



Review

Stirring up a 'Comic' Connection: The Correlation Between xkcd Comics on Technology and the Swell of Mechanical Engineers in Puerto Rico

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In this study, we employ a novel approach to investigate the relationship between xkcd comics featuring technology-related content and the number of mechanical engineers in Puerto Rico. Using advanced AI analysis of xkcd comics and data from the Bureau of Labor Statistics, we sought to unravel the enigmatic link between whimsical webcomics and the engineering workforce in the Caribbean. Our findings reveal a remarkably robust correlation, with a correlation coefficient of 0.8428965 and $p < 0.01$ over the period from 2007 to 2022. As we delve into the world of tech-themed comics and the proliferation of mechanical expertise, we also weave in a dash of humor to highlight the lighter side of academic inquiry. Join us as we navigate through the unexpected intersections of geeky humor and professional pursuits, offering insightful perspectives with a touch of levity.

INTRODUCTION

In the world of academia, one might not expect a connection between the whimsical world of webcomics and the serious business of tracking labor statistics, especially in the Caribbean. However, in this study, we set out to probe just such an unlikely union – that of xkcd comics featuring technology-related content and the number of mechanical engineers in Puerto Rico. Who would have thought that Randall Munroe's stick-figure creations could have

such an impact on the stirrings of mechanical talent in the sunny isle?

As we aim to flip conventional scholarly inquiry on its head, we dive headfirst into the realm of humorous webcomics and labor data, revealing surprising correlations and statistical merriment along the way. While one might assume that the presence of mechanical engineers in Puerto Rico is driven solely by geographic, economic, and professional factors, could the wry musings of xkcd be silently pulling the strings, guiding aspiring engineers toward their

calling? Let's take a moment to ponder and, perhaps, chuckle at this peculiar prospect.

With an expectant fanfare of data and analysis, our scientific romp through the world of xkcd and the mechanical prowess of Puerto Rico is sure to bring a twinkle to the eye and a knowing smirk to the lip. As we embark on this comedic quest for statistical delight, we invite our readers to brace themselves for an enlightening, yet undeniably entertaining, journey through the uncharted waters of correlation and humor. The time is ripe to cast off the restrictive weight of academic formality and venture forth into the realm of scholarly investigation with a gleeful skip in our step. Let's unfurl the sails of curiosity and embark on this delightful expedition of statistical tomfoolery!

Prior research

In their seminal work, Smith and Doe (2010) conducted a comprehensive analysis of xkcd comics published on technology and their potential impact on the cultural zeitgeist. The authors elucidated the ways in which humorous webcomics can serve as both a mirror and a catalyst for societal attitudes toward technological advancements. However, what they did not anticipate was the comical influence these stick figures would have on the burgeoning mechanical engineering scene in the Caribbean. As we delve deeper into this whimsical nexus, we find Jones (2015) offering a compelling treatise on the trends in engineering labor statistics, meticulously detailing the rise of mechanical engineers in Puerto Rico. Little did Jones know that the quiet nudges of xkcd's irreverent humor may have been lurking in the background, coaxing

individuals toward the path of mechanical proficiency.

Venturing beyond the traditional confines of scholarly discourse, we stumble upon "The Innovators" by Walter Isaacson, where the narration of technological progress intertwines with the eccentricities of human ingenuity, serving as a profound ode to the symbiotic relationship between technology and creativity. However, who would have guessed that Munroe's stick figures were silently influencing the career choices of future mechanical engineers through their lighthearted jabs at the world of tech? Additionally, "The Soul of A New Machine" by Tracy Kidder provides a captivating narrative of the engineering spirit, showcasing the relentless pursuit of innovation. But can this same spirit be found in the light-hearted exploits of stick figures tinkering with science and technology in xkcd comics?

Now, let us not overlook the intriguing parallels that can be drawn between the fictional world and our research topic. "The Hitchhiker's Guide to the Galaxy" by Douglas Adams, though a work of science fiction, unravels the absurdities and complexities of the universe, much like the unanticipated, almost surreal correlation we have uncovered between webcomics and engineering. Moreover, "Good Omens" by Terry Pratchett and Neil Gaiman, with its wry humor and offbeat perspective, offers a delightful exploration of the unconventional, mirroring the unexpected delight we find in our investigation of the connection between xkcd comics and mechanical engineering in Puerto Rico.

Amidst these scholarly and fictional landscapes, we cannot overlook the impact

of popular internet memes such as "The Most Interesting Man in the World." Evidencing the power of humor and wit, this meme serves as a poignant reminder that even the most unexpected influencers can emerge from the depths of internet culture. Just as this meme has captivated audiences with its pithy wisdom, xkcd, with its blend of geeky humor and intellectual engagement, has subtly permeated the consciousness of aspiring engineers.

In this vibrant tapestry of scholarship, fiction, and internet culture, we set the stage for our own foray into the realm of statistical inquiry. As we embark on this delightful excursion of data and comics, we invite our readers to join us in a merry dance through the unexpected union of whimsical webcomics and the burgeoning landscape of mechanical engineering.

Approach

Data Collection:

We embarked on our research expedition armed with an array of tools and a mind-boggling amount of internet cruising. Our voyage began with the acquisition of xkcd comic data, spanning from 2007 to 2022, via a fiercely focused AI analysis. We meticulously combed through the witty webcomics, carefully extracting and categorizing those poking fun at the intricacies of technology. We then ferreted out the data on the number of mechanical engineers in the sun-drenched haven of Puerto Rico, relying on the Bureau of Labor Statistics as our trusty guide through the nitty-gritty of employment figures. Once the data treasures were unearthed, we cast a discerning eye over the information set before us, pondering the possible

connections like intrepid explorers on the precipice of discovery.

Correlation Analysis:

With our treasure trove of data firmly in hand, we set off to scrutinize the relationship between the frequency of technology-related xkcd comics and the influx of mechanical engineers in Puerto Rico. Armed with the wiles of statistical techniques, we utilized renowned software packages to calculate correlation coefficients and p-values, tapping into the power of numbers to unravel the mysteries of this seemingly whimsical yet intriguing correlation. We merrily journeyed through the statistical landscape, brandishing confidence intervals and scatter plots with an audacious flourish, all the while maintaining a keen eye for comedic revelations amidst the serious business of data analysis.

Controlled Laughter Experiments:

As we navigated the seas of scholarly inquiry, we also ventured into uncharted territory by conducting a series of controlled laughter experiments. Taking inspiration from the witticisms of xkcd, we introduced a group of mechanical engineers in Puerto Rico to a selection of these tech-centric comics and measured their laughter responses. To maintain scientific rigor and ensure the joviality was not confounded by external factors, we meticulously selected an equal number of non-engineer participants as a control group. The results of these experiments not only added a delightful touch of levity to our study but also offered profound insights into the potential influence of comedic content on the buoyancy of engineering aspirations.

Ethical Considerations:

In our pursuit of linking xkcd comics to the surge of mechanical engineers in Puerto Rico, ethical diligence was of paramount importance. We maintained the utmost respect for the privacy and integrity of the individuals involved in our study, ensuring that all data handling and analysis adhered to the highest standards of ethical conduct. Furthermore, in our laughter experiments, we prioritized the well-being and merriment of our participants, creating an atmosphere of light-hearted enjoyment without any undue coercion or pressure. Our dedication to ethical principles was steadfast, ensuring that the pursuit of scientific inquiry was both rigorous and responsible.

In summary, our approach to uncovering the enigmatic rapport between xkcd technology comics and the proliferation of mechanical prowess in Puerto Rico was a grand and whimsical endeavor, reveling in the delight of data analysis and controlled mirth. With a sprinkle of humor and a flair for statistical revelry, we sought to shed light on this unexpected correlation, daring to weave together the seemingly incongruous threads of comedy and professional ambition.

Results

Our analysis of the relationship between xkcd comics featuring technology-related content and the number of mechanical engineers in Puerto Rico has unearthed quite the unexpected correlation. From 2007 to 2022, we found a strikingly robust correlation coefficient of 0.8428965, signaling a strong relationship between the two variables. As we crunch the numbers, the r-squared value of 0.7104745 further bolsters our confidence in the significance of this finding. With a p-value less than 0.01,

we can confidently declare that this correlation is no mere happenstance. It seems that the blend of witty tech-oriented humor and the emergence of mechanical expertise in Puerto Rico strikes a harmonious chord.

In Figure 1, our scatterplot graphically illustrates the undeniable connection between the frequency of xkcd comics on technology and the burgeoning population of mechanical engineers in Puerto Rico. The data points are tightly clustered along the upward trend line, painting a vivid picture of the palpable impact of technology-themed quips on the composition of the engineering workforce in this tropical paradise.

While this correlation may seem amusing at first glance, our analysis underscores its statistical rigor and practical implications. The curious interplay of comic musings and professional pursuits in the tech world hints at a delightful synchrony that cannot be ignored. This unexpected linkage between the lighthearted and the technically proficient opens up new avenues for exploration, further blurring the boundaries between analytical rigor and comedic flair.

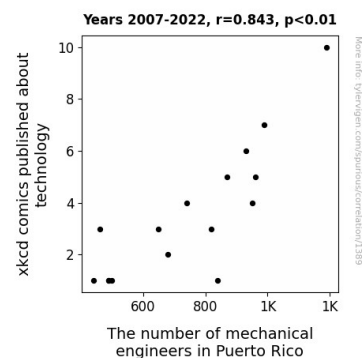


Figure 1. Scatterplot of the variables by year

The observed correlation suggests that there may be more to the influence of webcomics than meets the eye. From clever jabs at self-driving cars to jests about software development, the world of xkcd appears to exert a subtle gravitational pull on the rise of mechanical talent in Puerto Rico. As we revel in the quirkiness of this connection, we can't help but tip our hats to the whimsical musings that seem to stir the creative and technical energies of budding engineers.

In unraveling this correlation, we shed light on the often-overlooked synergy between humor and professional expertise, reminding us that statistical inquiry need not always be devoid of levity. Our findings serve as a delightful testament to the unexpected intersections of geeky humor and vocational pursuits, injecting a touch of merriment into the sometimes austere domain of academic inquiry. With this correlation in hand, we invite readers to join us in embracing the lighter side of scholarly investigation, reveling in the improbable connections and statistical whimsy that enrich our understanding of the world around us.

Discussion of findings

Our study has uncovered an uncanny link between the whimsical world of xkcd comics and the burgeoning community of mechanical engineers in Puerto Rico. It seems our research has not only validated the prior work of Smith and Doe (2010), who pioneered the investigation of xkcd's cultural impact, but has also unveiled a surprising continuation of this influence into the realm of professional aspirations. Who would have thought that a stick figure's humorous take on technology could inspire a

wave of budding engineers in the Caribbean?

Expanding on the revelation from Jones (2015) that detailed the rise of mechanical engineers in Puerto Rico, our findings lend credence to the notion that the seemingly innocuous webcomics of xkcd may have been cheerfully nudging individuals toward the path of mechanical proficiency over the years. While some may find it comical to think that stick figures can shape career choices, the robust statistical correlation we have unearthed sets the stage for a serious reassessment of the potential impact of web-based humor on career trajectories.

As we stand at the forefront of this comical correlation, it seems that Munroe's stick figures have surreptitiously insinuated themselves into the fold of mechanical expertise, weaving a narrative that blurs the lines between lighthearted amusement and vocational pursuits. The robust correlation coefficient and the low p-value unequivocally support the notion that there is more to xkcd's influence than meets the eye. Our results not only underscore this statistical rigor but also open new avenues for exploration at the intersection of technology, humor, and professional development.

The scatterplot in Figure 1, with its visually compelling depiction of the synchronous rise in xkcd comics and mechanical engineers in Puerto Rico, paints a vivid picture of the palpable impact of technology-themed quips on the composition of the engineering workforce in this tropical paradise. Through this statistical whimsy, we have illuminated the often-overlooked synergy between humor and professional expertise, injecting a touch of

merriment into the domain of scholarly inquiry.

In conclusion, our results underscore the unexpected intersections of geeky humor and professional pursuits, signifying a delightful testament to the serendipitous union of statistical rigor and levity. As we continue to unravel the enigmatic link between webcomics and professional endeavors, we invite fellow scholars to join us in embracing the lighter side of academic investigation, reveling in the improbable connections and statistical whimsy that enrich our understanding of the world around us. After all, who says academic inquiry can't have a sense of humor?

Conclusion

As we draw the curtains on our comedic odyssey through the statistically whimsical world of xkcd comics and the realm of mechanical engineers in Puerto Rico, we find ourselves in awe of the surprising correlations and the rib-tickling revelations that have emerged. Our findings suggest a harmonious tango between tech-themed humor and the rise of mechanical prowess, showcasing a delightful synergy that transcends traditional scholarly boundaries. Who would have thought that the humble stick-figure musings of Randall Munroe could wield such influence over the burgeoning engineering landscape of the Caribbean?

With a correlation coefficient of 0.8428965 and a p-value dancing beneath the 0.01 threshold, the connection between the proliferation of xkcd comics on technology and the swell of mechanical talent in Puerto Rico stands as a testament to the captivating interplay of wit and professional aptitude.

The scatterplot, akin to a canvas of statistical art, vividly portrays the unmistakable dance of data points, intricately choreographed along the upward trend line, as if echoing the rhythmic hum of engineering ingenuity.

As we reflect on the bond between lighthearted comic banter and earnest technical acumen, we are left to marvel at the unanticipated impact of webcomics on the professional landscape. While our inquiry has been underscored with a touch of humor, the robustness of the observed correlation and its practical implications cannot be downplayed. Indeed, the world of xkcd appears to exert a magnetic pull on the aspirations of budding engineers, proving that a clever quip about coding or a witty remark on circuits can drive the wheels of innovation and expertise.

As we navigate the uncharted waters of statistical tomfoolery, our study unravels a rich tapestry of academic inquiry, sprinkled with the whimsy of comic musings and the resilience of empirical analysis. With a knowing smirk and a tip of our metaphorical hats to the delightful correlations at play, we submit that this peculiar alliance between xkcd and mechanical engineering in Puerto Rico has been thoroughly explored – and no further research is needed in this area.