Personalized Presentation Builder for Persuasive Communication

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Abstract

Presentations are effective ways of communicating information, especially in the field of education, but they might not be equally or fully beneficial and persuasive to all users. Each member of the audience might be interested in a particular topic, come from a different background and profession, and have his or her own personality traits.

In this conceptual paper, we first describe our persuasive personalization model; the Individualization Pyramid based on Yale Attitude Change Approach. The model consists of the following main sections: selecting contents by applying segmentation, adjusting comprehensibility of the text, tailoring the language of the text to fit with user's personality and recommending content that is associated with user's personal history within the related subjects. We then propose an enhanced version of our previously published presentation builder, which uses users' digital traces such as those on social media to personalize presentation content. Finally, we highlight the available tools and algorithms to assist us with developing the system.

1. Introduction

Using presentation slides to share and present context is one of the most common communication methods these days. Different presentation software tools are used every day all around the globe for accelerating information absorption and improving comprehension. These tools provide an easier way to share knowledge, resulting in faster decision making.

The economic recession has prompted organizations everywhere to look for opportunities to increase efficiency and cut costs. Online education has become a cost effective alternative to traditional training process. While the persuasiveness of the presentation is an important factor in face-to-face classroom scenarios, it becomes even more important in an online course when the "presenter" cannot interact with audience and attract and influence them. According to Yale Attitude Change (Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, 1953), to maximize the chance of persuading the audience to take action or to change their opinion, we should gain the audience attention first. We should adjust the comprehension level so the user consumes the message, make sure that the argument is accepted, and finally assure that the message is remembered. Although a regular presentation should be designed to target its audience and address their needs, it is not practical for the presenters to generate slides that fit all of their audiences' personality and background. Therefore, it would be very beneficial to the authors to be able to present different information in the same framework for different audiences.

Our research began with work on an idea based on Recommender Narrative Visualization system (Amirsam Khataei, Diana Lau, 2013). Due to the nature of visualization, the content can become very complex and to simplify the system, we looked into personalizing the presentation first. As discussed previously in our paper, Personalized Presentation Builder (Amirsam Khataei and Ali Arya, 2014), real-time rule-based personalization of the slides can be a great improvement for slide presentation software. In the publication, we developed a framework based on the impress.js software library to support a rule-based presentation builder. Impress.js is an open source presentation tool based on the power of CSS3 transforms and transitions in modern browsers. It was inspired by the idea behind prezi.com (Szopka, n.d.). In that system, the author of the presentation is in charge of adding tags to the presentation content and associating rules to it. When users log in to the system to access the presentation through their social network accounts, the system associates the relevant rules to the user profiles and generates the personalized presentation. Although such a system would address the persuasion issue, it relies extensively on the author's manual custom rules.

In this paper, we explore techniques to automate the personalization process. Based on the review of the related literature, we developed a personalization model called the Individualization Pyramid. By applying this model on top of our existing framework, we can enhance the automated generation of personalized presentations. The objective of

the model is to address the persuasion factors which are highlighted by Yale Attitude Change approach. To examine our model, we began with designing and developing a system to extract, classify, and aggregate the data from users Twitter and Facebook accounts. By aggregating the collected data, the data is processed to predict the users' personality traits, comprehensibility score, their interests, and background information. The analysis is then used to personalize the content.

In the next section of this paper, the related work and the motivation behind this research has been reviewed. We present some background information about the system, a general overview of the model, and some implementation notes. Following that, we look into some conceptual results and examples. Finally, we describe how this system can be improved and what work remains to be done in future phases of the research.

2. Related Work

We have identified two main streams of research that share common areas with the work presented in this paper. The first major area is personalizing web contents based on collected user's preferences and user profiles. One of the classic examples in this domain is content personalization models for news. Personalizing news content requires models to choose the appropriate depth of personalization, and to assess the readers' explicit expressions of interest. Lavie and Sela rely on the users personal interests to develop filtering techniques that allow users to enjoy a personalized experience when they are browsing news (Talia Lavie, Michal Sela, IIit Oppenheim, Ohad Inbar and Joachim Meyer, 2010). This approach is commonly implemented in the personalized news feed apps. Other researchers like Mobasher, Cooley, and Srivastava (Bamshad Mobasher, Robert Cooley, and Jaideep Srivastava, 2000) suggest tracking user's browsing behavior to automatically personalize the contents. The main disadvantage of using this method is the challenge of increasing the level of confidence in data accuracy. Besides, relying exclusively on this method will assist us only with collecting users' interests and navigation trends in the page.

A more popular choice among personalization techniques is applying user modeling. User modeling is an important element in the management of personal profiles and identity of users, but also a key element for providing adaptive features for dynamic personalized content. Tavrozek and Barla, pointed out the essence of requiring an adoptive architect for personalized presentation in web-based information systems using user modeling (Michal Tvarožek,

Michal Barla, Mária Bieliková, 2007). They present a model for the personalized presentation layer of a web-based information system. The model employs a set of interconnected software components that are implemented for presentation, personalization, and user modeling. The implementation supports different views on the presented data, acquisition and evaluation of user characteristics, and personalization. The model that they proposed structures the user model solely based on personal interests, and it is missing other user characteristics such as readability or personality traits.

All the above approaches emphasize getting the audiences' attention by suggesting content that belongs to a topic of interest, but in our opinion, personalization needs to go one level deeper. Personalization factors such as personal interests or readability score are tools to gain user attention and build more informative dynamic contents. However, improving content visibility and readability are not the only principle elements to enhance the persuasiveness of the contents. In this paper, we investigate other challenges like understanding the reader's personality, proper combination of reader's personal goals, use of personal content, and balance between authorship and flexibility.

The second major stream that shares a common area with our research is the field of different interactive storytelling models. These models allow users to change the unfolding of a story while keeping the general idea of the story the same (A. Piacenza, F. Guerrini, N. Adami, R. Leonardi, J. Porteous, J. Teutenberg and M. Cavazza, 2011). Although the interactivity enhances the data discovery and analysis, due to verity of data complexity and audience requirement, different genres have been designed. The genres, together with interaction and core contents, must balance a narrative intended by the author with data that can be seen by the user. Based on balancing the proper level, Segel and Heer introduced Martini Glass Structure, Interactive Slideshow, and Drill-Down Story genre (Edward Segel and Jeffrey Heer, 2010). Other techniques of narrative storytelling have been presented by various researchers. Brooks (K. M. Brooks, 1997), Aguierre Smith et al. (T. Smith and G. Davenport, 1992) (T. Smith and N. Pincever, 1991), Cesar et al. (P. Cesar, D. Bulterman and L. Soares, 2008), Bocconi et al. (S. Bocconi, F. Nack and L. Hardman, 2008) Zsombori (Zsombori, M. U. J. W. D. W. I. K. V., 2008), and Shen et al. (H. L., G. D. Edward Yu-Te Shen, 2009) have designed systems that organize video content into a narrative format. Steiner and Tomkins have used the narrative event adaption in virtual environments (J. Vanderdonckt, N.J. Nunes and C. Rich, 2004). Narrative event adaption focuses on reducing the environment interactivity, which results in giving the author more control but may

also lead to less immersion and engagement in a virtual space. They believe that event adaption allows the system to keep a balance between user control and authorial direction. In addition, they have developed an adaption manager for the purpose of their studies, which exploits information regarding the event, the user, and the world state. Although finding a balanced point between user control and authorial direction remains a challenge, this study shows that event adaption and narrative storytelling can improve comprehension. Most of the above methods are developed for virtual environments, and some of these techniques are designed for a specific domain of applications. It could be beneficial to design a personalization system that allows author-driven elements, like selecting the narrative structure, and reader-driven elements, such as interactive exploring, within a presentation framework. Using HTML-based frameworks such as impress.js allows such features, as utilized in our approach.

3. Proposed Personalization Model

Members of the audience may have different personalities, backgrounds, and comprehensibility preferences. Despite all our differences, when we look closely, we can find common similarities such as goals and interests among ourselves. If we define every individual as a pyramid, each side of the pyramid represents a side of the person's characteristic. When we put all these pyramids inside a sphere, it creates a Crowd Sphere. The Sphere represents our society, where the intersection of the pyramids reveals the individuals' similarities. As illustrated in Figure 1, we divide individual's basic characteristics into three main layers of features: demographic segments (such as age and

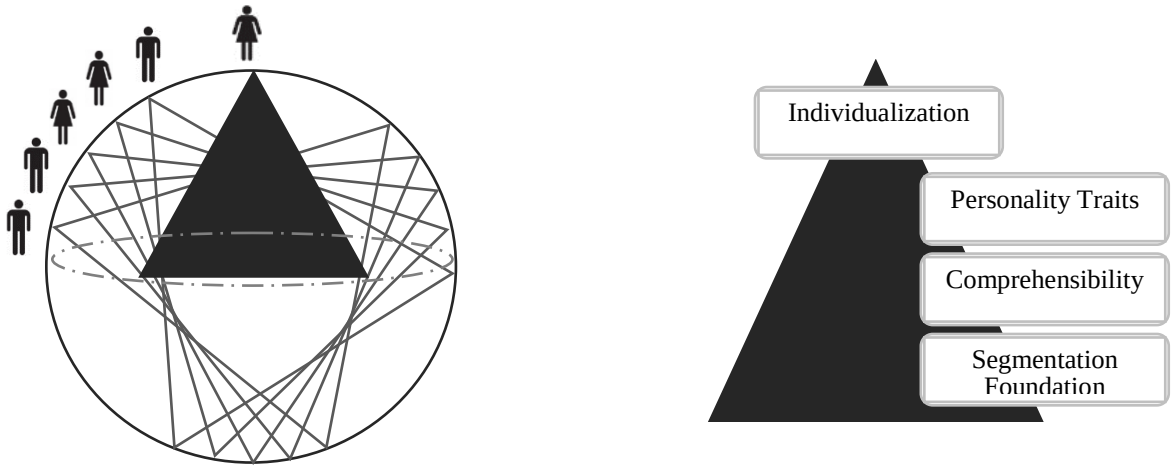

Figure 1 – Individualization Pyramid within Crowd Sphere

gender), comprehensibility level, and personality traits. These types of features are usually shared with a larger group of people. However, personal features like family history, personal memory, or geosphere type of data are shared with smaller crowds. We represent these more intimate features in a fourth layer called Individualization. In order to achieve the highest chance of influencing the audience in a presentation, the presenter must have access to the above features and for the audience in order to create personalized content. To design a system to gather this information and personalize the content, we developed Individualization Pyramid based on Yale Attitude Change approach objectives. Our hypothesis is that there is a large enough heterogeneity in responses to this system that, on average, effective influence strategies could have positive persuasive effects for the majority of individuals.

3.1.Segmentation Level

As displayed in our pyramid, the easiest rational method to begin understanding individuals is basic demographic segmentation such as age, gender, or marital status. Gender has always been one of the main segments for comparison. Rachel Croson and Uri Gneezy reviewed the literature on gender differences and identified robust variations in three main sections: risk preferences, social preferences, and competitive preferences (Rachel Croson and Uri Gneezy, 2009). In addition to different preferences, studies prove a relation between gender differences and persuasive communication. For instance, findings revealed that although men are more inclined to present criterion-based arguments, women are more likely to invent their own (Andrews, 1987). Getting recipient attention marked by Yale as the first process to determine persuasion success. Although age can become a factor in other levels of the pyramid too, the main focus in this level is content preference and filtering contents within the given domain. For instance, in the entertainment domain, it has been examined how adult age influences media content preferences, and as a result, increases the chance of getting their attention (Marie-Louise Mares and Ye Sun, 2010). In this layer, we are not only limited to well-known basic segments, but also it is the author's job to select custom classification based on the argument's domain.

3.2.Comprehensibility Level

The second level of the pyramid is comprehensibility adjustment. Text comprehensibility is the sum of all the factors in textual material that affect the readers' level of understanding and interest in the material (Dale and Chall. 1949).

This can be a function of text characteristics, reader educational level, social background, and personal interests. As suggested by Yale Attitude Change Approach, in order to increase the likelihood of acceptance and retention, the intended audience must first understand the presented message. We have seen numerous experiments around the concept of comprehension's role in persuasion (Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, 1953). After conducting three experiments involving 885 subjects, Alice Eagly demonstrated how lowering comprehensibility lessened acceptance of the conclusion of a message (Eagly, 1974).

3.3.Personality Traits Level

The third layer is matching the format and wording used in the presentation to the recipient's persona. One of the common methods to classify individuals is based on the five major trait domains of human personality: Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Atkinson, Rita, L.; Richard C. Atkinson; Edward E. Smith; Daryl J. Bem; Susan Nolen-Hoeksema, 2000). In a sample of 324 survey respondents, the contents were evaluated more positively, as they were more coherent with the participants' dispositional motives (Jacob B. Hirsh, Sonia K. Kang and Galen V. Bodenhausen, 2012). Such a result suggests that persuasive appeal's effectiveness can be increased by aligning the message framing with the audience's personality traits. This means improving the chances of accepting the argument and changing audience opinion. While classification of personality using any of the existing models has the risk of stereotypical treatments, combination of this layer with other layers of our model reduces such risk and increases the chances of a true "personalized" presentation.

3.4.Individualization Level

Creating a sense of trust and credibility is one of the persuasiveness strategies. Family history, personal memories, or photos from past life events are great sources of information that distinguish each individual. Intuitively, we should treat data that falls into the above categories just like any other background information. The only difference is that we should collect these types of information from social media accounts instead of conventional places like journals, books, or other reliable sources. Since the actual publisher of the information is the user, the user should not have concern with approving the applicability and credibility of the data. A simple example could be a restaurant's online flyer to encourage people to reserve the restaurant for their future events. Incorporating the recipient's favorite colors,

art style, or even a personal photo from the individual's own happy past events may enhance the sense of positive emotion and trust. This may increase the persuasiveness as compared to using a generic restaurant advertising image. Although this may raise privacy concerns, the proposed model is designed to respect the existing privacy setting in the user's social network account.

4. System Design

In the proposed system, our first process is to build user profiles by gathering information from users' social network accounts and digital traces. Based on the user profiles, our goal is to apply the Individualization Pyramid methodology to construct personalized presentations. The system consists of a multi-stage process where each stage corresponds to one of the Pyramid layers, and includes two external actors: the author and the regular end user (the audience). The author is responsible for providing three critical requirements for the system: content template, type of social media information that is needed, and content rules. The author's roles are illustrated as the inputs into the system in **Error! Reference source not found.**.

In the content (presentation) template, the author identifies the places which require personalization with a unique ID. These places are designed to hold either textual information or multimedia content. This ID will be used later in the rule section as the assigned location for the personalized contents in the template.

As for the social media accounts, we have decided to support multiple social network accounts, since each social network is designed for a different purpose/domain. For instance, LinkedIn is an excellent source to collect information related to the audiences' professional life, while Facebook is great source to collect data about their personal life.

Content rules are the essential core logic that is fed to the personalization engine. The content rules collect, analyze, and personalize the presentation contents. There are two types of rules: goal-based rules and manual rules. The goal-

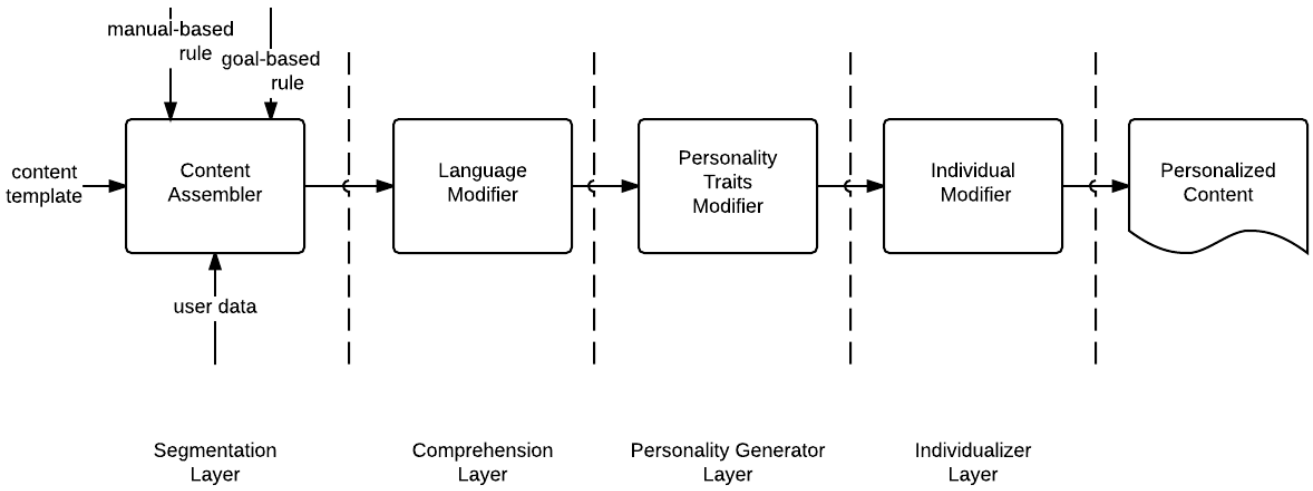

Figure 2 - System overview

based rule consists of facts and goals. Facts are essentially users' data and goals are topics that users' can potentially be interested in, such as increasing savings, higher education, etc. In order to activate a rule, the system must obtain all the necessary criteria (user data) for the rule. Once the rule is activated, the system applies the content topic in data mining and recommends the most relevant content based on the criteria. **Error! Reference source not found.** illustrates an example of a goal-based rule.

Consider the example below of collecting content that is related to children's college fund plan as part of a presentation about top ten investment advice for families. In order to activate the rule to collect the data, the system needs to know the family annual household income range, number of children, and the children's age range. While the goal is to recommend a contents' topic given by the author like college fund, when the required facts are not available, the system will look for a more general rule or topic. The system will move back to the default content in the presentation template if it fails to find reliable user data. This way, we assure that the system is displaying the most relevant content to the user.

In cases when more than one rule are activated for a particular personalizable content item, weight values are provided that allow combining the content for each of the rules into one item. As shown in Figure 2, this is done in

the first stage of the proposed system, which is identified as Content Assembler. This stage uses content rules to select various content items and combines them into personalized items for the presentation. This combination borrows the concept of a node-based structure from interactive storytelling and assembles the content nodes based on their connectivity features, similar to a LEGO toy.

```
<rule id="longTermFund">
    <contents fact="income;childrenAge" weight="20">College Fund</contents>
    <contents fact="income;maritalStatus" weight="60">Retirement Fund</contents>
    <contents fact="income;maritalStatus" weight="20">Life Insurance</contents>
</rule>
```

Figure 3 – Goal-based rule example

In addition to creating goal-based rules, it is optional for the author to design manual rules. Manual rules are strict rules where the author gives the actual content in the rule file instead of relying on the recommender system. Another

```
<rule id="age">
    <content id="age-advice" value="20u">Are you ready for your school expenses?</content>
    <content id="age-advice" value="20to35">You absolutely must save for retirement. <br></br>Under no cir
    <content id="age-advice" value="36to50">You absolutely must be honest about whether you're ready <br><
    <content id="age-advice" value="51to65">You absolutely must explore long-term-care insurance.</content
    <content id="age-advice" value="66o">You absolutely must scope out your Social Security options.</cont
</rule>
```

Figure 4 – Manual rule example

purpose of manual rules is to allow the author to overwrite the contents which are generated by goal-based rules. Figure illustrates a sample of a manual rule.

Once the system has established the base content, it starts simplifying the text in the presentation as well as altering its personality tone. Last but not least, as part of the individualization stage, the system gathers personal type of information to support the assigned goals for the presentation. The personalization is now complete and the system can display the final result to the audience.

5. Implementation

The system is implemented in such a way that it first displays a login page and sends a request for the results to be submitted by the user. Once the user logs in, the first task of the system service is to begin building and aggregating user profiles. The process is summarized in the following four steps:

- Collecting the semantic user profile data

  The data is collected by calling social media designated APIs to collect data such as name, age, profile picture, and gender. This step also includes building semantic information based on the domain-specific data collection on non-semantic text that appears in the user's social network accounts.

- Identifying user professional content preferences and knowledge level

  This step is an essential requirement for the comprehension layer. In this step, we construct a reading proficiency profile based on topic preferences and collaborating filtering. As discussed by Collins Thompson (Collins-Thompson, 2011) and then by Tan (Chenhao Tan, Evgeniy Gabrilovich, Bo Pang, 2012), the learning algorithms could be applied based on observations like historical satisfied clicked documents, semantic or syntactic features of current and past queries, and other extracted professional preferences from user social network accounts (Fabian Abel, Eelco Herder, and Daniel Krause, 2011).

- Predicating user personality traits

  Backed by psycholinguistic analysis (T, 2010) (Gou, L., Zhou, M. X. and Yang, H, 2014), it is possible to

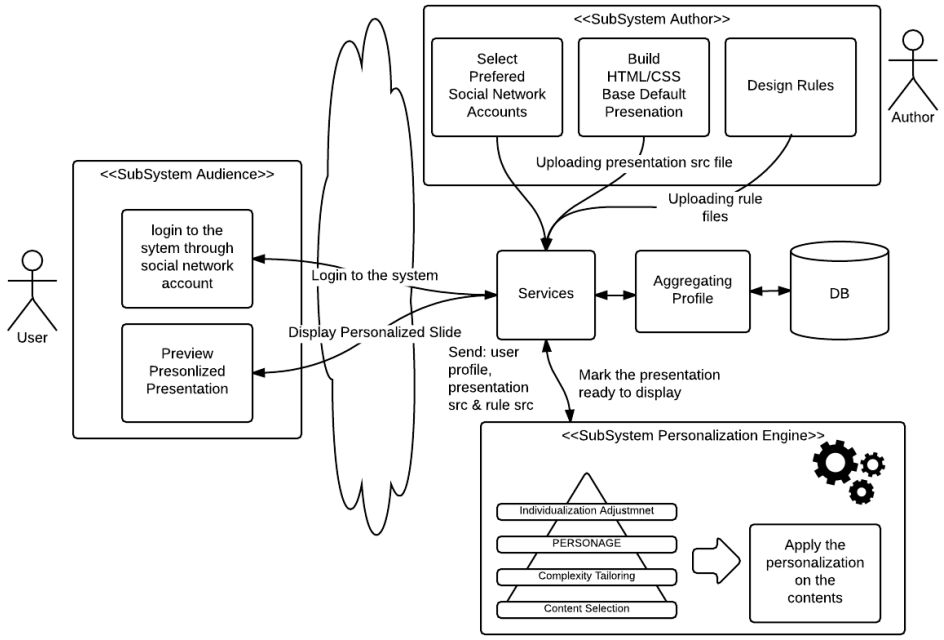

Figure 3 - Personalized Presentation Builder detailed design

predict users' personality traits and construct their personality profile. To achieve this task, we are depending on System U, a system to collect linguistic signals from a person's social network activities to predict the personality portraits (Hernan Badenes, Mateo N. Bengualid, Jilin Chen, Liang Gou, Eben Haber, Jalal Mahmud, Jeffrey W Nichols, Aditya Pal, Jerald Schoudt, Barton A Smith, Ying Xuan, Huahai Yang, Michelle X. Zhou, 2014).

- Enriching the content by personal data

  In order to add the individualization piece of the profile and create a sense of personal connection to the content, a part of the profile consists of personal photos. Based on the specified domain and criteria by the author, and relying on CBIR and tags that are associated with the photo albums, the system collects users' publicly available photos. This is a light individualization version since we are just going to use only personal images.

After the service aggregates all the above data, we pass them to the personalization engine followed by the presentation template and rule files as illustrated in Figure 5.

The first task of the engine is the segmentation layer. Besides the rule content which is designed by the author, we look into novel adaptation of summarization techniques. The summarization techniques are based on creating clusters of text spans with similar word distribution to use as representatives of within-document topics (Regina Barzilay and Lillian Lee, 2004) (Ani Nenkova, Sameer Maskey, Yang Liu, 2011). Such a model has been used in many tools like Open Text Summarizer by Nadav Rotem or TextTeaser and includes information ordering as well as exclusive summarization.

While the system is gathering and organizing contents as the foundation of the presentation, it initiates readability assessment using tools such as Text Readability Consensus Calculator or New Dale-Chall Readability Calculator (Scott, n.d.). The assessment is a requirement to assure that the selected content is the best match to the readability score of the audience. In addition to using the assessment to select the content, the system decides whether to simplify the text by comparing the user readability assessment and the selected content complexity level. As discussed by Woodsend and Lapata Sentence Simplification Model (Kristian Woodsend and Mirella Lapata, 2011), the

simplification process includes sentence splitting using Stanford CoreNLP, substituting uncommon words with more familiar words or phrases (Goldman, n.d.), and deleting some elements of the original text. After altering the text, the model is verified to make sure that the output is grammatically correct and coherent.

The next step is to alter the text to match the reader's personality. The tool that our system is using is PERSONAGE (Mairesse, F. and Walker, M, 2007). PERSONAGE (PERSONAlity Generator) is a highly parameterized text generator to automatically generate language that varies along personality dimensions.

The last phase before publishing the personalized version of the slides is to replace the images, marked to be personalized in the presentation source file, with the most relevant image extracted from the user profile, as defined by the search criteria.

Over time, we can improve the accuracy level of the information based on the feedback from the user and the historical digital traces we kept in our system. This is based on information such as user's past ranking on content relevancy, time spent on the slides, and overall user satisfaction.

6. Results and Examples

For a better demonstration of the methodology, we have selected one of the US Securities and Exchange Commission (SCE) publications as a conceptual example. The title for the SEC's publication is Financial Navigation in the Current Economy: Ten Things to Consider before You Make Investing (Financial Navigating in the Current Economy: Ten Things to Consider Before You Make Investing Decisions, n.d.). Although the title is self-explanatory, there is no guarantee that its content can be the most suitable match for all the readers' interests. The publication has selected generalized topics around making smart investment decisions. Despite the apparent simplicity of the publication's objective, the SCE's main mission is to educate the audience, protect investors and families, maintain fair, orderly, and efficient markets, and facilitate capital formation. This can be achieved in different ways, such as advising first-time investors to turn to the markets to help secure their futures, pay for homes, and send children to college. On the other hand, the SCE can add fewer additional goals for families with high income, such as guiding them carefully with investing in different sectors to grow their capital while also contributing to the creation of jobs for others.

For better demonstration of the concept, in this section we are referring to two imaginary families, Smith and Jones. Table 1 Summarized background information about each family.

	Marital Status	Annual Income	Children Age
Smith	Married	$250,000	10, 13
Jones	Widow	$75,000	2

Table 1 - Smith and Jones family persona

Based on our Individualization Pyramid, the first phase is the segmentation layer. As mentioned before, this phase works more like a Lego game. The most relevant collected contents are put together within the given presentation template. In the SCE document, one of the slides is titled “Draw a Personal Financial Roadmap”. In the financial roadmap, the readers are looking to figure their goals based on their risk tolerance. Due to level of income, the Smith family can contribute higher amounts to their retirement than the Jones family. Possible collected content for the Smith family could be:

“Plan your early retirement. If you have more than $250 in any one bank, that’s the current FDIC limit per depositor. Consider other options such as purchasing US savings bonds or treasury bills directly from the federal government at savingsbonds.gov.”

While for the Jones family, the system may collect following content:

“Saving at least 10 to 15% for retirement at an early age is a wise strategy. You will have to save less if you start early, and your savings will have longer to grow. Not all savings are guaranteed, such as 401K and stocks, so choose a savings option that is comfortable for you.”

Although we cannot always accurately predict each individual’s goals, people with similar lifestyles form groups with similar goals, and our system will have the ability to improve overtime.

As mentioned in the system design, once the foundation of the content has been identified and constructed by the system, the next steps are two levels of personalization on the selected contents. Those steps are adjusting the

comprehensibility level and tailoring the personality language of the content for each reader. For the first phase, within the finance domain, the following sentence can be chosen as an example:

“The principal concern for individuals investing in cash equivalents is inflation risk, which is the risk that inflation will outpace and erode returns over time.”

Assuming the readability score for the sentence is higher than the reader’s, thus the system simplifies the sentence:

“The principal concern for people investing in cash equivalents is inflation risk, which is the risk that inflation will run faster than/win over and wear away returns over time.”

Since technical nouns such as “inflation” cannot be simplified, the system adds a short background to improve the overall comprehensibility of the sentence using Wikipedia public API:

“The principal concern for people investing in cash equivalents is inflation risk, which is the risk that inflation will run faster than/win over and wear away returns over time. In economics, inflation is a sustained increase in the general price level of goods and services in an economy over a period of time.”

Each individual from both families has their own personality traits and language. As discussed previously in Section 3.3, talking with user language could improve the sense of trust and the connection between the reader and author. This section of the sentence is eventually being processed by PERSONAGE. We are not going to discuss this further since it has been already discussed in more detail separately (Mairesse, F. and Walker, M, 2007).

After completing all the above steps, there is still room to narrow down the personalization level for an individual. Every person comes with personal background and shared moments with families and friends. This information may have a variety of types, from factual information to basic geospatial information. Assuming Jones’ house is located at East Point, Georgia, by accessing the house location, the system can enhance the presentation with more accurate quantitative information for the suggested long-term investment plan.

Let’s move back to the Jones family retirement investment example. Now the paragraph could be enriched as follows:

"Saving at least 10 to 15% for retirement at an early age is a wise strategy. You will have to save less if you start early, and your savings will have longer to grow. Not all savings are guaranteed such as 401K and stocks, so choose a savings option that is comfortable for you. One of the investment opportunities is in real-estate. Just four years ago, there were less than 25 annual starts in your neighborhood, and today it has grown to nearly 200 annual starts. It looks like the recovery is starting to occur even in the most exurban parts of Atlanta."

7. Conclusion and Future Work

In this paper, we have discussed our proposed personalization model, conceptual system design, and described the required implementation process for each component. Our proposed system is based on a multi-layer Personalization Pyramid consisting of content assembler, comprehensibility improvement, personality-type modification, and individual customization. This model uses a corresponding 4-stage pipeline where the author's initial content and rules, in addition to user data, will be used to create a final personalized presentation. Our implementation uses a variety of existing components and tools that are customized for our requirements, and also uses our own custom-designed framework.

The initial results demonstrate the ability of our system to generate personalized content in a semi-automated way, using templates and rules provided by the author and information that is collected from user's social media. While further research is required to fine-tune all major parts of our system, the current design and findings are promising and show the potential use in many educational and otherwise informative applications, such as customer briefing, etc.

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