The influence of bootstrapping in testing a model of motivation and visit intention of generation Z to the attractive building architecture destinations

R Purwaningsih1*, D A Sekarini1, A Susanty1, S N W Pramono1
1Department of Industrial Engineering, Faculty of Engineering, Diponegoro University, Jl. Prof. Soedarto, SH, Tembalang Undip Campus, Semarang, Indonesia 50275

ratna.tiundip@gmail.com

Abstract. This research aims to identify the impact of e-WOM on the enthusiasm of generation Z to travel in architectural tourist attractions using the theory of reasoned action. The four variables used in this analysis are e-WOM, attitude, subjective norm, and visit intention. Structural equation modeling (SEM) with Amos software is used to assess the impact of independent variables on the dependent variable. One of the prerequisites for using SEM is that the data is normally distributed; however, the data in the analysis was not normally distributed, so the bootstrapping process was used to solve this. This article focused on explaining the data processing process in SEM to concern the data testing and the effect of bootstrapping in the model forming and not discuss the model result, only compare the result before and after bootstrapping process. The most influential variable in each construct is the same between before and after bootstrapping. The goodness of fit result before bootstrapping in all categories is poor fit but after bootstrapping only one category is poor fit and others are a good fit.

1. Introduction
The World Tourism Organization forecasts that the tourism industry will become one of the world's biggest and fastest developing sectors in 2016. Tourist visits are expected to hit 1.8 billion by 2030, with $ 1.03 billion in foreign exchange produced. A person's decision to travel is determined by push and pull factors, push factors are basic encouragement, and pull factors are destination-specific qualities [1]. The visitors are the guiding force, and the tourist destination is the pulling force. These push and pull factors influence tourists' travel decisions. According to World Tourism Organizations, approximately 95% of web users use the internet to gather tourism-related information, and 93% of web users visit tourism websites when preparing for a vacation [2]. As a result, social media engagement can be considered as one of the driving forces influencing tourists' perceptions.

According to the survey results conducted by the Indonesian Internet Service Providers Association, there were 143.26 million people in Indonesia who use social media, 49.52% of social media users were between the ages of 19 and 34 [3]. Facebook is the most popular social media platform for internet users which reaches 50.7%, while 17.18% of internet users accessing Instagram, 15.1% accessing YouTube, and 1.7% accessing Twitter [4]. These details show that majority of internet users in Indonesia are people born after 1980 or Generation Y (the birth year 1980-1995) and Generation Z (the birth year 1996-2009). Generation Z is the subject of this research, this generation is the first generation to be born in the age
of the internet [5]. Previously, Generation Y was still transitioning to the internet, while Generation Z was born when the technology was available. Also, generation Z has a significant effect on family vacation decisions [6]. Generation Z was born when the infrastructure was open, when they have a positive or negative experience of something, they will share it on social media [7]. The tourist attraction of building architecture is one of the most popular tourist attractions for selfie-tourism among Generation Z proven by 293,000 post-tour images of Borobudur Temple, 232,000 photo posts of Prambanan Temple tours, 254,000 post Tamansari photos, 290,000 post photos of Lawang Sewu tours, and others on the hashtags used on Instagram.

The research objective is to determine the impact of e-WOM on Generation Z travel motivation and develop suggestions to tourism service providers in improving the design of tourist destinations of an architectural tourist attraction by using the theory of reasoned action. The focus of this article is to describe the step of data processing on the research using SEM (structural equation modeling), especially on using bootstrapping process. The data can be processed used SEM only if the data has a normal distribution, sometimes the data is not normal and need more effort to increase the amount of data by collecting data. Bootstrapping is a solution where SEM generates large amounts of data so that it is sufficient to produce data that is normally distributed. The data of this study amounted to 200 respondents and which could be processed were only 150 data, which were later found to be not normally distributed. Bootstrapping generates by adding 1000 data, many times more than the primary data. It is necessary to ensure that the research results do not change from the results of the initial model processing before bootstrapping is used. However, because the hypothesis test is only valid if the data is normally distributed, there is no comparison of the results of the hypothesis test (model testing) and only comparisons are made on the most influential variables for each construct.

Electronic word of mouth (e-WOM) is community members sharing their views on social media. One of the latest phenomena is the posting of travel images in new destinations that many people have never heard of or seen. Today's visitors, especially those from Generation Z, are more likely to photograph and post fascinating tourism attractions on social media; this is known as self-nutrition. Consumer behavior is the study of how individuals, communities, and organizations select, consume, and use products, resources, concepts, or interactions to meet their needs and desires [8]. The theory of reasoned action is used to evaluate the visiting intentions of Generation Z, the theoretical study of people's behavior, and explains a systematic integration of attitude components to guide forecasts and better interpretations of behavior [9]. Four variables in the theory used are e-WOM, attitude, subjective norm, and visit intention, each of the variables consist of some indicators. This research uses structural equation modeling (SEM) and bootstrapping method with Amos software to evaluate the impact of independent variables on the dependent variable under consideration to obtain results that can justify the study's objectives. One of the prerequisites for using SEM is that the data is normally distributed; however, the data in the analysis was not normally distributed, so the bootstrapping process was used to solve this. Bootstrapping is a method of validating a multivariate model that involves the resampling of a large number of original samples and estimating the model from each of the respondents' subsamples [10]. In addition to dealing with data inconsistencies, the performance of the bootstrapping process in the form of a standard error value is used in this analysis to measure the suitability of the model, whether the model with its parameters is suitable or not.

2. Methodology

2.1. Theory reasoned action

Human behavior is studied using the principle of reasoned action model. According to social psychology research, a person's intention for such actions is a deciding factor in the person engages in certain behavior [11]. Furthermore, the decision to do or not do such actions is determined by two fundamental determinants, the first of which is related to attitude (attitude towards behavior) and the second of which is related to social control, namely subjective norms. Figure 1 depicts a simplified representation of the theory of reasoned action.
Figure 1. Reasoned action theory.

According to the theory, behavior is equated with the assumption that doing something would result in certain outcomes, as determined by an assessment of the expected outcomes. Generally, the more positive the attitude, the stronger the intention to buy behavior and vice versa. Subjective norms lead to the sense of societal demand by more prominent individuals. The perceived expectation from other people's opinions to do or not do something affects the behavioral intentions. If anyone enjoys the action, the desire to act on it would be stronger [12].

2.2. Structural equation modeling & boot-strapping methods

Structural Equation Modelling is a synthesis of two distinct mathematical approaches, first is factor analysis developed in psychology and psychometrics, and the second is simultaneous equation modeling developed in econometrics [13]. There are two kinds of SEM: Covariance Based SEM and Component or Varian Based SEM. Variance is a measure for metric variables which measures the divergence of results from the mean of a sample. The variance is defined mathematically as the average square value of the standard deviation. Covariances indicate a linear relationship between two variables, respectively X and Y. The covariance is positive if a variable has a positive linear relationship. The covariance is negative if the relationship between X and Y is inverse. If the two variables X and Y have no interaction, the covariance is zero. The condition that the data have a multivariate normal distribution is one of the most critical assumptions in CB-SEM. The bootstrap method is one method for dealing with unusual data [14]. Bootstrap is a resampling technique that uses the initial sample, which is thought to be representative of the population [15]. Bootstrapping is a method of validating a multivariate model that involves resampling from a large number of original samples and estimating the model from each of the respondents' subsamples [16].

The research sample size of respondents was 200, chosen with the consideration that the respondent is generation Z and active on social media (Facebook, Twitter, and Instagram). The justification for deciding on 200 respondents was to meet the criteria of the study using the SEM process, which required a minimum sample size of 100 to 200 respondents [16].

2.3. Conceptual model

There are four constructs in this model: Electronic Word of Mouth (e-WOM), Attitude, Subjective Norm, and Visit intention, Figure 2 depicts the conceptual model. This mathematical model's variables are latent, and each variable has its predictor. The relationship will be checked to see if it has a meaningful relationship or has not based on these factors.

Figure 2. Conceptual model.
According to the model in figure 2, some hypotheses included in this study are:

- **H1**: E-WOM significantly affects attitudes towards the tourist attractiveness of building architecture
- **H1a**: Attitudes towards the architectural tourism attractiveness of buildings have a significant effect on the visit intention.
- **H2**: E-WOM significantly affects subjective norms
- **H2a**: Subjective norms significantly affect the visit intention to the building's architectural tourist attraction
- **H3**: E-WOM significantly affects the visit intention to the tourist attraction of the building architecture

The conceptual model in Figure 2 indicates that the researchers want to know the impact of e-WOM using the theory of reasoned action in producing the visit intention and predicting the tourist visiting behavior. The theory of reasoned action proposes two variables that affect a person's intention: attitude and subjective norm. The indicators used in this research to represent the construct are described in detail in Table 1.

| No | Construct         | Indicator code | Statement                                                                 |
|----|-------------------|----------------|---------------------------------------------------------------------------|
| 1  | **Electronic Word of Mouth** | eWOM1       | I often read travel reviews on social media to find out what memorable tourist destinations to visit. |
|    |                   | eWOM2       | To make sure I choose the right travel destination, I decided to read other people's travel reviews on social media. |
|    |                   | eWOM3       | I am interested in visiting tourism destinations because of knowledge shared on social media. |
|    |                   | eWOM4       | I normally plan a vacation after learning about it on social media. |
| 2  | **Attitude**      | A1          | Architectural tourism attractions are excellent tourist destinations. |
|    |                   | A2          | Architectural tourism attractions are very meaningful tourist destinations. |
|    |                   | A3          | The tourist attraction style of building design is a very nice tourist destination. |
| 3  | **Subjective Norm** | SN1         | My friends and family advised me to go to an architectural tourist attraction-style destination. |
|    |                   | SN2         | My friends and family have requested that I visit numerous architectural tourist attractions. |
|    |                   | SN3         | My friends and family suggested an architectural tourism attraction as a must-see tourist destination. |
| 4  | **Push Factor**   | Y1          | Get away from the usual surroundings. |
|    |                   | Y2          | Get rid of tension and emotional strain. |
|    |                   | Y3          | Develop your interests. |
|    |                   | Y4          | Rest and relax. |
|    |                   | Y5          | Take the time off yourself. |
|    |                   | Y6          | Visit a tourist attraction that none of your peers have ever seen. |
|    |                   | Y7          | Visit friends or family. |
|    |                   | Y8          | Spend time with friends or family. |
|    |                   | Y9          | Meet new people. |
|    |                   | Y10         | Consider previous memories. |
|    |                   | Y11         | I'd be delighted to share my travel stories on social media. |
|    |                   | Y12         | Upload images on social media to improve self-presence. |
|    |                   | Y13         | Would like to keep a record of your travels as a memento. |
|    |                   | Y14         | Would like to share travel tips that could be helpful for other tours. |
|    |                   | Y15         | The need to take photographs and share them. |
| 5  | **Pull Factor**   | Y16         | Enjoy the local cuisine. |
|    |                   | Y17         | Easy access to transportation. |
|    |                   | Y18         | Tourist destinations' security. |
|    |                   | Y19         | Destinations have a relaxing and tropical feeling. |
3. Result and discussion
In the output of iterative calculations 0 and 1, outliers are identified, thus the calculation will be repeated until the data is free of outliers. Furthermore, in the second iteration of this analysis, the data is free of outliers. Outliers are observations or measures that are suspicious because they are much smaller or much larger than most of the observations [17]. Evaluation of multivariate outliers needs to be done because there is no guarantee that the analyzed data shows that there are no outliers at the univariate level showed no outliers at the multivariate level. To detect outliers at the multivariate level we used the Mahalanobis distance. The distance of Mahalanobis for each observation shows the distance of an observation of the average of all variables in a dimensional space [18].

3.1. Evaluation of iterative outliers 0
The data are classified as free of outliers if the value of Mahalanobis d-squared is <45.642. Where the value of 45.642 is the value of the chi-square model based on Df 26 with a significant level of 0.01. The results of the outlier evaluation for iterative data 0 are shown in Table 2. After sorting, the table is truncated at the transition of the value from the chi-squared over 45.642 to under 45.642 (respondent 1-7) to become free of outliers.

| No | Observation number | Mahalanobis d-squared | p1 | p2 |
|----|--------------------|-----------------------|----|----|
| 1  | 68                 | 55.343                | .001| .128 |
| 2  | 85                 | 54.499                | .001| .014 |
| 3  | 9                  | 53.785                | .001| .001 |
| 4  | 92                 | 51.709                | .002| .001 |
| 5  | 5                  | 49.482                | .004| .001 |
| 6  | 47                 | 48.407                | .005| .000 |
| 7  | 11                 | 47.119                | .007| .000 |
| 8  | 8                  | 44.962                | .012| .003 |
| 9  | 12                 | 44.032                | .015| .003 |
| 100| 200                | 24.334                | .557| .954 |

The table above illustrates that there are seven outlier data since they have a value of Mahalanobis d-square > 45.642, therefore, the data must be discharged, and the processing must be repeated using new data.

3.2. Evaluation of iterative outliers 1
The data are classified as free of outliers if the value of Mahalanobis d-squared is <45.642 (26:001). The results of the outlier test for iteration 1 are shown in Table 3. After sorting, the table is truncated on the transition of values from respondent whose chi-squares fulfilled to the respondent who does not meet the requirements to become free of outliers. The table illustrates that there are two outlier data since they have a value of Mahalanobis d-square > 45.642, therefore, the data must be discharged, and the processing must be repeated using new data. In this analysis, the data is finally free from outliers in iteration 2, while the evaluation of outliers with this data is depicted in Table 7. It can be concluded that the outliers discarded in this study were 9 respondents. The data processing to test the model used a set of data from the second iteration which was free of outliers.

| No | Observation number | Mahalanobis d-squared | p1 | p2 |
|----|--------------------|-----------------------|----|----|
| 1  | 7                  | 46.687                | .008| .772 |
3.3. **Calculation of CFA full model**

Confirmatory factor analysis is utilized to measure whether the indicator will represent the latent variables or not. A 99% confidence level was used in this analysis, which indicated that if the critical ratio (CR) value was >1.96 and the probability (P) was <0.05, the results met the criterion. The CR and P values for each model indicator are meet the criteria, implying that all indicators in the model should represent the latent variables. All indicators in the model have a loading factor value above 0.5, indicating that the model’s convergent validity test has been accomplished.

3.4. **Construct reliability test (CR)**

The minimum CR limit for reliable instruments is lies between 0.6 and 0.7 [16]. If the CR value is more than 0.7, then the CR value meets the criteria. The results of calculating the CR value for each variable are shown in Table 4 and the CR value for four variables is above 0.7, indicating that the data is reliable. Construct validity test is performed to determine whether the questions contained in the questionnaire are good enough to measure the desired variables. Construct validity is determined by correlating the value obtained from each of the questions with a total score [19].

| No | Observation number | Mahalanobis d-squared | p1  | p2  |
|----|--------------------|-----------------------|-----|-----|
| 2  | 65                 | 46.332                | .008| .481|
| 3  | 9                  | 45.420                | .011| .335|
| 4  | 46                 | 44.587                | .013| .246|
| 5  | 15                 | 44.244                | .014| .143|
| 6  | 66                 | 43.682                | .016| .099|
| ...|                    | 24.647                | .539| .744|

3.5. **The average variance extracted (AVE)**

The minimum AVE limit for reliable instruments is 0.5, this value indicates the errors in indicator items than the variance that can be explained by other constructs. The results of the VE value calculation for each variable are shown in Table 5 and it is seen that four variables have VE above 0.5, indicating that the data is reliable.

| Variables | AVE Value |
|-----------|-----------|
| EWOM      | 0.535     |
| Attitude  | 0.791     |
| Subjective Norm | 0.718   |
| Visit Intention | 0.540  |
3.6. Multicollinearity and singularity test
The multicollinearity test is used to determine multicollinearity and singularity in the combination of variables. Indication of multicollinearity and singularity can be seen through the determinant value of the sample covariance matrix which is small or close to zero. The data test result provides the determinant results of the covariance matrix and the value of the determinant of the sample covariance matrix is close to zero, indicating that there is multicollinearity and singularity in this analysis.

3.7. Normality test
Evaluation of univariate normality is determined using the critical ratio (c.r) skewness value criteria with a value of ± 2.58 and data classified as normal multivariate were data with a multivariate critical ratio value between -2.58 and +2.58 with a significant level of 0.01 [15]. The results of the normality test in this analysis are shown in Table 6. It can be inferred that the data is not normal, both univariate and multivariate and that outliers should be evaluated to determine which data should be discharged.

Table 6. The result of the normality test.

| Variable | min | max | skew | c.r. | kurtosis | c.r. |
|----------|-----|-----|------|-----|----------|-----|
| SN1      | 1.00| 5.444| .105 | .591| -.156    | -.440|
| SN2      | 1.00| 5.177| .014 | .081| -.252    | -.712|
| SN3      | 1.00| 4.886| .003 | .016| -.327    | -.922|
| A3       | 1.00| 4.773| -.114| -.643| -.273   | -.771|
| A2       | 1.00| 4.681| -.120| -.674| -.315   | -.888|
| A1       | 1.00| 4.611| -.151| -.854| -.431   | -1.216|
| eWOM1    | 1.00| 4.011| -.548| -3.094| -.719   | -2.029|
| eWOM2    | 1.00| 3.597| -.472| -2.662| -.998   | -2.816|
| eWOM3    | 1.00| 4.048| -.343| -1.934| -.663   | -1.870|
| eWOM4    | 1.00| 4.361| -.175| -.987| -.567   | -1.599|
| Y1       | 1.00| 3.884| -.407| -2.294| -.803   | -2.266|
| Y2       | 1.00| 3.632| -.622| -3.512| -.811   | -2.288|
| Y3       | 1.00| 4.651| -.140| -.789| -.427   | -1.206|
| Y4       | 1.00| 3.617| -.612| -3.452| -.853   | -2.407|
| Y5       | 1.00| 3.911| -.392| -2.213| -.855   | -2.412|
| Y6       | 1.00| 4.025| -.372| -2.100| -.690   | -1.947|
| Y7       | 1.00| 4.477| -.224| -1.265| -.329   | -.929|
| Y8       | 1.00| 3.705| -.776| -4.378| -.570   | -1.609|
| Y11      | 1.00| 4.318| -.141| -.797| -.626   | -1.767|
| Y13      | 1.00| 3.697| -.778| -4.390| -.646   | -1.824|
| Y14      | 1.00| 4.726| -.151| -.853| -.436   | -1.231|
| Y15      | 1.00| 4.310| -.170| -.957| -.624   | -1.759|
| Y16      | 1.00| 3.789| -.511| -2.884| -.804   | -2.269|
| Y17      | 1.00| 3.726| -.463| -2.613| -.905   | -2.554|
| Y18      | 1.00| 3.545| -.625| -3.524| -.893   | -2.519|
| Y19      | 1.00| 3.634| -.486| -2.745| -.877   | -2.474|

3.8. Outlier evaluation
Outlier testing is a test that attempts to see if there are any outliers in the data that show a high univariate comparison of the observed data scores by examining the centroid score for the entire data. The data can be classified as not outliers if the value of Mahalanobis d-squared is <45.642. Where the value of 45.642 is the value of the chi-square model based on Df 26 with a significant level of 0.01.
Based on the table above, it appears that there is no outlier data because the data from iteration 2 has a value of Mahalanobis d-square <45.642. Because the model does not meet the normality test even though the data is free from outliers, thus the next step is to carry out the bootstrapping method.

3.9. Bootstrapping method
The results of the above analysis indicate that the data does not follow the multivariate normal distribution, implying that if we proceed to analyze the data, the multivariate normal assumption will be violated. This violation is resolved using the bootstrapping process. The number of bootstrap samples should be high, but not greater than the number of valid samples in the data set [16]. The number of data samples to be resampled in this analysis was estimated to be 1000 samples with a significant level of 0.01. From the results above, it is revealed that the bootstrap chi-square value is 342.834, where the chi-square value is smaller than the chi-square value without bootstrap, which is 1062.775. The output of the next bootstrapping method is to display the p-value to test the overall fit model hypothesis. The following Figure 4 is the result of p Bollen-Stine through the bootstrap method.

3.10. Model fit-test
Based on the calculations above, the chi-square value obtained using the bootstrap method is 342.834 with degrees of freedom of 294. While the bootstrap p-value seen in Bollen - Stine is 0.001 where the chi-square bootstrap value and the bootstrap p-value can be utilized to calculate the level model fit hypothesis with existing data. The results of the calculation of the model suitability test in this study are shown in Table 8. Table 8 provides the result of manually calculating the goodness of fit index value using the bootstrapping method, where the 4 goodness of fit categories have a good fit value, indicating that the model is fit.

| The goodness of Fit Index | Cut of Value | *Result | Model Evaluation |
|--------------------------|--------------|---------|------------------|
| Chi-Square               | N = 191      | 342.834 | Marginal Fit     |
|                          | Indicator = 26 |         |                  |
|                          | Df = (191 – 26 = 165) |         |                  |
|                          | Level of sig 1% ≤ 210.176 |         |                  |
| Probability              | > 0.05       | 0.001   | Poor Fit         |
| TLI                      | > 0.95       | 0.991   | Good Fit         |
| CFI                      | > 0.95       | 0.988   | Good Fit         |
| RMSEA                    | ≤ 0.08       | 0.030   | Good Fit         |
| NC                       | ≤ 2 or ≤ 3   | 1.166   | Good Fit         |
3.11. Hypothesis testing

The critical ratio value can be calculated using the mean and SE values obtained from the regression weight bootstrapping method's results. A critical value of parameter estimation can be determined by dividing the estimated value of the bootstrapping parameter by the standard error. The critical value in the range of 1.96 is determined to be insignificant with a confidence level of 99%. The following is a description of how the critical value of each variable is calculated. Based on the results of these calculations, the results of hypothesis testing in this study are shown in table 9 below.

**Figure 3.** Processing results before bootstrapping process.

**Table 9.** Hypothesis testing result.

| No | Hypothesis                                                                 | CR   | Test results |
|----|---------------------------------------------------------------------------|------|--------------|
| H1 | e-WOM significantly affects attitudes towards the tourist attractiveness of building architecture<br>Attitudes towards the architectural tourism attractiveness of buildings have a significant effect on the visit intention | 5.834 | Accepted     |
| H1a| e-WOM significantly affects subjective norms                               | 3.564 | Accepted     |
| H2 | e-WOM significantly affects subjective norms                               | 3.875 | Accepted     |
| H2a| Subjective norms significantly affect the visit intention to the building architectural tourist attraction | -1.204 | Rejected     |
| H3 | e-WOM significantly affects the visit intention to the tourist attraction of the building architecture | 6.214 | Accepted     |
3.12. Processing output comparison

The processing output comparison before and after using the bootstrapping method is used to see the difference between that output so that it can be seen which parts have changed after using the bootstrapping method. Figure 3 below shows the results of the processing model before using the bootstrapping method which the e-WOM variable can be represented by the indicators eWOM1, eWOM2, eWOM3, and eWOM4. Where the eWOM1 indicator has the largest outer loading value (0.848). It appears that the eWOM1 indicator (I often read travel reviews on social media to find out what memorable tourist destinations to visit) has the highest influence in forming the e-WOM variable.

The attitude variable can be represented by indicators A1, A2, and A3. Since the A1 indicator (destination type of architectural tourist attraction is a very good tourist destination) has the highest outer loading value of 0.932, it can be said that the A1 indicator (destination type of architectural tourist attraction is a very good tourist destination) has the greatest impact in shaping the attitude variable. The SN1, SN2, and SN3 indicators can also be used to represent the subjective norm component. Since the SN2 indicator has the highest outer loading value of 0.937, it can be inferred that the SN2 indicator (my friends/family want me to visit a building architectural tourist attraction type destination) has the highest influence on the formation of a subjective norm variable. The visit intention variable is represented by all Yx indicators except 2 indicators (Y10 and Y12). The Y18 indicator (security in tourist destinations) is the highest outer loading value of 0.840, which means that it has the highest influence in shaping the visit intention variable. The hypothesis values in the figure are all within the range of 1.96, indicating that all hypotheses are rejected. Furthermore, without the bootstrapping method, the goodness of fit index values of all indicators are poor fit values, which means that the model is not fit. The results of calculating the goodness of fit index value without using the bootstrapping method are shown in Table 10, where all goodness of fit groups have a poor fit value.

Table 10. The output of goodness of fit indexes without bootstrapping.

| The goodness of Fit Index | Cut of Value | Result Analysis | Evaluation Model |
|---------------------------|--------------|-----------------|------------------|
| Chi-Square                | N = 191      | 1062.775        | Poor Fit         |
| Indicator = 26            |              |                 |                  |
| Df = (191 – 26 = 165)     |              |                 |                  |
| Level of sig 1%           | ≤ 210.176    |                 |                  |
| Probability               | > 0.05       | 0               | Poor Fit         |
| TLI                       | > 0.95       | 0.786           | Poor Fit         |
| CFI                       | > 0.95       | 0.807           | Poor Fit         |
| RMSEA                     | ≤ 0.08       | 0.117           | Poor Fit         |
| NC                        | ≤ 2 or ≤ 3   | 3.615           | Poor Fit         |

Figure 4 shows the results of the processing model after using the bootstrapping method. The calculation of the hypothesis and the goodness of fit index value are obtained from manual calculations using the values obtained from the output of the bootstrapping method. The indicator that affects the variables in the model is the same as the explanation in Figure 4, where the most influential indicator on the e-WOM variable is the e-WOM1 indicator, the most influential indicator on the attitude variable is the A1 indicator, the most influential indicator on the subjective norm variable is the SN2 indicator, and the most influential indicator on the variable visit intention variable is the Y18 indicator. It is possible to determine that the bootstrapping method is used to obtain a fit model for hypothesis calculations.
value that varies in the model is the hypothesis value, as seen in Figure 5, where only the H2a hypothesis is rejected because it is in the range of ± 1.96.

**Figure 4.** Output model after bootstrapping process.

Figure 4 shows some findings on the Reasoned action theory are (1) Attitudes toward building architectural tourist attraction have a significant effect on the visit intention, (2) e-WOM has a significant effect on subjective norms, and (3) e-WOM has a significant effect on the visit intention the architectural tourist attraction. Findings 3 has the highest critical ratio value of 6.214 as compared to the other hypotheses.

Explanation on the most influential indicator in each construct between before and after bootstrapping process gives us the same result, the most influential indicators are e-WOM 1, A1, SN2, and Y 18. We can conclude that bootstrapping only serves to normalize the data as a requirement for data processing in SEM. Data processed further by providing hypothetical test results after bootstrapping show that all hypotheses are accepted except Subjective norms significantly affect the visit intention to the building architectural tourist attraction (H2a). Even though there were only 200 respondent data and finally 150 data were eligible to be processed, then bootstrapping generated 1000 additional data, it was proven that the results of research related to the most influential indicators did not change. After the most influential indicators defined, then the recommendation to improve the tourism destination can be formulated. One method to formulate recommendation is Product-service system (PSS) [20], [21] which consider the feasibility and the effectiveness of the program.

4. Conclusion

Sequential data testing and data processing in SEM are already done and obtained outliers that need to be discharged. Since the results of the normality test in this research show that data is not normal, both univariate and multivariate, then the bootstrapping is taken to fix the data normality. The goodness of fit index before bootstrapping is a poor fit for all goodness of fit categories, while after bootstrapping only one index category (Probability) in poor fit and other goodness of fit index categories are a good fit. E-WOM gives an impact on tourism motivation and visiting intention of Generation Z in Traveling toward building architectural tourism attractiveness. Some findings on the Reasoned action theory are (1) Attitudes toward building architectural tourist attraction have a significant effect on the visit intention, (2) e-WOM has a significant effect on subjective norms, and (3) e-WOM has a significant effect on the visit intention the architectural tourist attraction. Findings 3 has the highest critical ratio value of 6.214 as compared to the other hypotheses. While the result on which indicators are the most influential indicator in each construct gives the same result before and between the bootstrapping process. Bootstrapping by duplicate 1000 data to add in 150 data respondents only influences the normality data and not the result of the test. Bootstrapping helps to provide the normal data distribution requirement of data processing in SEM.

References

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