Alia Abdullah Hasan Al-Mokhtar. The Role of Information Technology in Improving the Performance of Faculty Members at Sana'a University and Science and Technology Universities: A Comparative Study, supervised by Prof. Associate Dr. Ali Mutahar Alalmani, Prof. Yahya Abdalrzaq Qutran._(PhD thesis)._ Sana'a, Sana'a University, College of Arts and Humanities: Department of Library and Information Science, 2023.

The study aimed to identify the role of information technology in improving the performance of faculty members at Sana'a University and Science and Technology. The different demographic variables (gender, age, degree, university, colleges, teaching experience, training courses) on their uses of information technology in the educational process, and two methodologies were used: survey and comparator, and the questionnaire was adopted as one of the information collection tools, and included (100) variables, and was distributed to a stratified random sample of (260) members, and used the (SPSS) program in collecting and introducing And analysis of information, using statistical methods: Cronbach alpha coefficient of stability, T.test test, single analysis of variance (F.test) called (ANOVA), test direction of differences (LSD).

Results: The study found that:

- 1. The level of faculty members' use of computers came high with an arithmetic average of (3.92), and a percentage of (78%), and the most role played by faculty members using the computer was the use of computers in preparing tests with an arithmetic average of (4.70), and by (94%), while the least role was the use of the smart board in storing lectures with audio and video and presenting them to students with an arithmetic average of (2.42), and by (48%)
- 2. The level of faculty members' use of the Internet in the educational process was average with an arithmetic average of (3.21), and by (64%), and the most role played by faculty members was the use of the Internet in the educational process with an arithmetic average of (4.25), and by (85%). In contrast, the least role of employing TikTok in creating and publishing videos about the course came with an arithmetic average of (1.80), and by (36%).
- 3. The level of faculty members' use of smartphones came high with an arithmetic average of (3.67), and by (73%), and the most role played by faculty members using smartphones was to respond to students' inquiries via smartphone with an arithmetic average of (4.28), and by (86%), and the least role played by faculty members is to use

the smartphone in the electronic calendar for students with an arithmetic average of (3.07), and by (61%).

The study recommended:

- 1. By investing the potential of the role of information technology by employing it in the educational process to provide a flexible educational process
- 2. Introducing a variety of new methods and methods of teaching, and supporting them with images, videos, multimedia, camera... All these means facilitate the faculty member to follow up on students and inform them of everything new.

Keywords: Information Technology, Sana'a University, University of Science and Technology, Performance Improvement, Faculty Members.