

STUDY OF E-SERVICES AVAILABILITY AND AWARENESS
AMONG HIGHER EDUCATION STUDENTS IN LIBYA

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(MATIC NO:3120122)

THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE
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SECURITY AND ASSURANCE

FACULTY OF SCIENCE AND TECHNOLOGY
UNIVERSITY SAINS ISLAM MALAYSIA

NILAI

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APPROVAL

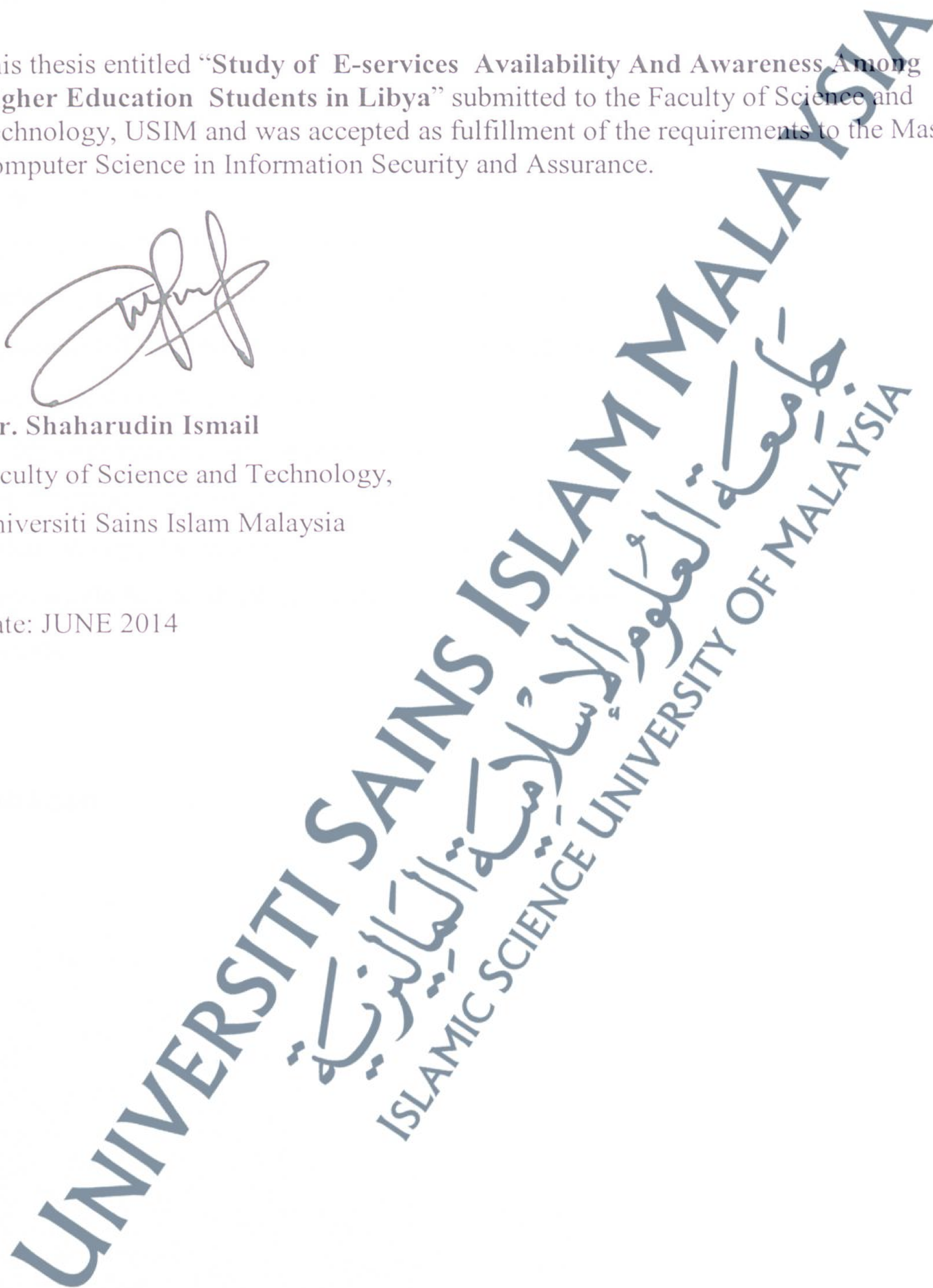
This thesis entitled “**Study of E-services Availability And Awareness Among Higher Education Students in Libya**” submitted to the Faculty of Science and Technology, USIM and was accepted as fulfillment of the requirements to the Master Computer Science in Information Security and Assurance.



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ABSTRAK

Institut pengajian tinggi di Libya menghadapi pelbagai cabaran untuk mempromosi infrastruktur komunikasi elektronik yang berkualiti melalui perkhidmatan elektronik yang disediakan. Tambahan pula, para pelajar di Libya mempunyai kesedaran yang terhad tentang aliran akademik moden dan para pengajar juga kurang berpengalaman berbanding dengan negara-negara lain. Oleh itu, objektif utama kajian ini adalah untuk menilai tentang ketersediaan perkhidmatan elektronik dan menentukan tahap kesedaran terhadap perkhidmatan elektronik di kalangan pelajar universiti di Libya. Melalui kajian ini, kesan ketersediaan perkhidmatan elektronik dan kesedaran pelajar tentang pelaksanaan perkhidmatan elektronik dalam pendidikan tinggi di Libya dikenalpasti. Dalam usaha untuk mencapai matlamat kajian ini, dua objektif telah dicapai. Data yang dikumpulkan dari tiga universiti terbesar di kawasan yang berbeza di Libya: 1-Tripoli universiti di Tripoli (ibu kota) yang terletak di barat Libya, Benghazi 2- universiti di bandar Benghazi yang terletak di tengah-tengah Libya dan 3-Omar AL-Mukhtar universiti (AL-Beda universiti) timur Libya. Selepas pengumpulan data ia dianalisis bagi mengenalpasti dan meninjau kesan kesedaran dan ketersediaan pada penggunaan perkhidmatan elektronik di universiti terpilih. Hasil kajian yang telah dibincangkan berdasarkan beberapa ujian untuk menentukan kesan daripada faktor-faktor terlibat tentang pelaksanaan perkhidmatan elektronik dalam tiga kes. Kajian ini merupakan kajian pertama yang telah mengenalpasti faktor kritikal yang mempengaruhi pelaksanaan perkhidmatan elektronik di institusi pengajian tinggi di Libya. Dapatan kajian mendapati bahawa kesedaran pelajar dan ketersediaan infrastruktur merupakan faktor penting yang memberi kesan kepada penggunaan dan kejayaan pelaksanaan perkhidmatan elektronik di institut pengajian tinggi di Libya.

ABSTRACT

The Libyan academic Institutions faces a multitude of challenges regarding the availability of e-services to quality technological infrastructure promoting electronic communication. Moreover Libyan students suffer from limited awareness to modern academic trends and instructors themselves are deficient in their experience when compared to other countries. Hence, the main objectives of this study were to evaluate the availability of e-services and to determine the awareness level for e-services among the students in Libyan universities .This research study identified the impact of the availability of e- services and the students' awareness on the implementation of e-services in higher education in Libyan universities. In order to achieve the research aim, two objectives have been accomplished. The data were collected from three biggest universities in different areas in Libya: 1- Tripoli university in Tripoli (the capital city) which located in the west of Libya, 2- Benghazi university in Benghazi city which located in the middle of Libya and 3- Omar AL-Mukhtar university (AL-Beda university)eastern of Libya. After collecting the data it was analyzed to identify and explore the impact of the awareness and the availability on the adoption of e-services in selected universities. The findings of the research have been discussed, using many tests to determine the impact of these factors on the implementation of e-services in the three cases. This study is the first study that has identified these critical factor affecting the implementation of e- Services in higher education in Libyan institutions. The finding of this research is that the awareness of students and availability of infrastructure were very important factor affecting e-Services adoption and its success implementation in institute of higher education in Libya.

المخلص

المؤسسات الأكاديمية الليبية تواجه العديد من التحديات فيما يتعلق بتوافر الخدمات الإلكترونية للوصول إلى البنية التحتية التكنولوجية التي تعزز الاتصالات الإلكترونية. وعلاوة على ذلك

فأن الطلاب الأكاديميين في ليبيا يعانون من محدودية الوعي بالاتجاهات العلمية الحديثة والمدرسين أنفسهم يعانون من نقص في خبرتهم بالمقارنة مع بلدان أخرى وبالتالي، فإن الأهداف

الرئيسية لهذه الدراسة هي تقييم توفر الخدمات الإلكترونية وتحديد مستوى الوعي بالخدمات الإلكترونية بين الطلاب في الجامعات الليبية. من خلال هذه الدراسة تم تحديد تأثير توافر

الخدمات الإلكترونية ومدى وعي الطلاب الليبيين بهذه الخدمات في تنفيذ الخدمات الإلكترونية في التعليم العالي بالجامعات الليبية. من أجل تحقيق الغاية من البحث تم انجاز هدفين. تم جمع البيانات من أكبر ثلاث جامعات في مناطق مختلفة من ليبيا: 1 - جامعة طرابلس في طرابلس (العاصمة) والتي تقع في غرب ليبيا، 2- جامعة بنغازي في مدينة بنغازي التي تقع في وسط ليبيا وجامعة عمر المختار الواقعة شرق ليبيا. بعد جمع البيانات تم تحليلها لتحديد و استكشاف تأثير كلا من عاملي الوعي والتوافر على تبني الخدمات الإلكترونية في الجامعات المختارة. وقد نوقشت النتائج التي توصل إليها البحث، وذلك باستخدام العديد من الاختبارات لتحديد تأثير هذه العوامل على تطبيق الخدمات الإلكترونية في الجامعات الثلاث. هذه الدراسة هي الأولى التي حددت هذه العوامل الحاسمة التي تؤثر على تبني الخدمات الإلكترونية في التعليم العالي في المؤسسات الليبية. أهمية هذا البحث هو أن وعي الطلاب و توافر البنية التحتية كانا عاملان مهمان جدا يؤثران على تبني و نجاح تطبيق الخدمات الإلكترونية في مؤسسات التعليم العالي في ليبيا

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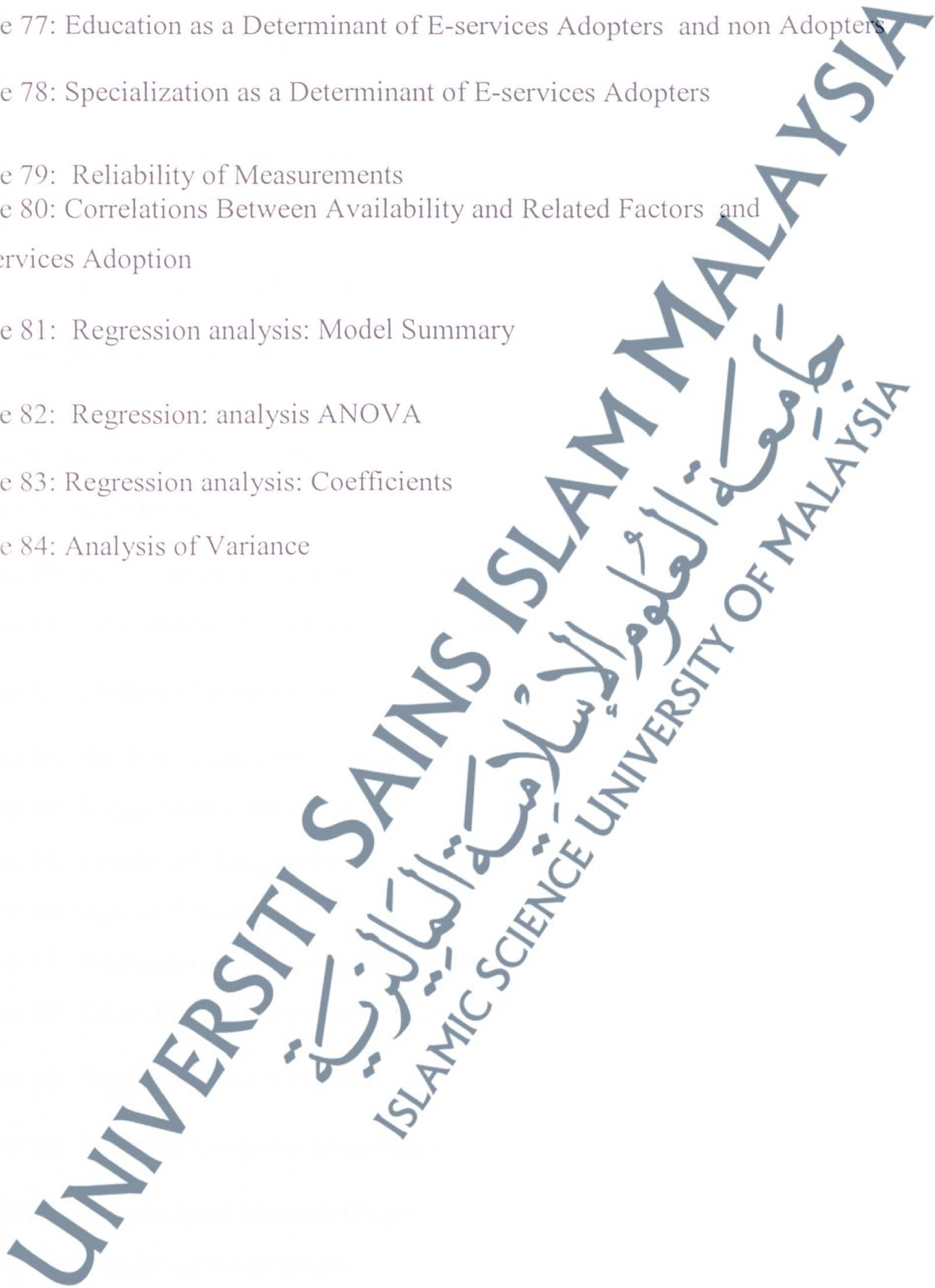
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ABBREVIATIONS

ICTs	Information communication technologies
ICT	Information communication technology
LTT	Libya Telecom and Technology Company
ADSL	Asymmetric Digital Subscriber Line
LD	Libyan Dinars
E-services	Electronic services
PC	Personal computer
DD	Digital divide
ANOVA	Analysis of variance
X^2 Test	The Pearson's chi-square test

