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A Business Librarian Finds Inspiration in PICO

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Not quite a year ago I found myself in a familiar situation. A one-shot instruction session was fast approaching. It was for a professor and class project that I knew from prior semesters: a marketing research class in which student teams work on specific business questions or problems put forth by local clients (small businesses, non-profit groups, campus organizations, etc.). The semester-long project involves a mixture of both primary and secondary market research. My role in these sessions is to introduce the students to some key library resources and search techniques to help them find secondary research to inform their projects. To this end, I began to assemble some PowerPoint slides (a mixture of old material and new) highlighting key sources and useful search techniques (Boolean operators, truncation, brainstorming synonyms and related terms, etc.). I also started to consider what examples I would use when demonstrating the databases in class. I aspired to come up with some interesting examples (to better engage the students' minds and to keep myself interested), but my mind kept reaching for old standbys: a restaurant and bar, a coffee shop, an ice cream shop, etc.

I wanted to make a change and mix things up a bit, but how could I do it? How could I come up with more interesting, multidimensional examples (hypothetical topics or scenarios) to share with the students in class?

I needed a system or a template to guide me; some bit of structure, however loose, on which to hang my ideas.

And then, in a stroke of good luck, an idea bubbled up.

My mind jumped back four or five years to my time in library school. During that period, I worked part-time at the university's health sciences library in reference services. And now a few key pieces of the training I received in that job came to mind: evidence-based practice (EBP) and, more specifically, the PICO framework that is often taught to medical and nursing students to help them formulate answerable questions that can be used to query databases such as PubMed, CINAHL, etc. PICO is an acronym that stands for: Patient/person; Intervention

(or treatment); Comparison (such as a control group that does not receive the intervention or that receives a different treatment); and Outcome. In very simple terms, PICO allows one to take a messy, complex medical situation and formulate an answerable question by focusing on certain key details and ignoring other less salient ones (see Figure 1).
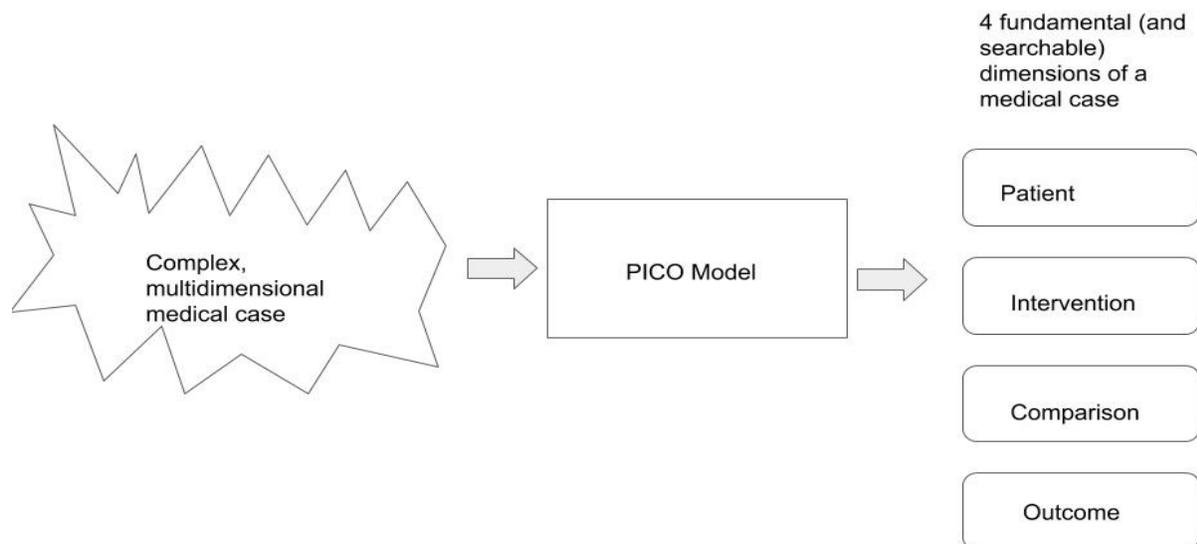
Figure 1. Application of PICO model in health sciences context

 A key strength of PICO (and approaches derived from it) is its focus on fostering the generation of research questions. As Welty, Hofstetter, and Schulte (2012) note: "Even if the question is imperfect, the structure forces the development of a defined research question even within a complex situation, compelling the student to start" (p.477). Could a version of this model be just what I needed? Might such an adapted version push me forward in developing hypothetical scenarios to share with students?

To create a few engaging scenarios for the marketing class to consider, I needed to move in the opposite direction; I needed to use PICO in reverse (see Figure 2). I needed to choose a few categories of variables (something more fitting for a marketing scenario than PICO), make specific selections in the chosen categories, and then create a bit of a story around it. The first variables I used were product/service and target customer. In subsequent experimentation with this model, I have added an additional variable: geography.
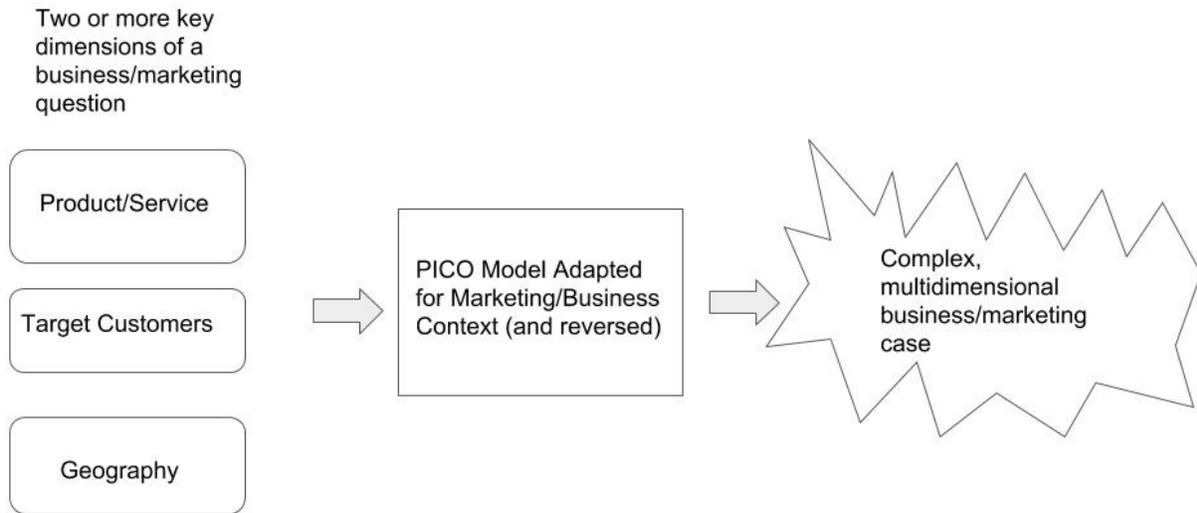
Figure 2. Application of PICO model adapted for business/marketing context

One of the first examples I developed and shared in class is the following:

> A ride-sharing service has had good success in bringing people in their 20s-40s onto the platform both as riders and drivers. The company is interested in getting recommendations for boosting use of the platform by people over age 60. Are folks in this age range aware of the service/platform? What, if any, impediments are there to engaging a bigger piece of this demographic as riders and drivers? Please offer the company suggestions.

I then showed the students a breakdown of how they might approach exploring the questions posed in this scenario. This guidance included pointing them to specific databases, encouraging them to develop lists of synonyms and related terms, and considering how they might use Boolean operators to construct searches.

Welty et al. (2012) note that some PICO users may not use all of the components in all situations: "Many expert searchers in healthcare first search the P and the I before considering the need to search the other PICO elements" (p. 477). My basic framework, like PICO, allows for flexibility. All possible variables need not be incorporated into every vignette I create.

To be sure, this technique is not magic. A certain amount of creativity is still needed. For the needs of my situation, though, using the PICO model, essentially in reverse, gave me just enough structure and forward momentum to help me generate multidimensional examples to share with students; examples that would be, like some of the students' client projects, a bit messy and ill-defined.

Reference

Welty, E., Hofstetter, S. & Schulte, S. J. (2012). Time to re-evaluate how we teach information literacy. *College & Research Libraries News*, *73*(8), 476–477.