**6 - AI Tools**

0:01  
Hi, my name is Rosa Fria and I'm excited to share more about AI tools, evaluation, development, and analysis.

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If you are at an organization that is building technology, this will help you be more informed about what goes into building in the age of generative AI and what's possible by looking at what has been done and how it's been done.

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This is the 6th module in our AI and Nonprofit series.

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Over the past quarter, Afua, Bruce, and I have led several community conversations on AI for nonprofits supported by Microsoft.

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Together, we developed materials providing an overview on AI, overarching principles, how to decide an AI, this one on an exploration of core AI tools and approaches to governance as well as privacy.

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We held community learning sessions combined with a comprehensive scan of existing frameworks and lived experience as practitioners in nonprofits.

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This all informed our resources centering on equipping nonprofits with policy templates, frameworks, and board talking points to incorporate AI for transformative impact.

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So now let's delve into AI tools for builders of technology.

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So at the end of this module, you'll be able to understand key factors and roles involved in evaluating AI tools.

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We'll also review the roles and their functions and how teams work together on AI.

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Then we will look at some of the key ways nonprofits build tools for internal as well as external use.

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And finally, we will conclude and share best practices on AI and tool development, looking at some of the key considerations for nonprofits as they build with the ultimate goal of success in their field.

1:51  
OK.

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So first let's discuss what you want to consider when you build.

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Here we are taking some cues from the center of excellence and we have adapted what primarily they consider for government agencies to the nonprofit context because we believe they call out areas that will also be helpful for our field.

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The factors we encourage you to consider on their list, though not exhaustive, our development environment.

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Are you using Visual Studio Code or Eclipse for infrastructure?

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Are you building on Azure, AWS, Google Cloud Platform, or on Prem?

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These decisions will impact how you scale and what it costs to scale.

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One quick aside though that I want to note is that when you are a nonprofit, you can qualify for so many discounts when it comes to infrastructure.

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So you want to look into every single discount coupon code at your disposal to build as cheaply as possible for as long as you can.

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But also you don't want to ignore what it costs after your coupon code runs out because switching costs can also be equally high.

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So those are just some things you want to be thinking about on the infrastructure and cost front.

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Also how you plan to manage your data, your approaches to data manipulation and visualization are important.

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And then because of the nature of AI, your computing power and technologies also have to be paid attention to.

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So computing power technologies impact how quickly you can train your models.

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And so that's going to be another area that you add to your evaluation of what you're going to build.

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So on to roles and responsibilities.

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So while tech enabled nonprofits will traditionally retain ACTO engineers, programmers, and even some data scientists or researchers that have some data experience, we are starting to see more machine learning engineers and AI researchers.

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So while it's important to note that machine learning isn't all AI has to offer, making use of these frameworks like Tensorflow is a typical part of how these roles function today to build with AI.

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These roles can also help with the automation of model training and work to analyze data and model performance, which is really going to be critical as you're thinking about preventing and mitigating error.

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I think the biggest take away from our sessions with leaders who are building with AI is data, data, data.

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The proper treatment of data is critical, and attention must be paid to the hygiene and relevance of data.

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We also know that in this funding climate, nonprofits must be especially strategic about what they label for AI training, and that it also boils down to what the culture of data leaders see is at your organization.

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So how are you making decisions based on data?

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What's the culture in terms of people being trained and equipped to understand and also interpret the data that your nonprofit generates?

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So this is something that's really important for leaders to remember as they're starting to leverage their data infrastructure to build AI.

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And then if you have development, security and operations personnel or if you have a cloud and infrastructure team, you want to be aware of some of the advantages and leveraging cloud platforms, especially if you have limited needs and you are trying to free up some staff time.

5:12  
Additionally, there is so much I could say about Devsec OPS, but it comes down to being holistic about your security approach and also thinking about it from the outset and not as an afterthought.

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And then also, even after you you're fully deployed and you're you're running, you want to have a continuous approach to monitoring security to ensure that you are being a great steward of data.

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So now let's look at some examples of what you might build with AI.

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So chat bots are all the rage.

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They've been especially impactful for internal use.

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So to help with onboarding, but also externally to provide initial support for clients seeking assistance.

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And then even as you think of these examples, we also want you to remember key best practices when building with AI.

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So you want to be sure to pilot consumer facing tools with experts before you launch.

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This is a great way to track the types of errors and hallucinations that may occur so that you can build against them and develop a plan to mitigate the impact it might have on your service delivery.

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Among other things on this list, you want to make it possible for any tools you build to fail safely to a human if user needs are unmet and the stakes are higher for those needs going unmet.

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So now let's look at some tools in practice.

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And here and in the next example, you can learn more about their tech stack, what's under the hood, and also how they employ it to build an incredible organization And E cannons.

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They train, prepare, and connect individuals who have experienced human trafficking to sustainable careers in tech.

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They use AI to refactor, but they also use it to customize learning pathways for their students.

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So they use it creatively to help them build websites that just don't have that standard Lorem Ipsum content, but text content that gives students a real feel of what something might look like after it's fully built out.

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I would also be remiss, though, if I didn't call out that some staff members are strongly opposed to using AI, citing environmental and copyright concerns.

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This is definitely a conversation that's equally important as what to build and how to build.

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So you want to be mindful of that and navigate that with care as you explore what you will employ AI to build.

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Because I think at the end of the day, it's all about mitigating as much harm as possible while also making sure that you are thinking about how can you provide as much benefit to the people you serve as possible.

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The organization I Co founded, M Relief, which has the mission to transform access to social services for the inherent dignity of all people.

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They have been using AI for several years.

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And so we first started with use cases including speech to text transcription to help SNAP applicants avoid wait times.

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We also have leveraged it to apply sentiment analysis to text messages that come in when people are live and in the middle of enrollment processes and something goes wrong and they text.

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And we want to detect the emotion associated with the language that they use so that we can provide even more empathy, especially if something has gone wrong.

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And we're actively using a suite of tools to train data for a next generation chatbot to help people sign up for Snap benefits in the US.

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What's been top of mind for our CTO, Dezeja Joglu is coming up with the best data structure for our training data.

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This is really important because at the end of the day, what we want to support are responses that are as accurate as possible, especially when the stakes are getting the food that you need to survive now.

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So we shared about any cannons and M relief.

9:02  
But organizations like American Red Cross and Empower Work are also leveraging chat bots in innovative ways.

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One for disastrous relief, the other to also help volunteers practice providing supportive services to workers after their trained.

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And then we've also been tracking some of the work coming out of Doctors Without Borders.

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They're doing some really great work and thinking about how to use AI to support the analysis of medical data.

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So it's exciting to review organizations that use AI to amplify the work they already do, allowing it to complement, not replace expertise.

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Internal testing ensures you can benefit even further from the expertise on your teams.

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We also see organizations starting smaller in scope before picking up momentum and scaling.

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And finally, these organizations have a strong reflex of assessing not just performance, but impact.

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So there isn't so much more to cover, but we're really excited that we've been able to at least start the process of helping you brainstorm the tools that you need to accelerate the impact you're making in the world.

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Thank you.