This is the 4th of four optional modules in which I share a demo added of a students work from a previous course.,Watching this demo edit will help to synthesize some of the lessons that you've been learning in the 1st four weeks of this course, and will also help you to get,prepared to do the periods,that you'll be doing in a few weeks.,So now that you've read the piece through a few times, you consider this is a piece about what they're calling big data analytics, and the author is talking about essentially a review paper.,So that's a little bit different than the other papers that I edited for you, because this is not talking so about an original research, it's talking about a review paper.,So it's a little bit easier to understand, probably for a general audience, simply because it's a little bit more high level.,It's not as technical. So the others in a nice job of setting this up.,Their language is generally pretty clear throughout.,and I'm just going to reorganize things a little bit.,So one of the things I'm gonna do with this paper is notice the introductory paragraph.,It starts writing on the What the name of the paper and the authors of the paper.,And that's fine, but I think we can start in with a little bit more of an interesting introduction.,So we get in the introductory paragraph that it's a review paper.,They define analytics in this way, and then we get this nice example of how analytics is used.,So I think in the introduction, because you kind of kind of draw the reader in, let's just start by illustrating exactly what we mean by big data analytics.,And the author has that in their paper.,So we are just going to move a few things around so that we start with an illustration of what big data analytics is, rather than a definition.,Illustrations are always more interesting to the reader than just kind of a general definition.,So we get this nice statement down in the 2nd paragraph.,In our digital lives, we generate huge amounts of data, and that's the the crooks of big data analytics. So let's just start with that.,Let's pull that up and move it right to the beginning.,So in our digital lives, we're not going to want to start with the paren'theses there, but I don't think we need that.,So let's just start with In our digital lives, we generate huge amounts of data.,And then a nice is the coal in here, social relationships, purchasing behavior, watching a videos, etc.,I'm going to change that to video watching, just to be parallel here.,Video watching. And I don't like the etc, is a little bit too informal, ,so we'll just drop it and say, in video watching, I think the reader can infer that there might be other types of data that we're generating, but those are three examples.,So then we get big data analytics aims to construct the big picture from the manusia of our digital lives.,Notice the repetition here. Digital lives, digital life.,So that might be telling you that we actually don't need to say this again.,So that's a little bit of a general way of saying what big data analytics is, right?,It constructs a picture from the manusha of our digital lives.,Well, rather than saying something general, let's just say, very specifically, exactly what is it that companies are doing with the data?,So I'm going to define big data analytics by just saying what it is that the companies are doing, rather than trying to give some kind of general definition.,So what if we just jumped in with companies are analyzing these data?,Because we know this is about analyzing data.,We get this down here in the world of analyzing data, and then that what are the data being used for?,While authors define analytics as a term that refers to any data driven decision.,So the data are being analyzed in order to drive decisions.,So let's just say that companies are analyzing these data and using them to drive decisions.,And there now we've defined, essentially, we've defined big data analytics.,So now we can put that at the end a practice called big data analytics, in case the reader doesn't know what we mean by big data analytics, we've now defined it. But notice, I didn't say, let me define big data analytics for you.,I said what it was, and then I put at the end that that's what the term is called.,Because it's always more interesting to say what something is, and the term itself has less interesting to people.,So let's stick that at the end.,So companies are analyzing these data and using them to drive decisions, a practice called big data analytics.,So now you know that this paper is going to be about big data analytics, but you have a better sense of what exactly big data analytics is.,And then we have this nice example about this online company, uh Zinga.,So let's just move that up to the 1st paragraph.,It's always good to use a really concrete example, as they have here.,So let's say, e.g. the online company ZINGA studies how its audience plays the game and uses that data effectively to modify the games.,So now we get a really good example of exactly how this works.,So now we kind of have a big picture statement of what are exactly we're talking about.,Everybody is generating data in our Facebook and Amazon and all our online behavior is generating data for companies.,Companies are then using that data to drive decisions.,We call that big,data analytics. And here is a nice, concrete example of a company doing that.,And now we can dive into the details of this particular review article.,So in a,recent work on interactions with big data analytics, we probably don't need to say authors here.,We can just say, daniel Fisher at AL.,I might change that to Anne.,Colleagues. Daniel picture and colleagues,talk about,interesting developments in the world of analyzing data.,Well, I think that's a little bit vague, and let's just jump right into what it is they're talking about.,We don't even need to give that introductory task.,I've also, by the way, already included the material about what the term analytics means and the data driven decision ideas already in there,, so we can cut that and just jump into ann colleagues, rather than say, what the paper does twice, we can just jump right into it here. In a recent work on interactions with big data alytics, daniel Fisher and colleagues review the state of the field, ,the state of the field of big data analytics, by interviewing 60 pioneering analysts.,And now we've got this repetition analyst in the field.,In the field, they had said the state of the practice, probably because they didn't want to repeat in the field.,I like state of the field better, but let's just get rid of this in this field, and call them big data analysts.,I assume that their big data analyst, if they're, you know, pioneers in this field.,So, uh, we're going to jump right into that.,And then what did they do?,So, uh, the paper, I'm going to say the authors discuss, rather than the paper discuss, that's a minor stylistic thing, the authors discuss, we don't need the about here.,Discuss the definition of big data.,Contemporary ways of analyzing data, challenges peculiar to big data, and proposes a five step workflow.,Now, notice when I read that out loud, you probably heard the non parallelism in there, so that sentence isn't parallel.,We get discussed definition, discuss challenges, discuss contemporary ways, and then we get this shift where there's a new verb introduced and proposes.,So it doesn't quite work. We're going to have to set that proposes off as a new sentence.,I'm going to set it off with a semicle to make that parallel.,So just watch out for parallelism, as we've talked about.,So let's make this a list.,The authors discuss the definition of big data, contemporary ways of analyzing data, and challenges peculiar to big data.,Wrap that list up, and then start with the next idea about proposing So they also propose a five step workflow, and then we get type of an approach to analyzing big data.,Well, we don't need any of that, right?,So we just say, they propose a fight at workflow for analyzing big data.,We don't need the type of approach to right?,And I'm actually gonna and that paragraph right there.,So this gives us an overview of what this review article accomplishes. They discuss things like the definition, the challenges, things like that, ,and they propose a five step work for So then I'm going to set this next idea at this parallel with old age mainframe computing.,I'm going to set that off as a new pair.,So this has a nice idea that the authors have this draw a refreshing parallel.,That's a nice way of putting it to the old age that needs A-A hyphen there to the old age mainframe computing, ,where the work would be submitted to massive systems and the results would be obtained after a period of time.,Now, I'm going to point out that that these couple of sentences have some passive voice in them.,So I'm going to try to put this back into the active voice to make it a little bit more lively.,So to put this in the active voice, we would say, the authors draw a refreshling parallel to the old age mainframe computing.,And then I'm going to say, who submitted the work?,So we're say, uh, we're analyst.,Notice the would be submitted his passive voice, where analysts submitted the work to massive systems and had to wait for a period of time to obtain results.,Now, it would be nice to be specific.,What type of period of time are we talking about?,For those of us who don't really remember the old age mainframe computing, was it ours?,Was it days in general? How long?,So I might just say to the author, you know, put something concrete in there, if it's possible.,And had to wait for hours, days week to obtain results.,So I'm going to just highlight that so that we can tell the the author, I can tell the other, well, what is it?,Can you give a more specific time frame here?,If it's possible, then we get big data analytics.,Argue the authors is very similar.,Well, actually, you don't need to say all that, because we've already said it's a parallel, so you don't need to repeat the fact that it's similar.,That's what we mean by a parallel.,So we can just jump right into with big data analytics.,Um, the analyses. Again, I'm going to turn this into passive from passive voice, back into the active voice. So the analyses require huge computing power.,I'm trying to also make this, and as Peril with the last sentence, require huge computing power.,So scientists,must submit the results, say, to a super computer.,I'm adding this detail, but I would assume that they're submitting them to a supercomputer, and that's why they're having to wait, right?,Had to must submit the results to a supercomputer and again, wait for a period of time, so and wait for the results.,So this sentence is now parallel to the 1st one.,and we have to wait for the result, sort of like we used to submit things to mainframe computers and wait for the results.,And then I would make this last thought just its own sentence, the and user computers,, so we can just start with and user computers are only used for viewing the results and not for processing.,I'm going to change that just likely to be a little more direct so and user computers display, but do not process the results.,And then I might ask the author to add just a little bit of detail here.,So that's a really nice parallel, but what are the implications of that?,Can we learn something from recognizing that it has this parallel at the old age mainframe computers?,So I'm going to ask the author to add something here.,So what implications does this parallel have for big data analytics?,So that's a little bit more.,You know, it's a kind of acute parallel, but if it's just cute and it doesn't have any implications, and it's not that important, so there must be some implications of that.,What implications does that parallel have?,That the author of this paper has spent a whole paragraph, for a whole few sentences describing So what are the of that?,Add that in there, then we get to the next paragraph, and the author jumps into these five step, this five step workflow.,So they say, pivotal contribution of the paper is the generalization of how big data analytics can be approached.,Well, notice we already set up here.,They propose a five step workflow.,I'm going to put the word pivotal back up in the 2nd paragraph to emphasize the significance of the work. So they also propose a pivotal five step workload for analyzing big data.,And then I think we can get rid of all of this.,So we've already eluded that this is a major contribution in the paper.,We put it right up front.,We've emphasized that it's significant by using the word pivotal.,So I'm just going to delete that whole thing.,I don't think we need anything out in that.,So we're gonna say, the authors, how about the authors?,Propose a general, five step approach.,I'm going to get the idea of general in there that it can be used across many different problems.,Four, big data analytics. So the author here originally had like, here are the five steps suggested by the authors.,But I'm going to flip that around and say, the authors propose these five steps and then list the steps.,So I'm not gonna have the authors propose them rather than the steps were suggested by the authors.,So we can get rid of that little bit, and now we have this list.,So the authors propose a general five step approach for a big data analytics coal in here in the steps.,So acquiring data, choosing the red architecture for analyzing the acquired data, fitting the data for the chosen architecture, coding into bugging and fine tuning.,There's the five steps. So knows how we've just streamline this paragraph a little bit.,This five step process repeats itself as many times as necessary until meaningful results are obtained.,Now, I'm actually going to put a passive voice here is repeated.,This five step process is repeated.,The reason is it, I don't think the the process repeats itself is it is itself sustaining?,I'm not sure it. It kind of seems like there must be somebody involved in repeating those steps.,So, um, maybe the authors should clarify little here.,They could put this in the active voice The scientist repeats the five step processes many times as necessary.,I'm going to leave it in the passaways because I'm not sure who the subject is there.,But I think we, uh, the unless the Fi suppresses is really self sustaining, we have to assume that a scientist is involved, and then we get the paper cautions. The skill gap in bringing the right proportion of scientific flavor in models created by business users.,I didn't quite understand that last Senate, so I'm kind of guessing here.,But what I'm thinking the author here meant to say is the paper cautions that, um,, that many business users have some skill gaps currently lack, like many business usually wouldn't be able to do these five steps, currently lack many of the skills,to perform this workflow, something like that.,So there's like a skill gap here.,I'm getting that idea. So I think that the the papers clashing that many businesses may not have,all the skills needed, and I'm wondering if the author here can add something they propose, you know, what, to address this skill gap.,So this is a review paper.,I'm assuming that the authors of this review paper, maybe, you know, said something about how we might go about addressing that skill gap.,So I might suggest that the authors add something in there.,They propose something XX to address the skill gap.,What did they propose to address this skill gap?,Now, I want to .1 thing out here we get in the very introductory in this 2nd paragraph here, ,which introduces the review paper, ,we are told that the authors discuss the definition, definition of big data, contemporary ways of analyzing these challenges, and they also propose this pivotal five step workful.,So in the body of this paper, we get the five step workful, but we don't get any of these other things, the definition of big data, the challenges, etc.,So I'm going to actually ask the author to add a paragraph here that addresses the things that are that we've been told are in this review paper.,So tell me something about maybe don't need to define big data, ,but tell me something about the challenges and the the contemporary ways of analyzing data, how a paragraph that addresses that, because we've been set up to be told that the review paper contains this.,So give me something about that, and then give me the five step approach.,So we need another paragraph here that adds that those details, and then the final paragraph is reading really nicely. I'm going to just change a tweak, a few things here, so but we get this idea of the significance of big data analytics.,So again, the author returns it to the practical application.,So this is really nice. I'm just going to change a few words here so we can just jump right in in the potential, I think the potential of big data analytics is sufficient here.,The the potential of big data analytics, I'm going to say, is vast.,And then a semi call in, e.g.,companies can this is companies, mostly companies, can design more user friendly interfaces.,I've been there in rich customer experience by analyzing the ways customers use, use the product and understand health care spending.,And again, these are all examples, so we don't really need the etc there.,That's a little bit too informal.,So the potential big data analyts is vast.,E.g., here's all the things companies can do with these data.,And then we get this nice out of the end.,The limitation is only our human ability to think creatively and harness the exploding world of data.,That's really nice language. The only little thing I'm going to tweak here is that there's something slightly funny about this, ,because, um, it says, the limitation is our ability to think creatively.,So it's not our ability to think creatively.,That's the limitation here. It's sort of the the bounds.,The limit is the limits of our ability to think creatively.,So this was a little tricky to set up, so I rearrange this sentence just slightly, and probably the author, in their revision, could even come up with a better way of putting this.,But you have to change this this slightly, so doesn't sound like the human creativity is the limit.,So I change it to, I move things around in harnessing.,So I move this in Harnessing the exploding world of data, I move that to the beginning of the sentence to set this up in harnessing the exploding world of data.,And that's really nice. Active descriptive.,Uh, claws there, uh, something like We are constrained.,You don't want to use the word limits twice. So we are constrained only by the limits of our human ability to think creatively, something like that.,And I think, again, you can even probably do a little better in improving that last sentence.,But it had a really nice idea, and it it just needs to be brought out a little bit more.,So, uh, so we get our final version here.,I'll just move that down a little bit.,I would ask the author, now we've got the kind of this nice opening that says exactly how data analytics is being used, give something nice more examples.,I would ask the author to fill in a few things about exactly how long here to be a specific as possible, to tell me what the implications of this parallel is,, to add a paragraph that gets into, ,um, the this list of things that they said that the authors tackled in the review article, um, maybe, and a little bit about how,, if the authors proposed a way to address this, this skill gap.,And other than that, I think it's reading really well now.,It It started out really well, and I've just moved a few things around to bring out a few things.,There's a few more details we need, but I think, uh, the author did a great job on this one, and it's reading really well.,Now, the.

这是四个可选模块中的第四个，在这些模块中，我将分享学生在上一门课程中添加的作业演示。观看此演示，它将有助于综合您在本课程的前四周中学到的一些课程。而且还可以帮助你做好准备，做好几周后要做的事情的准备。好吧。因此，既然你已经通读了几次这篇文章，你可以看到这是一篇关于他们所谓的大数据分析的文章。而作者所说的本质上是一篇评论论文。所以，这与我为你编辑的其他论文略有不同，因为这不仅仅是在谈论最初的研究，而是在谈论一篇评论论文。因此，对于普通受众来说，可能更容易理解，这仅仅是因为它的水平更高一点，没有那么技术性。所以，其他人在设置这个方面做得很好。他们的语言通常自始至终都很清晰，我只想稍微重新组织一下。所以，我要写这篇论文的一件事就是注意介绍性段落，它从论文的名字和论文的作者开始。我的意思是没关系，但我认为我们可以从多一点有趣的介绍开始。因此，我们在介绍性段落中得知这是一篇评论论文。他们以这种方式定义分析，让我举一个很好的例子来说明如何使用分析。所以，我想在导言中是因为你有点吸引读者。让我们先来说明一下我们所说的大数据分析到底是什么意思。作者的论文里有这个。因此，我们只想四处走动，这样我们就可以从说明什么是大数据分析开始，而不是一个定义。对于读者来说，插图总是比一种笼统的定义更有趣。因此，我们在第二段中写下了这个不错的陈述，在我们的数字生活中，我们生成了大量的数据，这就是大数据分析的症结所在。所以，让我们从这个开始。让我们把它拉起来，把它移到起点。所以，在我们的数字生活中，我们不想从那里的括号开始。但我认为我们并不需要这样做，所以让我们从数字生活中开始吧，我们生成了大量的数据。而且我看到这里有一个冒号。社交关系、购买行为、观看视频等。我将把它改为观看视频，只是为了与之类似。看视频，我不喜欢等等，有点太非正式了，所以，我们就把它丢掉然后说看视频。我认为读者可以推断出我们可能正在生成其他类型的数据，但这是三个例子。因此，我们得到了一个大数据分析，旨在从我们数字生活的细节中构建大局。现在这里有重复，数字生活，数字生活，所以这可能会告诉你，我们实际上不需要再说一遍。所以这有点像大数据分析是什么样子，对吧。它根据我们数字生活的细节构造了一幅画面。与@@其说笼统的话，不如说非常具体地说出这些公司在用数据做什么。因此，我将通过说出公司正在做的事情来定义大数据分析，而不是试图给出某种笼统的定义。那么，如果我们直接参与进来，公司正在分析这些数据，因为我们知道这是关于分析数据，我们在分析数据的世界里得到这些数据，该怎么办。然后这些数据是用来干什么用的？好吧，作者将分析定义为一个术语，指的是任何数据驱动的决策。因此，我们正在对数据进行分析，以推动决策。所以我们就这么说吧。各公司正在分析这些数据，并利用它们来推动决策。现在我们已经基本定义了，我们已经定义了大数据分析。所以，现在我们可以把它放到最后，一种叫做大数据分析的做法。因此，如果读者不知道我们所说的大数据分析是什么意思，我们现在已经对其进行了定义。但是请注意，我没有说让我为你定义大数据分析。我说了那是什么，然后我最后说这个词就是这个词的名字。因为说出术语本身的含义总是更有趣的，所以让我们最后来看看。因此，各公司正在分析这些数据并使用它们来推动决策，这种做法称为大数据分析。因此，现在你知道这篇论文将是关于大数据分析的，但是你对大数据分析到底是什么有了更好的了解。然后我们有关于这家在线公司Zynga的好例子。所以，让我们把它移到第一段。像他们在这里那样举一个非常具体的例子总是件好事。因此，假设在线公司Zynga研究了其受众如何玩游戏，并有效地使用这些数据来修改游戏。因此，现在我们得到了一个很好的例子，说明它是如何运作的。因此，现在我们有了一个大局陈述，说明我们到底在说什么。每个人都在我们的Facebook、亚马逊上生成数据，而我们所有的在线行为都在为公司生成数据。然后，各公司正在使用这些数据来推动决策。我们称之为大数据分析，这里有一个很好的具体例子，说明一家公司这样做。现在我们可以深入了解这篇特别评论文章的细节。因此，在最近一项关于与大数据分析交互的研究中。我们可能不需要在这里说作者，我们可以说丹尼尔·费舍尔等人。我可能会把它改成和同事们。丹尼尔·费舍尔及其同事谈到了数据分析领域的有趣发展。好吧，我认为这有点模糊，让我们直接谈谈他们在说什么。我们甚至不需要提供入门通行证。顺便@@说一句，我也已经收录了关于分析一词含义的材料，而数据驱动的决策理念已经存在了。因此，我们可以把它剪掉然后直接进入同事们，而不是两次说论文做了什么，我们可以直接跳到这里，在丹尼尔·费舍尔及其同事最近的一篇关于与大数据分析互动的研究中，通过采访60位开创性的分析师来回顾该领域的现状，大数据分析领域的现状。然后，我们有这样的重复，该领域的分析师。在实地他们之所以说这种做法的现状，可能是因为他们不想在现场重演。我更喜欢该领域的现状，但让我们把这个领域中的这个问题排除在外，称他们为大数据分析师。如果他们是该领域的先驱，我认为他们就是大数据分析师。那么，我们要直接谈这个问题然后他们做了什么？因此，我要说的是，论文作者讨论的是一些小风格的东西，而不是论文讨论的。作者讨论了，我们不需要这里的内容，讨论了大数据的定义、当代数据分析方式、大数据特有的挑战，并提出了五步工作流程。现在，请注意，当我大声朗读这篇文章时，你可能听到了那里的非平行性。因此，这句话不是平行的，我们讨论定义，讨论挑战，讨论当代方式，然后我们有了新的动词引入和提议。所以，我们不得不说这是一句新句子，这并不完全奏效。我要用分号开头让它平行。所以，只要注意我们所说的并行性即可。所以，让我们把它列成一个清单。其他人讨论了大数据的定义、当代数据分析方式以及大数据特有的挑战。总结一下这份清单，然后从下一个关于提案的想法开始。因此，他们还提出了五步工作流程。然后我们得到了一种分析大数据的方法。好吧，我们什么都不需要，对吧？所以，我们只是说，他们提出了分析大数据的五步工作流程。我们也不需要那种方法对吧？我实际上要把那段话写在那里。因此，这使我们大致了解了这篇评论文章所取得的成就。他们讨论了诸如定义、挑战之类的问题，并提出了五步工作流程。因此，我将设定下一个想法，这与旧的大型机计算相似，我将把它当作一个新的段落来讲述。所以，这是个好主意，那就是作者们画了一个令人耳目一新的相似之处。这是个不错的表达方式。对于需要连字符的老年人，到老年人的大型机计算，在这种计算中，工作将提交给大型系统，结果将在一段时间后获得。现在，我要指出的是，这几句话里面有一些被动语态，所以我要试着把它放回主动语态中，让它更生动一点。我们要说，用活跃的声音来表达，作者与老式的大型机计算有一个令人耳目一新的相似之处。然后我要说谁提交了作品。那么，我们要说，分析师在哪里。将要提交的通知是被动语态，即分析师将工作提交给大型系统，并且必须等待一段时间才能获得结果。现在，具体一点就好了，我们说的是什么样的时间段？对于我们这些不太记得旧的大型机计算的人来说，是几个小时吗？是几天吗？一般来说，需要多长时间？所以我可以对作者说，如果可能的话，在里面放点具体的东西，必须等几个小时、几天、一周才能得到结果。所以我只想强调一下这样我就能告诉作者，好吧，这是什么？如果可能的话，你能在这里给出更具体的时间表吗？然后我们得到大数据分析，认为作者非常相似。好吧，实际上你不是故意说作者，因为我们已经说过这是一种相似之处。所以，你不需要重复这样一个事实，那就是你所说的平行意思是相似的。因此，我们可以通过大数据分析直接进入分析。再说一遍，我要把它从被动语态变成主动语态。因此，分析需要巨大的计算能力。我也想让这句话与最后一句话平行，需要巨大的计算能力。因此，科学家必须提交结果。对一台超级计算机说？我正在添加这个细节，但我假设他们正在将它们提交给一台超级计算机，这就是为什么他们必须等待，对吧？必须将结果提交给超级计算机，然后再次等待一段时间，然后等待结果。因此，这句话现在与第一句话平行。因此，再说一遍，我们必须将东西提交给超级计算机，我们必须等待结果，就像我们以前向大型计算机提交东西然后等待结果一样。然后我会把最后的想法当作自己的句子。最终用户计算机，所以我们可以从一开始，最终用户计算机仅用于查看结果，不用于处理。我将稍微更改一下，使其更直接一些，因此，最终用户计算机会显示结果但不处理结果。然后，我可能会请作者在这里补充一点细节。那么，这是一个非常好的相似之处，但其含义是什么？我们能否从认识到它与老式大型机计算机有相似之处中学到一些东西？因此，我要请作者在这里添加一些内容。那么，这种相似之处对大数据分析有什么影响呢？所以，这是一种可爱的相似之处，但如果它很可爱而且没有任何影响，也没那么重要。因此，这肯定有一些影响。本@@文的作者花了整段或几句话来描述，这种相似之处有什么影响？那么，这有什么影响呢？把它加在那里。然后我们进入下一段，作者跳入了这个五步工作流程。因此，他们在这里说，这篇论文的关键贡献是概括了如何进行大数据分析。好吧，正如我们已经在这里说过的那样，他们提出了五步工作流程。我将在第二段中加上“pivotal”一词，以强调这项工作的重要性，因此他们还提出了一个关键的五步工作流程来分析大数据。然后我想我们可以摆脱所有这些。因此，我们已经暗示这是该论文的一项重要贡献。我们把它放在前面。我们通过使用pivotal一词强调了这一点意义重大。所以，我只想删除整件事。我认为我们不需要从中得到任何东西。所以，我们要说作者，怎么样，作者提出了一种通用的五步方法。我将在其中给出一个概念，即它可以用于解决许多不同的问题，进行大数据分析。所以，这里的作者最初有这样的五个步骤是作者建议的。但是我要把它翻过来然后说，作者提出了这五个步骤，然后列出了这些步骤。所以，我不会让作者提出这些建议，而不是作者建议的步骤。所以，我们可以把那一点丢掉。现在我们有了这份清单。因此，作者提出了一种通用的五步大数据分析方法，冒号以下是这些步骤。因此，采集数据，选择正确的架构来分析采集的数据，为所选架构提供数据，进行编码和窃听以及微调。有五个步骤。所以，请注意我们刚刚如何稍微简化了这段话。这个五步过程会根据需要重复多次，直到获得有意义的结果。现在，我实际上要在这里放一个被动的声音，重复这个五步的过程是重复的，原因是，我认为这个过程不会重复。它能自给自足吗？我不确定。看来一定有人参与重复这些步骤。所以，也许作者应该在这里澄清一下。他们可以用主动的声音说出来，科学家可以根据需要多次重复五步过程。我将把它留在被动语态中，因为我不确定拍摄对象何时在那里。但我认为，除非五步过程真正可以自我维持，否则我们必须假设科学家参与其中。然后，我们得到了论文上的警告，即在企业用户创建的模型中引入适当比例的科学风味方面的技能差距。我对最后一句话不太理解。所以我在这里有点猜测，但我想这里的作者想说的是，这篇论文警告说，许多企业用户存在一些技能差距？目前缺乏，就像许多企业无法完成这五个步骤一样，目前缺乏执行类似工作流程的许多技能。所以这里有个技能差距。我一直明白这个想法，所以我认为报纸警告说，许多企业通常可能不具备所需的所有技能。我想知道这里的作者能否添加一些他们建议你知道如何解决这个技能差距的东西。因此，这是一篇评论论文。我假设你可能认识这篇评论论文的作者谈到了我们如何解决这个技能差距。所以，我可能会建议作者在里面添加一些东西，他们提出一些XX来解决这个技能差距。他们提出了什么建议来解决技能差距？现在，我想在这里指出一件事，我们在介绍评论论文的第二段中是非常介绍性的，我们被告知作者讨论了大数据的定义、分析数据的当代方法、这些挑战，他们还提出了这个关键的五步工作流程。因此，在本文的正文中，我们得到了五步工作流程，但我们没有其他任何东西，包括大数据的定义、挑战等。因此，我实际上要请作者在这里添加一段来解决这篇评论论文中告诉我们的内容。所以，告诉我一些事情，也许你不需要定义大数据，而是要告诉我一些关于挑战和当代数据分析方法的信息。有一段话来解决这个问题，因为我们已经准备好被告知评论文件包含这个问题了，所以给我一些关于这个问题的信息，然后给我一个五步的方法。因此，我们需要在这里再增加一段来添加这些细节。然后最后一段读起来非常好。我只想在这里调整一些东西。那么，我们对大数据分析的重要性有了这样的认识。因此，作者再次将其返回到实际应用中。所以，这真的很不错。我只想在这里改几个字这样我们就可以直接跳进去，潜力。我认为这里大数据分析的潜力或大数据分析的潜力已经足够了。我要说的是庞大然后是分号，例如，公司可以，这主要是公司。公司可以设计更用户友好的界面，你需要在那里加一个连字符，通过分析客户使用产品的方式和了解医疗保健支出来获得客户体验，话又说回来，这些都是例子，所以我们真的不需要有点过于非正式的等等。因此，潜在的大数据分析是巨大的。例如，以下是公司可以利用这些数据做的所有事情。最后我们有了这个好主意，局限性只是我们人类创造性思维和利用爆炸式增长的数据世界的能力，这是一种非常好的语言。我在这里要调整的唯一一点是，这有点滑稽，因为它说，局限性在于我们的创造性思维能力。因此，这里的局限性不是我们的创造性思维能力，而是反弹，是我们创造性思维能力的极限。所以，设置起来有点棘手。所以我稍微重新排列了句子，也许修订版中的作者甚至可以想出更好的表达方式。但是你必须稍微改变一下，这样听起来人类的创造力就不会是极限。所以，我把它改成，我在利用中四处移动。所以，我在利用爆炸式增长的数据世界方面采取了这一举措。我把它移到句子的开头来设置这个。在利用爆炸式增长的数据世界中。再说一遍，这是一个非常不错的主动描述性子句。比如我们之所以受到限制，是因为你不想两次使用字数限制，所以我们只受到人类创造性思维能力的限制。我再想一遍，在改进最后一句话方面你甚至可以做得更好一点，但它有一个非常好的主意，只需要再多提一点。因此，我们在这里得到了最终版本。我就把它向下移动一点。我想问一下作者，现在我们有了那种很好的开场白，可以准确地说明数据分析是如何使用的，再举一些不错的例子，我想请作者填写一些关于这里要尽可能具体多长时间的内容，告诉我这种相似之处的含义是什么。添加一个段落，列出作者在评论文章中提到的他们所说的事情清单。也许有一点关于作者是否提出了解决这一技能差距的方法。除此之外，我认为现在情况真的很好。起步非常好，我只是四处移动了一些东西来展示一些东西。我们还需要更多细节，但我认为作者在这篇文章上做得很好，而且现在读起来非常好。