Using Piktochart for Presentations:

A Formal Analysis of the Design, Implementation, and Evaluation

by

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Section 1 – Analysis

Introduction

An organization in the insurance industry faced obstacles to knowledge sharing based on the presentation abilities of mid-level managers. These managers are responsible for communicating monthly updates on training and education at different sites around the globe. Their presentations are used in an information-sharing program designed to promote transparency company-wide. After being presented at monthly meetings, the presentations are posted on the company's SharePoint website so that the information is available globally to all sites for the company's employees to access. However, upper management was dissatisfied with the quality of the presentations, which were regarded as boring, unattractive, inconsistent, and difficult to comprehend. As a way of standardizing the presentation format and improving the clarity and appeal of the presentations, upper management expressed the desire to have all middle managers use infographics to present their regular updates.

Infographics are visual representations of information using a combination of text and graphics. Abundant research suggests that people attend more actively, understand more deeply, and remember more accurately when information is presented using both words and images (Mayer & Gallini, 1990; McCrudden, Schraw, Lehman, & Poliquin, 2007; Pashler et al., 2007). Infographics have become extremely popular across many contexts for being quick to process, visually attractive, self-contained, and easily shareable. Studies have found that employees, and particularly younger employees, feel positively towards the use of infographics for business communication and prefer

infographics to other forms of communication (Vanichvasin, 2013; Young & Hinesly, 2014). Recognizing their appeal, businesses are increasingly using infographics for their internal communications, including for training manuals, job aides, meeting notes, and annual reports (Toth, 2013; Young & Hinesly, 2014).

At this organization, the managers' presentations lacked a visual element; although the middle managers possessed other presentation abilities, they were unfamiliar with methods for efficiently presenting visual information. Given the widespread support for infographics as a presentation method and the preferences of senior management, a one-hour long workshop was designed to train managers to create infographics using an online infographic-design application.

Analysis

Mid-level managers are responsible for sharing regular information updates across the organization. Upper management expressed a desire to have all mid-level managers use one effective method for presenting these updates. The performance analysis revealed that presently, there is no homogeneity in the presentation methods used by mid-level managers. Upper management described the presentations of their respective mid-level managers as lengthy, disorganized, and visually unappealing.

Upper management would like 100% of mid-level managers to use a consistent, clear, and concise presentation method that is appropriate both for meetings and for posting to the organization's knowledge-sharing website. Currently, only 67% of mid-level managers feel that their presentations of information are consistently clear and concise; this was corroborated by upper management. Managers reported being

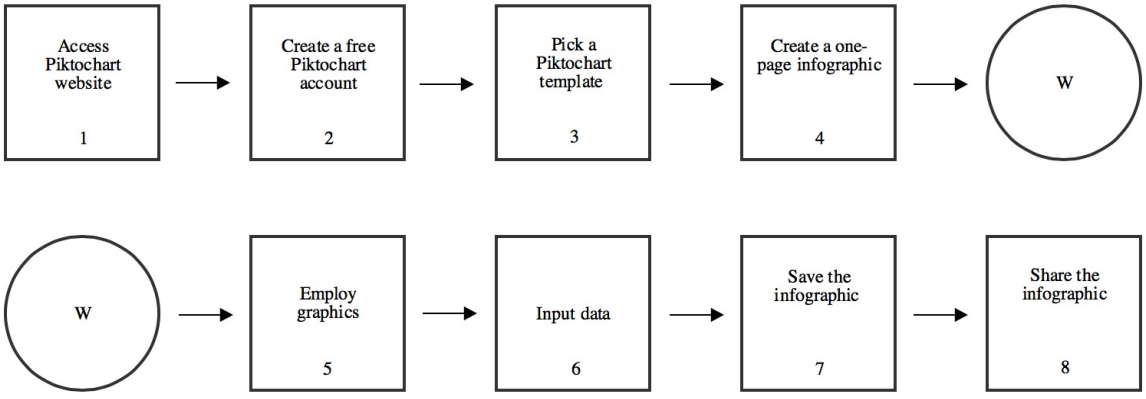
unfamiliar with tools and methods for concise information presentation. These gaps between the desired knowledge sharing practices and the current status of knowledge sharing practices demonstrate operational and performance needs. The number of managers presenting their updates clearly and concisely needs to be increased by 33%.

The instructional design team has concluded that Piktochart is the best tool to use to meet this goal. Piktochart is a web-based program that uses templates and pre-loaded images to create presentation materials. Because of the user-friendly interface and detailed help menu provided, the instructional designers concluded that a one-hour workshop on software navigation and presentation creation techniques would be sufficient to meet the instructional goal.

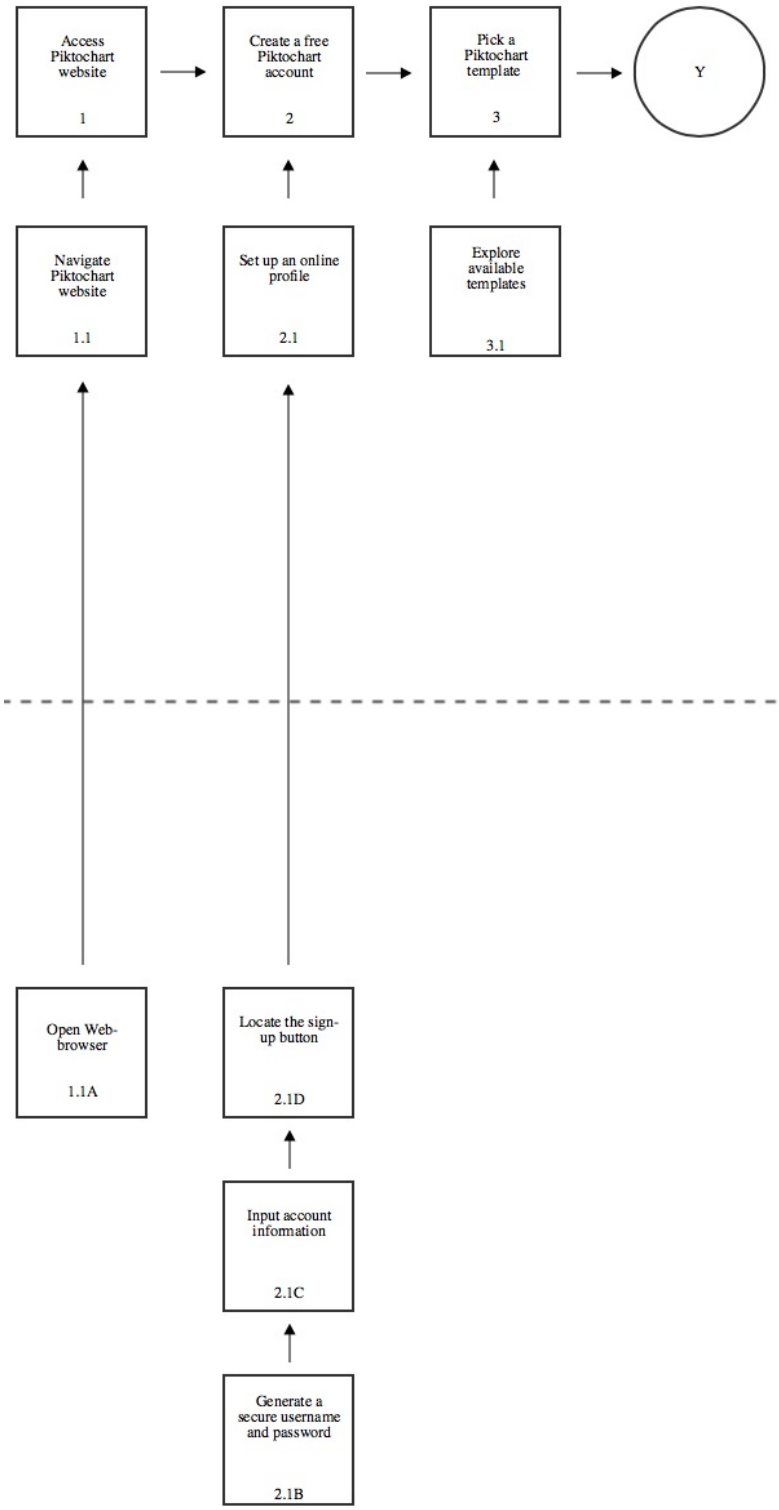
Instructional Goal

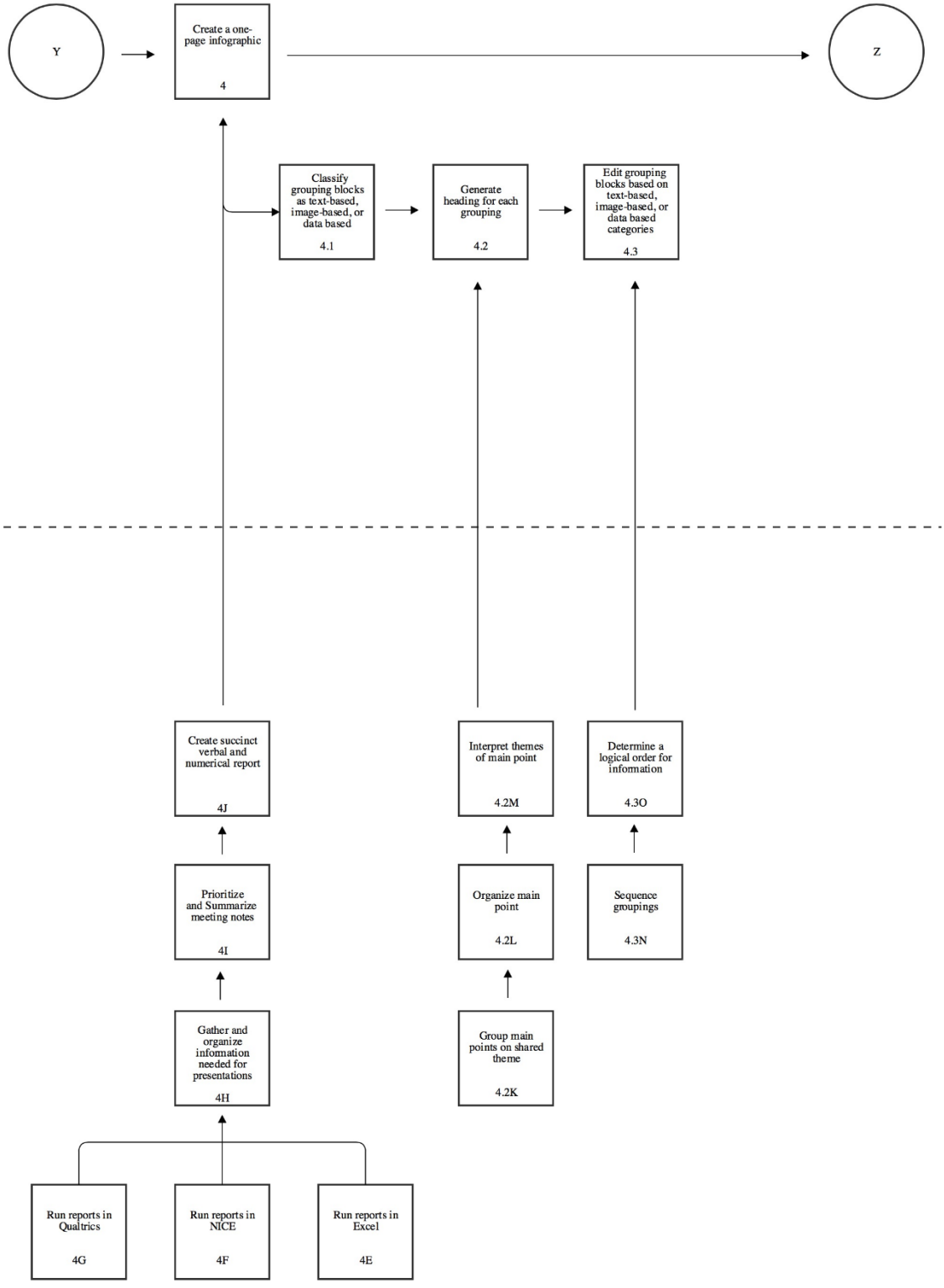
One hundred per cent of middle management supervisors will create clear, concise, informative, and visually attractive presentations that can be easily shared throughout the organization.

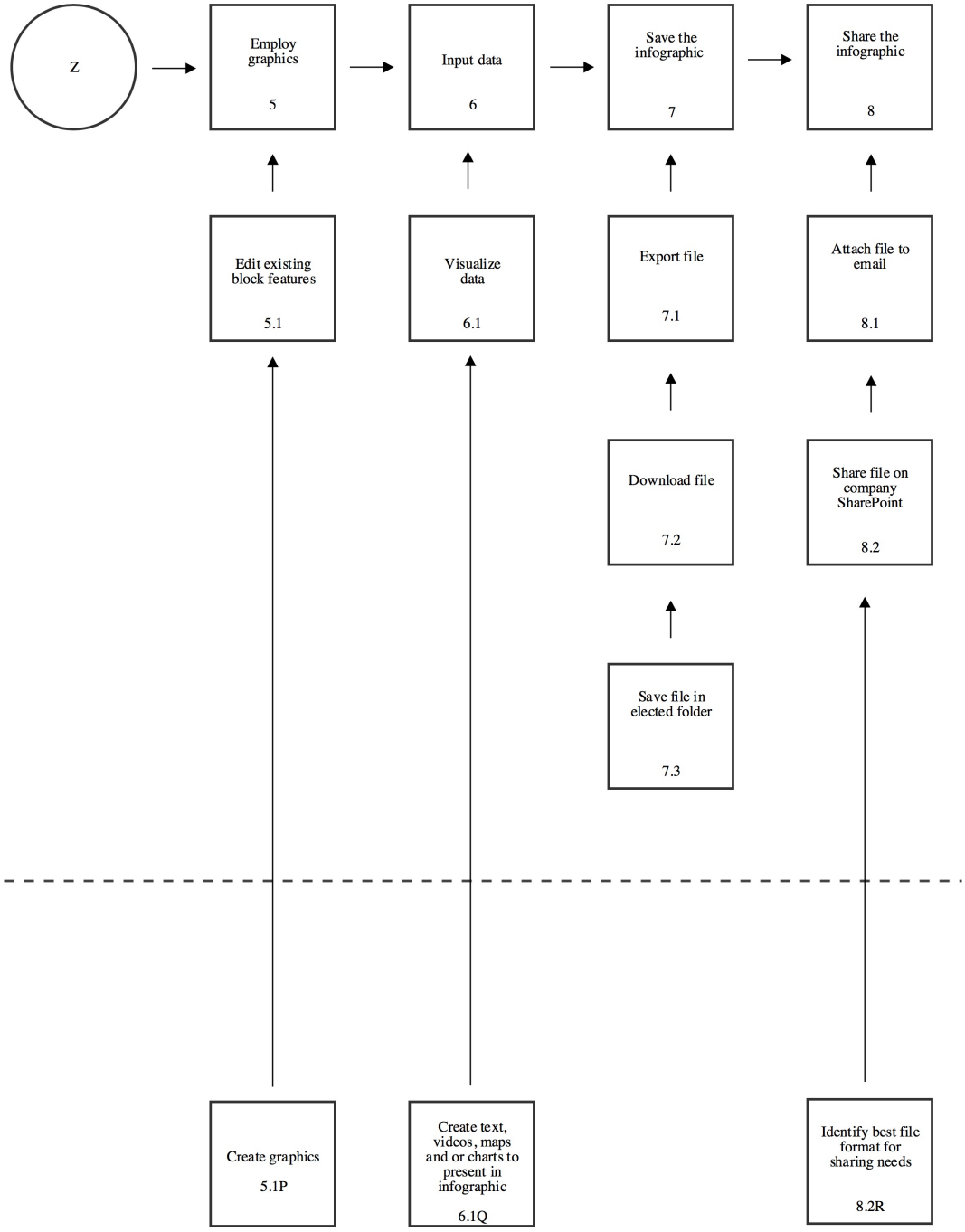
Goal Analysis



Subordinate and Entry Skills Analysis




Y
Create a one-page infographic
4
Z
Classify grouping blocks as text-based, image-based, or data based
4.1
Generate heading for each grouping
4.2
Edit grouping blocks based on text-based, image-based, or data based categories
4.3
Create succinct verbal and numerical report
4J
Prioritize and Summarize meeting notes
4I
Gather and organize information needed for presentations
4H
Run reports in Qualtrics
4G
Run reports in NICE
4F
Run reports in Excel
4E
Interpret themes of main point
4.2M
Organize main point
4.2L
Group main points on shared theme
4.2K
Determine a logical order for information
4.3O
Sequence groupings
4.3N


Z
Employ graphics
5
Input data
6
Save the infographic
7
Share the infographic
8
Edit existing block features
5.1
Visualize data
6.1
Export file
7.1
Attach file to email
8.1
Download file
7.2
Share file on company SharePoint
8.2
Save file in elected folder
7.3
Create graphics
5.1P
Create text, videos, maps and or charts to present in infographic
6.1Q
Identify best file format for sharing needs
8.2R

Learner Analysis

A survey of all mid-level managers was used to collect the following information. Some demographic information was collected from the organization's employee records.

The learners are 20 mid-level managers at an organization in the insurance industry. They are evenly split by gender, and range in age from mid-20s to mid-40s. The learners are similar in their current job responsibilities and need for presenting information, but otherwise tend to be heterogeneous in background and experience. All learners have completed some form of higher education, but vary widely in undergraduate major. The learners also have varying degrees of experience at the organization and in their current positions.

None of managers have a formal background in training, but they have all attended a short course in on-the-job training. They have little experience in creating visual presentations, though they are generally aware of the characteristics of clear information presentation. They show sound comprehension of the information they are responsible for presenting, and they are skilled at summarizing and organizing that information. All learners possess basic computer skills, with some range in technical proficiency. None of the learners are familiar with the application Piktochart.

The learners believe that learning a method for visual presentation will help them ensure that knowledge is shared efficiently, and they support the use of infographics and specifically Piktochart as a tool. The learners are accustomed to in-person workshops as a method of delivering instruction, and are accepting of this type of instruction. The learners feel positively about the organization they work for and the instructor delivering the workshop.

Context Analysis

Interviews with upper management and with mid-level managers were used to complete the context analysis.

Performance requires a computer with internet access, which all learners have regular access to. Although the products will be presented in meetings and broadly shared, the actual task of creating the infographics will be done individually. The training is strongly supported by upper management, in part because members of upper management initially identified lack of visual presentation skill as a performance problem. The training should meet the instructional need of improving presentation and knowledge sharing abilities. The learners will be able to use their new skills immediately to prepare for their next upcoming meeting.

Instruction will be delivered to the whole group through an hour-long in-person workshop. The workshop will be hosted in the organization's computer lab, so learners will be able to practice their skills in a realistic context during the workshop.

Section 2 – Design

Assessment Instruments

Entry Skills Assessment: As middle level organizational employees, ready to actively participate and fulfill the company's information sharing programs deliverables, entry skills have already been grasped. Entry skills for this goal are basic computer skills such as using a search engine, working on word processing and spreadsheets, accessing web browsers and navigating the internet, and running reports in Excel, NICE, and Qualtrics in addition to familiarity with common keyboard and mouse commands. No assessment is needed in this area for employees would not occupy their current job positions if they did not demonstrate mastery of these skills.

Pre-test: In order to gauge where the middle managers feel their presentations currently stand, there will be a survey pre-test administered to them as well as to upper management. The pre-tests will establish current state from two perspectives, upper management and middle management. The survey for upper management will include questions that ask them to identify the current quality of middle management presentations (see appendix F). The survey for middle management will ask them to identify how they currently rate their presentation quality (see appendix D).

Post Test: The post-test for this workshop will be mostly product based. Each of the learners will be expected to create a presentation as they usually would for their job responsibilities. The presentations will be assessed using a checklist of qualities that reflect mastery of the performance objectives (see appendix G). In addition, upper management will be using a survey

to rate the quality of the presentations post-training. The survey will be the same survey that was administered to them before the training. The survey will be administered after each of the middle management supervisors has a chance to create and deliver a presentation in Piktochart. After creating their first presentation in Piktochart, the middle management supervisors will also be administered a survey. Upon completion, the post-test survey will be compared with the pre-test survey to determine the success of the training.

Design Evaluation Chart

Main Instructional Goal	**Terminal Objective**	**Test Item**
To utilize Piktochart to create clear, concise, informative, and visually attractive presentations that can be easily shared throughout the organization.	Given web-based infographic software Piktochart's readily available infographics' templates, the learner will choose a template, input the summarized information to be saved and distributed, correctly and independently, read and assessed by colleagues, on a monthly basis.	To participate in the one-hour workshop and produce the one-page infographic, on a monthly basis.
Main Step in Instructional Goal	**Objective**	**Test Item**
1 Access Piktochart website	Given Piktochart web-based host address, access the website. Learners should be able to independently access the site.	Accurately repeat steps: 1- Open Chrome or Explorer navigation Browser 2- Type on navigation bar: www.piktochart.com 3- Hit "Enter" button
Subordinate Skills	**Objective**	**Test Item**
1.1 Navigate Piktochart website	Given the Piktochart website, learner should locate main features of the website.	Repeat steps: 1- Identify the web-based software ribbon 2- Locate each of the software resources as per ribbon's tags
Main Step in Instructional Goal	**Objective**	**Test Item**
2 Create a free Piktochart account	Given Piktochart's requirements, learner should be able to fill in a profile form and create an account.	Repeat steps: 1- On the Piktochart entry page, click "Sign up" 2- Create a free account – options are: a) Sign in with Google b) Sign in with Facebook c) Create a profile in 4 steps 3- Click "Create my account"
Subordinate Skills	**Objective**	**Test Item**
2.1 Set up an online profile	Given the prompted online page that requires learners to fill in a form with their personal information, learners will create a login credential to enter and use the web-based software.	Repeat steps: 1- On the Piktochart "Sign up page", create a profile in 4 steps: 1.1- Select and type a username 1.2- Type email address 1.3- Select and type a password

		1.4- Click “create my account”
Main Step in Instructional Goal	**Objective**	**Test Item**
3 Pick a Piktochart Template	Given the web-based infographic software’s available templates, learners should be able to select a template of an infographic that fit their information sharing summary needs.	Repeat steps: 1- On the Piktochart “Signed in” page, click “Pikto Template” 2- Browse through the 500 free available templates 3- Hover the template and click “Create” to start working on the template of learner’s choice
Subordinate Skills	**Objective**	**Test Item**
3.1 Explore available templates	Given the web-based infographic software’s available templates, learners should be able to browse and review the website’s selection.	Repeat steps: 1- On the Piktochart “Signed in” page, click “Pikto Template” 2- Browse through the 500 free available templates 3- Hover a template of interest and click “Preview” to visualize the infographic
Main Step in Instructional Goal	**Objective**	**Test Item**
4 Create a one-page infographic	Given the web-based infographic software’s available tools, learners should be able to input their information into a one-page infographic.	Repeat the steps: 1- Add Graphic: a) Use simple Drag & Drop actions to add graphic elements to the canvas b) Select "Graphics" and "Icons" on the elements menu on the left of the screen c) Enter the keyword for what you are looking for in the search box d) Once you've found what you're looking for, move it to the canvas 2- Edit text: a) To add text, select "Text" and drag the type you need to the canvas b) Then simply double click on the text box and start typing c) Formats such as Typeface, Font Size, Colors, Alignment can be edited at the tool bar on the top 3- Upload image: a) Drag-and-drop your own images from your computer to the canvas b) Manage uploads in the Uploaded Images tab 4- Draw a line:

		a) Find Line element under Graphic in the element tool bar b) Drag and Drop it into the canvas c) Adjust the thickness and style on the Toolbar on top 5- Blocks: a) Organize the infographic in blocks b) Manage the content of the infographic by cloning, moving or deleting them 6- Background: a) Select a block and click "Background" on the elements menu b) Pick the color and adjust its opacity 7- Add chart: a) Click on "Tools" and then "Charts" to add data visualization b) Customize how the Chart looks in the "Settings" tab
Subordinate Skills	**Objective**	**Test Item**
4.1 Classify template blocks as text-based, image-based, or chart-based	Given a Piktochart template, classify blocks as text-based, image-based, or chart-based. Learners should correctly classify at least 90 percent of sections.	Classify each of the following template blocks as mostly text, mostly charts/images or evenly spilt.
4.2 Generate heading for each grouping	Given Piktochart heading grouping options, generate a heading for each.	Repeat the steps: 1- Click on selected grouping block 2- Write selected heading for each grouping
4.3 Edit grouping blocks based on text-based, image-based, or chart-based categories.	Given organized written information and a Piktochart template, identity pairings of information sections and blocks based on type. Learners should identify matches correctly at least 90 percent of the time.	Repeat the steps: 1- Click on selected grouping block 2- Add content as per group category 3- Format font, size, color and shape
Main Step in Instructional Goal	**Objective**	**Test Item**
5 Employ graphics	Given a Piktochart template, select and edit the existing graphic blocks in the one-page infographic.	Repeat the steps: 1- Add Graphic: a) Use simple Drag & Drop actions to add graphic elements to the canvas
Subordinate Skills	**Objective**	**Test Item**
5.1 Edit existing block	Given a Piktochart template,	Repeat steps:

features	edit existing block features to include appropriate information and formatting.	1- Double click on category block 2- Use active features in block to manipulate image
Main Step in Instructional Goal	**Objective**	**Test Item**
6 Input data	Given Piktochart infographic creation page, input data into the work being developed.	Repeat the steps: 1- Edit text: a) To add text, select "Text" and drag the type you need to the canvas b) Then simply double click on the text box and start typing c) Formats such as Typeface, Font Size, Colors, Alignment can be edited at the tool bar on the top
Subordinate Skills	**Objective**	**Test Item**
6.1 Visualize data	Given the data being shared in the infographic, visualize data placement and options such as videos, maps, and charts.	Repeat the steps: 1- Click on “Tools” tab 2- Select an option of video, map or chart 3- View
Main Step in Instructional Design	**Objective**	**Test Item**
7 Save the infographic	Given the web-based infographic software’s available actions, save the work produced.	Repeat the steps: 1- On the Create page, click on button “Save” on the top left 2- Select file format: JPEG or PNG 3- Select file size
Subordinate Skills	**Objective**	**Test Item**
7.1 Export file	Given the web-based infographic software’s available actions, export file to a safe folder hosted by the learners’ computers.	Repeat the steps: 1- Save & Export: a) Save the infographic before it is published b) Then click "Download" to save the infographic in JPEG, PNG, or PDF image format c) Share it by attaching it to "All Staff" company email directory
7.2 Download file	Given the web-based infographic software’s available actions, download file to a safe location hosted by the learners’ computers.	Repeat the steps: 1- Save & Export: a) Save the infographic before it is published b) Then click "Download" to save the infographic in JPEG, PNG, or PDF image format
7.3 Save file in elected folder	Given the web-based infographic software’s available actions, save file to	Select a secure folder to store the file as the final work.

	a determined folder hosted by the learners' computers.	
Main Step in Instructional Goal	**Objective**	**Test Item**
8 Share the infographic	Given the created one-page infographic, distribute the final work to colleagues company-wide.	Repeat the steps: 1- Save & Export: a) Save the infographic before it is published b) Then click "Download" to save the infographic in JPEG, PNG, or PDF image format c) Share it by attaching it to "All Staff" company email directory
Subordinate Skills	**Objective**	**Test Item**
8.1 Attach file to email	Given the created one-page infographic, attach the downloaded and saved file to an email to be distributed company wide.	Repeat the steps: 1- Save & Export: a) Save the infographic before it is published b) Then click "Download" to save the infographic in JPEG, PNG, or PDF image format c) Share it by attaching it to "All Staff" company email directory
8.2 Share file on company blog	Given the created one-page infographic, share the work to the company's information sharing website to be widely viewed by company's employees.	Repeat the steps: 1- Save & Export: a) Save the infographic before it is published b) Then click "Download" to save the infographic in JPEG, PNG, or PDF image format c) Share it by attaching it to "All Staff" company email directory

Instructional Strategy Plan

Objective Sequence and Clusters

1	**2**	**3**
1	3.1	7
2.1	3	7.1
2	4.1	7.2
1.1	4.2	7.3
	4.3	8.2
	4	8.1
	5.1	8
	5	
	6.1	
	6	

Cluster 1 (20 minutes)

Objectives

1 Given Piktochart web-based host address, access the website. Learners should be able to independently access the site.

2.1. Given the prompted online page that requires learners to fill in a form with their personal information, learners will create a login credential to enter and use the web based software.

2 Given Piktochart's requirements, learner should be able to fill in a profile form and create an account.

Content Presentation

Content: Provided with Piktochart's website address: www.piktochart.com, learners will be briefed on how to complete an online form in order to create an online profile for log in credentials on the site.

Examples: Access the page www.piktochart.com, fill in the name, input email, create a password and login into a free Piktochart account.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: Learners will access www.piktochart and create their own online profile in order to acquire each their own login credentials for the site.

Feedback: Learner will get an email confirmation sent to their inbox from Piktochart confirming their login credentials and that a profile has been created at their site.

Student Grouping and Media Selection: Learners' final work is developed independently and asynchronously.

Objectives

1.1 Given the Piktochart website, learner should locate main features of the website.

Content Presentation

Content: Provide the learners with verbal and visual guidelines on how to navigate through

Piktochart's website home screen.

Examples: Instructor will navigate through Piktochart's website home screen and showcase the available resources on the software's ribbon while briefly explaining their usage.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: With all learners having operating computers, actively participating in the course by being present at the workshop, listening to the instructor's introduction to the course, and learning the software and its features while watching the instructor's screen, the instructor will guide them to visualize and access the page www.piktochart.com. Participants will be navigating the software's ribbon to be introduced to and become familiar with: *Account Settings, FAQs, Piktochart Templates, My Saved Piktocharts, Featured Piktocharts, Search bar*.

Feedback: A navigation scavenger hunt quiz (see appendix B) will be used to test the learner's knowledge of the user interface. The quiz will be posted on the screen for everyone to view. Once a learner has completed the quiz and written down the path for each item on the scavenger hunt, they will raise their hand. The first person to complete the quiz correctly, will be determined the winner and will receive a prize.

Student Grouping and Media Selection: Learners' work is developed independently.

Cluster 2 (30 minutes)

Objectives

3.1 Given the web-based infographic software's available templates, learners should be able to browse and review the website's selection.

3 Given the web-based infographic software's available templates, learners should be able to select a template of an infographic that fits their information sharing summary needs.

Content Presentation

Content: On the Piktochart homepage, once logged in, show learners the 500+ available templates, briefly discuss some of their utilities, and demonstrate how to view and select a choice.

Examples: Instructor will select, at random, one template among those available to demonstrate how to view and select a template, and open it for customization.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: Present an information sample similar to what managers typically use. Highlight examples of information that could be presented as text, or alongside images, and in a chart.

Feedback: Learners can explore a variety of templates and experiment which ones would best fit their departmental information sharing needs. Participants may also demonstrate how the entire sample can be classified as mostly text, mostly images/charts, or evenly split based on the balance of information types within the sample. Scroll through templates and classify examples as mostly text, mostly charts/images, or evenly split.

Student Grouping and Media Selection: Learners' work is developed independently.

Objectives

4.1 Given a Piktochart template, classify blocks as text-based, image-based, or chart-based. Learners should correctly classify at least 90 percent of sections.

4.2 Given an information section, generate a heading to describe the information. Heading should concisely state the topic of the information.

4.3 Given organized written information and a Piktochart template, edit the content of all features to display the associated information section. Learners should perform the correct editing action at least 90 percent of the time.

4 Given the web-based infographic software's available tools, learners should be able to input information into a one-page infographic.

Content Presentation

Content: Demonstrate how to add a graphic, edit text, upload image, draw a line, insert

background, and add charts.

Examples: Instructor will select, at random, one template among those available to demonstrate how to view and select a template, and open it for customization. In addition, instruction with demonstrate the customization possibilities of a template such as how to add a graphic, edit text, upload image, draw a line, insert background, and add charts.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice items and activities: Instructor will pass out a sheet of written information similar to that which they will be reporting. Learners will then select a Piktochart template, identity pairings of information sections and blocks based on type.

Feedback: After the activity, learners should identify matches correctly at least 90 percent of the time.

Student Grouping and Media Selection: Learners' work is developed independently.

Objectives

5.1 Given a Piktochart template, edit existing block features to include appropriate information and formatting.

5 Given a Piktochart template, select and edit the existing graphic blocks in the one-page infographic.

6.1 Given the data being shared in the infographic, visualize data placement and options such as videos, maps, and charts.

6 Given Piktochart infographic creation page, input data into the work being developed.

Content Presentation

Content: Demonstrate how to add, edit, and view graphics as well as other forms of data displayed such as text, maps, charts and videos.

Examples: Instructor will select, at random, one template among those available to demonstrate how to view and select a template, and open it for customization. In addition, instructor will demonstrate the customization possibilities of a template such as how to add, edit and view graphics as well as other forms of data display such as text, maps, charts and videos.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: Learners will be provided with an "Infographic Layout Cheat Sheet" (see appendix C) to use as reference when selecting graphic and media as per information sharing selected grouping.

Feedback: Peers and instructor present at the workshop will provide immediate feedback on practice exercises.

Student Grouping and Media Selection: Learners' work is developed independently.

Cluster 3 (10 minutes)

Objectives

7 Given the web-based infographic software's available actions, save the work produced.

7.1 Given the web-based infographic software's available actions, export file to a safe folder hosted by the learners' computers.

7.2 Given the web-based infographic software's available actions, download file to a safe location hosted by the learners' computers.

7.3 Given the web-based infographic software's available actions save file to an elected folder in the learners' computers.

Content Presentation

Content: The instructor will demonstrate how to customize a template as well as show how to save, export, download and visualize the saved work on Piktochart.

Examples: Instructor will guide learners to save, export, download and view their customized work.

Student Grouping and Media Selection: All participants will have access to the internet, using their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: Learners will save and download the infographic they have built over the course of the workshop.

Feedback: Instructor will confirm that infographics have been correctly saved to the appropriate format.

Student Grouping and Media Selection: Learners' work is developed independently.

Objectives

8.2 Given the created one-page infographic, share file in the company's website.

8.1 Given the created one-page infographic, attach the downloaded and saved file to an email to be distributed company wide.

8 Given the created one-page infographic, distribute the final work to colleagues company-wide.

Content Presentation

Content: As a final step of this demonstrative web based workshop, instructor will indicate to learners how to attach the file to their emails and share it with a destination email of learners' choice as well as how to post it on the company's website.

Examples: Instructor will guide learners to attach customized infographic to their emails and send it to a destination email of learners' choice as well as how to post it on the company's website.

Student Grouping and Media Selection: All participants will have access to the internet, using

their own computers, in the company's computer lab.

Student Participation

Practice Items and Activities: Learners will email the infographic they created during the workshop to the instructor.

Feedback: Instructor will confirm that email was received with file attached.

Student Grouping and Media Selection: Learners' work is developed independently.

Section 3 – Development

Workshop Agenda

See Appendix A

Workshop Materials

Navigation Scavenger Hunt – See Appendix B

Infographic Layout Cheat Sheet – See Appendix C

Middle Management Pre-Test Survey – See Appendix D

Middle Management Post-Test Survey – See Appendix E

Upper Management Pre- and Post-Test Survey – See Appendix F

Post-Test Rubric – See Appendix G

Section 4 – Implementation, Evaluation, and Revision

Implementation Report

After discussing multiple preliminary designs ranging from an asynchronous eLearning course to a recorded WebEx, an in-person hands-on workshop was chosen as the instructional format for this pilot. Because of the challenges that present of teaching a new system to a group of learners in a one-hour workshop, it was decided that a hands-on approach was the best fit for this training. An initial pilot was designed and implemented with one sample of learners.

The pilot group consisted of six people, ranging in age from 20-40. Half of the participants were women and half of the participants were men. All of the participants are middle management supervisors who are responsible for creating some sort of presentation on a monthly basis. None of the participants were familiar with the Piktochart website, though one of them had used other design programs in the past.

The workshop was requested because of the lack of visual appeal and engagement noted by upper management. In response to the pre-test survey that was distributed to the pilot learners, four out of the six of them (67%) thought that their current presentations were visually appealing. Out of the three upper management supervisors interviewed, none (0%) of them thought that their middle management supervisor's presentations were visually appealing. There was a major disconnect between perception and reality for the learners attending the workshop, demonstrated by the results of the pre-test surveys.

Pre-test responses for middle management supervisors are as follows:

1. The presentations I create are visually appealing.

   67% of participants felt their current presentations were visually appealing.

2. The presentations I create are engaging in nature.

   67% of participants felt their current presentations were engaging.

3. The presentations I create contain the appropriate level (content) of information.

   100% of participants thought their presentations contained the appropriate level of information.

4. The presentations I create contain the appropriate amount of information (length).

   100% of participants thought their presentations contained the appropriate amount of information.

Pre-test responses for upper management supervisors are as follows:

1. The presentations created by middle management supervisors are visually appealing.

0% of upper management supervisors felt the presentations created by middle management supervisors were visually appealing.

2. The presentations created by middle management supervisors are engaging in nature.

   0% of upper management supervisors felt the presentations created by middle management supervisors were engaging.

3. The presentations created by middle management supervisors contain the appropriate level (content) of information.

   33.33% of upper management supervisors thought that their presentations contained the appropriate level of information.

4. The presentations created by middle management supervisors contain the appropriate amount of information (length).

   33.33% of upper management supervisors thought that their presentations contained the appropriate amount of information.

Assessment Report: Learner Performance

A post-test survey was distributed to both middle management supervisors and upper management supervisors. There was also a product-based post-test that was distributed to the participants in the pilot. The results of the surveys following the training and product-based post-test were overwhelmingly positive. The pre-test survey revealed that while most of middle management supervisors in the pilot felt their presentations were appealing and informative, their supervisors did not agree. After the implementation of the workshop, 100% of upper management supervisors believed that the presentations were visually appealing and engaging, and that they contained the correct content and appropriate amount of information.

Post-test responses for middle management supervisors are as follows:

1. I felt the need for the training before attending the training program.

   83 % of participants reported feeling the need for training before the workshop.

2. The objectives for the training were clearly stated at the beginning of the course, and met by the end of the course.

   100% of participants thought the objectives were clearly stated and met by the training.

3. The training was well-structured and sufficient time was allocated for each topic.

   100% of participants thought the training was well-structured and timed.

4. The materials presented in this training will be useful in my current position, and will assist me in creating visually appealing and informative presentations in the future.

   100% of participants thought the material from the workshop would be useful for creating presentations in the future.

5. The trainer presented the training materials in a way that was easy to understand.

   100% of participants thought the training was easy to understand.

6. The trainer encouraged questions and participation and used relevant examples during the training.

   100% of participants thought the trainer encourage questions and participation and used relevant examples.

7. I would recommend this training to my coworkers in the future.

   100% of participants would recommend the workshop to their coworkers.

Post-test responses for middle management supervisors are as follows:

1. The presentations created by middle management supervisors are visually appealing.

   100% of upper management supervisors felt the presentations created by middle management supervisors were visually appealing.

2. The presentations created by middle management supervisors are engaging in nature.

   100% of upper management supervisors felt the presentations created by middle management supervisors were engaging.

3. The presentations created by middle management supervisors contain the appropriate level (content) of information.

   100% of upper management supervisors thought that their presentations contained the appropriate level of information.

4. The presentations created by middle management supervisors contain the appropriate amount of information (length).

   100% of upper management supervisors thought that their presentations contained the appropriate amount of information.

The participants in the pilot were pleased with the functionality and effectiveness of the training. One participant gave the comment, “Great presentation and very useful information. Thank you for presenting this material. It will be more than useful in my future projects.” Upper management supervisors were also pleased with the outcome of the training, giving uniformly high ratings to their middle managers’ presentations after the implementation of the workshop. However, one upper management supervisor commented that their agreement with the post-test

questions was not because the presentations were perfect by the end of the workshop, but because they saw great potential for the presentations to be improved once managers had more opportunities to practice their new skills.

This idea that participants now have the tools needed, even though they may not have been able to fully master all skills in one hour, was supported by the results of the product-based post-test. The average score given to middle management supervisors' presentations using the post-test checklist was 28 out of 31, or 90%. All participants showed proficiency in basic use of the program, including saving their presentations to the correct file type for sharing, and their contents of their presentations were almost entirely complete, clear, and appropriate. The checklist items for which participants were mostly like to receive a "no" rating were those about visual appeal, especially regarding the charts, graphics, and layout of the presentation. However, the presentations were still judged to be markedly improved, and it is expected that with the help of the provided job aids and additional time to practice, participant performance will continue to improve. The combined results of the post-test surveys and product-based post-test demonstrate that the instructional goal of the workshop was met.

Even though the design of the workshop proved effective, there was some feedback from the facilitator and a few participants that suggest some areas for improvement. To ensure future success of the workshop a few things will need to be re-evaluated and possibly reconfigured.

Formative Evaluation and Revision Report: Instruction / Workshop Components

Overall, the workshop was judged to be useful and effective by the facilitator, the participants, and the upper management supervisors who initially desired the training. The hands-on nature of the workshop was very successful. Being able to build their own infographics

during the workshop kept participants engaged. Participants were invested in creating sample infographics on topics that interested them, and reported having fun during the workshop. Participants were all able to see one another's computers, which both assisted with modeling the steps to be completed and created a sense of friendly competition, particularly during the scavenger hunt activity.

One issue that arose during the workshop was technical difficulty. The projector in the computer lab where the workshop was held did not have the proper hook-up, resulting in screen resolution that was too small to be useable. The intention had been to demonstrate steps to the group using the project, but instead the facilitator improvised by walking participants through the steps verbally while walking around the room, often asking the group to watch as one participant demonstrated on their computer. Due to the size of the pilot group, this was perfectly feasible, and actually resulted in somewhat more participation and engagement. However, the facilitator would not recommend using the same lab for future training, emphasizing the need for an adequately equipped instructional context, especially regarding technological requirements.

A second issue that had not been considered prior to implementation of the pilot was that of confidentiality. The intention of the workshop as a solution to a performance problem was that middle management supervisors would be able to use their free Piktochart accounts for their regular presentations. However, presentations created using free Piktochart accounts are publicly saved on Piktochart's third-party cloud. For this reason, managers will not be able to create presentations on confidential information unless they purchase a pro-level account. Even with the pro account, managers will sometimes need to get permission to use the software as presentations are still saved to a third-party server.

For future use of this workshop, it will be important to ensure that the training environment is properly equipped and that the Piktochart software will be usable for the kind of information managers typically need to present, but these issues do not necessarily require changes to the design of the workshop. One area where revision is recommended is timing. A one-hour long workshop was appropriate for presenting and demonstrating all the necessary material, but it did not leave sufficient time for participants to practice. In the future, it would be beneficial to lengthen the instructional time so that participants have more time to practice under supervision of the facilitator, or to otherwise incorporate more opportunities for practice before the post-test is delivered. Given the complex nature of the product-based post-test, participants were not able to demonstrate complete mastery at the end of one hour. However, all involved were hopeful that participants would reach mastery with additional practice.

References

Mayer, R. E., & Gallini, J. K. (1990). When is an illustration worth ten thousand words? Journal of Educational Psychology, 88, 312-320.

McCrudden, M. T., Schraw, G., Lehman, S., & Poliquin, A. (2007). The effect of causal diagrams on text learning. Contemporary Educational Psychology, 32, 367-388.

Pashler, H., Bain, P., Bottage, B., Graesser, A., Koedinger, K., McDaniel, M., & Metcalfe, J. (2007). Organizing instruction and study to improve student learning. Washington, DC: National Center for Education Research, Institute of Education Sciences.

Vanichvasin, P. (2013). Enhancing the quality of learning through the use of infographics as visual communication tool and learning tool. In Proceedings ICQA 2013 International Conference on QA Culture: Cooperation or Competition, 135-142.

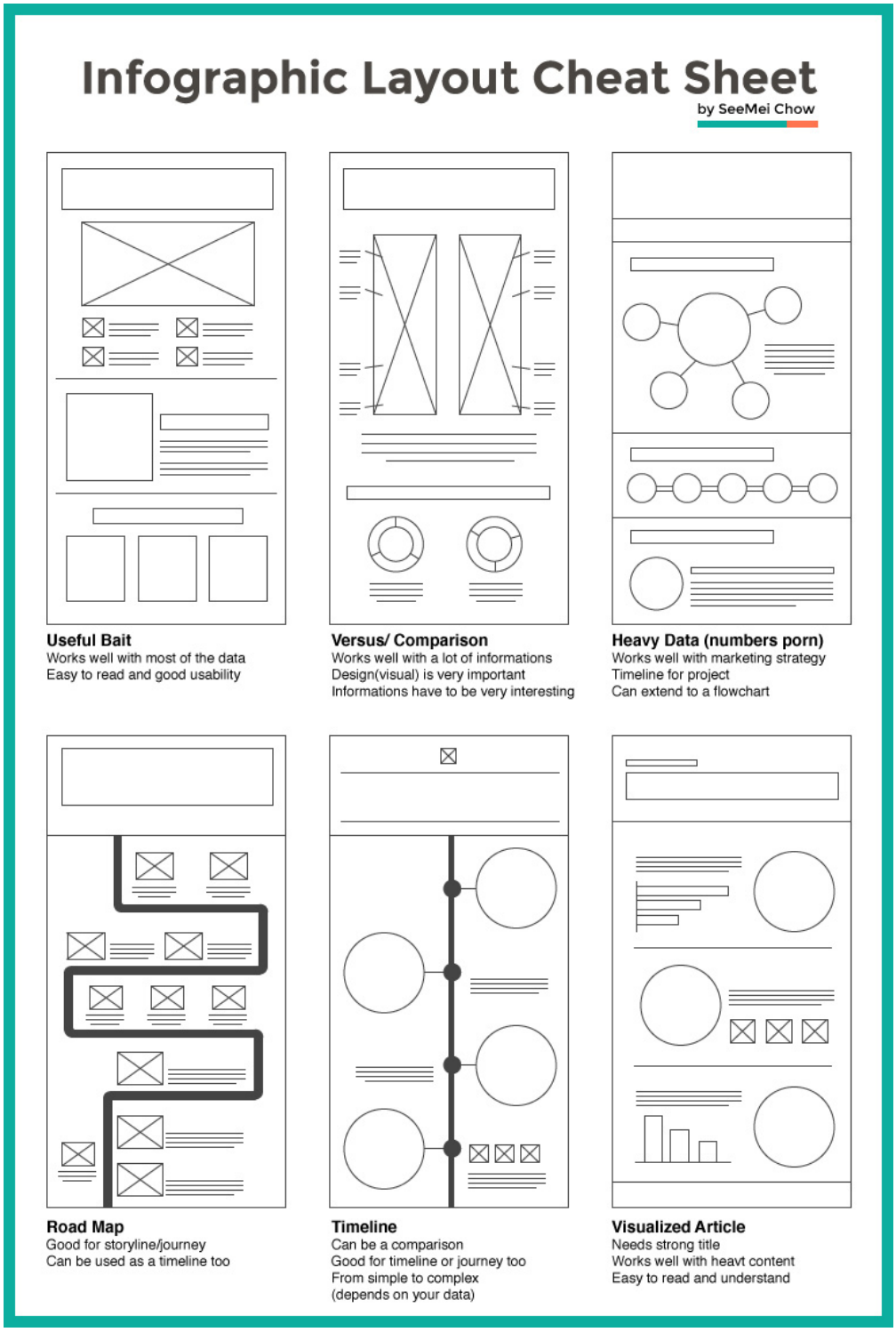
Young, A. M. and Hinesly, M. (2014). Infographics as a business communication tool: An empirical investigation of user preference, comprehension & efficiency. Social Science Research Network (January 12, 2014). http://dx.doi.org/10.2139/ssrn.2548559

Appendix A: Workshop Agenda

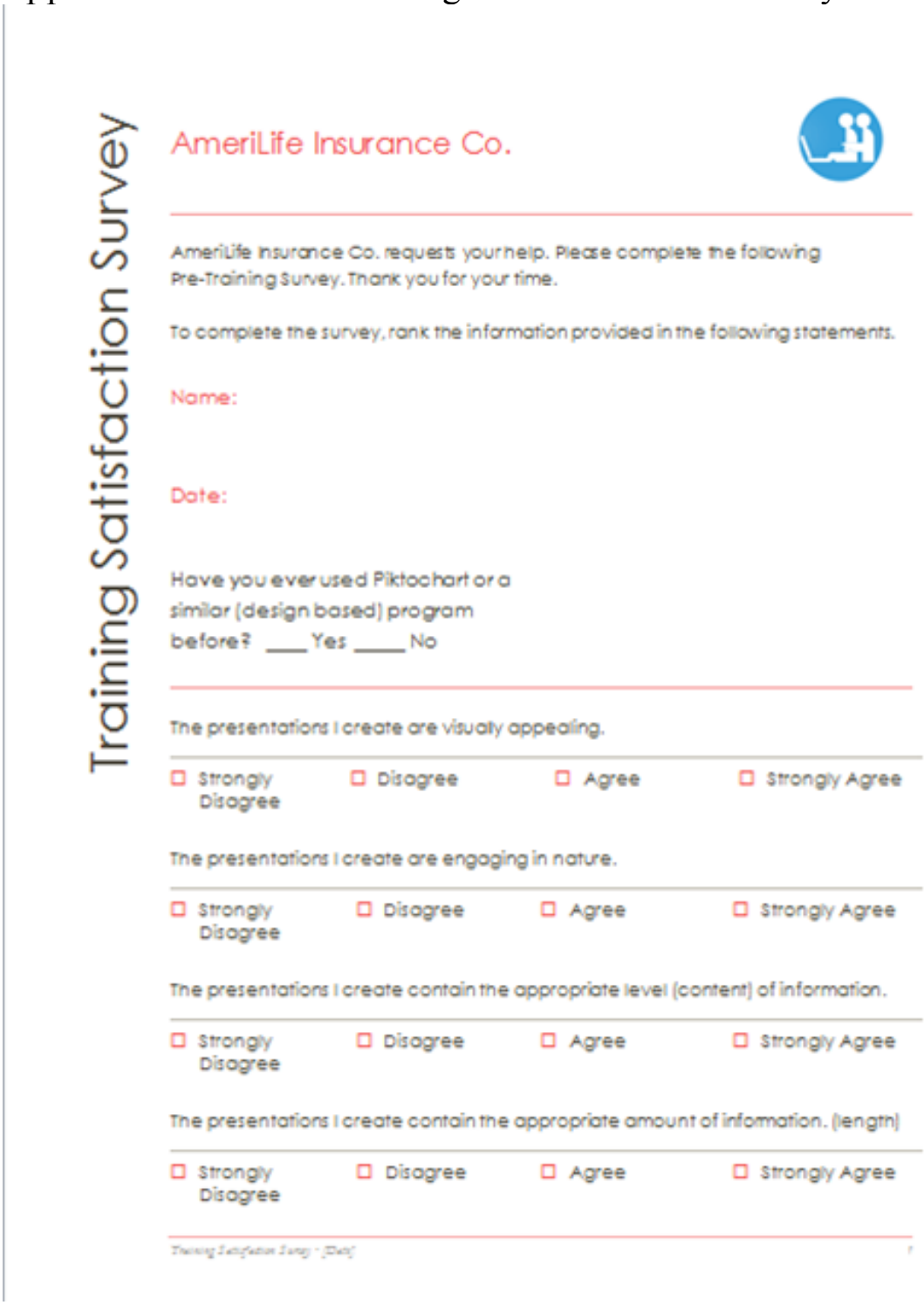
Topic	Time Estimated
Introduction and Administration of Pre-test	12:00-12:05
Accessing Piktochart	12:00-12:05
Basic Pikotchart Website Navigation	12:05-12:15
Choosing a Template	12:15-12:20
Piktochart Software Tools	12:20-12:30
Editing a Template	12:30-12:45
Saving and Sharing a Template	12:45-12:55
Wrap Up & Administration of Post-Test	12:55-1:00

Appendix B: Navigation Scavenger Hunt

Appendix C: Infographic Layout Cheat Sheet



Appendix D: Middle Management Pre-Test Survey



Training Satisfaction Survey

AmeriLife Insurance Co.

AmeriLife Insurance Co. requests your help. Please complete the following Pre-Training Survey. Thank you for your time.

To complete the survey, rank the information provided in the following statements.

Name:

Date:

Have you ever used Piktochart or a similar (design based) program before? ___ Yes ___ No

The presentations I create are visualy appealing.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations I create are engaging in nature.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations I create contain the appropriate level (content) of information.

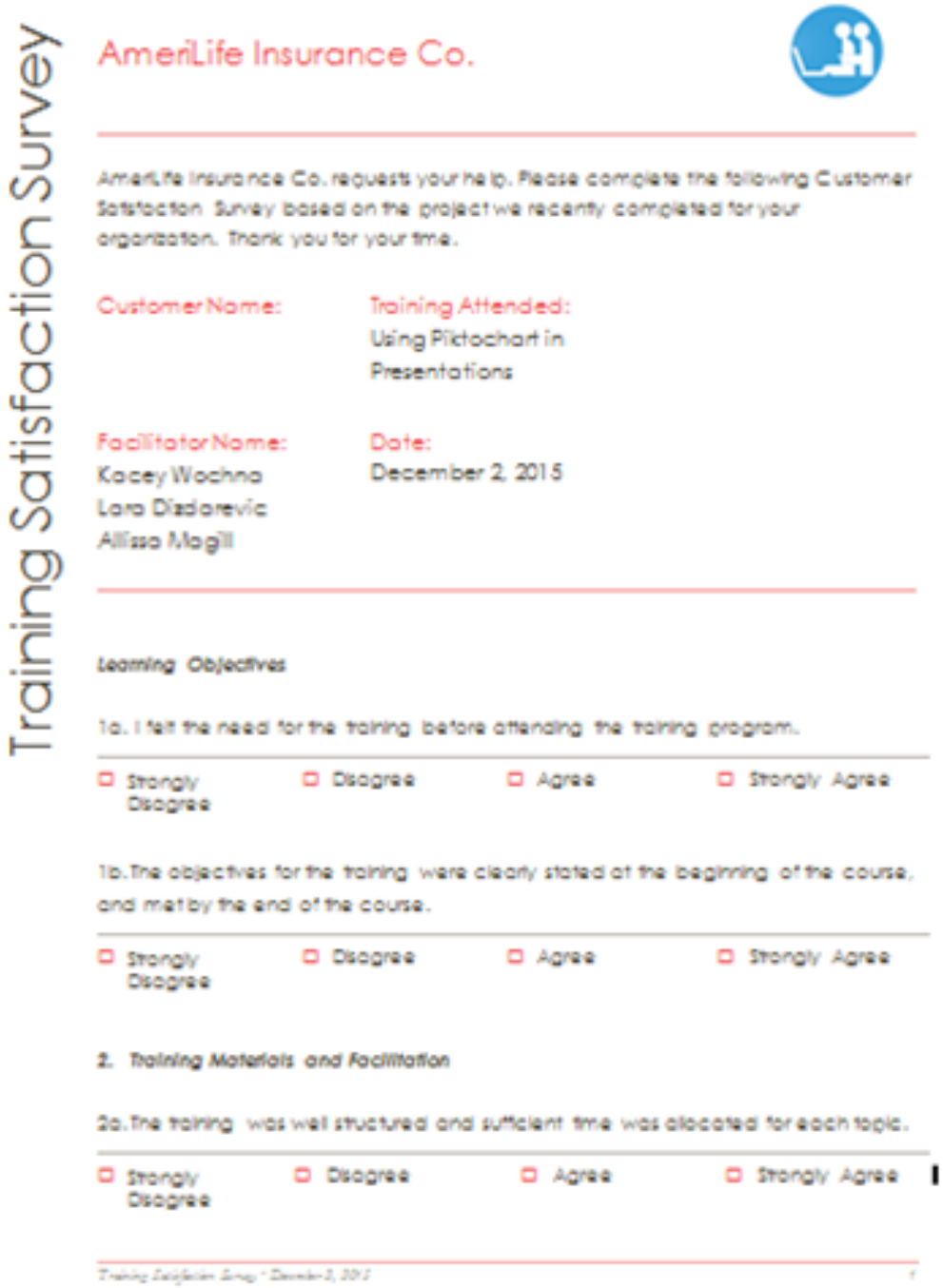
☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations I create contain the appropriate amount of information. (length)

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

Training Satisfaction Survey - [Date] 1

Appendix E: Middle Management Post-Test Survey



Training Satisfaction Survey

AmeriLife Insurance Co.

AmeriLife Insurance Co. requests your help. Please complete the following Customer Satisfaction Survey based on the project we recently completed for your organization. Thank you for your time.

Customer Name:

Training Attended:
Using Piktochart in Presentations

Facilitator Name:
Kacey Wachna
Lara Dzelarevic
Allissa Magill

Date:
December 2, 2015

Learning Objectives

1a. I felt the need for the training before attending the training program.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

1b. The objectives for the training were clearly stated at the beginning of the course, and met by the end of the course.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

2. *Training Materials and Facilitation*

2a. The training was well structured and sufficient time was allocated for each topic.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

2b. The materials presented in this training will be useful in my current position, and will assist me in creating visually appealing and informative presentations in the future.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

2c. The trainer presented the training materials in a way that was easy to understand.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

2d. The trainer encouraged questions and participation and used relevant examples during the training.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

3. *Overall Training Satisfaction*

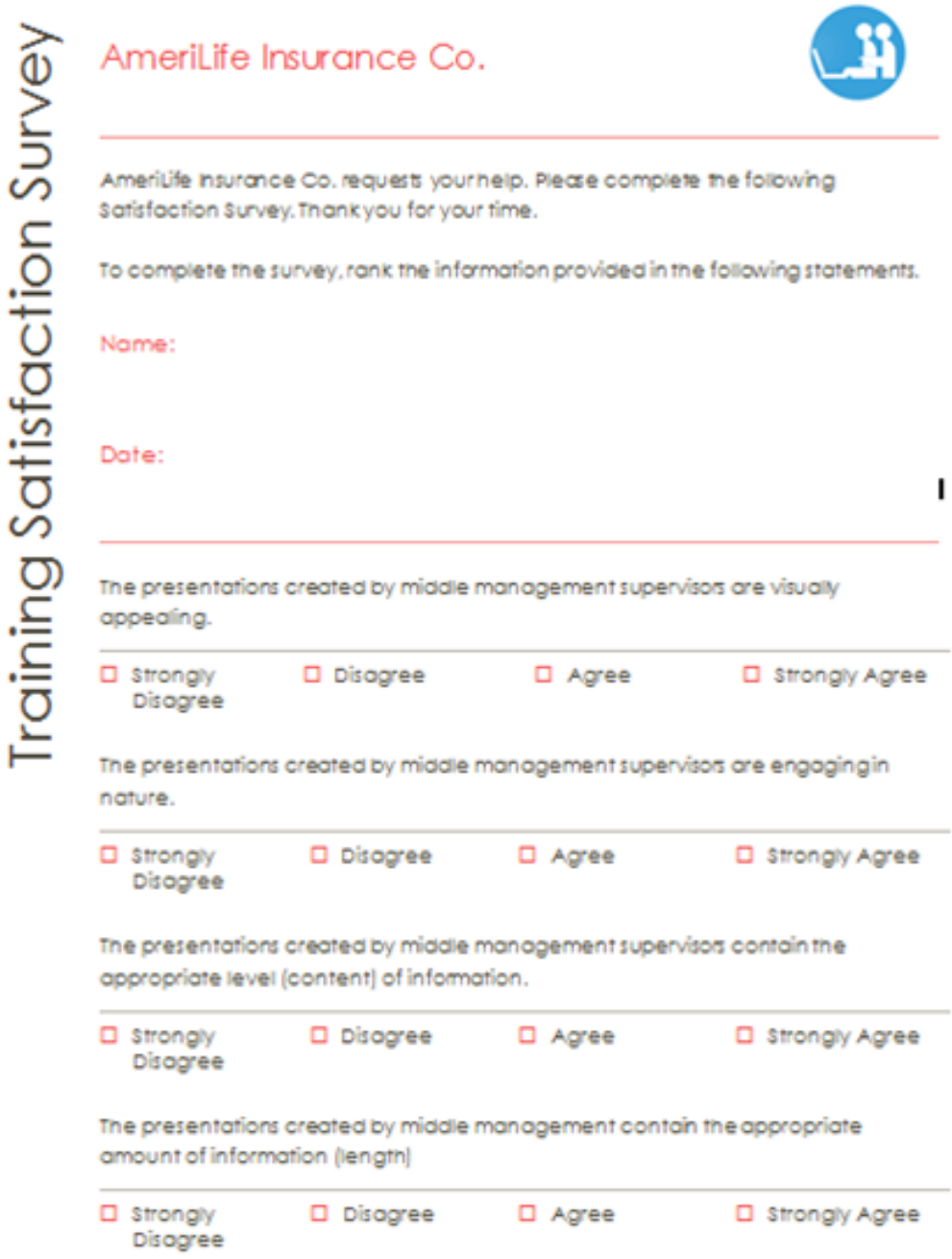
3a. I would recommend this training to my coworkers in the future.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

4. *Additional Comments*

Thank you very much for taking the time to complete this survey. Your feedback is valued and very much appreciated!

Appendix F: Upper Management Pre- and Post-Test Survey



Training Satisfaction Survey

AmeriLife Insurance Co.

AmeriLife Insurance Co. requests your help. Please complete the following Satisfaction Survey. Thank you for your time.

To complete the survey, rank the information provided in the following statements.

Name:

Date:

The presentations created by middle management supervisors are visually appealing.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations created by middle management supervisors are engaging in nature.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations created by middle management supervisors contain the appropriate level (content) of information.

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

The presentations created by middle management contain the appropriate amount of information (length)

☐ Strongly Disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

Appendix G: Post-Test Rubric

Name:_____ Date:_____

Piktochart Presentation Assessment Checklist

	Yes	No
Program Use		
Created using Piktochart account	_____	_____
Uses “infographic” or “report” format	_____	_____
Text		
Contains text	_____	_____
Text expresses ideas clearly	_____	_____
Text is concise	_____	_____
Text is content-appropriate	_____	_____
Text uses an easy-to-read font	_____	_____
Text uses an easy-to-read font size	_____	_____
Text is in an easy-to-read color	_____	_____
Text is visually-appealing	_____	_____
Charts		
Contains charts	_____	_____
Charts depict data clearly	_____	_____
Charts are content-appropriate	_____	_____
Charts are easy-to-read	_____	_____
Charts are visually-appealing	_____	_____
Graphics		
Contains graphics	_____	_____
Graphics are content-appropriate	_____	_____

Graphics are visually-appealing	_____	_____
Organization		
Uses different blocks to separate different topics	_____	_____
Block number is appropriate for amount of content	_____	_____
Blocks are logically ordered	_____	_____
Blocks have titles	_____	_____
Objects are logically ordered within blocks	_____	_____
Object layout is visually-appealing	_____	_____
Blocks are visually-appealing	_____	_____
Completeness		
Contains all relevant and necessary information	_____	_____
Aesthetics		
Theme is content-appropriate	_____	_____
Document formatting is easy-to-read	_____	_____
Document formatting is visually-appealing	_____	_____
Sharing		
Saved as a PDF	_____	_____
Emailed as attachment to facilitator	_____	_____
Total	_____	_____

Total Score: _____ / 31