INNOVATION& INTELLECTUAL PROPERTY COLLABORATIVE DYNAMICS IN AFRICA

Editors: Jeremy de Beer, Chris Armstrony, Chidi Oguamanam & Tobias Schonwetter

Innovation & Intellectual Property Collaborative Dynamics in Africa

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Published by UCT Press in association with the IP Unit, Faculty of Law, University of Cape Town (UCT) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).



Innovation & Intellectual Property: Collaborative Dynamics in Africa First published 2014 by UCT Press

an imprint of Juta and Company Ltd First floor, Sunclare Building

21 Dreyer Street Claremont, 7708 South Africa www.uctpress.co.za

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This book is published by UCT Press. This work was carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada, with financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ), and in cooperation with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

ISBN: 978-1-91989-599-4 (Parent) ISBN: 978-1-77582-143-4 (EBPUB) ISBN: 978-1-77582-142-7 (WebPDF) ISBN: 978-1-77582-184-5 (WebPDF Chapter 8)

Project manager: Glenda Younge Editor: Daphne Burger Proofreader: Alfred LeMaitre Indexer: Ethné Clarke Cover designer: Farm Design

Typeset in 10.5 pt on 13 pt Minion Pro by: Integra

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This book has been independently peer-reviewed by academics who are experts in the field.

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Preface

This book is among the key outputs of the Open African Innovation Research and Training (Open A.I.R.) Project. Based on case study research in nine African countries, the book examines the recent history and current on-the-ground realities of innovation and intellectual property (IP) in African settings. In doing so, the book reveals complex collaborative dynamics across a range of different countries, sectors and socio-economic contexts, and generates recommendations for how innovation and IP can be married with social and economic development objectives in African settings. This book's sister report, *Knowledge and Innovation in Africa: Scenarios for the Future*, situates the current realities covered in this book within a much longer historical trajectory and multiple potential futures.

Conceived in 2009, established in 2010 and launched in 2011, Open A.I.R. is a pan-African and globally interconnected research and training network, which was established to:

- raise IP awareness in African settings and facilitate critical policy engagement;
- empower a networked, epistemic IP community in Africa;
- identify IP-related innovation bottlenecks and modes of open collaboration; and
- interrogate IP-related innovation metrics, capital and power structures.

Open A.I.R. is financially supported by Canada's International Development ResearchCentre (IDRC) and Germany's Federal Ministry for Economic Cooperation and Development (BMZ), and collaborates with numerous other organisations and individuals – all of whom are recognised in the Acknowledgements' pages of this book. In addition to the aforementioned case study and foresight research, the Open A.I.R. network engages in a wide range of training, capacity building, outreach and policy engagement activities – both on the African continent and in settings outside the continent where matters of African innovation and IP are engaged. These engagements target external stakeholders capable of changing policies and practices, including:

- innovators, creators and entrepreneurs individuals and companies;
- business groups such as chambers of commerce and industry associations;
- national, regional and international law-makers and policy-makers;
- issue leaders, such as politicians, judges, professors and practitioners;
- scientific and cultural research and development funding bodies;

- university researchers, administrators and technology transfer officials;
- rights-holders and collective rights management organisations; and
- representatives of indigenous and local communities.

Open A.I.R. is motivated by a vision in which innovation and creativity in Africa are sustainable, properly valued, collaborative, widely accessible and result in benefits that are distributed throughout society. Based on this vision, the network's mission is to better understand how innovation and IP processes work in African settings, how knowledge and technology currently protected by IP can be mobilised, and how IP systems can be harnessed or adapted in a manner that fosters openness-oriented collaborative innovation resulting in just distribution of new knowledge and technology.

This book and the *Scenarios* volume are two parts of a much broader attempt, by Open A.I.R. and other initiatives, to facilitate, in the medium to long term, the emergence of new, pragmatic means of valuing and facilitating innovation and creativity in Africa. Contextually appropriate metrics sensitive to the monitoring of meaningful changes in behaviour around innovation and creativity could be instrumental for promoting African grassroots entrepreneurship, broad-based business development, and a vibrant private sector built on small and medium-sized enterprises (SMEs) with a sustained ability to innovate. And the opportunities for innovation-driven SMEs could also benefit from policy-maker adoption of appropriate metrics when designing the policy and regulatory frameworks necessary to ensure predictable innovation environments for stakeholders.

Open A.I.R.'s core funders, IDRC and BMZ, have provided a framework for Open A.I.R.'s objectives. Open A.I.R. fits within the IDRC's Science and Innovation programme, which supports research and policy engagement in relation to how science, technology and innovation (STI) can be engines of socio-economic development. Within this programme, the Information and Networks (I&N) initiative, which funds the Open A.I.R. Project, aims to better understand the linkages among innovation, creativity, networked collaborations (often enabled via information and communication technologies [ICTs]), and determinants of openness – including IP rights. The IDRC also supported the precursor network to Open A.I.R., the African Copyright and Access to Knowledge (ACA2K) Project, which ran from 2007 to 2011 and generated the nucleus of the expert network now driving Open A.I.R.

BMZ supports Open A.I.R. via Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), under the GIZ commons@ip – Harnessing the Knowledge Commons for Open Innovation initiative. The commons@ip initiative focuses on how IP rights interact with open innovation, the knowledge commons, open licences and collaborative innovation. It is part of the BMZ- mandated Train for Trade programme, which aims at strengthening the private sector and its constituent bodies in the Southern African Development Community (SADC) region through training and capacity building in export promotion, quality control and promotion of open innovation – as well as through promotion of local and regional economic development and trade.

Open A.I.R.'s training and capacity building components include:

- building the network's capacity through online platforms, network-wide workshops, research methodology support, scenario-building meetings and thematic seminars;
- awarding Open A.I.R. Fellowships to emerging IP scholars and potential leaders from Tanzania, Kenya, Uganda, Ethiopia, Cameroon, Nigeria and Egypt;
- exchanging knowledge through Africa-wide and South–South knowledge networking at seminars, workshops and conferences;
- growing awareness among African creators, innovators, entrepreneurs and policy-makers of openness-oriented approaches to innovation and IP matters in Africa; and
- teaching at African tertiary educational institutions, including development of a replicable, open course curriculum on IP law and development.

Because of the immense geographic size of the African continent, and unique logistical challenges of African intra-continental travel, ICTs have been instrumental in empowering the research network's "community of practice". Open A.I.R. has an offline presence in 14 African countries and in multiple countries outside the continent. Online, the network includes hundreds of individuals and institutions throughout Africa and from all corners of the globe, linked via a suite of online networking and social-media tools. The Open A.I.R. community of practice advances a culture of multidirectional exchange among African innovative and creative communities and external actors – with a view to sustainably empowering local communities and SMEs. Network members promote cross-fertilisation of ideas via original thinking and partnerships with national and international institutions, scholars, funding agencies, civil society organisations and other willing partners. Those wishing to join the community can visit http://www.openair.org.za/join.

Acknowledgements

True to its emphasis on "collaborative dynamics", this book is the product of the collective energy of dozens of people and institutions in many countries, all of whom work within the Open African Innovation Research and Training (Open A.I.R.) network. Open A.I.R. currently has core network members and institutions in 14 African countries, spanning North Africa (Egypt, Tunisia), West Africa (Senegal, Ghana, Nigeria, Cameroon), East Africa (Ethiopia, Uganda, Kenya, Tanzania) and southern Africa (Malawi, Mozambique, Botswana and South Africa). Other network members and institutions are in Canada, the United States, the United Kingdom, Germany and France. These members are, in turn, linked – via online and offline interactions – to a broader Open A.I.R. network of hundreds of individuals and institutions, including people and entities in Brazil, India, Malaysia, Australia, Switzerland and the Netherlands. The network receives generous financial support from Canada's International Development Research Centre (IDRC) and Germany's Federal Ministry for Economic Cooperation and Development (BMZ).

Each of the editors and authors of this volume is part of, and collaboratively exchanges knowledge and expertise with, this large network, and we the editors, and each of the contributors, are profiled in "About the Editors" and "About the Contributors" sections of this book and on the Open A.I.R. website's Team page, http://www.openair.org.za/content/open-air-team. On this Team page, one can also find the names and contact details of Open A.I.R. Fellows and other network members and institutions. The network is also accessible via its social media platforms, featured at http://www.openair.org.za/join

Open A.I.R.'s administrative hub is the IP Unit in the University of Cape Town Faculty of Law, where Project Manager Nan Warner and Administrator Phyllis Webb are the key operational drivers. Warner and Webb receive management support from two of the editors of this book (and the co-Principal Investigators of the Open A.I.R. Project), UCT IP Unit Director Tobias Schonwetter and Jeremy de Beer of the University of Ottawa Faculty of Law. Also supporting project management are Julie Nadler-Visser of UCT's Research Contracts and IP Services (RCIPS) unit, members of the UCT Finance Department and Faculty of Law Finance Department, and another editor of this book: Chris Armstrong of the LINK Centre at the University of the Witwatersrand (Wits) in Johannesburg.

Network strategic guidance is provided by a Steering Committee composed of De Beer, Schonwetter, Warner, Chidi Oguamanam (another of this book's

editors) of the University of Ottawa Faculty of Law, Nagla Rizk of The American University in Cairo (AUC), Sisule Musungu of IQsensato in Nairobi, Khaled Fourati of the IDRC office in Cairo, and Balthas Seibold of Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in Bonn. Further strategic support from the IDRC is, or has been, provided by Naser Faruqui, Simon Carter, Laurent Elder, Fernando Perini, Matthew Smith, Heloise Emdon and Phet Sayo; Karim Badran and Rose-Marie Ndiaye Pereira on financial matters; and Michelle Hibler and Nola Haddadian on publications. GIZ's involvement is focused on the capacity-building components of the network, which are carried out in collaboration with the GIZ's commons@ip - Harnessing the Knowledge Commons for Open Innovation initiative. At GIZ, in addition to support from the aforementioned Steering Committee member Balthas Seibold, who advises on matters of international knowledge cooperation and networking, support has also come from Petra Hagemann, Christine de Barros Said, Ursula van Look, Marina Neuendorff, Margrit Brockhaus and the Working Group of German Development Organisations on Promoting Innovation Systems. At UCT, as well as those already mentioned, key supporters and collaborators have been the Dean of Law, PJ Schwikkard, Lee-Ann Tong in the Faculty of Law, and, in the IP Unit, the Unit's founder Julian Kinderlerer, its Deputy Director Caroline Ncube and its Senior Research Fellow Bernard Maister. At the University of Ottawa, in addition to those already mentioned, support has been provided by the Dean of the Faculty of Law, Common Law Section, Nathalie Des Rosiers, and Former Dean Bruce Feldthusen.

For this book, key network participants were the team of JD candidates in the University of Ottawa Faculty of Law - Lukas Frey, Will Sapp, Phil Holdsworth, Maya Boorah, Kristen Holman and Saara Punjani - who provided long hours of diligent editorial assistance. In addition, because the research case studies presented in this book all required collection of data from human subjects - via interviews and/or focus group discussions and/or written surveys - this book would not have been possible without the cooperation of dozens of respondents across the countries of study. For reasons of confidentiality, most survey and interview respondents are not named in this book, but we are sincerely grateful for their contributions. Also contributing to the research outlined in this book was Donna Podems of OtherWISE in Cape Town, who advised on research methodologies and supported a methodology workshop for several of the authors featured in this volume, in addition to her support of Open A.I.R.'s monitoring and evaluation (M&E) framework. At this book's publisher, UCT Press, the key drivers have been Publisher Sandy Shepherd and Project Manager Glenda Younge. The cover design for this volume is by Elsabe Gelderblom of Farm Design in Cape Town, who does all of Open A.I.R.'s design work for its website, social media tools, PR materials, *Briefing Notes* and the network's other substantial publication output, the Open A.I.R. *Scenarios* compendium – which is available in hard-copy, and on the Open A.I.R. website, as a separate published output and companion to this book.

Network headquarters at the UCT IP Unit serves as Open A.I.R.'s Southern Africa Hub, coordinated by Project Manager Warner. There are also four other Hubs: the North Africa Hub at the Access to Knowledge for Development Center (A2K4D) of the School of Business at The American University in Cairo (AUC), coordinated by Nagham El Houssamy under the direction of Nagla Rizk; the West Africa Hub at the Nigerian Institute of Advanced Legal Studies (NIALS) in Lagos, coordinated by Helen Chuma-Okoro under the direction of Adebambo Adewopo; the East Africa Hub at the Centre for IP and IT Law (CIPIT) of Strathmore University, Nairobi, coordinated by CIPIT Director Isaac Rutenberg; and the Canada Hub at the University of Ottawa Faculty of Law, coordinated by De Beer and Oguamanam. Contact can be made with these Hubs and Hub Coordinators via the aforementioned Open A.I.R. website Team page.

Also integral to the success of the network are its nine Fellows, each of whom has spent time at the UCT IP Unit in Cape Town. The Fellows have contributed to Open A.I.R.'s case study and foresight research, to outreach and training work, and to building the network. The nine Fellows are: Esther Ngom of the Ngo Nyemeck law firm in Yaoundé; Seble Baraki of the Justice and Legal System Research Institute (JLSRI) in Addis Ababa; Moses Mulumba of the Centre for Health, Human Rights and Development (CEHURD) in Kampala; Douglas Gichuki of CIPIT in Nairobi; Milton Lore of Bridgeworks Africa in Nairobi; Eliamani Laltaika of the Tanzania Intellectual Property Rights Network (TIP-Net) in Dar es Salaam; Alexandra Mogyoros, a student in the Faculty of Law at the University of Ottawa; West Africa Hub Coordinator Helen Chuma-Okoro of NIALS in Lagos; and North Africa Hub Coordinator Nagham El Houssamy of A2K4D in Cairo.

Other collaborating institutions are the Program on Information Justice and Intellectual Property (PIJIP) at the Washington College of Law at American University in Washington, DC; the Centre for Technology and Society (CTS) in Brazil; the Centre for Internet and Society (CIS) in India; and the Open Society Foundations, where Open A.I.R.'s key partner is Vera Franz. The Open A.I.R. network has also benefited from interaction with staff at the World Intellectual Property Organisation (WIPO) headquarters in Geneva. In London, Shirin Elahi of Scenarios Architecture is the driver of Open A.I.R. foresight research work, as featured in the aforementioned *Scenarios* compendium that provides an important forward-looking complement to the current picture offered by this volume. Jo Higgs of Go Trolley Films in Cape Town did post-production on the videos available on the Open A.I.R. YouTube channel – videos which show how the network came into being and how the research was conceptualised. All the people and institutions mentioned here have in one way or another played a role, by collaborating within the Open A.I.R. network, in the conceptualisation, planning, data collection, data analysis, writing, editing, design and production processes that resulted in successful research and the completion of this book. It is hoped that this volume's free availability online, under a Creative Commons (CC) licence, will ensure that the book's collaborative dynamics do not end here at the moment of publication, and continue long into the future in the work of the still-growing Open A.I.R. community.

Jeremy de Beer, Chris Armstrong, Chidi Oguamanam, Tobias Schonwetter September 2013

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Acronyms and Abbreviations

A2K	access to knowledge	
A2K4D	Access to Knowledge for Development Center (The American	
	University in Cairo, Egypt)	
AAU	Addis Ababa University	
ABS	access and benefit-sharing	
ACA2K	African Copyright and Access to Knowledge Project	
ACP	African, Caribbean and Pacific Group of States	
ACTS	African Centre for Technology Studies (Kenya)	
ADPP	Ajuda de Desenvolvimento de Povo para Povo (Mozambique)	
AERC	African Economic Research Consortium	
AFTE	Association for the Freedom of Thought and Expression (Egypt)	
AGOA	African Growth and Opportunity Act	
AIM	Agência de Informação de Moçambique	
AmCham	American Chamber of Commerce (Egypt)	
ARC	Aquaculture Research Centre (Egypt)	
ARIPO	African Regional Intellectual Property Organisation	
ASSAf	Academy of Sciences of South Africa	
ASTII	African Science, Technology and Innovation Indicators	
ATO	alternative trading organisation	
ATPC	African Trade Policy Centre	
ATPS	African Technology Policy Studies Network	
AU	African Union	
AUC	The American University in Cairo	
B-BBEE Act	Broad-Based Black Economic Empowerment Act 53 of 2003 (South	
	Africa)	
BCP	bio-cultural community protocol	
BIH	Botswana Innovation Hub	
BMZ	Federal Ministry for Economic Cooperation and Development	
	(Germany)	
BoI	Bank of Industry (Nigeria)	
BOTEC	Botswana Technology Centre	
BPR	business process re-engineering	
CAA	Cocoa Abrabopa Association (Ghana)	
CARICOM	Caribbean Community	
CBD	Convention on Biological Diversity	
CBN	Central Bank of Nigeria	

CC	Creative Commons	
CCIA	Computer and Communications Industry Association	
CEDAT	College of Engineering, Design, Art and Technology (Makerere	
GLEIN	University, Uganda)	
CEHURD	Centre for Health, Human Rights and Development (Uganda)	
CEPIL	Centre for Public Interest Law (Ghana)	
CIGI	Centre for International Governance Innovation	
CIPC	Companies and Intellectual Property Commission (South Africa)	
CIPIT	Centre for IP and IT Law (Strathmore University, Kenya)	
CIPO	Canadian Intellectual Property Office	
CIPR	Commission on Intellectual Property Rights (UK)	
СМО	collective management organisation	
COCOBOD	Ghana Cocoa Board	
CPD	Centre for Policy Dialogue (Nigeria)	
CRTT	Centre for Research in Transportation Technologies (Makerere	
	University, Uganda)	
CSIR	Council of Scientific and Industrial Research (India)	
CTEA	Copyright Term Extension Act (US)	
CVCP	Committee of Vice-Chancellors and Principals (UK)	
DACST	Department of Arts, Culture, Science and Technology (South Africa)	
DEST	Department of Education, Science and Training (Australia)	
DFID	Department for International Development (UK)	
DHET	Department of Higher Education and Training (South Africa)	
DNS	domain name system	
DRC	Democratic Republic of Congo	
DRM	digital rights management	
DRST	Department of Research, Science and Technology (Botswana)	
DST	Department of Science and Technology (South Africa)	
DTI	Department of Trade and Industry (South Africa)	
EAEP	East African Educational Publishers (Kenya)	
EC	European Commission	
ECBP	Engineering Capacity Building Program (Ethiopia)	
ECOWAS	Economic Community of West African States	
ECX	Ethiopia Commodity Exchange	
EEAA	Egyptian Environmental Affairs Agency	
EIPO	Ethiopian Intellectual Property Office	
EIPRL	Egyptian Intellectual Property Rights Law	
EPA	Environmental Protection Authority (Ethiopia)	
EPO	European Patent Office	
EST	environmentally sound technology	

EU	European Union		
EUEI	EU Energy Initiative		
Eurostat	Statistical Office of the European Communities		
FAO	UN Food and Agriculture Organisation		
FCN	Friendship, Commerce and Navigation (Kenya)		
FDI			
FDRE	foreign direct investment Federal Democratic Republic of Ethiopia		
FDSE	Free Day Secondary Education (Kenya)		
FES	Friedrich Ebert Stiftung (Germany)		
FLO	Fairtrade Labelling Organisations International		
FOSS	free and open source software		
FPE	Free Primary Education (Kenya)		
FTA	free trade agreement		
GDP	gross domestic product		
	•		
GEM GERD	Global Entrepreneurship Monitor		
GERD	gross expenditure on research and development		
-	geographical indication		
GIPC	Global Intellectual Property Center Deutsche Gesellschaft für Internationale Zusammenarbeit		
GIZ			
014	(Germany)		
GM	genetically modified		
GOAN	Ghana Organic Agriculture Network		
GOK	Government of Kenya		
GR	genetic resources		
GTZ	German Technical Cooperation		
HSRC	Human Sciences Research Council (South Africa)		
ICANN	Internet Corporation for Assigned Names and Numbers		
ICIDSS	International Creativity and Innovation Development Support		
	Services (Ethiopia)		
ICJ	International Commission of Jurists		
ICLS	International Conference of Labour Statisticians		
ICPSK	Institute of Chartered Public Secretaries of Kenya		
ICT	information and communication technology		
ICT4D	ICT for development		
ICTSD	International Centre for Trade and Sustainable Development		
IDC	Industrial Development Corporation (South Africa)		
IDLO	International Development Law Organisation		
IDRC	International Development Research Centre (Canada)		
IDS	Institute of Development Studies (Kenya)		
IE	informal economy		

IFC	International Finance Corporation		
IICA	Inter-American Institute for Cooperation on Agriculture		
IIDMM	Institute of Infectious Disease and Molecular Medicine (South Africa)		
IIED	International Institute for Environment and Development		
IIPA	International Intellectual Property Alliance		
IISD	International Institute for Sustainable Development		
ILC	indigenous and local community		
ILO	International Labour Organisation		
INAO	Institut national des appellations d'origine (France)		
IP	intellectual property		
IPA	Industrial Property Act (Botswana)		
IPC	International Patent Classification		
IPI	Industrial Property Institute (Mozambique)		
IPR-PFRD Act	Intellectual Property Rights from Publicly Financed Research		
	and Development Act (South Africa)		
IRB	Institutional Review Board (Botswana)		
IRENA	International Renewable Energy Agency		
ISAS	integrated seawater agriculture system		
ISCTEM	Instituto Superior de Ciências e Tecnologia de Moçambique		
ISI	Institute for Scientific Information		
ISO	International Organisation for Standardisation		
ISP	Information Society Project (Yale University, US)		
ITC	International Trade Centre		
JBEDC	Japan Bio-Energy Development Corporation		
JITAP	Joint Integrated Technical Assistance Programme		
JLSRI	Justice and Legal System Research Institute (Ethiopia)		
K2C Biosphere	Kruger to Canyons Biosphere (South Africa)		
KE	knowledge economy		
KECOBO	Kenya Copyright Board		
KENFAA	Kenya Nonfiction and Academic Authors' Association		
KES	Kenyan Shilling		
KHA	Kenya Historical Association		
KICD	Kenya Institute of Curriculum Development		
KIPI	Kenya Industrial Property Institute		
KIPPRA	Kenya Institute for Public Policy Research and Analysis		
KNAS	Kenya National Academy of Sciences		
KOLA	Kenya Oral Literature Association		
КТО	knowledge transfer office		
LBC	Licensed Buying Company (Ghana)		
LDC	least developed country		

LE	Egyptian Pound		
LINK Centre	Learning Information Networking Knowledge Centre (Wits University, South Africa)		
LSK	Law Society of Kenya		
MAN	Manufacturers Association of Nigeria		
MANCAP	Mandatory Conformity Assessment Programme (Nigeria)		
МСН	Maasai Cultural Heritage Organisation (Kenya)		
MCST	Ministry of Communications, Science and Technology		
11001	(Botswana)		
МСТ	Ministério da Ciência e Tecnologia (Mozambique)		
MDCA	Malindi District Cultural Association (Kenya)		
MDG	Millennium Development Goal		
MEA	Multilateral Environmental Agreement		
MIST	Ministry of Infrastructure, Science and Technology (Botswana)		
MIT	Massachusetts Institute of Technology		
MOA	Ministry of Agriculture (Ethiopia)		
MOE	Ministry of Education (Ethiopia)		
MOFA	Ministry of Food and Agriculture (Ghana)		
MoFED	Ministry of Finance and Economic Development (Ethiopia)		
MOST	Ministry of Science and Technology (Ethiopia)		
MoU	memorandum of understanding		
MRC	Medical Research Council (South Africa)		
Natoil	Natural Oil Company (Egypt)		
NACI	National Advisory Council on Innovation (South Africa)		
NCC	Nigerian Copyright Commission		
NDA	non-disclosure agreement		
NEP	National Enquiry Point (Botswana)		
NEPAD	New Partnership for Africa's Development		
NESC	National Economic and Social Council (Kenya)		
NESTI	National Experts on Science and Technology Indicators		
NIALS	Nigerian Institute of Advanced Legal Studies		
NRF	National Research Foundation (South Africa)		
NGO	non-governmental organisation		
NIALS	Nigerian Institute of Advanced Legal Studies		
NIPMO	National Intellectual Property Management Office (South Africa)		
NIS	national innovation system		
NMIMS	Narsee Monjee Institute of Management Studies (India)		
NPR	National Public Radio (US)		
NPSB	National Policy and Strategy on Biofuels (Mozambique)		
NRC	National Research Centre (Egypt)		

NREA	New and Renewable Energy Authority (Egypt)	
NWLR	Nigerian Weekly Law Report	
OA	open access	
OAPI	Organisation africaine de la propriété intellectuelle	
OCEES	Oxford Centre for the Environment, Ethics and Society	
OCFCU	Oromia Coffee Farmers Cooperative Union (Ethiopia)	
ODEL	open, distance and electronic learning	
ODI	Overseas Development Institute (UK)	
OECD	Organisation for Economic Co-operation and Development	
OER	open educational resource	
Open A.I.R.	Open African Innovation Research and Training Project	
ORD	Office of Research and Development (Botswana)	
PBIP	place-based intellectual property	
РСТ	Patent Cooperation Treaty	
Petromoc	Petróleos de Mozambique	
PIIPA	Public Interest Intellectual Property Advisors (US)	
PIJIP	Program on Information Justice and Intellectual Property	
	(American University, US)	
PPS	probability proportional to size	
PRO	public research organisation	
ProBEC	Programme for Basic Energy and Conservation in Southern Africa	
R&D	research and development	
RCIPS	Research Contracts and IP Services unit (UCT, South Africa)	
RIPCO (B)	Rural Industrial Promotion Company (Botswana)	
RMI	rights management information	
SADC	Southern African Development Community	
SARUA	Southern African Regional Universities Association	
SCE	Society for Critical Exchange (Kenya)	
SID	Society for International Development (Kenya)	
SINER-GI	Strengthening International Research on Geographical Indications	
SME	small and medium enterprise	
SMIEIS	Small and Medium Industries Equity Investments Scheme (Nigeria)	
SMME	small, micro and medium enterprise	
SNA	social network analysis	
SON	Standards Organisation of Nigeria	
SPS	sanitary and phytosanitary measures	
STCI	Science and Technology Capacity Index	
STEP	Science Technology and Economic Policy (US)	
STI	science, technology and innovation	
STS	Society for Technology Studies (Ethiopia)	

SVKM	Shri Vile Parle Kalamani Mandal (India)		
TBT	technical barriers to trade		
TCE	traditional cultural expression		
TGE	Transitional Government of Ethiopia		
THE	Times Higher Education (UK)		
THRIP	Technology and Human Resources Programme (South Africa)		
TIA	Technology Innovation Agency (South Africa)		
TIP-Net	Tanzania Intellectual Property Rights Network		
TISC	Technology and Innovation Support Center		
ТК	traditional knowledge		
TKDL	Traditional Knowledge Digital Library (India)		
TPMs	technological protection measures		
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights		
ТТО	technology transfer office		
TVET	Technical and Vocational Education and Training (Ethiopia)		
UB	University of Botswana		
UCC	Universal Copyright Convention		
UCITA	Uniform Computer Information Transactions Act (US)		
UCT	University of Cape Town (South Africa)		
UEM	Eduardo Mondlane University (Mozambique)		
UGT	Uganda Gatsby Trust		
UK	United Kingdom		
UM	utility model		
UNCST	Uganda National Council for Science and Technology		
UNCTAD	UN Commission on Trade and Development		
UNDESA	UN Department of Economic and Social Affairs		
UNDP	UN Development Programme		
UNECA	UN Economic Commission for Africa		
UNEP	UN Environment Programme		
UNESCAP	UN Economic and Social Commission for Asia and the Pacific		
UNESCO	UN Educational, Scientific and Cultural Organisation		
UNFCCC	UN Framework Convention on Climate Change		
UNICAMP	University of Campinas (Brazil)		
UNIDO	UN Industrial Development Organisation		
Unilag	University of Lagos		
US	United States		
USAID	US Agency for International Development		
USPTO	US Patent and Trademark Office		
WAK	Writers Association of Kenya		
WATH	West Africa Trade Hub		

WBCSD	World Business Council for Sustainable Development	
WCT	WIPO Copyright Treaty	
WEF	World Economic Forum	
WEP	World Employment Programme	
WHO	World Health Organisation	
WIPO	World Intellectual Property Organisation	
Wits	University of the Witwatersrand (South Africa)	
WPIS	WIPO Patent Information Service	
WPPT	WIPO Performances and Phonograms Treaty	
WTO	World Trade Organisation	
ZAR	South African Rand	

Chapter 8

From *De Facto* Commons to Digital Commons? The Case of Egypt's Independent Music Industry

Nagla Rizk¹

Abstract

This chapter provides the findings of a research study into the dynamics of Egypt's vibrant independent music industry, which previous research has identified as potentially having "commons" dynamics. Based on a survey of musicians and consumers, and interviews with key stakeholders, the research found a complex set of dynamics and attitudes at play in relation to distribution and consumption of the musicians' output. The research generated the conclusion that a Creative Commons-based "digital commons" business model using a "freemium" approach to payment may be worth exploring as a means to comply with copyright law in a manner that still caters to the existing priorities of musicians and consumers.

1. Background

The research case study outlined in this chapter explored the legal and sociocultural frameworks that reward creativity and enable knowledge-sharing in Egypt's independent music industry. Egypt is renowned for its entertainment industry and has been dubbed the "Hollywood of the East". Its long and extensive history has made Egypt a cultural powerhouse, dominating the film and music industries in the region and making it fertile ground for this research.

This research builds on the findings and recommendations of the author's previous work on Egypt's music industry, which concluded that "the live music scene in Egypt offers a special form of the commons [...] [dubbed the] *de facto*

¹ The author is grateful for the work of the A2K4D research team, comprising Lina Attalah, Nagham El Houssamy, Mariam El Abd and Youssef El Shazli, and for the contribution to the field work by Marc Michael and Nagla Eid.

commons because it represents practices that have naturally emanated from the bottom up without any deliberate actions or conscious decision on the part of any organizing agency" (Rizk, 2010a, p. 128). I consequently recommended that "a more commons-based approach" to music be adopted through advertising or a subscription-based model "that incorporates social networking, virtual gift giving, and holding virtual parties. Such formats would be highly suitable to the Egyptian culture and practices of accessing music" (Rizk, 2010a, p. 128).

This case study comprised a collection of on-the-ground responses and evidence relating to music consumption patterns, and to the relevance and role of the current copyright regime in Egypt's independent music industry, from multiple perspectives: the musicians, consumers and other stakeholders, such as venue owners and lawyers. The work also examined the "open development" paradigm (see Smith *et al.*, 2011) by addressing the question of how to create a valid environment that would empower peer production and collaboration rather than marginalise selected stakeholders via intellectual property (IP) exclusion tools. (See Chapter 9 of this volume for discussion of the dynamics of copyright in relation to openness-oriented approaches to scholarly works.) Given the need for music-sharing among alternative Egyptian musicians, a valid IP environment in the country will be one with accepted and workable IP laws that eliminates the need for copyright infringement. Alternative musicians (as opposed to mainstream commercial musicians) were chosen as research participants because their field serves as a laboratory for studying the limitations of, as well as alternatives to, current IP regimes.

Music as a quasi-public good, and the access versus incentive tension

Music, like other knowledge goods, evokes the question of the extent to which it can be considered a public good or a private one. A public good is typically nonrivalrous (one person's use does not preclude another person's utility) and nonexcludable (no member of the public can be denied access). Because adding an extra user has no effect on the cost of producing a public good, universal access is usually socially desirable because excluding people means sacrificing public welfare unnecessarily. For public goods, the marginal cost of production (what it costs to produce one extra unit of the good) is zero. Therefore, the provision of a public good is unsustainable as a market practice; no private entity has an incentive to produce it.

Music is conceptually non-rivalrous; one person's enjoyment of a song does not take away from another's. However, the non-rivalrous nature of music becomes complex when we consider different forms of music. The most common forms of music today are digital, as downloaded and stored in a computer or another digital device, packaged in a tape or CD, or delivered via live performances. Digital music is non-rivalrous and involves zero marginal cost of reproduction and distribution. On the other hand, packaged music makes music rivalrous, as the tape or CD is a private good by definition (Romer, 2002). Live performances by a particular musician also have an element of rivalry.² For concerts in closed halls with a limit on space, there are costs to expanding the size of the audience, and, for any concert, each additional person creates additional clean-up costs. In this way, a second cost adds to the marginal cost of expanding the audience size.

Given the rivalrous nature of some forms of music, it is clear that some forms can also be excludable, unlike a typical public good. Music can be technically excludable in the case of a record album that cannot be easily reproduced, or a digital file with technological protection measures (TPMs). Legal barriers in the form of IP rules that prohibit one musician from covering another musician's song, or that treat digital music-sharing as piracy, can also make music excludable. Physically, music can also be excludable in the case of a wall that blocks out members of the public who do not pay to see a live performance. Music can therefore be characterised as a *quasi*-public good, in the sense that it may be both non-rivalrous and possibly excludable at the same time. An additional user may not add to the marginal cost, yet excludability can be maintained by imposing a price (AmosWEB, 2013). It is possible to treat a *quasi*-public good as a purely private one by charging for access, but this is not economically efficient from the perspective of maximising social welfare. A trade-off emerges between maximising public welfare by expanding access and maximising private incentives by limiting access.

Egypt's music industry illustrates an access–incentive trade-off: music suppliers seek to maximise compensation through accruing monopoly rents via IP-based exclusion (incentive), whereas music consumers maximise their welfare by pursuing more access and sharing – using a variety of tools, including digital technologies (access). My previous research on Egypt's music industry found that in adapting to access–incentive tensions in the market and declining CD sales, the bulk of musicians' income comes from the live music scene, as opposed to copyrighted recordings. This live music scene, a type of social commons (coined "*de facto* commons" in my previous research), provides "a medium of bringing music creators and users together, without much need for the label, nor indeed copyright" (Rizk, 2010a, p. 127). According to Lemos (2007), social commons modalities

² Live music performance may be non-rivalrous, since one person's enjoyment does not take away from another's, except if one is placed in a spot where he/she is blocked by the person in front. Free-riding can still occur when, for example, people listen to outdoor concerts from neighbouring surroundings (Lange, 2009). For open-air concerts, adding a user may not add to the marginal cost. In general, the possibility of non-rivalry and excludability qualifies the live performance as a quasi-public good.

thrive in situations where technology precedes the law, allowing independent creative industries based on free sharing and dissemination to appear. I referred to the live music scene in Egypt as a *de facto* commons because it represents practices that have naturally originated through a bottom-up approach, without any planned action or deliberate decision from any organising agency (Rizk, 2010a, p. 128). Such social commons models based on bottom-up approaches may be suited to developing countries where intellectual property regimes are not fully developed (Lemos, 2007). In a world of *de facto* commons, there is a convergence between the interests of musicians and users, without much need for copyright protection.

This *de facto* commons operates in parallel to the legal mainstream and serves both consumers and musicians. It also upholds the *quasi*-public nature of music goods (i.e. non-rival consumption but possibly excludable consumption), which renders traditional pricing mechanisms and typical IP maximalist motives in the music industry ineffectual in catering for economic efficiency. In relation to sustainable development, social commons or *de facto* models crystallise the meaning of knowledge as a form of public good that needs to be shared and disseminated (Rizk, 2010a, p. 101). Additionally, in a gift culture that "rejoices in sharing and gives little attention to individuality", the commons-based approach upholds the nature of music as a *quasi*-public good, whose value increases with the number of users (Rizk, 2010a, p. 126).

The legal context

Statutory protection of copyright in Egypt was introduced by the Copyright Law 354 of 1954, which was modified several times. In 2002 Egypt adopted a new law, the Egyptian Intellectual Property Rights Law 82 of 2002 (EIPRL, or "the Law"), which replaced the copyright statute and kept many of its provisions but expanded its scope by adding new ones, such as folklore protection. The Law generally protects all creative productions in the literary, scientific and musical domains, whatever their type or mode of expression. It provides protection for written works, oral works, paintings, sculpture, architecture, applied and plastic arts, theatre and musical pieces, photographs and cinematographic films, television and radio works, sketches, databases and computer software. Protection does not extend to mere ideas, procedures, systems, operational methods, concepts, discoveries and data. Protection does not cover information or ideas contained in a work; it only protects the original way in which information or ideas have been expressed. Protection for the author is automatic as soon as the original work is created in a fixed and tangible form of expression. While the Law requires publishers, printers and producers of works, sound recordings, performance recordings and broadcast programmes to "jointly deposit one or more copies, not exceeding 10, of their works", failure to deposit such copies "shall not affect the author's rights and related rights provided for under this Law" (Art. 184).

For musical recordings, Articles 160–165 of the Law grant copyright protection "for 50 years from the recording date if owned by a company and for 50 years after the death of the author if owned by an individual". Article 140.6 gives authors an exclusive right over musical works. Copyright violations are subject to fines ranging between LE 5,000³ and LE 10,000 (approximately US\$ 900 and US\$ 1,800) per infringement and/or a minimum of one month imprisonment (Art. 181). Article 140(13) also protects derivative works and covers the "related rights" of performers such as musicians, actors, dancers, producers of phonograms (or sound recording such as CDs and cassettes) and broadcasting organisations. (See Appendix 8.1 for further review of the copyright provisions of the Law of 2002.) The Ministry of Culture is responsible for enforcing copyrights associated with music.

Alongside the Law's IP rights provisions, alternative licensing has sparked interest in Egypt. Creative Commons and other alternative licences are the product of individual negotiations for specific rights between the licensor (copyright owner) and the licensee, resulting in standardised licences for re-use cases with no commercial compensation sought by the copyright owner. Creative Commons licences enable creators to decide which rights they reserve and which rights they waive so that users and other creators can share, use and build upon the original work. Instead of falling under a typical copyright protection umbrella of "all rights reserved", alternative licences create an umbrella of "some rights reserved", creating "a balance between the reality of the Internet and the reality of copyright laws" (Creative Commons, 2012).

In June 2007, Egypt signed a memorandum of understanding with Creative Commons to adopt the alternative licence in accordance with Egyptian law. The licence was first translated into Arabic, and this "unported" licence (i.e. not associated with any specific jurisdiction) was carefully reviewed to ensure compatibility with the Egyptian law, including IP law and civil law. The revised Arabic Creative Commons licences were made available for discussion online in January 2010. In January 2013, as the research described in this chapter was being completed, Egypt was transferring the Egyptian licence to HTML to be posted online (Essalmawi, 2013).

IP law in practice

As evidenced by the abundance of illegally copied cassette tapes and CDs available on the market, Egyptian IP law as it applies to music is hardly respected or

³ LE stands for Egyptian pound.

enforced. There are no published local statistics on music piracy in Egypt; the only available figures are by the International Intellectual Property Alliance (IIPA), a coalition of associations representing US copyright-based industries. The IIPA reports that 75% of physical music (cassette and CD) distribution in Egypt consists of black market copies of a single original copy (IIPA, 2010). A popular form of illegal copying is the creation of "cocktails" – cassette and CD compilations of a variety of top hits sold on street kiosks downtown and elsewhere. These are part of an informal network of shops, street vendors and small-scale replication plants called "copy shops" that burn CDs on the spot (AmCham, 2005).

Mirroring the illegal music copying on Egyptian streets is an abundance of illegal access to music from the internet. Table 8.1 below offers an example of illegal download websites with the highest traffic in Egypt, which are among the top 75 websites most visited by Egyptians. These websites are easily accessible from home computers and PCs in internet cafés. The unlicensed software typically installed on computers in Egypt enables illegal downloading (AmCham, 2005). In 2008, the Egyptian music and record industry reported that illegal downloads represented 97% of all digital distribution of music in the country (IIPA, 2010, p. 177).

Alexa traffic rank *	Online music website
33	mazika2day.com
48	mawaly.com
60	melody4arab.com
75	Sm3na.com

Table 8.1: Popular websites for illegal music downloads in Egypt

* Rank among top websites visited in Egypt, as compiled from Alexa.com (January 2013). Alexa is an online provider of global web metrics that offers site analysis based on keyword, category or country.

Source: Alexa.com (2013)

The evidence on illegal copying, street "cocktails" and illegal downloading demonstrates that a great deal of music consumption in Egypt falls outside the scope of IP laws. Against this background, this case study explored how the consumption and production of independent music in Egypt, operate in the midst of restrictive copyright instruments and the mutual need of both consumers and producers for music sharing. This case study sought to bring the voices of central actors into the debate, namely, the consumers, musicians, producers and other stakeholders in the music industry. The study was the first to use field work to collect primary data on a large scale in Egypt on this topic, and it tapped into the perceptions behind music consumption habits and the thrust behind producing music outside the scope of the mainstream.

2. Research objectives and questions

How can independent music be nurtured and sustained within frameworks and models that reward creativity and enable knowledge-sharing, in a way that reflects the current practices of music consumption and production in Egypt? To answer this research question, field work was carried out to explore the prevailing perceptions of copyright and the practices of consumption and delivery of independent music. The research looked into the extent to which awareness of copyright and its breach intersects with trends in music delivery and consumption. It also looked at the gap in copyright awareness between physical and digital goods, whereby the notion of materiality directly correlates with the relevance of copyright. (This has its effect on the understanding of how products that are available online can be consumed and how the musicians behind them should be remunerated.) Accordingly, the study tapped into propositions on models that would legalise, accommodate and refine existing grassroots mechanisms for music production and sharing. The research also explored the possibility of creating a "quasi-commons" in which collaborators could be compensated for creativity and simultaneously satisfy the public interest in unhindered music-sharing. Specifically, the questions in the research included, but were not limited to:

- What are the prevalent trends of music consumption among users?
- What are the existing perceptions of copyright among users and producers?
- What types of reward are musicians seeking? Are they content with using their music as a channel for voicing opinion, or would they want to reap a monetary benefit as well, and, if so, how would that be possible?
- Which channels of remuneration do musicians prefer? Which ones do consumers prefer?
- How might it be possible to capitalise on the *quasi*-public, non-rival nature of music and yet create value that provides incentives to production?
- Which business models would be most suitable to empowering authors in the industry, bearing in mind socio-cultural factors?

The findings of this case study should prove valuable to policy-makers, as, in essence, the study addresses the core controversy inherent in any

knowledge-embedded good: how can modern business models adapt to derive value from sharing and collaboration rather than resorting to maximalist IP tactics? If such models are to be developed, they will ultimately empower collaborators in the creative industry and encourage knowledge-sharing, thereby acting as a catalyst for invention, knowledge production and open development.

3. Methodology and design

The sample for this study consisted of a cross-section of 600 consumers of alternative music in Cairo and 38 individuals involved in the music industry (coming from creative, production, distribution and policy-making perspectives).⁴ These included 24 independent musicians, five owners/managers of performance outlets, three owners/managers of digital platforms, two owners/managers from cultural centres, one policy-maker, one union lawyer, one producer and one copyright expert. (See Appendix 8.2 for a complete list of interviewees). A structured survey was deemed appropriate for the consumer group, whereas in-depth semi-structured interviews were utilised for the music industry sample. The survey allowed a larger number of consumers to be sampled in a cost-effective way, and the types of answers sought were straightforward enough to warrant beforehand-coding and very few open-ended questions. On the other hand, given that much less was known beforehand about the music industry and its operations i.e. about the generation of musicians that constitutes the alternative music scene, their business models and the problems and successes they encounter - interviews were necessary so as to elicit more detailed information.

The consumer survey was carried out in Cairo – by a research team based at the Access to Knowledge for Development Center (A2K4D) at The American University in Cairo (AUC) – between March and April 2012. The survey followed a targeted stratified methodology. Appendix 8.3 provides the list of all institutions and venues targeted for the purposes of this study. These venues represent a crosssection of the most important institutional players on the Cairene alternative art scene. The researchers carried out the surveys at these alternative music outlets and performance and art spaces because the interested customer population was

⁴ The initial research plan included interviewing 60 individuals from the music industry, but, due to several constraints, that target was unattainable. One limitation in this study was the difficulty in contacting the originally desired number of musicians. This limitation should be taken into consideration in interpreting the numerical results of the musicians. This is, to some extent, compensated for by the anecdotes provided by musicians, which are reflected in the analysis.

more concentrated at those venues than among the general population, and in consideration of the high rates of non-response that were likely to occur had a random, door-to-door methodology been adopted. The sample was stratified according to gender only, given that for alternative music-consuming populations, older age groups might not be available. In absolute terms, a larger percentage of interviews was obtained from Sakiat al-Sawy (Al Sawy Cultural Wheel)⁵ compared with other outlets, understandable given that venue's large capacity, diversity of audience and attendance rates. However, relative to their size, capacity and attendance rates, institutions were all fairly represented in the final sample of 600 respondents. (See Appendix 8.4 for more details on the consumer survey sample.)

For the semi-structured in-depth industry interviews, individuals involved in the alternative music and art industries were chosen according to criteria associated with their specific roles in the music industry. Musicians were chosen according to their visibility on the alternative music scene, as measured by their YouTube video click count or by their concert presence at the more frequented alternative venues. In this sense, the sample was also slightly stratified to include musicians whose music had "gone viral" and also those who were relatively well-known but had not broken through as yet. The policy-maker interviewed was selected according to his knowledge of the topic at hand.

4. Findings Participants' knowledge of IP and perceptions of its relevance

The survey and interview results revealed a lack of relevance – from the perspective of consumers, musicians and other stakeholders – of copyright in relation to the Egyptian alternative music scene. This comes from their answers regarding three topics: (1) knowledge of the law; (2) obstacles hindering their creativity; and (3) incentives to comply with the law.

First, the lack of knowledge of the Egyptian copyright law by consumers and musicians pointed to the limited relevance of copyright in the independent music industry. While 71% of music consumers surveyed knew the general meaning of copyright and IP, only 26% of the total sample was familiar with the content of Egyptian copyright law. All of the musicians interviewed confessed they knew

⁵ Al Sawy Cultural Wheel was built on the site of a garbage dump under a flyover by the Nile. The centre transformed the role of the middleman in the music industry by "removing the concept of CVs", according to centre founder/director Mohamed Al Sawy (cited in Rizk, 2010a).

very little or nothing about copyright law in Egypt.⁶ Additionally, the majority of musicians felt that the copyright regime was irrelevant to the art industry at large and to their own work. Only two out of 24 musicians thought copyright reform mattered, and stated it would only be effective if it shifted the balance of power away from production companies in favour of musicians. Hosam Loutfi, member of the Law Committee in the Supreme Council of Culture (and an IP lawyer), shed light on the lack of awareness of copyright in Egypt. He pointed out that independent musicians do not seek out the options available to them, and thus are not aware of how they could benefit from copyright (Loutfi, 2012). This perspective also explains the process by which copyright may have been rendered irrelevant in the minds of musicians.

Second, the musicians' perception of the lack of relevance of copyright could be deduced from their answers to questions on the obstacles hindering music and creativity in Egypt. None of the musicians cited the copyright regime as a main obstacle. Instead, they cited the role of production companies, media and government bureaucracy as the main obstacles. Furthermore, responses from other stakeholders also did not place importance on copyright. Dr. Ahmed El Maghraby, owner of Makan art outlet,⁷ felt that, despite the existence of copyright in Egypt, the main obstacle facing musicians is the corrupt judicial process and court system, which hinder any protection that copyright could otherwise give to musicians (El Maghraby, 2012). Ahmed Mohamed, Partner and General Manager of Studio Vibe, mentioned the music syndicate laws as a major hindrance, since their requirements are too restrictive for young independent musicians. To illustrate this, Mohamed spoke of how requirements seek to compel musicians to be members of the syndicate in order to perform when, in fact, nowadays some young musicians have not reached the required membership age (Mohamed, 2012).

Third, copyright's lack of relevance is compounded by its absence as an incentive to musicians. Two main perspectives were voiced regarding copyright's apparent failure to incentivise. One view was that the legal coercion associated with enforcing copyright is a hindrance to musicians. Among the respondents voicing this view was Tarek Metwalli, founder of Who's Jammin?,⁸ a digital platform composed of a worldwide private social network of musicians categorised by city and instrument. Metwalli spoke of copyright as a major obstacle in building a relationship between musicians and their consumer base. From his perspective,

⁶ Despite the musicans' little knowledge of the EIPRL, two musicians had heard of Creative Commons, and three felt that Creative Commons licensing would bring improvement to the Egyptian music landscape.

⁷ Makan is an art outlet in Cairo oriented towards cultural and heritage preservation/awareness.

⁸ A list of services provided by Who's Jammin? can be found at Who's Jammin? (n.d.).

copyrights promote a relationship of violent coercion, whereby the court system is involved and fines are imposed, rather than promoting a relationship of ethical consumption, whereby consumers want to do the right thing to support good art. Furthermore, Metwalli felt that copyright simply protected the rights of the industry and not that of the musicians (Metwalli, 2012). Another view was that the lack of enforcement of copyright laws deters musicians from pursuing a legal course of action in relation to copyright. When musicians were asked, "How would you feel about changes in copyright policies?" half of them said copyright did not matter because the law was a luxury irrelevant to most people's lives and it was impossible to get one's rights enforced in Egyptian courts. Makan art outlet owner El Maghraby also voiced this view, alluding to the corrupt judicial process and court system in Egypt (El Maghraby, 2012). Thus, in the perceived absence of incentives to comply with copyright, it becomes understandable why musicians see copyright as irrelevant.

Knowledge of the notion of a "digital commons"

In the next set of questions, consumers and musicians were asked about their perception of the notion of a "digital commons". The following is from the definition adopted for this research study:

The digital commons comprises informational resources created and shared within voluntary communities of varying size and interests. These resources are typically held *de facto* as communal, rather than private or public (i.e. state) property. Management of the resource is characteristically oriented towards use within the community, rather than exchange in the market. As a result, separation between producers and consumers is minimal in the digital commons. (Stalder, 2010)

The sustainability of a digital commons model depends on its source of revenue. In the music context, revenue is commonly generated through advertising, sponsorships and subscription fees, which may include user payments in varying forms: direct payment in case of subscription, or a versioned user model with differential pricing possibly complementing advertising and/or sponsorships. Meetphool⁹ is an existing digital platform based on sponsorship that seeks to develop a future model of user payment. Meetphool was established via a grant by the EU awarded in 2009 (Delegation of the EU to Egypt, 2011). Nada Thabet, Meetphool Concept and Technical Manager, explained that one element of the project is an effort to devise models for revenue generation in order to ensure sustainability (Thabet,

⁹ Meetphool is a platform that specialises in building a network for the performing arts, including music, with a regional focus seeking to bridge the Mediterranean and connect North African and European artists (Meetphool, 2012).

2012). Who's Jammin? founder Metwalli stated that his service's main source of revenue was studio bookings, and he hoped he would not have to resort to placing advertisements on the Who's Jammin? website. Metwalli added that Who's Jammin? will, however, eventually levy a subscription fee for non-musicians to get access to the music uploaded by member musicians on the digital platform (Metwalli, 2012).

Despite the existence of digital platform initiatives in Egypt, there was low familiarity with the notion of a digital commons among the surveyed sample. Initially, none of the consumers or musicians appeared to be familiar with the term. Once the concept was explained to them, just over one fifth of consumers and more than half of the musicians said they were familiar with the notion.

Half the musicians said they did not want to develop a digital commons model, partly because people do not buy music online and partly because they did not believe it could survive in Egypt. Of the total sample of music consumers, 96% said they downloaded music online, yet only 1% said they paid for it. The musicians dismissed alternative licensing and digital commons as irrelevant models for the improvement of the Egyptian independent music industry. Reasons included the lack of internet access and limited security for online payment, as well as the irrelevance of copyright as adequate legal protection. Meetphool interviewee Thabet also pointed to the problem of online payments in Egypt, stating that the country does not have a culture of online credit card use (Thabet, 2012).

Nevertheless, two musicians were in favour of developing a digital commons model to foster collaboration among musicians, citing the potential networking benefits of such a platform. As well, these two musicians expressed the view that a common digital platform could resolve the moral aspect of copyright. Citing YouTube as an example of a technology that helps address the issue of copyright, they felt that uploading a song to a digital platform obviates the need for recourse to a notary public or even to courts, i.e. they viewed uploading a video or a recording to YouTube as guaranteeing proof of authorship, with proof of date, without the hassle of the registration process. In addition, uploading music to YouTube was commended by musicians because, in their opinion, it blurred the distinction between promotion and protection.

Music consumption patterns

Most consumers surveyed were aware that street CDs were illegally copied, but the consumers did not seem to be deterred by this knowledge. Specifically, 97% of the consumers surveyed were aware that cheap street CDs were pirated and 91% believed it was illegal to buy them on the street. The EIPRL does not contain a specific clause for buying illegally copied CDs and thus it is not considered illegal to buy such copies.¹⁰ More than three quarters of consumers surveyed believed that burning CDs was an illegal practice, but only 34% of all consumers were willing to pay more to purchase CDs that respected copyright.

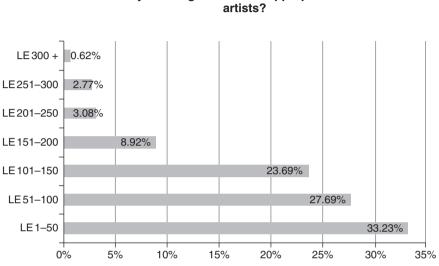




Figure 8.1: Amount respondent willing to pay per month to musicians

The survey asked consumers how much they would be willing to pay per month to reward musicians, regardless of the format of music delivery (Figure 8.1). While one third of the consumer sample was willing to pay between LE 1 and LE 50 (about US\$0.17–0.18) per month to reward musicians, roughly one quarter of the sample was willing to pay between LE 51 and LE 100 (about US\$8–16) per month, and slightly more than a quarter was ready to pay between LE 101 and LE 150 (about US\$16–25). Together, this means that 85% of consumers were willing to pay some amount between LE 1 and LE 150 (US\$0.17–25) per month, while only 15% were willing to pay more than that (LE 151–300 [US\$25–50]).

Some questions were directed to the sub-group of consumers who use CDs or cassettes to listen to music (200 people, representing 33% of the sample). Of this sub-sample, 20% purchased illegally burned CDs and cassettes on the street at a cheaper rate, and 65% purchased them from stores with legal distribution

¹⁰ According to Article 181 of the EIPRL, it is illegal to sell burned/copied CDs. However, making a single copy of a CD for exclusive personal use is legal (Art. 171.2), provided that this copy shall not hamper the normal exploitation of the work nor cause undue prejudice to the legitimate interests of the copyright-holder.

rights. When asked about the reasons behind their consumption patterns, only 14% mentioned a respect for IP rights, as opposed to 86% who mentioned better quality as their primary reason.

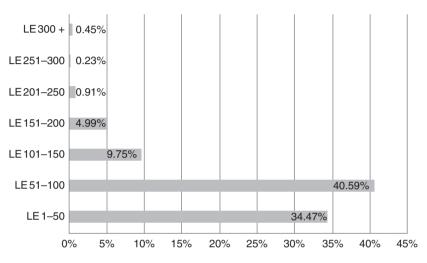
In the sample of consumers, 33% (200 individuals) listened to CDs and cassettes that they purchased either in stores or on the streets. Consumers demonstrated a distinction in attitudes with respect to digital music. The prevailing view among the majority of consumers was that music available online is free and legally available for all. Consumption patterns reflected this view. Of the total sample of music consumers, 96% said they download music online, yet only 1% said they pay for it. Slightly more than 80% of respondents said they do not pay for the music they download due to the availability of free download sites. Another 14% held the view that websites and music available online are "free" (a misconception which reveals the lack of knowledge of online IP requirements and payment rules). The lack of knowledge of IP and payment rules suggests that there may be a widely held view that all virtual music products are implicitly free of charge by virtue of their online, unrestricted (in practical terms) accessibility.

Interviews with the independent musicians revealed a similar trend, whereby online digital music is perceived as "free". Streaming, in particular, was viewed by several musicians as a free-of-charge form of music. More than one musician noted, as obstacles for charging for digital downloads, the technical difficulties of tracking digital downloads and administering online payments in Egypt. Thus, while the concern for copyright and IP was found to be generally low among the sample of consumers and musicians, it was particularly low in respect of online digital music products. Music consumers and musicians both shared the view that virtual, online products are for free-of-charge use.

Remuneration, musicians' incentives and business models

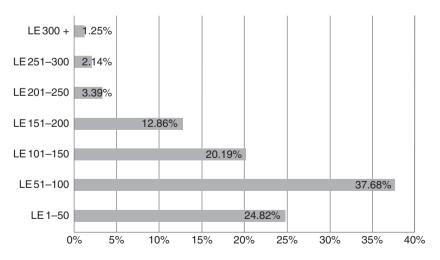
The next set of questions explored the views of consumers and musicians regarding musicians' remuneration, incentives and business models. Out of the sample of consumers, 91% said they pay for music and 34% of the sample said they spend up to LE 50 (about US\$8) on music per month (Figure 8.2). In comparison to spending money on CDs/cassettes or online music, consumers spend more money on concert-going. Almost 39% of consumers surveyed said they spend up to LE 100 (about US\$16) on concerts per month (Figure 8.3).

On average, a respondent in the sample would spend LE 96 (about US\$ 15) per month on concert-going, whereas the average respondent would spend a mere LE 14 (about US\$ 2) per month on purchasing CDs/cassettes (and, in rare cases, online downloads), in other words approximately seven times less than on concert-going. And, as was mentioned above, although 96% of the sample reported downloading music online, only 1% of them reported paying for it, suggesting that the overwhelming majority of the "downloaders", 99%, download music free. Money spent on concerts, therefore, represents a disproportionately much larger



How much money do you spend on music per month?

Figure 8.2: Money spent on music per month



How much do you spend on concerts per month?

Figure 8.3: Money spent on concerts per month

sum than money spent on physical or online music goods. Confirming this trend, concerts and live performances were identified as the best medium of reward for musicians' work, with 59% of consumers sampled stating that they believe music creation is a real job that should be rewarded monetarily, and of that 59%, 76% saying that such work should be rewarded monetarily via paid attendance at concerts and performances (see Figures 8.4 and 8.5).

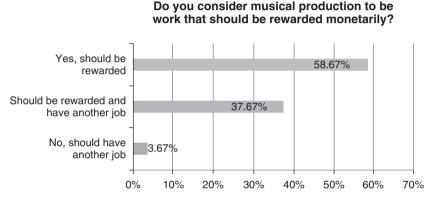


Figure 8.4: Monetary reward for production?

For consumers who considered musical production work that should be rewarded monetarily, how do you think artists should be rewarded for their work?

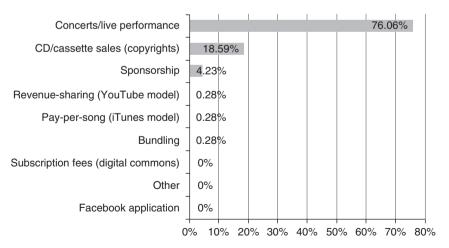


Figure 8.5: Method of monetary reward

Preference for the live scene as the main venue for music delivery was echoed by the musicians. One third of the musicians interviewed (8 out of 24) said they believe that, ideally, musicians should be remunerated for live performances, while half of them (12 out of 24) chose live performances as the first revenue source for themselves. Additionally, half the musicians (12 out of 24) said they get at least 50% of their music income from live performances, and 14 of them said they do not get any music income from copyright-protected recorded material. An exception is George Kazazian, a famous veteran star in the independent scene, who said copyrighted material represented a small amount of music income for him (Kazazian, 2012). For nearly half the musicians (10 out of 24), music is not their main source of income; they make most of their money from other occupations.

Other income for the musicians surveyed mostly comes from composing short jingles for advertisements, or from composing music for famous mainstream musicians. Rather than expecting to generate income from producing an album, a great majority of musicians who had recorded an album said they invested in its production with no hope of getting any direct return from it, demonstrating the fact that album production is viewed as a promotional exercise. Although 11 of the 24 musicians said they had produced one or more CDs, only one had actually signed with a label. Nine of the interviewed musicians agreed they would want to sign if offered the chance, but only if the conditions suited their tastes. They said they were concerned about "selling their souls" to production companies or labels.

For the majority of the alternative musicians surveyed, the importance of performances was said to be not merely an adaptation to the business realities of the contemporary independent music scene in Egypt, but also a lifestyle and ideological choice. This choice was reflected in the musicians' notable self-distancing from the notion of business models or the commercialisation of music practice. While 15 out of the sample of 24 musicians said they receive some income from music, the musicians were found to be uncomfortable when sharing their views about business models. They showed a lack of interest in making money, and were mostly interested in surviving by doing something they were passionate about. When asked, "What is your main incentive for producing music?" none of the independent musicians answered, "To make money". In fact, 16 of the respondents said they do not expect to make much money out of their music.

Many of the musicians surveyed voiced anti-commercialisation notions, perhaps as a reaction to the financially driven mainstream production universe. Almost half the musicians interviewed (10 of 24) highlighted that they would prefer to focus on their music as self-expression, rather than as a response to market demands. They said they did not want to commercialise themselves and preferred to continue creating their music to send their message. Three musicians emphasised the secondary importance of money and their willingness to struggle financially for their musical passion.¹¹

In terms of the musicians' business model, more than half (13 of 24) the independent musicians interviewed said they had no business plan at all when they started, and that they still saw themselves as operating without a business plan. During the interviews, some musicians became annoyed or smiled at the mention of business terms, thus demonstrating their anti-commercial inclinations (as noted earlier). In the most extreme cases, the musicians argued against having business plans or considering financial success in order to progress in the field of art. The trend that emerged was that independent musicians accumulate and save money from multiple sources, mostly live performance or non-music-related work, to invest into the production of a recorded album, which is mostly seen as a tool of self-promotion, akin to a rite of passage rather than an important element of survival.

When asked whether they minded if their music is shared free, nine musicians answered that they did not, mostly because they said they see CDs as just a promotional tool and that the more people who listen, the better it is for them. This sentiment was present despite the fact that the musicians who said they do not mind their music being shared free tend to know that this sharing is illegal. Ten musicians agreed that art should be a public good, explaining that access to cultural production should be a human right.

However, despite the musicians' non-monetary and anti-commercial inclinations, some responses revealed propositions to make Egypt's independent music industry more economically viable. Fairuz Karawia, an independent musician, proposed an alternative remuneration model that would use mainstream IP for collaborative production of albums and collective licensing. This, according to Karawia, could be aided by consumers paying for material music goods such as CDs and cassettes. The proposed remuneration model was in line with Karawia's view that musicians should collaborate and devise business models to suit their own needs rather than complain about production companies (Karawia, 2012). Meanwhile, Emad Mubarak, the copyright lawyer interviewed, said he favoured

¹¹ These statements echo those made by interviewees in my earlier research on Egypt's music industry. Moreover, in a National Public Radio (NPR) interview in 2008, independent Egyptian group Black Thema stated that it was not easy for the band to operate and they were working as musicians for almost no monetisation, because they refused to be part of the commercial music industry. The band said its music covered mundane Cairo life scenes so that it could provide "very real street-level views of Egypt", while focusing on raising the profile of a part of Egypt – Nubia – mostly ignored by popular music and musicians.

the notion of a sharing-based public licence coupled with ethical consumption, whereby consumers would pay symbolic prices for CDs and other artistic products subsidised by the state (Mubarak, 2012).

5. Conclusions

This study was an attempt to tap into the universe of independent music consumption and production in Egypt. Field questions focused on exploring the prevailing perceptions on matters of copyright, musician remuneration and consumption and delivery practices. The study found that the lack of awareness and the breach of copyright intersect with practices of music delivery and consumption. Moreover, there is a gap in copyright awareness with reference to physical goods versus virtual goods: respect for copyright is directly correlated with the physicality of the music product. This gap in copyright awareness is reflected in consumption and expenditure patterns by consumers and will need to be taken into consideration in proposing any model that would seek to legalise, accommodate and refine existing grassroots mechanisms for music production and sharing.

Through canvassing the prevalent trends in music consumption, it was found that Egyptian consumers do pay for music, albeit modestly. The majority of money spent on music goes towards attending concerts and barely any is spent on CDs or cassettes. Moreover, consumers who buy illegally copied street CDs and cassettes are not deterred by the counterfeit character of the goods. At the same time, online downloads are overwhelmingly done without any payment.

Consumers and musicians convey similar perceptions of copyright. While the majority of consumers (71%) surveyed knew of the general concept of copyright, only a minority were aware of the Egyptian law. All the musicians surveyed admitted to knowing very little about copyright, deeming it irrelevant to their practices. From the musicians' perspective, IP law is totally removed from people's lives and hence knowledge of it would not serve any end. Some musicians find the courts' approach to enforcing IP rights inadequate, thus rendering the IP regime even more irrelevant to them. Copyright law was not cited by any of the musicians as an obstacle to music production, and only a few of the non-musician stakeholders said that it was an obstacle. There thus appears to be a parallel and non-intersecting universe for independent Egyptian music alongside that of the mainstream universe of commercial production: a parallel independent music reality in which notions of copyright, cost and financial remuneration are of much less concern (than in the commercial dispensation) to both musicians and consumers.

An unexpected finding was the difference in perceptions (among both consumers and musicians) regarding physical versus virtual music. Most

consumers surveyed said they felt that online music, unlike CDs or cassettes, was free from the legalities of economic rights (e.g. copyrights), given its immateriality. This view was shared by the independent musicians surveyed, for whom online platforms are primarily a vehicle not for monetary gain but rather exposure, promotion and sharing.

Despite its seeming potential, few respondents knew about the concept of a digital commons, and several musicians cast doubt on the feasibility of the concept for independent music in the Egyptian context. This lack of feasibility was, to a large extent, attributed by the musicians to the requirement that consumers would have to pay (directly or indirectly) for digital music in such a commons arrangement, a modality which musicians saw as running contrary to consumer expectation (as confirmed by the findings of this research) that online music is free of charge. Other potential structural impediments to a digital commons were, according to respondents, the lack of an e-commerce culture in Egypt and the overall low internet penetration.

In this author's analysis, however, the current reticence towards the idea of a digital commons for Egyptian independent music should not necessarily limit the possibility of promoting the concept. A digital commons platform could, in my view, resolve the moral element of copyright as it resonates with the spirit of EIPRL (which renders copyright protection for the artist automatically [see Appendix 8.1]). According to the EIPRL, moral rights are independent of economic rights and remain with the authors even after they transfer their economic rights (art. 143). The author of a work "cannot assign, waive, transfer or sell their moral rights", even if the owner of the economic rights is a different individual (Awad *et. al.*, 2010, p. 30). In addition, digital platforms could, for instance, allow for a "freemium" model (a mix of free and paid-for offerings) whereby free online music is bundled with forms of paid-for content and goods such as concert tickets (paid-for goods which clearly align with the musicians' ideologies towards their music and with the consumption patterns and economic preferences of consumers).

Egypt's independent musicians produce music for reasons other than monetary benefits. For most of the musicians surveyed, music is primarily a means of self-expression and voicing opinion. A few musicians surveyed did, however, note the importance of financial reward, albeit as a secondary motivation. Musicians could, in my analysis, reap an enhanced monetary benefit if they were to collaborate in the adoption of a business model that capitalised on the capacity of digital platforms to freely disseminate their artistic voice, promote their music and enable innovative means of remuneration.

Compensation for live performances was identified as the preferred channel of remuneration by both the musician and consumer sub-samples of the survey sample. Consumers spend as much as seven times more money on concert-going as they do on CDs/cassettes (and, extremely rarely, online music). A hybrid offering of live performances, CDs/cassettes and online music could represent a workable balance between public access and producers' returns. The sustainability of this balance would likely depend on factors such as the presence of spaces to host live performances, the adoption of alternative physical outputs of production (away from the expensive recording companies) for which consumers are willing to pay, and, finally, investment in more awareness about the promises and possibilities of a digital commons. One viable business model for Egypt's independent music scene could be based on a free digital commons licensed under an alternative licensing framework such as a Creative Commons.¹² Such a model could offer the option of direct purchase to support the idea of ethical consumption, and/or remuneration to musicians for their live performances (in alignment with the musicians' ideological stance of self-distancing from commercialised music practice).

Opening up an independent music digital commons is, in my analysis, realistic in Egypt, given the prevalent consumption patterns and the prevalent perceptions towards copyright and online payment modalities. Bundling free digital commons content with paid access to live performance (and optional contribution to the band and purchase of a physical CD or both) could be one way to capitalise on the nature of music as a *quasi*-public good (and also an "experience good" in a culture that thrives on social interaction). Business models that follow a *quasi*-commons approach to Egyptian independent music could offer an alternative, whereby collaborators could be compensated for creativity and could simultaneously satisfy the public interest in unhindered music-sharing. Such models could constitute one way of easing the tensions (between access and incentive) that have emerged with the expansion of free online music, while at the same time expanding user access and, through complementary means, generating musician remuneration.

Fine-tuning the appropriate business models as such would approach the "open development" paradigm. It would create a valid environment to empower music producers, promote collaboration and expand access, through an inclusive rather than exclusive IP paradigm. This would entail more sharing among musicians and, ideally, eliminate the need for copyright infringement.

¹² There have been recent efforts (as mentioned above) to adapt Creative Commons licensing to the Egyptian context, as well as holding an event in December 2012 to promote the licence to artists in particular (Essalmawi, 2013).

Appendix 8.1: Review of Egyptian copyright provisions (in the EIPRL of 2002)¹³

1. Conditions of protection

Egypt's IP Law, the EIPRL of 2002, does not require any formalities for copyright protection. An author does not need to officially register, or apply, for copyright protection. Copyright protection exists as soon as an original work is created in a fixed and tangible form of expression.

In certain instances, however, keeping a private register of works *is* required by law. Article 187, for instance, provides as follows:

Any establishment that puts in circulation works, recorded performances, sound recordings or broadcast programmes through sale, rent, loan or licensing, shall be required to:

- (1) Obtain a license from the competent minister against payment of a fee prescribed by the Regulations, not exceeding 1,000 pounds;
- (2) Maintain registers in which data and circulation year relating to each work, sound recording or broadcast programme are recorded [...].

Moreover, Article 149 of the Law, dealing with the right to transfer economic rights, requires any such transfer to be "certified in writing and contain an explicit and detailed indication of each right to be transferred with the extent and purpose of transfer and the duration and place of exploitation". Article 185 then goes on to require every competent ministry to establish a register in which any act of disposal relating to works, performances, sound recordings and broadcast programmes shall be recorded (Art. 185).

2. Core rights

Egypt is a civil law country and both moral rights and economic rights are protected. Economic rights allow authors to extract economic value from the utilisation of their works and moral rights allow authors to claim authorship and protect their integrity.

¹³ This Appendix was written by Bassem Awad, an IP specialist affiliated to A2K4D (where the author is Director) at The American University in Cairo (AUC). In addition to contributing this Appendix on Egyptian copyright provisions, Awad co-authored Chapter 12 of this book, on biofuel innovation and patenting in Egypt.

Moral rights include the right to make the work available to the public for the first time; the right to claim authorship; and the right to object to any distortion, mutilation or other modification of the author's work that might be prejudicial to his/her honour or reputation (Art. 143). These rights are independent of economic rights and remain with the author (and his/her successors) in perpetuity, even if he/she transfers his/her economic rights. Creators cannot assign, waive, transfer or sell their moral rights.

Economic rights cover any form of work exploitation. They provide the copyright-owner with an exclusive monopoly to do – and to authorise others to do – the following in relation to the copyright-owner's work: reproduce in various forms, adapt, translate, distribute, rent, lend, perform publicly, broadcast, communicate to the public and/or make available to the public (Art. 147).

In many countries, rights-holders in musical works have authorised so-called collective management organisations (CMOs) to license restaurants, retail outlets, broadcasting organisations and other users to perform/play/communicate their music. In Egypt, however, there is no CMO for copyright-holders. In countries with CMOs, the CMOs act on behalf of their members, negotiating rates and terms of use with users, issuing licences authorising uses and collecting and distributing royalties. The CMOs distribute the collected revenues, after the deduction of administration costs, to individual right-holders. There are typically various kinds of CMOs, depending on the category of works involved (e.g. music, dramatic works, multimedia productions).

3. Duration of protection

The Egyptian Law provides the standard term of copyright protection – 50 years – set out in international treaties. Copyrights are protected during the author, composer or lyricist's life and for 50 years after his/her death (Art. 160). The duration of protection of performer or producer "related rights" (also known as "neighbouring rights") is the same as that for the author/composer/lyricist rights: performers enjoy an exclusive right for the exploitation of their performances for a period of 50 years calculated from the date on which the performance/recording took place (Art. 166); and producers of sound recordings enjoy an exclusive economic right to exploit the recordings they produce for a period of 50 years calculated from the date on which the recording was made or made public, whichever comes first (Art. 167). Meanwhile, broadcasting organisations enjoy an exclusive right to exploit their programmes for a period of 20 years, calculated from the date on which the programme was first broadcast (Art. 168).

4. Administrative bodies

The following ministries and government authorities are responsible for enforcement of copyrights in Egypt:

Relevant government entity	Enforcement area
Ministry of Culture's Central Department for Audio-visual Censorship	Copyright and neighbouring rights for music, films and theatre performances; the Ministry of Culture does not enforce rights in literary works, databases and broadcasts
The Ministry of Information	Broadcasting rights
Ministry of Communications and Information Technology's Information Technology Industry Development Authority (ITIDA)	Software and databases
The Ministry of Trade	Counterfeits
The Cyber Investigation Unit of the Ministry of Interior Affairs	Internet copyright infringement

To promote stronger enforcement, Egypt in 1996 set up an IP unit within the police force, with the unit named the General Administration for the Prevention of Infringement of Intellectual Property Rights. In addition, teams of civil inspectors are authorised to remove infringing goods from the market, and an Economic Court was created in 2008 to handle several types of cases, including copyright disputes.

Appendix	8.2: List of	interviewees
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Digital platforms	Tarek Metwalli	Founder ,Who's Jammin?
	Nada Thabet	Concept and Technical Manager, Meetphool
	Mohamed El Ayat	Producer and founder of Underground Music Federation (UMF)
	Ahmed El Maghraby	Founder/Director, Makan
	Ammar Dajjani	Owner, Cairo Jazz Club
	Moataz Nasr El Din	Director, Darb 1718
Outlets	Ahmed Mohamed	Partner and General Manager, Studio Vibe
	William Wells	Director, Townhouse Gallery and Rawabet Gallery
Cultural institutes	Azza El Husseiny	Member of Organising Committee, El Fan Midan
	Mohamed Talaat	Project Coordinator, Jesuit Cultural Centre
Policy-maker	-maker Hossam Loutfi Member, Law Committee, Supreme Council of Culture (and IP lawyer)	
Union	nion Emad Mubarak Lawyer, Association for the Freedo of Thought and Expression (AFTE	
Stakeholder	Mohamed Khalifa	Producer, Bassem Youssef Show
IP rights officer	Hala Essalmawi	Principal Attorney and IP Rights Officer, Library of Alexandria

Continued

Appendix 8.2: List of interviewees (continued)

	Youssef Atwan	Like Jelly
	Georges Kazazian	Solo
	Nadia Chanab	Solo
	Mohamed Hassan	Solo rap/hip-hop
	Fairuz Karawia	Solo
	Moe (Mohamed El Arkani)	Percussion Show
	Hani Mustafa	HanyMust
	Hazem Shahin	Eskenderella
	Khaled Gabri	Ashara Gharby
	Ibrahim	Asphalt Band
	Gad	Asphalt Band
Independent	Ahmed Mostafa	City Band
musicians	Noor Ayman	Simplexity and Zabaleen Band
	Aya Metwalli	Solo and Mashrou3 Chorale
	Tarek El Borolossy	Digla
	Omar El Deeb	Simplexity
	Ousso (Mohamed Lotfy)	Eftekesat and Nagham Masry
	Ragui Akram	Karma Band
	Cherine Amr	Mascara Band
	Mado (Mohamed Adel Aal)	Taxi band
	Jimmy (Mohamed El Gohary)	Salalem
	Neobyrd	Solo DJ
	Aly B (Aly Bahgat)	Solo DJ
	Salam Yousry	Mashrou3 Chorale

Appendix 8.3: List of alternative art outlets in Cairo, as at May 2012

I) Cairo Opera House	El Borg Gezira, 11567, Cairo – Tel 0227390132
2) Darb 1718	Kast El Sham3 Street Al Fakhareen, Old Cairo, Cairo – Tel 0223610511
3) El Sawy (Culture Wheel)	End of 26th of July Street, Zamalek, Cairo- Tel 02 27368881, 2736 6178 – Email: info@culturewheel. com – Co-founder: Abdel Moneim El Sawy
4) Makan	I, Saad Zaghloul St, El Dawaween, Cairo – Tel 27920878, Dr Ahmad El Maghraby, Admin Secretary Dina Mohamed Said
5) Townhouse Gallery	Hussein El Me'amar Pasha St, off Mahmoud Basyouni St, Downtown Cairo – Tel 25768086 – Email: info@ thetownhousegallery.com – Director: William Wells
6) Rawabet Theatre	3 Hussien El Me'amar St, ext. of Mahmoud Bassiouny St, from Talaat Harb – Tel 01275070727
7) El Gueinena Theatre / Beit El Harawi	Al Azhar Park, Salah Salem Street, Cairo – Tel 202 25103868 – 25107338 – Email info@alazharpark.com
8) After Eight	6, Kasr El Nil St, Downtown, Cairo – Tel 0103398000
9) Bikya	23, Dr Zaki Hassan St, off El Nasr Street, Nasr City, Cairo – Tel 224046688 – Email info@bikyabookcafe.com
10) Cairo Jazz Club	197, 26 of July Street, Sphinx Square, Agouza, Cairo – Tel 02 33459939 – Care of Mariam

Appendix 8.4: Consumer survey sample diagnostics

A problem encountered regarding the sample stratification was the gender balance. Although instructions were given to the research team in charge of the questionnaires, they were unable to respect a 50/50 gender balance due to the disproportionate number of men attending cultural events relative to women. The final gender distribution was 75/25 in favour of men, or 446 men and 154 women. Researchers reported, *ex post*, that the majority of women present at the venues were not particularly interested in music, and were simply there with their male partners/boyfriends or accompanying some friend/relative as a favour (encouraged by gender attendance policies which give preferential treatment [entry] to couples over young men).

In terms of age, the sample was, on average, younger than an average random sample of the population, as expected of alternative cultural outlets. Seventy per cent of the sample was aged 24 or younger, and 90% of respondents were 29 or younger. No respondents older than 44 were interviewed. Unsurprisingly, the majority of the respondents in the sample were students (62%). The fact that approximately 30% of the rest were employed by the private sector or in the liberal professions (e.g. lawyers, doctors, engineers) suggested a significantly more affluent segment of the population relative to the Egyptian average. This interpretation is further supported by the educational attainments of the sample: 83.5% of respondents had either already obtained or were in the process of obtaining a university degree. For only 10% of the sample was high school the highest educational attainment, and only 2.3% had obtained a technical licence.

To complete the picture, all but one respondent had access to the internet. For the greatest majority of internet users, the principal internet access point was at home (76.7%), while 15% accessed the internet primarily via mobile phone and 6% primarily at their workplaces. This high educational, class and connectivity profile was also mirrored in the linguistic abilities of the sample: only one third of respondents were Arabic-only speakers, whereas the majority (57%) spoke both Arabic and English, and 9% spoke Arabic and another language.

One of the more telling characteristics of the sample – considering its relative wealth, connectivity and high educational achievements – was its rate of bank account ownership. Only 34% of respondents reported having a bank account, a figure not disproportionately higher than the average population. Further, only half of the bank account holders in the sample reported using online banking features, and only a third felt safe using credit instruments for online purchases (i.e. 5% of the total sample). These characteristics severely restrict the ability of the vast majority in the sample to make online purchases of artistic products, including legal music downloads.

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