





Sample sizes for trials are usually small, ranging from fifteen to thirty respondents (Sekaran & Bougie, 2016). As a result, it is envisaged that with a valid and reliable instrument, measurement error can be greatly minimized. Cronbach's alpha coefficient is the most widely used inter-item consistency and reliability measure. As a result, Cronbach's alpha coefficient was utilized in this study to assess the instrument's internal consistency (Sekaran & Bougie, 2010). After the data was run using SPSS version 23, all measures were discovered to have excellent reliability criteria ranging from 0.736 to 0.933. According to the standard, an instrument with a coefficient of 0.60 is regarded as having moderate dependability (Hair *et al.*, 2010; Sekaran & Bougie, 2013).

#### *Instrumentation and Measurement of Variables*

In the pilot survey, a structured questionnaire consisting of closed multiple-choice questions was used because, in addition to being the most efficient and reliable tool for data collection, this tool was able to reduce ambiguity regarding questions and also gave respondents the freedom to express their output more efficiently. Furthermore, data analysis can be easily coded. (Sekaran & Bougie, 2016)

Scales represent the ways in which individuals are differentiated regarding their differences from each other on variables of interest in a particular study (Hair *et al.*, 2010). Although various Likert scales are used in some research, a five-point Likert scale will yield the expected results. Previous studies have claimed that utilizing a scale with a midway produces better and more accurate findings (Schuman & Presser, 1981).

#### *Knowledge*

The conceptualization and instrument for knowledge were adapted from (Ardiana, Brahmayanti & Subaedi, 2010). In her definition, knowledge is defined as a person's grasp of science and technology gained via the learning process as well as life experiences. The variable of knowledge is measured by five items that consist of 1) business management knowledge, 2) product or service knowledge, 3) consumer knowledge, 4) promotion, and 5) marketing strategy.

#### *Skills*

Skill is defined as the ability to physically manipulate an object (Ardiana, Brahmayanti & Subaedi, 2010). The seven items are used to measure: 1) production skills, 2) communication, 3) cooperation and organization, 4) supervision, 5) finance, 6) administration, and 7) accounting.

#### *Abilities*

The ability conceptualization and instrument were adapted from (Ardiana, Brahmayanti & Subaedi, 2010). Knowledge is defined in her conceptualization as an individual's ability to accomplish numerous job responsibilities. This variable is divided into seven items that maintain the ability to: 1) manage business, 2) make decisions, 3) lead, 4) control, 5) innovate, 6) situation, and 7) changing business environment.

#### *Government Policy*

Government policy is a policy that assists in the development of industry, particularly small and medium-sized firms, by providing actual activities such as training frequency, finance availability, and business partnership (Stuart, 2019). The three items are used to measure government policy: 1) training frequency, 2) capital access, and 3) business partnerships.

#### *Performance of SMEs*

The extent to which SMEs' ability to carry out work in order to achieve goals in accordance with their capabilities, programs, and policies, as well as the declared vision and mission (Darmanto & Yuliari, 2018). Variable SMEs performance is measured by nine (nine) items adapted from Hunjra et al. (2021) that consist of: 1) Profitability, 2) Growth of sales and revenues, 3) Return on assets, 4) Trend of return

on assets, 5) Market share, 6) Operationa and cost efficiency, 7) Productivity, 8) Return on sales, and 9) Trend of return on sales.

## Results and Discussion:

### Content and Face Validity

The process of interviewing a small sample of experts to examine the adequacy of selected items to measure a construct is known as content validity (Sekaran & Bougie, 2013). Based on this, the design of this instrument was presented to supervisors who were experts in their field of study, as well as management doctors who were familiar with the human resources context, and the results of this research were consulted to check the clarity and specificity of the instrument in the context of Small and Medium Enterprises. The questionnaire was distributed in a total of 30 copies, and all 30 copies were distributed. Researchers individually distribute questionnaires and explain to respondents any issues that need further clarification. The process takes about a full month, which is carried out in the first month of September 2022.

The instrument in this study is regarded as valid if it can consistently measure what it seeks to assess and expose the data and variables analyzed. Validity refers to an indicator's level of accuracy in measuring the target variable. The accuracy of the scale on the measurement of the instrument employed with the purpose of verifying that the measuring instrument used, in this case the questionnaire questions, matches the item to be measured is referred to as a validity test. The term validity refers to how accurate and precise a measuring device is when performing its measurement function. The validity test should be carried out on each question item in the validity test. We compare the results of the  $r$  count with the  $r$  table, where the degree of freedom (df) is  $n-2$  with a sig of 5%. If  $r$  table  $<$   $r$  count, then it is valid. The following is a summary of the results. The validity test of the research instrument is presented in Table 1.

**Table 1:** Recapitulation of Research Instruments Validity Test Results

Variables	Indicators	Question Items	Corrected Items	r table	Information
Knowledge (X1)	Business management knowledge	X1.1	0.832	0.361	valid
	Product knowledge or services	X1.2	0.879	0.361	valid
	Consumer knowledge	X1.3	0.879	0.361	valid
	Promotion	X1.4	0.812	0.361	valid
	Marketing Strategy	X1.5	0.802	0.361	valid
Skills(X2)	Production skills	X2.1	0.526	0.361	valid
	Communications	X2.2	0.724	0.361	valid
	Cooperation and organization	X2.3	0.825	0.361	valid
	Supervision	X2.4	0.842	0.361	valid
	Finance	X2.5	0.897	0.361	valid
	Administration	X2.6	0.842	0.361	valid
	Accounting	X2.7	0.792	0.361	valid
Abilities(X3)	Manage business	X3.1	0.769	0.361	valid
	Make a decision	X3.2	0.942	0.361	valid
	Leads	X3.3	0.880	0.361	valid
	Controls	X3.4	0.880	0.361	valid
	Innovate	X3.5	0.867	0.361	valid
	Situation	X3.6	0.822	0.361	valid
	Changing business environment.	X3.7	0.533	0.361	valid
Government Policy	Training frequency	Z1	0.801	0.361	valid
	Capital access	Z2	0.880	0.361	valid

(z1)	Business partnerships	Z3	0.838	0.361	valid
Performance of SMEsY	Profitability	Y1	0.581	0.361	valid
	Growth of sales and revenues	Y2	0.818	0.361	valid
	Return on assets	Y3	0.637	0.361	valid
	Trend of return on assets	Y4	0.708	0.361	valid
	Market share	Y5	0.812	0.361	valid
	Operation and cost efficiency	Y6	0.249	0.361	valid
	Productivity	Y7	0.109	0.361	valid
	Return on sales	Y8	0.191	0.361	valid
	Trend of return on sales.	Y9	0.009	0.361	valid

Source: SPSS processed results 2022

Based on the findings of the analysis, it is known that each indicator is valid for measuring the construct because the corrected item-total correlation value is greater than 0.235.

By using the number of respondents as many as 30, the value of r table can be obtained through Pearson's r product moment table with df (degree of freedom) = n-2, so df = 30-2 = 28, then r table = 0.312. Question items are said to be valid if the value of r count > the value of r table.

#### Reliability Test

Cronbach's alpha coefficient is the most widely used inter-item consistency and reliability measure. As a result, Cronbach's alpha coefficient was utilized in this study to assess the instrument's internal consistency. After analyzing the data with SPSS version 23 for Windows, it was discovered that all measures had high reliability standards ranging from 0.736 to 0.933. This is consistent with the benchmark, which states that an instrument with a coefficient of 0.60 has moderate reliability, while a coefficient of 0.70 and above shows that the instrument has a high level of reliability (Hair *et al.*, 2010; Sekaran & Bougie, 2013). A reliability test is a measure of an indicator's internal consistency, a concept that indicates how well each indicator variable detects a common latent element. The purpose of a reliability test is to determine the measuring instrument's reliability or consistency if it is used to measure the same thing more than once. In other words, this reliability test can assess the level of confidence in the measurement data. The Cronbach Alpha technique was used to examine the reliability of the statement items utilized in this study. Although not an absolute standard, the sternal cut of points for Cronbach's alpha level is > 0.60 (Sekaran, 2003).

The instrument is considered to have an acceptable level of reliability if the value of the measured reliability coefficient is > 0.60. An instrument is declared reliable if it can be used to measure variables repeatedly, which will produce the same data or only slightly vary (Supranto, 2005). The summary of the results of the research instrument reliability test is presented in table 2 below. Based on the analysis process of the alpha cronbach method, the reliability of the calculation results for the four research variables, namely Knowledge (X1), Skills (X2), ability (X3), Government Policy (Z) and UKM performance (Y) can be accepted with a level of reliability value between 0.713 — 0.915, because if the alpha value is greater than 0.6, it indicates the instrument is reliable (Malhotra, 2004). The summary of the results of the research instrument reliability test is presented in table 2 below.

**Table 2:** Recapitulation of Research Instruments Reliability Test Results

Variables	Indicators	Croanbach's Alpha scores	Information
Knowledge (X1)	Business management knowledge	0.929	Reliable
	Product knowledge or services	0.921	Reliable
	Consumer knowledge	0.921	Reliable

	Promotion	0.933	Reliable
	Marketing Strategy	0.935	Reliable
Skills(X2)	Production skills	0.943	Reliable
	Communications	0.921	Reliable
	Cooperation and organization	0.912	Reliable
	Supervision	0.910	Reliable
	Finance	0.905	Reliable
	Administration	0.910	Reliable
	Accounting	0.915	Reliable
abilities(X3)	Manage business	0.924	Reliable
	Make a decision	0.909	Reliable
	Leads	0.914	Reliable
	Controls	0.914	Reliable
	Innovate	0.915	Reliable
	Situation	0.919	Reliable
	Changing business environment.	0.961	Reliable
Government Policy (z1)	Training frequency	0.801	Reliable
	Capital access	0.880	Reliable
	Business partnerships	0.838	Reliable
Performance of SMEs(Y)	Profitability	0.750	Reliable
	Growth of sales and revenues	0.707	Reliable
	Return on assets	0.740	Reliable
	Trend of return on assets	0.729	Reliable
	Market share	0.713	Reliable
	Operation and cost efficiency	0.792	Reliable
	Productivity	0.805	Reliable
	Return on sales	0.797	Reliable
	Trend of return on sales.	0.817	Reliable

Source: SPSS processed results 2022

Based on the results of the above data analysis, the questionnaire about the things that affect the performance of small businesses (in this case, just knowledge, skills, abilities, and government policies) passed the validity and reliability tests. Previous studies have shown that knowledge management variables have a negative impact on the development of SMEs from both technical and managerial perspectives (Alawi *et al.*, 2018). Similarly, managers and owners of small and medium-sized firms have limited capabilities (Khan, 2015). Meanwhile, Kareem *et al.* (2019) asserted that the inability of small and medium-sized firms to exchange knowledge is the root cause of their poor performance. Furthermore, government initiatives are still viewed as incapable of improving the performance of small and medium-sized businesses (Yuzaria, Rahmi & Rias, 2021). Therefore, this research shows that this questionnaire is valid and reliable for measuring knowledge variables consisting of (1) business management knowledge, 2) product or service knowledge, 3) consumer knowledge, 4) promotion, and 5) marketing strategy. Skills variable consisting of (1) production skills, 2) communication, 3) cooperation and organization, 4) supervision, 5) finance, 6) administration, and 7) accounting. The ability variable consists of (1) managing business, 2) making decisions, 3) leading, 4) controlling, 5) innovating, 6) situation, and 7) changing the business environment. and the government policy variable consists of 1) training frequency, 2) capital access, and 3) business partnerships to improve the performance of small and medium enterprises.

## Conclusion

The primary goal of this pilot study is to evaluate the measuring instrument's validity and reliability on a smaller scale before performing full-scale empirical research. After the main investigation is completed, the consequences of the constructs being measured will be known. Experts evaluated the measuring instrument's content and face validity, resulting in a revised instrument. The inter-item reliability test demonstrates that all items are reliable, with Cronbach's alpha greater than 0.70; hence, no items need to be deleted.

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#### **Conflict of Interest:**

The authors state that they do not have any conflicts of interest.

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