, with a standard deviation of 4.5%

## **Appendix I : Data Background**

The source data was obtained by scraping the panel picker website using a Ruby script, and outputting a JSON object that represents each proposal which is then stored in a CouchDB instance hosted on Cloudant. Map/Reduce functions were constructed against the data set to extract counts for terms in documents, tags, categories, etc, which were then reprocessed using Ruby, importing data into both Numbers and Google Docs for graph generation.

## **Appendix II: Names and Gender**

Since SXSW does not provide gender information along with panels, a gender is associated with the organizer of each proposal, and the speakers in the case of panels by inspecting their first name and comparing it against US Census Data from 1990 detailing relative frequencies of first names for genders<sup>5</sup>. From this a confidence rating can be calculated for gender, and in this instance a confidence interval of 90% was used for assignment. Approximately 20% of the names appearing in submissions are not contained in the 1990 Census<sup>6</sup>, which means that in some instances, only 80% of the data was available for analysis. However, since presence of name in a census (or lack thereof) is not discriminatory towards this dataset, one can assume that ratio driven calculations are still valid. This was verified by comparing the ratio of female names to male names on random samples of the data set.

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<sup>5</sup> <http://www.census.gov/genealogy/names/>

<sup>6</sup> Such as Orian, Tikva and Poornima

## **About the Author**

Emma Persky is a vocal technology evangelist, an avid traveler and vibrant storyteller. You can't miss her with her bright red hair and distinctively British accent. When Emma is not at home in New York, doing science with data at Hashable she can be found on an intrepid expedition, collecting stories for her blog, [travellerwithatale.com](http://travellerwithatale.com).

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