

TERM CREATION, A PREREQUISITE FOR THE SURVIVAL OF NIGERIAN LANGUAGES: THE IGBO LANGUAGE EXPERIENCE

By

Mme Okeogu, Chidinma I

National Institute for Nigerian Languages (NINLAN), Aba.

chyokeogu@yahoo.fr

08051710569

Abstract

Nigerian languages are still in their developmental stages. Development can only be made possible through creation of terms to reflect the realities of our day in any given indigenous language and any given domain. Terminological activities are thus necessary tools in the advancement and development of these languages. We decided to create terms in the area of Economics in the Igbo language. Compiling a list of about 80 terms on the New Economy in the English Language, we tried to look for the Igbo equivalents of these terms. It was not easy to get informants who are native speakers from whom we can get the equivalents of terms in the domain of New Economy hence we decided to create the terms. This paper thus focuses on the creation of Igbo terms in the New Economy and the methodology of creation. It further highlights the importance of terminological development in the Igbo Language as a veritable tool in the development of the language. We will equally discuss the possibility of implantation of the terms created.

Key words: Terminology, New Economy, term creation, implantation

1.0. Introduction

To the best of our knowledge, no terms have been created in the Igbo language in the New Economy. Okeogu (1998: 110) citing Okafor (1995: 5) opines that for any language to develop, it constantly needs to “increase its literary and communicative capacities in the world of realities” through lexical enrichment or otherwise face the risk of dying out. Nigeria is forging ahead to develop technologically and scientifically. For the development to be useful, indigenous languages need to be developed through term creation especially in the scientific and technical domains to reflect the realities in this 21st century.

Our area of study is not common so an explanation of what the New Economy is becomes necessary. The New Economy according to Wikipedia (assessed on line), “is the result of the transition from a manufacturing based economy to a service-based economy”. As a result of the New Economy, a lot of investments were made in the sector of technology. Business leaders claimed that “old laws of economics did not apply anymore and the new laws had replaced the old ones”. This is because of the claim that improvement in computer, hardware and software would dramatically change the future, since information/communication have the most important value in the New Economy.

Korten (2010) (assessed on line), is of the opinion that the old Economy is that of greed when he says “The old Economy of greed and dominion is dying. A new Economy of life and partnership is struggling to be born”. According to him the New Economy recognizes humans as living inhabitants of a living Earth and that they are creative, conscious and living in strong healthy

communities. Families are made up of strong and healthy people that make up the foundation of human happiness and well-being. Economy has no other legitimate purpose than to serve life, all life, including the entire world's people. He then calls for a radical reinvention of our defining economic culture and institutions to create a New Economy that serves all the people all the time.

The New Economy's areas of work range from:

- Business, Innovation & Science
- Planning, Housing & Environment
- Research, Evaluation & Cost Benefit Analysis
- Skills & Employment
- Strategy (<http://www.neweconomymanchester.com/about-us/about-new-economy>)

“The New economy is commonly believed to have started in the late 1990s, as high tech tools, such as the internet, and increasingly powerful computers, began penetrating the consumer and business marketplace”. (<http://www.investopedia.com/terms/n/neweconomy.asp>)

Having talked about the New Economy, we agree with Okeogu (2012: 86) that “each language has the stylistic and lexical capabilities to respond to the communication needs of its speakers.” We believe that the Igbo language is capable of creating terms in the New Economy.

Nigeria's indigenous languages can be enriched through creation of terms. Jibir-Daura (2014) (assessed on line), is of the same opinion when he stated that:

Indigenous languages can be made richer by finding ways of including new science and technology terms in the language. (...). Technological and scientific terms should be translated into the various languages to make teaching and learning easier.

This goes to prove that when terms are created in the indigenous languages, we show that our languages have the means to explain scientific terms.

2.0. National Policy on Education

The first edition of Nigeria's National Policy on Education (NPF) was in 1977, since then other revised editions have appeared: 1981, 1998, 2004, 2007, and 2013. The 2004 edition emphasizes the importance of Nigerian languages as a means of preserving the culture of our people as well as for national unity and development. The new editions appear because it is believed that educational developments have taken place and such developments need to be incorporated, but implementation is always not carried out. This goes to confirm what Ajulo (2000: 222) stated:

A document specifically called “Language Policy for Nigeria” has not emerged. However, given the fact that the country has witnessed an endless wave of launching of National Policies on different aspects of governmental business, there is every reason to surmise that one day a “National Language Policy” is to be formulated and launched. (...) In the final analysis, the “National Language Policy” might emerge as a codification of the existing linguistic practices, usages and conventions adopted in accordance with provisions of those documents.

It goes without saying that Nigeria tries to progressively create language policies to help development in Science and Technology. The said development can only be attained if terms are created in these areas to enable indigenes know the names of objects in their mother tongue and not

only in the English language. This is one of the reasons why we decided to create terms in the area of New Economy.

3.0. Methodology

Our methodology of term creation is based on Socioterminology which “is the study of terminology within the real use of language in a specific social context” (Okeogu 2015: 92). Gaudin (2003: 154), defines Socioterminology as a “sociolinguistic conception” of the discipline which is directed towards the study of terms in relationship with the contexts in which they appear. Terms are thus studied in their linguistic, pragmatic, social and historical contexts. Socioterminology “is, in fact, a sociolinguistic approach to terminology that takes into account the analysis of terms (emergence, formation, consolidation and relationships), considering them from a linguistic perspective in a social interaction” (Okeogu 2015: *ibid*).

To collect the necessary information for our study, a documentary research became necessary. We consulted dictionaries and encyclopedias relating to New Economy from where we extracted terms relating to New Economy in the bid to look for their equivalents. We equally searched the Internet. The list compiled, we searched for their meanings in the Dictionaries and Encyclopedias. We were not able to do a field work because the area is not well known in the Igbo language judging from the few attempts we made and could not get any favourable results. We could not also get the equivalents to these terms in Igbo since no known glossary or work exists in Igbo. We then decided to create the terms based on the collection from our documentary research. Since no known glossary of New Economy exists in the Igbo language, we therefore made enquiries from some Igbo linguists. The linguists interviewed include Dr. Bright Nnabuihe of the University of Lagos, Dr. Zebulon Iwuala of National Institute of Nigerian Languages, Dr. Ogbonna Anyanwu of University of Uyo and Dr. Ijeoma Iloene of University of Nigeria.

4.0. Criteria for selecting and accepting terms

The criteria on which the selection of terms were based on are semantic, morphologic and syntactic.

4.1. Semantic

For a term to be accepted, it has to indicate a scientific or technical notion or concept belonging to the domain under study. For this to be possible, collaboration with specialists is necessary. Since no known specialist in the domain of New Economy was around, we relied on the linguists for the confirmation of the meanings of the terms created. This criterion also helps to differentiate words from terms. A term is only valuable if it represents concepts in the domain in question Audet (1994: 24) and we adhered to the semantic criteria in our acceptance of terms.

4.2. Morphologic

The form of the term can suggest its meaning: free market = *ahĩa oha n'eze*. The term has to be brief and simple: one price = *otu onuahĩa* but it is not always easy to respect the criterion of a term being brief and simple thus: nethead = *ndi n'aga n'igwe ntaneti*. This term as we see is an explanation.

4.3. Syntactic

We were careful of the rules of syntactic combination for a given word or words to be a term. Following this rule we accepted Big Bang, data mining, feedback, shrinkage etc. as terms.

Our objectives in creating terms is to contribute in the maintenance or support of the National Policy in Education and to contribute in making scientific terms available in the Igbo language. We support Alberts when she gives the objectives of term creation as follows:

[...] implementation and maintenance of national policy and strategies concerning technical languages in order to promote scientific and technical communication in all [...] Language communities [...] to standardize technical and scientific concepts and definitions and to provide equivalents [...] in all the official languages and different domains – from grassroots level up to the highest tertiary level (Alberts, 1998 : 10).

By creating terms in the Igbo language, we identify the language as belonging to a distinct cultural group distinguished from other languages and at the same time, we uphold the Igbo language as one of the indigenous languages in Nigeria.

5.0. Criteria for creating terms

While proposing the new terms, we took into cognizance the cultural dimension in terminology as proposed by Diki-Kidiri (2008) and Edema (2008). To Diki-Kidiri, creating terms in African languages should be carried out in such a way that the experiences and knowledge of the terminologist should permit him/her to be able to name any new concept. As a result, Edema sees cultural motivation as being a product of the sum total of individual and collective memory in its continuity. Motivation permits the native speaker of a language to try to give names to objects. The cultural dimension helps in the understanding of technical languages of developing languages. The cultural dimension applied to the Igbo language favours naming things metaphorically and also through composition.

Dubuc (1980) outlined two techniques in term creation: Direct (derivation, affixation, composition) and indirect formation (borrowing, hybridization, semantic extension (metaphorisation)). Each technique must respect the rules of the language. In our work we made use of composition and borrowing which was either wholesome, phonologised or hybridization.

Term-formation varies between languages to some degree because of grammatical differences and preference for certain methods. While compounding or composition seems to be common to all languages, the methods by which words are combined vary. Noun + noun combinations are much less common in the Romance languages than in the Germanic. The French ‘noun + à+ verb’ construction (e.g., *machine à écrire*) has no morphological equivalent in English or German; the formation of nouns by combining a verb with a noun is no longer productive in English (nouns like *scarecrow* and *pickpocket* are no longer constructed) as it is in French and Spanish (e.g., *brise-vent*, *casse-mottes*; *portaaviones*, *rompeolas*, *tocadiscos*); French and Spanish have no adjective-participle construction paralleling the English *slow-running*. In Igbo nouns can be combined with verbs or other parts of speech as will be seen in the next heading.

5.1. Lexical Composition

In composition, each term can be composed with two or more words put together to form a term. The composition can belong to the same grammatical class for example:

N+N: *aha + njirimara = aha njirimara* (brand) or to different grammatical class:
V+N+V+N: *ihazi + iwu + ji + onuahia = ihazi iwu ji onuahia* (deregulation),

N + N+ N: *ochichi + mgbochi + nsogbu = ochichimgbochinsogbu* (adhocracy),
 N + N: *isiego + ahja = isiegoahja* (capital).

The composition can be hybrid. It can be English + Igbo or Igbo + English that is to say that each language supplies part of the name given to a term either before or after for example : *sistemu ego bekee* = EMS, *njemileniomu* = millennium bug, Chaos theory = *atutu keChaos*, Moore's law = *iwu keMoore*, - data mining = *ichunta data*.

It could be observed that the English words in the hybrids are phonologised or igbonised.

The composition is said to be syntagmatic if the term constitutes more than three or four words joined together: *mgbazinye nchekwa ego n'esighi n'uloaku* (securitization).

5.2. Borrowing

All languages borrow Edema (2008: 94). As Stroberski puts it,

[...] the development of a language depends not only on its own inner laws, as in the case with an individual, a family and a nation, but on external influences, contacts, and on adapting foreign words as well (Stroberski 1987 : 94).

The borrowed words undergo changes morphologically, semantically or phonologically. We had some borrowings. Only very few are wholesome borrowing for example WIPO, WTO, Smith Adams, PC. Other borrowings were igbonised:

- electronic = eletroniki
- bandwidth = bandwiti,
- capitalism = kapitalizmu
- Microsoft = Mikrosofutu
- monopoly = monopoli
- narrowcast = narokastu
- Netscape = Netskepu (ke komputa)

6.0. Implantation of new terms

The notion of implantation of terms is delicate and it varies from place to place. The terminologist should identify the users of terms proposed and if possible work with them. There is no doubt that the vocabulary of the New Economy is of interest not only to Economists but to all who would want the Igbo language to advance towards development and to be acceptable in the international arena. For the terms to be implanted, resources such as reference materials (lexique, glossary, and dictionary), education materials (manuals etc.), press articles etc. need to be involved. In a country like ours, where communication is limited, to reach a large number of people, the radio and television are necessary tools of implantation (Diki-Kidiri 2007: 2).

Another means of implantation is teaching. In this case the speakers of the language can be trained in schools following the various disciplines and specialty each speaker is studying to enable he or she impart knowledge learned to others (Diki-Kidiri 2008: 129).

Terms and the Igbo equivalents proposed

English terms	Igbo equivalent proposed	Definition as proposed by the Encyclopedia and Dictionary
adhocracy	ọchịchị mgbochi nsogbu	Management that responds to urgent problems rather than planning to avoid them
bandwidth	Bandwiti	The range of frequency over which a receiver or amplifier should not differ appreciably from its maximum value
Big Bang	mmalite ahja mba uwa	Advent of world financial market. (Ref. The major modernization that took place on the London Stock Exchange on October 27 1986, after which the distinction between jobbers and brokers was abolished and operations became fully computerized.
bionomics	atutu ọganihu ndi ọrụ na ulo ọrụ	A theory that establishes a parallel between the behavior of individuals and enterprises and their adaptation to technological progress that is analogue to evolution and considers the economy as an ecosystem.
brand	aha njirimara	A trade name or mark
capital	isiego/okpurukpuego ahja	Material wealth owned by an individual or business enterprise
capitalism	kapitalizmu/ndabere naego	An economic system based on the private ownership of the means of production, distribution and exchange, characterized by the freedom of capitalists to operate or manage their property for profit in competitive conditions.
Chaos theory	atutu keChaos	Theory of prediction applied to economy, that apparently random phenomena having underlying order.
churn	mgbafulu ndi ahja	Progressive loss of clients, rate of loss of clients
community (virtual)	ndi ji igwe Ntaneti aru ọrụ	The totality of people using the Internet, or part of the users
complexity theory	atutu mgbagwojuanya	A theory inspired from ecology but applied to economy that explains complex systems for interrelation to their components.
convergence	nchikota nkanuzu	The combining of different forms of electronic technology, such as data processing and word processing converging into information processing especially the web
coopetition	mmeko ulo ọrụ ndi na aso mpi	Collaboration between competing companies (firms).
data mining	ichunta azumahja	Ability to extract and combine disparate facts from various sources in order to get useful information on market and the customers.
decentralisation	nkewasi usoro ọrụ	To reorganize an industry into smaller more autonomous units as a result of an economy based information.
deflation	odida onuahja	A reduction in the level of total spending and economic activity resulting in lower levels of output, employment, investment, trade, profits and prices.
deregulation	ihazi iwu ji onuahja	Removal of regulations or controls form imposed by the State to liberalize the economy.
diseconomies of scale	nwepu otutu azumahja	Disadvantage, such as lower efficiency or higher average costs, resulting from the scale on which an enterprise produces goods or services.
disintermediation	nwepu iheakaebe n' uloahja	The elimination of such financial intermediaries as banks and brokers in transactions between principals, often as a result of deregulation and the use of computers.
distributed system	usoro nkesasi ọrụ	Applying the principle of division of labour to economy
e-cash	Iji igwe latrikikwuwo ugwo / okwukwu ugwo-e	Electronic payment used for little amount.
EMS	EMS/ sistemu ego bekee	European monetary system whereby in 1993 crisis, despite the effort of the United Kingdom government, it was expelled
Encryption	sistemu koodu maka nchekwa	Information coding system used in commercial electronic for security reasons.

Geography	Jiografī (mmekọ ndi mmadụ n'ibe ha)	Geography is here included because direct human contact is important and explains places of preference despite possibility of increase in communication
globalisation	ozuruwaonụ	The process enabling financial and investment markets to operate internationally, largely as a result of deregulation and improved communications. (explanation)
information food-chain	chenu ozi	A process through which given information becomes information
information technology	mgbasa ozi kenkanuzụ	Technology comprising computers, software and the network that connects them
information theory	atụtumgbasa ozi	A theory that is based on statistics, concerned with methods of coding, transmitting, storing, retrieving, and decoding information.
innovation	nchọpụta ọhụrụ /mgbanwe	New Economy closely depends on its ability to be innovative, hence innovation is included in the list.
intangible assets	iheonwunwe keanahughị anya	Intellectual property, such as a copyright or patent brand, research results, know-how.
intellectual capital	nhakọta amamihe keulo ọrụ	The sum total of the knowledge of an enterprise.
intellectual property	iheonwunwe keamamihe	An intangible asset such as copyright or patent brand.
just in time learning	ozuzụ n'ọrụ	Professional training ie in-service training
knowledge management	nchikọta amamihe	The technique of managing knowledge. This is inherent to the new economy.
knowledgeable worker	onye ọrụ nwere amamihe	A worker who applies his technical know-how to his work (competences)
lock in	mmechibido	Technical constraint that hinders progress. For example; windows 98 (Aless reliable soft ware well established to be changed.
free market	ahịa ọha n'eze	An economic system that allows supply and demand to regulate prices, rather than government policy.
mass customization	nhazi ngwa ahịa ka ndi ahịa si chọọ	Preparation or adaptation of products according to a customer's individual requirements.
microfinance	nchekwa obere ego	Provision of funds at a lower level./ Little quantity
microprocessor	igwe nhaziozi	A single integrated circuit performing unit in a small computer. It is relevant in New Economy where it helps process and stock information
Microsoft	Mikrosọftu (nke kọmputa)	Relevant to New Economy in the sense that the PC is the most known technique.
Millennium bug	nje milenjomu	Any software problem arising from the change in date at the start of the 21st Century. This necessitate an expensive intervention on most of the computers to enable them take the year 2000 into account.
mindshare	nhazi inweta ndi ahịa	A commercial technique which aims at capturing the attention of potential customers.
monopoly	monopoli	Exclusive control of the market supply of a product or service by a manufacturer.
Moore's Law	iwu keMoore	The principle by which the power of a microprocessor doubles every 18 months.
narrowcast	narokastu	To supply (of programmers or advertisers) to a specialized audience on radio or television.
net head	ndi na-aga n'igwe ntaneti	Web communication participants
Netscape	Netskepu kekọmputa	A new software that permits communication through Web and is inherent to the New economy.
New Economy	akunabba ọhụu/ mkpata ọhụu	Economy boosted by the development of new technologies in information and technology.
new media	mgbasaozi ọhụu	Media characterized by their interactivity and based on NTIC

one price	mkpebiṣṣṣahja/ nkwekorita onuahja...	An economic principle that wants prize par product for a perfect market.
open system	sistemu gheoghe	A system whereby many actors can participate. The web is an example of open system.
outsourcing	nnyefe oru	To subcontract (work) to another company
PC	PC (kṣmputa)	Relates to new economy in the sense that the PC permits its opening
photonics	Fotoniksi	The study and design of devices and systems, such as optical fibers, that depend on the transmission, modulation, or amplification of streams of photons.
privatization	azumahja kennoduru onwe	Transferring (the production of goods or services) from the public sector of an economy into private ownership and operation.
productivity paradox	ahja uru n'adighi	Observing that data processing investment is not rapidly translated in forms of productivity gains.
restructuring	nhazighari	Organizing (a system, business etc.) in a different way.
securitization	mgbazinye nchekwaego n'esighi n'uloaku	The use of such securities as Eurobonds to enable investors to lend directly to borrowers with a minimum of risk but without using banks as intermediaries.
shrinkage	ntalata obaoru	Decrease in size of an enterprise as a result of New Economy.
Smith, Adam	Smith, Adam (Nwoke a bu nna nke azum ahja oha n'eze)	Father and advocate of free trade and private enterprise. He opposed state interference and as such indirectly inspired the New Economy
standard	ukpuru nhazi izugbe	An open norm that can be exploited with the aim of enhancing productivity.
supply chain	usoro mbuga ahja	A channel of distribution beginning with the supplier of materials or components, extending through a manufacturing process to the distributor and retailer, and ultimately to the consumer.
technology	nkanuzu	It applies to today's technology which is defined in relation to communication and no more in relation to production.
time zone	ndjiche n'oge	Time difference
tipping point	mgbasa ngwa ahja	The moment when success is inevitable, where a functioning product is spread everywhere.
trading limit	njedebe azumahja	Opening time of the Stock Exchange to function permanently and not to have trading limits.
transparency	nzimozu anaghi enyoenyu	Transparency permits flow of information in the New Economy.
ubiquity	ino ebe obula	The ability to be everywhere at once.
WIPO	WIPO (Otu mba uwa maka amamihe na ihe onwunwe).	World Intellectual Property Organization
work disappearance	ogwugwu oru	A situation where the authors of Encyclopedias predict the end of work due to technological renovations.
WTO	WTO (Otu mba uwa maka azum ahja)	World Trade Organization. The organization is in charge of rules regulating trade between countries.
zero sum	nkwusi otuto aku na uba	The theory through which L. Thurow (1980) predicted the end of economic growth. He recommended that countries should distribute their resources equally.

7.0. Conclusion and Recommendation

According to Franquesa (2001:16):

Language and knowledge work together and support each other mutually. Knowledge is constructed and extended and with this, language is constantly kept up to date and is able to indicate new concepts in all domains and all sectors of activity (our translation).

The Igbo language can become internationally valuable and attractive to the world at large when terms are created in areas of interest especially in this era of information technology. We are of the opinion that assessing scientific and technological knowledge in Nigerian languages enables us to be self-reliant thereby contributing meaningfully to national development. This can only be achieved through the usage of Nigerian languages in the creation of terms in various domains.

We believe that this work will contribute to the advancement of knowledge in the domain of New Economy and to terminology of the Igbo language in general. The bilingual lexical terms from this work will facilitate translation of documents in the New Economy into Igbo. We have by explanation given the meaning of the terms in English. We hope that our reflection will arouse terminological interest in this domain since no known work in Igbo can be cited in this area.

We highly recommend that NINLAN should establish a Centre for Translation and Terminological Studies as obtained in some universities abroad, for example *Université Lumière Lyon 11, France*. They can equally link up with the university's Centre there by further advancing the Igbo language to the outside world. The Centre, if operative, will serve as a research Centre for the study of terminology in Nigerian languages.

References

- Ajulo, S. B. (2000). Nigerian Linguistic Requirements for the Twenty-first Century. In Ajulo, S. A. and Festschrift Committee (Eds.), *Language in Education and Society*. Festschrift in Honour of Conrad Max Berdict Brann, 221-235.
- Alberts, M. (1999). Terminology in South Africa. *LEXIKOS* 9, 18-35.
- Audet, C-H. (1994). *Morphologie et syntaxe du français : précis et méthodologie de sémantique grammaticale*. Québec: Le Griffon d'argile.
- Browning, J. & Reisse, S. (1999). *The Encyclopedia of the New Economy*, Wired. 1999.
- Diki-Kidiri (2007). Éléments de terminologie culturelle. *Cahiers du Rifal*, 26, 14-25.
- Diki-Kidiri, M., (2008). *Le Vocabulaire scientifique dans les langues africaines. Pour une approche culturelle de la terminologie*. Éditions Karthala, Paris, 299.
- Dubuc, R. (1980). *Manuel pratique de terminologie*, CILF, Québec, 105.
- Edema, A. B. (2008a). Approche culturelle de la dénomination en terminologie. *Le vocabulaire scientifique dans les langues africaines. Pour une approche culturelle de la terminologie*. Éditions Karthala, Paris, 53-70.
- Federal Republic of Nigeria, National Policy on Education*. 1977, 1st edition. National Education Research and Development Council.
- Federal Republic of Nigeria, National Policy on Education*. 1981, 2nd edition.. National Education Research and Development Council.
- Federal Republic of Nigeria, National Policy on Education*. 1998, 3rd edition. National Education Research and Development Council.

- Federal Republic of Nigeria, National Policy on Education.* 2004, 4th edition. National Education Research and Development Council.
- Federal Republic of Nigeria, National Policy on Education.* 2007, 5th edition. National Education Research and Development Council.
- Federal Republic of Nigeria, National Policy on Education.* 2012, 6th edition. National Education Research and Development Council.
- Franquesa, E. (2001). Langue, technologie et terminologie. *Cahier du Riftal*, no. 22, pp. 10-17.
- Gaudin, F. (2003). *Socioterminologie : une approche sociolinguistique de la terminologie*. Rouen: Université de Rouen.
- Okeogu, C. I. (2015). Creating Terms in the Domain of Terrorism: The Igbo Experience. *African Educational Research Journal*, 3, 2, April. 89 - 95.
- Okeogu, C. I. (2012). Creating Computer Terms: The Igbo Experience. *USEM Journal of Languages, Linguistics and Literature*, University of Uyo, Vol. 5, 86-100.
- Okeogu, C. I. (1998). Translation as the Key to the Advancement and Continued Relevance of Nigerian Languages in the Contemporary Scientific Age: The Igbo Example. *JENDIC, Journal of Education for National Development and International Cooperation (NAEND)*, 108-116.
- Stroberski, Z. (1987). Transnationalization of Terminology. In Dagne E. & Greneda D (Eds.), *Proceedings of the International Seminar on Terminology*. January 16-18, 1986. Addis Ababa, Ethiopia. The Academy of Ethiopian Languages Science and Terminology Terms Translation Project, 87-89.

Webology:

- Korten, D. <http://livingeconomiesforum.org/the-new-economy>, assessed 20-02-16
- <http://www.neweconomymanchester.com/about-us/about-new-economy> assessed 08:02:16
- <http://www.investopedia.com/terms/n/neweconomy.asp> assessed 08:02:16