Introduction

There is great interest in decision-making, and no shortage of books detailing people’s shortcomings. Yet decisions do get made in the abstract, in the main environments: in conversations with friends and salespeople, by reading catalog pages, or increasingly, on websites and mobile devices that only present options but let us sort, search, and eliminate options.

This course is based on a simple premise: how we are presented options helps determine what we choose, and that by improving these presentations we can improve choices. The forthcoming book used as the course text is a user's guide to the new field of choice architecture. This is the science and art of presenting choices to deliver better outcomes for our friends, family, customers, citizens, and our present and future selves. This is relevant to everyone: we are all both choosers and choice architects.

As choosers, we want to know how choice architecture affects us and when we are being manipulated. Does the website favor the most expensive option? Have we made it easy for people to pick the health insurance that is cheapest for them? Does the name given to a bill make it more likely to be passed in Congress? Understanding how presenting options changes choice is an important element of decision-making self-defense.

But we also present choices to customers ("which car would you like to purchase?"), family (asking a toddler "do you want to fly into bed or jump into bed"), and even ourselves ("when should I work out today?"). We want to avoid stupid mistakes, and design others' choices wisely.
The course will present a series of tools and a chance for students to participate in a “workshop” that applies these tools to problems that interest them.

**Defaults: A Case Study**

Careless design can create terrible outcomes, making both the chooser and the choice architect unhappy. Organ donation worldwide is one example, characterized by two troubling statistics: First, 120,000 people are on the waiting list for organ donations in the US alone. Many will die before they find donors. Second, different countries show remarkable differences in the willingness of their citizens to be organ donors. For example, 99.9% of all Austrians are registered as donors, but only 12% of their neighboring Germans seem willing. What was the difference? Could understanding the cause of these differences help increase donations?

It turns out that the reason is surprisingly simple: it depends on what happens if they don’t make a decision, something we call a *no-action default*. Some countries ask you to choose to be an organ donor, but others ask you to choose not to be a donor. If you do not make an active choice, you are, by default, not a donor in Germany but are a donor in Austria. This affects not only people’s willingness to donate, but also the actual number of transplants that occur, and results in lives saved. Based on research like this, the default for organ donation has been widely debated and changed in Singapore, Chile, and Wales. Until we did our research on donation decisions, no one seemed very clear on whether defaults made a difference or why. In fact, when I tried to find out why defaults were set the way they were, there were no answers. Policy-makers had ignored how choice architecture might affect this incredibly consequential decision. These concepts have also been widely applied in retirement savings and elsewhere.

**Sample: Other Topics**

- **Sorting Options**: Whenever we see alternatives, they are presented in some order, sometimes randomly, sometimes alphabetically, or sometimes according to attributes.

- **Presenting Attributes**: All choices are described by properties, like the calories of food or the square footage of a house. These *attributes* need to be labeled and described. Most choices are based on aspects of the options: for selecting a car this might be gas mileage, acceleration, electronic gadgets, etc. For evaluating potential jobs, it might be salary, work environment, commute time, etc.

- **Timing Decisions**: We often make choices now that have consequences later. Moving the choice closer or further from the consequence, or reminding people of their past choices, can be very important.

- **Choosing Defaults**: Returning to defaults, I will discuss how defaults influence important decisions and then suggest when to use defaults and how to pick the right default.
• **Building Choice Engines:** One of the most powerful concepts in choice architecture is the idea of a *choice engine*. The idea is simple: in the past, we made choices between physical things. We only could process information that would fit on the can, or we would have to walk from car to car (or dealer to dealer) to compare information. Now technology allows us to customize the “aisles” of our online stores for each customer and show only the subset of information that is important to them. This gives the choice architect a much more powerful set of tools, and enables the customer to become a partner in designing the display that is right for them.

• **Risk:** Uncertainty is a part of most decisions. We will discuss ways of presenting risk that can improve decisions.

This content may seem radical to some, but even when we don’t realize it, we are choice architects for ourselves and others. There is no such thing as avoiding choice architecture. We all use choice architecture. We often make decisions about presenting choices intuitively and without awareness, but this can lead to potentially disastrous outcomes. We can be choosers blissfully unaware of how we are affected by the way our choices are molded by the way they are presented. If, instead, we think about how the presentation affects the process and outcomes of choice, we can make decisions easier, increase decision-makers’ confidence, and choose outcomes that will make us and others happier.

**Who should take this course? Why?**
This course should appeal to a wide variety of students:

• First, those who are choice architects. This includes anyone who interfaces with customers.
• Second, those who are interested in how the way that decisions are presented changes their choices.
• Third, those interested in marketing and consumer decisions more generally.
• Fourth, those interested in broader public policy issues (choice architecture is involved in many important public policy debates).
• Finally, the course will be helpful to anyone interested in learning how to better manage his or her own decisions.

The course is open to both MBA and EMBA students.

**Course structure**
The course will consist of six meetings. Students should come to the first meeting with a potential project/client. You do not need to have the cooperation or sponsorship of the client, but it should represent a decision or choice that has significant consequences, either because it is important to the decision maker or because, in aggregate, it has important consequences for the firm, or both. Examples of important decisions for the individual might be choice of a school, for example a primary school or MBA program, buying a major consumer good, or investment options (more below).

I am planning on doing a bit of a flipped class structure, with the book chapters being the
impetus for the discussion. In other words, I won’t be lecturing the book, and assume that you will have read those chapters ahead of time. I’ll present new material and answer questions for the first part of class (probably less than 45 minutes) and then we will move to your discussions of your project and its challenges.

Projects may be done by groups of two or three individuals, and I will encourage you to find examples that don’t overlap with others, and which you are not doing for another class. It is valuable to have a fresh perspective in applying these tools.

In-class Presentations: In the first class each group will sign up to present their decisions on 2 of the topics and defend them in class. The selection should depend on which decisions are particularly relevant to the project. The presentation will probably use 2-3 slides and probably take about 5-10 minutes.

Project Details.
As the syllabus says, you should come to class, if possible, as a team of 2, (max 3) people, and a potential choice architecture project. The syllabus has some details, but I’ve given some thought to examples. Here they are in no particular order:

• High School choice
  o One is NYC matching style
  o And many others: Washington DC, New Orleans.
• College choice
• College loan choice
• Mortgage Choice Any attempt to redesign Truth in Lending forms
• Electronic Health Records can be used to improve medical outcomes
  o Examples:
    ▪ Increasing prescription of generics
    ▪ Increasing appropriate evidence-based practice, for example, in prescribing on opioids.
• Firms presenting choices of products, services, policies, particularly those in financial services.
• Any kind of funnel dynamics that lead to a choice: For example getting people to sign up for subscriptions, internet services, health care.
• Personal Choice Architecture: How are you structuring your job choice? Etc.

You should pick a concrete example (think of it as an imaginary client, but a real web site, paper form, business process, etc.) that either needs to design a new way of presenting choices or needs to improve an existing method.

Culture
This course adheres to Columbia Core Culture. You are expected to be i) Present, ii) Prepared, and iii) Participating.
Course materials
The text will be preprints from an in-press book. They will be distributed on Canvas.

Final Project
The format of the final project is still being designed, and will depend upon enrollment. I have in mind something like a critique from fellow students and the instructor during the last session.

Course grading
Grades will be based on the assignments and short case write-ups, class participation, and a final exam, as follows:

<table>
<thead>
<tr>
<th>Weight for Grading</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>In-class presentation</td>
<td>30%</td>
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<tr>
<td>Class participation</td>
<td>30%</td>
</tr>
<tr>
<td>Final project</td>
<td>40%</td>
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Office hours
I am generally available via e-mail and also by appointment. Please feel free to contact me with any questions or feedback about the course.

Auditing
Depending up on the availability of space, we may accept auditors, but first priority for seats goes, of course, to registered students. If you are interested in auditing, please send an email to eijj3@columbia.edu with the Subject: Audit Request Choice Architecture. If you would share a couple of sentences, no more, about why you would want to audit the class that would be useful.

Instructor Bio
For the last 33 years, Eric has studied decision-making, taught in the best business schools in the country (Wharton, Columbia, MIT) and become one of the most cited scholars in the field, authoring about 100 journal articles and book chapters, and co-authoring two academic books. He has won teaching awards and developed courses that have been big hits in three fields: Electronic Commerce, Behavioral Economics and Decision-Making, and most recently Consumer Finance. Some of his research has been used as best practice examples of choice architecture, particularly the result that showed that changing the default option for organ donation could save thousands of lives. He also speaks at large non-academic conferences and is quoted in media outlets ranging across CBS Evening News, All Things Considered and the New York Times, not to mention Readers Digest. He has also been a consultant to political candidates (non-disclosure limits the ability to be specific).

His academic background includes a BA with Highest Honors at Rutgers University, a MS and PhD in Psychology at Carnegie-Mellon, and a National Science Foundation post-doctoral fellowship at Stanford where he worked with Amos Tversky, one of the founding fathers of Behavioral Economics. At Wharton, he started the Wharton Center for Electronic Commerce in
1997 – anticipating the e-commerce trend – and has been co-director of the Columbia Center for Decision Sciences since 2001. He has been the President of the Society for Judgment and Decision-Making and of the Society for Neuroeconomics. His academic awards include receiving the Distinguished Scientific Achievement Award of the Society for Consumer Psychology, being recognized as a Fellow of the Association of Consumer Research, and receiving an honorary doctorate in behavioral economics from the University of St. Gallen in Switzerland.

He has served in government as a senior visiting scholar at the Office of Research at the new Consumer Financial Protection Bureau, participating in the formulation of regulation and the design of disclosure and other consumer decision-making aids. He has also worked with large firms in the automotive, insurance and online retail industries and many of these experiences also inform the book.
## Tentative Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Session</th>
<th>Topics</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/22</td>
<td>1</td>
<td>Introductions: What is Choice Architecture? What are the goals?</td>
<td>Chapters 1-3</td>
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<td></td>
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<td>Chapter 6</td>
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<td></td>
<td></td>
<td>Guest Speaker: <a href="#">Chris Graves</a> President and Founder of the Ogilvy Center for Behavioral Science.</td>
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<tr>
<td>03/29</td>
<td>2</td>
<td>Drivers of Choice Architecture.</td>
<td>Chapters 4 and 5</td>
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<tr>
<td>04/05</td>
<td>3</td>
<td>Choosing and not choosing: The power of defaults Options: How many, which ones?</td>
<td>Chapter 7, Goldstein et al. Chapter 8</td>
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<tr>
<td>04/12</td>
<td>4</td>
<td>Attributes: How many? Which ones? How do describe them?</td>
<td>Chapter 10 -12</td>
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<tr>
<td>04/19</td>
<td>5</td>
<td>Sorting, Partitioning and Choice Engines.</td>
<td>Chapter 9, 13</td>
</tr>
<tr>
<td>04/26</td>
<td>6</td>
<td>Wrap up, Implementation and Critiques.</td>
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