Instructional Video Evaluation Plan

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Support Document Instructional Video for Process Design Consultants

The Process Design Consultant role was created to be an individual contributor that supports different lines of businesses to develop processes, write the processes into procedural and supplementary documentation, and provide developmental support to call center business analysts. These business analysts are responsible for evaluating performance data from the bank's call center data which includes call flow, average speed of answering calls, average handle time of client's needs, and the overall client experience from the beginning to the end of the total experience. The business analyst then uses different business functions to influence both the call agent's performance and the client's experience. These changes are in real-time and can have both positive and negative effects, therefore full understanding of the processes are essential in the business analyst role. The analyst's business acumen coupled with process documents ensures a positive client experience by making business decisions based on data and mitigating issues before they arise.

The team of Process Design Consultants (PDCs) was created in 2020 and lacked a formal onboarding process for the new PDCs. This led to inconsistencies in understanding how to document processes properly or effectively which impacted the business analysts. Through the ongoing feedback model, executives host round table meetings to gain insight on what is going well and what needs improvement from the call center agent's, business analysts and PDCs perspectives. Over time, a consistent area of opportunity has been to build the business acumen of the employees which begins with overhauling the approach to training and upskilling. The goal for these changes is to provide the foundational support to produce self-reliant and confident PDCs that can begin assisting their respective lines of businesses out of their onboarding training experience which in turn supports the business analysts. The instructional video artifact is an introduction to one facet of responsibilities of a PDC and it introduces the user to the art of writing a support document.

While the lessons previously were live, virtual training sessions, along with written process guides, the decision to move into instructional videos was considered to ensure a consistent training experience and the ability to scale up multiple PDCs. Instructional videos can be helpful quick reference guides for the new hires, where they can stop, rewind, and revisit the videos throughout their onboarding experience and reference these videos once they are in work production. In discussing the Cognitive Theory of Multimedia, Brame (2016) states, "…working memory has two channels for information acquisition and processing: a visual/pictorial channel and an auditory/verbal-processing channel. Although each channel has limited capacity, the use of the two channels can facilitate the integration of new information into existing cognitive structures". The first iteration of these lessons during this time at University of Cincinnati were audio lessons, however, instructional videos eventually were deemed more useful with the use of both visual aids like the presentation deck, along with the voice over which allows the lesson to engage both channels for information acquisition.

Evaluation Methodology

Having the creative space to build onboarding materials in the UC IDT program has been an invaluable experience to have a deeper understanding of research-based instructional design methods and receive vital feedback from peers. The User Experience (UX) questionnaire of this instructional video is to ensure that it properly engages the learner ensure the learner is able understands the subject once it is viewed.

The usability and emotional impact questions from the UX method are designed to understand the ease of use, how the users learn from the video and how it keeps learners' interest throughout the learning that assists in retaining the information. Hartson and Pyla (2018, p. 6) define User Experience as, "…the totality of the effects felt by the user before, during, and after interaction with a product or system in an ecology… create a user experience that is productive, fulfilling, satisfying, and even joyful". The rating questions (Appendix A) have been adapted from Weblei (2019) as they are relative to the user

experience data that is needed for this instructional video and the open-ended questions were written in conjunction with the rating questions for the learner to provide more information on both the design and usability of the videos. To prepare new hire PDC's it is imperative to not only ensure that the instructional video is usable and teaches the concept of process writing correctly but that it is aesthetically pleasing and engages the learner to build enthusiasm due to the high demand for qualified process writers.

As stated in the introduction, the past onboarding experience included reading an online guide on writing a document and being on conference calls with fellow PDCs. In a study conducted by Liu et al., (2023, p. 2) where they evaluated the quality and usability of instructional videos, they found in their online survey, "…more than 85% of participants prefer to use our instructional videos rather than the instructional text/images in the user manuals". This is promising data for the direction of the onboarding experience that includes instructional videos which has been encouraged by the design team. The Support Document Instructional Video needs to be evaluated based on the User Experience to make necessary changes prior to going into production to reduce re-editing and execution delays.

Utilizing IDT Masters students as the evaluators, allows for feedback from a population that share similar background knowledge of the future users of the instructional video without prior understanding of the PDC Team's procedural writing framework. Since the video will be used for onboarding, it is important to gain insight on the understanding of the introductory materials from a novice point of view, while also evaluating if the video is engaging to an adult learner in the workplace. The choice to use IDT Masters students instead of new hire PDCS is the limited access and lack of hiring currently occurring within the company.

The user experience and how the new hires interact with the videos are important in understanding the usability of videos in our line of work and IDT Masters students can replicate similar attributes as new hire employees. As stated by Tch-Tokey et al., (2016, p. 3) "Usability is defined as the

ease of learning and the ease of using". These questions are written to understand if video is easy to understand and were adapted from the USE questionnaire (2001). Instructional videos introduce information and serve as a reference for learners/new hires as they progress through their training experience. Looking at how the user perceives the usefulness and ease of use of the video will assist in making edits and additions that serve a purpose. The open-ended questions are looking for more user details on how the video can be easier to use, video functionality upgrades and improvements needed to increase understanding of the Support Document writing process.

Evaluation Instruments

The two constructs in the evaluation of the Support Document Instructional Video are engagement and usability. The questions that are in Appendix A, are adapted from both the Web-based Learning Environment Instrument (WEBLEI 2019) and Usefulness and Ease of Use (USE) Questionnaires. An online evaluation questionnaire was selected due to the tight timeframe of 2-3 where according to Regmi et al. (2016), online surveys allow data to be collected efficiently within limited timeframes. The online evaluation questionnaire will be created in UC Qualtrics to ensure consistency in the look and feel of the evaluation questionnaire while having the ability to be replicated. Once the questionnaire is loaded, Qualtrics will provide a URL for the questionnaire. The URL of the online evaluation questionnaire will be delivered to participants to take once they view the instructional video to provide feedback.

USE Justification

As identified by Lund (2001), "…Usability appears to consist of Usefulness and Ease of Use, and Usefulness and Ease of Use are correlated. Each factor in turn drives user satisfaction and frequency of use." The end users are in a fast-paced environment, where leaders are anxious to get them through training and have them proficient in the basic job functions. Therefore, careful considerations must be taken when developing materials for them to ensure they are useful when developing their job function

skills and easy to use. The instructional video is one part of the training on Support Document writing and it provides the foundation for the future activities that the new hire will experience in the learning module. Therefore, it is important that the video is concise, informative and useful for the PDC to confidently use as a reference as they begin writing their own Support Documents in the training environment for evaluation from their peers.

WEBLEI Justification

Engagement is an integral component of a virtual training environment and therefore, Weblei questionnaire questions has been adapted to fit the needs of the learners that are the end user of the instructional video. According to Chandra and Fisher (2005, p. 3), "WEBLEI is probably the most significant because it reflects students' perceptions of what they had gained through the web-based learning experience." In the virtual training environment, where new PDCs are spread throughout the country, engaging materials is a necessity for them to retain information and to improve the learner outcome when they go into full work production. The UX with the instructional video is to gather data on what, if anything, the PDC gained from watching the video and their preparedness to begin developing their own Support Document for their respective line of business. Engagement is subjective to the user and feedback from the questionnaire will be utilized to adjust and edit the instructional video to ensure the learning environment is properly delivered.

Sampling Methodology

According to AlRoobaea and Mayhew (2014), based on what is being evaluated determines the optimal number of participants, however, they were unable to determine a specific over-arching guideline. They examined the premise that 5 evaluators will identify 80% of all usability issues, however, they found that depending on the method this number may increase or decrease to three. For this evaluation plan, there will be 3-5 participants that have similar background to the end users of this

instructional video. The participants will be adult learners, with little to no background in the team's documentation process and with a procedural mindset.

These participants will be selected through an online intake form that is comprised of the following questions:

1. **Have you read a procedure document?**

   The purpose of this question is to ensure there are no barriers in reading through a procedural document. A barrier could be where the participant needs supplemental information to understand the purpose of a procedural document.

2. **Have you utilized a procedure document to complete a process successfully?**

   Biases can occur with the participant if they have been unsuccessful in completing a process from a procedure.

3. **Have you used an instruction video to learn something with zero to minimal experience?**

   The purpose of this question to ensure there are no barriers in using an instructional video. A barrier could be where this is the first time the participant is using an instructional video and they do not understand how to use the videos functions.

4. **Rank the following Statement from 1-5 (1-Strongly Disagree, 2- Disagree, 3-Neither disagree or agree, 4-Agree 4- Strongly Agree): I like to use instructional videos to learn something new**

   Based on the feedback from the intake form, the participants will be selected to find a mixed population that has minimal to extensive background in utilizing procedures to match the end-users.

Question #1	Yes- Potential selection No- Will not be an immediate selection
Question #2	Yes- Potential selection No- Will not be an immediate selection
Question #3	Yes- Potential selection No- Will not be an immediate selection
Question #4	Mixed responses are needed

Considerations	● If user has answered Question #1 and #2 with NO, they will not be selected as these users will not have background with the end users (new hires) ● Select equal number of users that have mixed responses for Question #4

Analysis Procedures

For the online questionnaire, there are 20 questions with 15 questions that are given a numeric value based on a 5-point scale and five open-ended questions. This questionnaire has been piloted in the first half of the Fall 2024 Semester by five random IDT Masters students and questions have been re-evaluated based on results to ensure language is transparent to yield clear results and to go from a 4-point scale to a 5-point scale. The decision to move to the 5-point scale was that a 4-point scale forces the user to select either disagree or disagree when they could be in fact neutral.

The data will be collected by a defined due date for the participants to complete both the watching of the instructional video and the online evaluation survey. Each question will be separated into an Excel Spreadsheet (Appendix B) to allow for quantitative data analysis of the scale questions and then an analysis of the open-ended questions. As identified by Bhatia (2017, p.2), “Once a data is organized in a tabular form spotting beneficial trends and anomalies becomes effortless. The main asset of tabular representation is its versatility…” The open-ended questions are developed to allow for users to provide additions/suggestions and the main themes that have emerged will be identified for deeper analysis when re-designing the instructional video.

The questionnaire results will reveal patterns and drive better design decisions. For each scale question, the mean, standard deviation, variance, and coefficient of variation will be determined using Excel formulas. During the testing of the questionnaire questions, the numeric data was insightful to assist in trends and patterns to help improve both the usability and engagement in the instructional

video. Therefore, it will be helpful to have a test group that is viewing the instructional video to learn the process to then provide their feedback on the questionnaire, instead of providing feedback on the questionnaire itself.

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Appendix A

Artifact	Support Document Video
Type of Media	Video Lesson
Description of Content	This video is for new hire Process Design Consultants learning about the different deliverables they are required to do in their new role. A support doc is a supplementary document that can be linked into a procedure. The support document is informative information that are "nice to haves" but do not impact the steps of the process being completed in the procedure.

<table>
<tr><td rowspan="4">Construct: Engagement
These questions have been adapted from the following:
WEBLEI</td><td colspan="2">Engagement: The purpose of this video is to provide instructions on writing support documentation, typically this is done through a classroom setting. However, we are moving to a model where instruction is provided asynchronously, so instructional videos are becoming more prevalent. One of the main goals of this activity is to examine the user engagement and understanding of the content. As stated by Tch-Tokey et al., (2016, p. 2), "Engagement is defined as 'the energy in action, the connection between a person and its activity consisting of a behavioral, emotional and cognitive form". These questions are designed to understand how the users engage with the video and if it keeps the new hire's interest throughout the learning.</td></tr>
<tr><td>Question</td><td>Answer</td></tr>
<tr><td>14. The multimedia technology (eg animation, graphics, sound, video) contributes to the affective appeal of the material.</td><td>● Strongly Agree
● Agree
● Neither Agree or Disagree
● Disagree
● Strongly disagree</td></tr>
<tr><td>7. The subject content is appropriate for delivery on the Web.</td><td>● Strongly Agree
● Agree
● Neither Agree or Disagree
● Disagree
● Strongly disagree</td></tr>
<tr><td>4. The video structure keeps me focused on what is to be learned.</td><td>● Strongly Agree</td></tr>
</table>

		• Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	19. The web-based learning approach can substitute traditional classroom approach.	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	12. The web-based learning environment held my interest throughout my course of study.	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	Provide an additional real-life example besides cooking a grilled cheese, that would be helpful to include in the video to assist in understanding the subject matter?	Open-Ended: Fill in the blank
	8. There is a logical sequence of presentation of the subject content	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	9. The presentation of the subject content is clear	• Strongly Agree • Agree

<table>
<tr><td></td><td></td><td>● Neither Agree or Disagree
● Disagree
● Strong Disagree</td></tr>
<tr><td></td><td>12. The graphics used in the video are appropriate</td><td>● Strongly Agree
● Agree
● Neither Agree or Disagree
● Disagree
● Strong Disagree</td></tr>
<tr><td></td><td>By updating a technical component of the video with _____, it would increase my engagement with the subject content of the video.</td><td>Open-Ended: Fill in the blank</td></tr>
<tr><td rowspan="4">Construct 2: Usability
These questions have been adapted from the following:
<u>USE Questionnaire</u></td><td colspan="2">Moving into a video-instruction format, the user experience and how the new hires interact with them are important in understanding the usability of videos in our line of work. As stated by Tch-Tokey et al., (2016, p. 3) “Usability is defined as the easy of learning and the ease of using”. These questions are written to understand if video is easy to understand and build their business acumen in a straight forward manner.</td></tr>
<tr><td>Question</td><td>Answer</td></tr>
<tr><td>The video is useful</td><td>● Strongly Agree
● Agree
● Neither Agree or Disagree
● Disagree
● Strong Disagree</td></tr>
<tr><td>The video helps me be more effective</td><td>● Strongly Agree
● Agree
● Neither Agree or Disagree
● Disagree</td></tr>
</table>

		• Strong Disagree
	The video meets my need for understanding the subject content	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	Describe two aspects that made the video easy to use	Open-Ended: Fill in the blank
	The video is easy to learn from	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	The video is user friendly	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	I easily remember how to use the video	• Strongly Agree • Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	I would recommend the video to a peer	• Strongly Agree

		• Agree • Neither Agree or Disagree • Disagree • Strong Disagree
	Describe one aspect that could be updated to increase your satisfaction of using the video	Open-Ended Fill in the blank
	To improve the effectiveness of this video, it needs the following _____.	Open-ended: Fill in the blank

Appendix B

Summary of Survey Responses								
Question 1: The multimedia selected contributes to the affective appeal of the subject content							Rating	
	Strongly Disagree	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**			Strongly agree	4
Respondent 1				4			Somewhat agree	3
Respondent 2			3				Somewhat disagree	2
Respondent 3			3				Strongly disagree	1
Respondent 4			3					
				Total:	13			
				Mean:	3.25			
				Standard Deviation:	0.5			
				Variance:	0.25			
				Coefficient of Variation (COV):	0.15384615			
				COV High/Low	Low COV			
Question 2: The subject content, Support Document creation, is appropriate for delivery in a self-paced instructional video								
	Strongly Disagree	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**				
Respondent 1			3					
Respondent 2			3					
Respondent 3			3					
Respondent 4			3					
				Total:	12			
				Mean:	3			
				Standard Deviation:	0			
				Variance:	0			
				Coefficient of Variation (COV):	0			
				COV High/Low	Low COV			