Profile

PERSONAL DETAILS

Names: ODAWA, JAIRUS (PhD, MSc, BSc, H.Dip, O.Dip, CQMSA, MITAK)
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E-Mail: odawajm@yahoo.com, jodawa@mmust.ac.ke,
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ResearcherID: **AAG-6976-2021**
Google scholar: **https://scholar.google.com/citations?hl=en&user=ghdgJYEAAAAJ**

Professional profile

- University Teaching - over 8 years
- Training, workshops and seminar facilitation - 10 years

Education & Professional Training

- University of Shanghai for Science and Technology: **PhD – Management Science and Engineering** (2016-19)
  Thesis title: Vehicle-pedestrian interaction at the midblock crosswalk, PhD Thesis, 2019
- Masinde Muliro University of Science and Technology: **M. Sc.** – IT (2010/12)
  Thesis title: "The Contribution of Business Process Reengineering to Business Process Automation in Public Universities: Case of MMUST", MSc – IT, 2013
- Kenya Methodist University: **BSc - Computer Information Systems** (2008/09)

Work Experience

Current **Senior Lecturer,** Dept. of Information Technology, Masinde Muliro University of Science and Technology;
2019-to-2024 **Lecturer,** Dept. of Information Technology, Masinde Muliro University of Science and Technology;
2014 to-2019 **Assistant Lecturer,** Dept. of Computer Science, Masinde Muliro University of Science and Technology;

Administrative Roles/Responsibilities

1. Current Director, Institute of Open, Distance and eLearning (IODeL)
2. 2023-2024 Chair, School Board of Graduate Studies
3. 2022-2024 Coordinator, Industrial Training Programme
4. 2020-2021 IT Department Projects Coordinator

Funded Research projects

1. **Epidemiology Database System Development Project**
   University Research Grant Amount: 500,000.00 (USD 3,832)
   PI: Jairus Odawa PhD, **Co-researchers:** Donald Kokonya MD, Patrick Wanguche MD, Raphael Angulu PhD

   Project summary: the purpose of this project was to develop a digital platform where data on comorbidities in Kakamega, Busia, Vihiga and Bungoma counties could be shared by the public health practitioners and researchers in mapping out COVID19 vulnerabilities. It included developing a digital database of medicinal flora and fauna and indigenous knowledge

2. **Project title:** the impact of COVID19 on the Transportation Industry.
   PI: Daniel Otanga PhD; **Co-researchers:** Jairus Odawa PhD, Umulkher Ali PhD, Victor Kadima MSc, Prof Peter Bukhala
   University Research Grant amount: 1,000,000.00 (USD 7,665);
   Estimated duration: 6 months (September 2020-February 2021).

   Project Summary: Transportation is a key component of an economy. The outbreak of the highly contagious new COVID-19 had adverse effects on all sectors of the economy including transportation. This research project was to explore the effect of COVID-19 on Transportation industry in Kenya and develop a policy framework/model for post-COVID19 public transportation in Kenya. This project was conducted Kakamega, Vihiga, Uasin Gishu and Kisumu counties of Western Kenya. Survey research was employed to investigate the effects of government mandated intervention protocols on various aspects of Transportation. Moreover, the Systematic monitoring and evaluation was conducted.

3. **Strengthening postnatal care through implementation of eRegistries in western Kenya**
   University Research Grant amount: 1,000,000.00 (USD 7,665);
   Estimated duration: 6 months (January - June 2022).
   PI: Jasper Ondulo, PhD; Co-researchers: Cynthia Shivachi MD, Dickens Aduda PhD, Dorothy Rambim PhD, Jairus Odawa PhD, Ms. Valentine Musimbi

   Project summary: the purpose of this study was to document the feasibility and quality of care of the current postnatal care package and its acceptability to providers and clients. Further, it was To evaluate the effectiveness of the postnatal package on women's reproductive health behavior and on their infant's health status and To develop and introduce a strengthened postnatal

care digital solution package with consultations (within 48 hours and at two weeks, six weeks and six months) in a hospital and or in health centers.

Reviewer of academic journal articles

- PLOS ONE, Accident Analysis and Prevention, Transportmetrica A: Transport Science, Scientific Reports, Frontiers in Psychology, Travel Behavior and Society

Research interests

- Informaion systems research: Business Process Management, ICT4D, Information Systems Engineering
- Transportation Research: Urban traffic congestion, Traffic engineering and management, Transportation Informatics

Select Journal/Research papers published

1. Chaojun Wang, Peng Li, Jing Zhao, **Jairus Odawa**. A Two-sided Market Pricing Model for Optimizing Revenue in a Self-Operating Taxi Service Platform; Transportation Research Part E (**under peer review**)
2. Jing Zhao; **Jairus Odawa Malenje**; Jingxian Wua; Ruoming Maa; (2020) "Modeling the interaction between vehicle yielding and pedestrian crossing behavior at unsignalized midblock crosswalks", Transportation Research Part F: Traffic Psychology and Behaviour, Volume 73, Pages 222-235; https://www.sciencedirect.com/science/article/pii/S1369847820304563?dgcid=coauthor
3. **Malenje, J. O**., Zhao, J., Li, P., & Han, Y. (2019). Vehicle yielding probability estimation model at unsignalized midblock crosswalks in Shanghai, China. PLoS One, 14(3), e0213876. doi:10.1371/journal.pone.0213876; SCI search https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0213876
4. Zhao, J., **Malenje, J. O**., Li, P., & Han, Y. (2019), "Gap acceptance probability model for pedestrians at unsignalized mid-block crosswalks based on logistic regression," Accident Analysis & Prevention, vol. 129, pp. 76-83, 2019, https://doi.org/10.1016/j.aap.2019.05.012. https://www.sciencedirect.com/science/article/pii/S0001457519300491
5. Jing Zhao, Kaijia Chen, Tao Wang & **Jairus Odawa Malenje (2018);** Modeling loading area effectiveness at off-line bus stops with no clear-cut separation of berths; Transportmetrica A: Transport science, Volume 15/2; Pgs. 396-416; https://www.tandfonline.com/doi/abs/10.1080/23249935.2018.1492999
6. **Malenje, J. O.,** Zhao, J., Li, P., & Han, Y. (2018). An extended car-following model with the consideration of the illegal pedestrian crossing. Physica A: Statistical Mechanics and its Applications, 508, 650-661. doi:10.1016/j.physa.2018.05.074 https://www.sciencedirect.com/science/article/pii/S0378437118306204