How to Write and Publish Articles in International Journals

Biswajit Sarkar

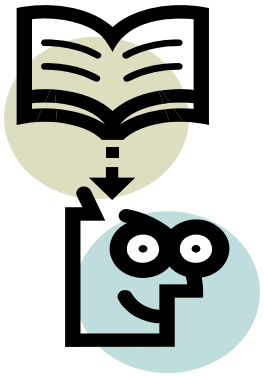
Assistant Professor

Department of Applied Mathematics with Oceanology and Computer Programming

Vidyasagar University, West Bengal, India

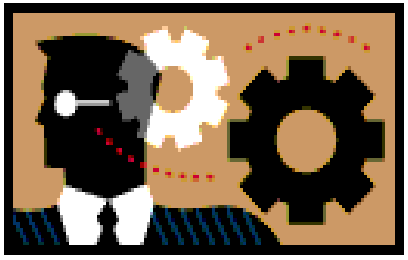
- International Journal of Production Economic (SCIE).
- Journal of the Operational Research Society (SCI).
- European Journal of Operational Research(SCIE).
- Economic Modeling (SSCI).
- Computer and Industrial Engineering (SCIE).
- Applied Mathematics and Computation (SCIE).
- Mathematical and Computer Modelling (SCIE).
- Applied Mathematical Modelling (SCIE).
- International Journal of System Science (SCIE).
- Journal of Enterprise Transformation (SCIE).
- International Journal of Production Research (SCIE).
- The Yugoslav Journal of Operations Research.
- African Journal of Business Management (2010-2011).
- Mathematical Æterna.
- Annals of Pure and Applied Mathematics.

A research article is an extended and formal combination of



Lots of Information collected from a number of sources

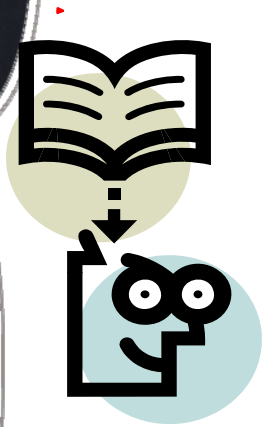
One's own point of view about the research topic



Types of a research article

Informational

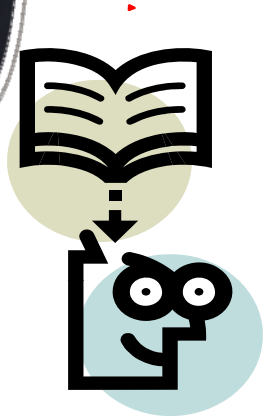
Analytical



Combination and summarization of various information collected from different sources

Author's task

- ✓ Focus on research topic
- ✓ Obtain the information
- ✓ Write a coherent papers



Analysis and conclusions about the information on the research topic collected from different sources

Author's task

- ✓ **Analyze the information**
- ✓ **Give an opinion about the research**

- **The starting sentence of the abstract should not contain any indentation.**
- **Each paragraph of whole model should start with indentation based on the journal.**
- **Some journals prefer subsections and the rests do not prefer subsections.**
- **If the research article consists of more mathematical expressions, the paper should be typed in LaTex otherwise Microsoft Word is preferred.**

- **Title of the research article**
- **Author's name and affiliation**
- **Abstract**
- **Keywords**
- **Introduction**
- **Model formulation**
- **Numerical experiments**
- **Conclusions and future extensions**
- **References**
- **Appendix**

Title of the research article

Give a suitable name of the research article such that the topic of the research is clearly obtained from this title.

uthor/s’

- ✓ Write the name of the author/s.
- ✓ Mention the corresponding author according to the recent journal’s format.
- ✓ Write the affiliation of each author and write address, email id, and phone number of the corresponding author (as per recent journal’s format).

o's

- ✓ Write the basic outline of the research.
- ✓ Write the statement of the problem.
- ✓ State your contribution to create the mathematical model.
- ✓ State whether any theorem/lemma/proposition is stated or not to analyze the model.
- ✓ State whether any numerical experiment is given in the article or not.

on’ts

- **Do not describe the model.**
- **Do not prove or disprove any theorem/proposition.**
- **Do not include the survey of literature.**
- **Do not incorporate the numerical experiment (if exists).**
- **Do not conclude anything about the research.**

click.

Words which are frequently used to describe the research article

O's

- ✓ **Write those words only which are important and <u>used frequently</u> in the research article to describe the model.**

on’ts

- **Do not describe the meaning of any word here just mention the words.**

o's

Step 1

✓ **Describe the problem and its practical utilization.**

Step 2

✓ **Describe your survey of existing literature related to the research.**

Step 3

✓ **Describe your contribution in the research.**

on’ts

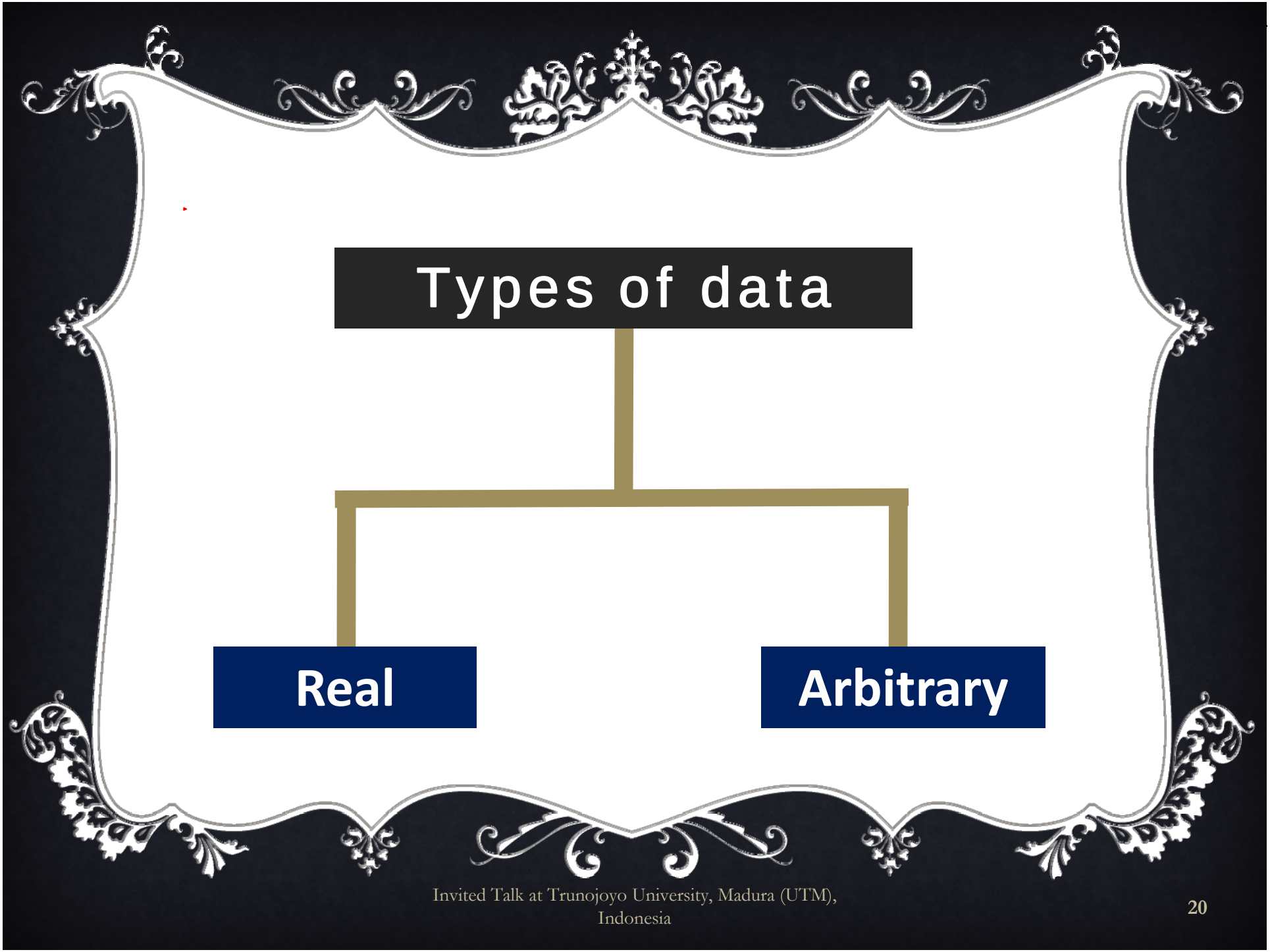
- **Do not explain the model.**
- **Do not describe the numerical experiment of the model.**
- **Do not conclude anything.**
- **Do not mix up active and passive voice.**

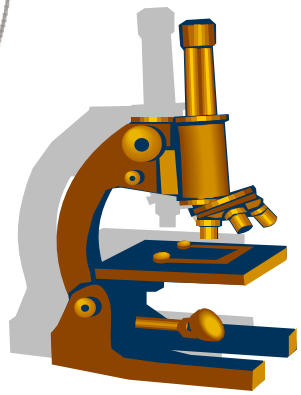
O's

- ✓ Describe the model thoroughly.
- ✓ Include all mathematical expressions needed to formulate the model (if necessary).
- ✓ Add figures to describe the model (if necessary).
- ✓ State and prove the theorems/lemmas/propositions (if necessary).

on’ts

- Do not include the mathematical derivation to prove the theorems/lemma/propositions if it consists of a huge number of mathematical expressions.
- Do not show any numerical result or numerical explanation.
- Do not make any conclusion.


Types of data
Real
Arbitrary



Real data

Collected from the sources that have real existence i.e., either from any scientific experiment or from any organization.

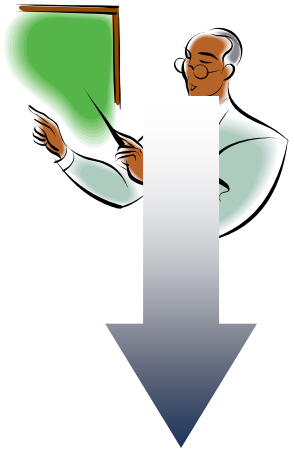
Arbitrary data

Data which are chosen arbitrarily and not from any experiment or organization.

O's

- ✓ Give all parametric values that are used to illustrate the model with proper unit.
- ✓ Prefer SI units while writing the article.
- ✓ Write all numerical results in a table format.
- ✓ Add graphical representation of the numerical results (if necessary).
- ✓ Analyze and explain the numerical results.
- ✓ Give a comparison table (if necessary).

on’ts

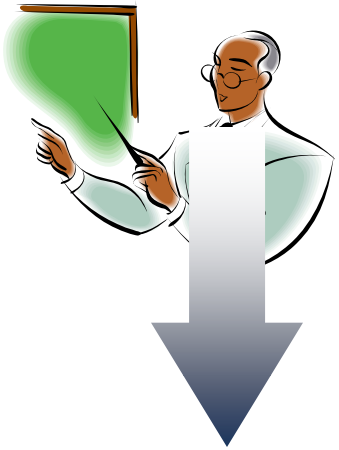


- **Do not use confusing units.**
- **Try to avoid CGS or FPS units.**
- **Do not use different number of decimal places.**

o's

- ✓ **Make a conclusion about what you have done in the research article.**
- ✓ **Write your contribution in this research i.e. how it differs from rest of the articles .**
- ✓ **Make a conclusion based on the numerical analysis with the existing literature (if possible).**
- ✓ **Write if any further extension of the article is possible.**

Do's



- ✓ **Write the name of all papers which have been cited in the survey of literature.**
- ✓ **Write the author name, paper title, journal name, year, volume and page number of the cited research article properly as per journal format.**

on’ts

- **Do not describe the research topic of any paper.**
- **Do not write the affiliation of any author.**

o’s

✓ **Show all mathematical derivation that are left in the model formulation section.**

✓ **Show the proof of the theorems/lemmas/propositions if it was left blank for further description in model formulation section.**

on’ts

- **Do not describe any mathematical expression.**
- **Do not write or explain any numerical result.**

- **Register your name and e-mail id to submit your research article in a particular journal.**
- **Follow the steps as suggested by the journal.**

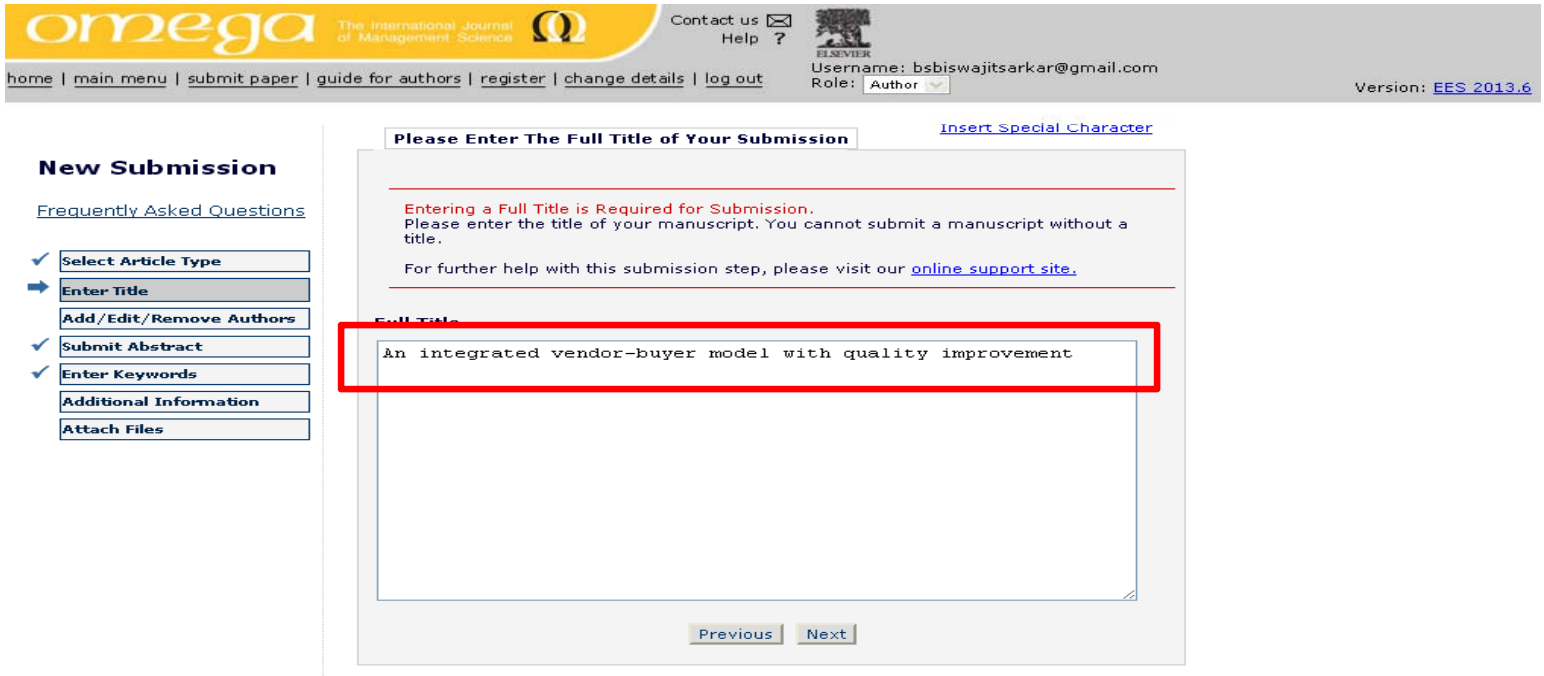
An example of submitting the research article in an international journal Omega is given on the following slides

Step 1

- select the type of the article.

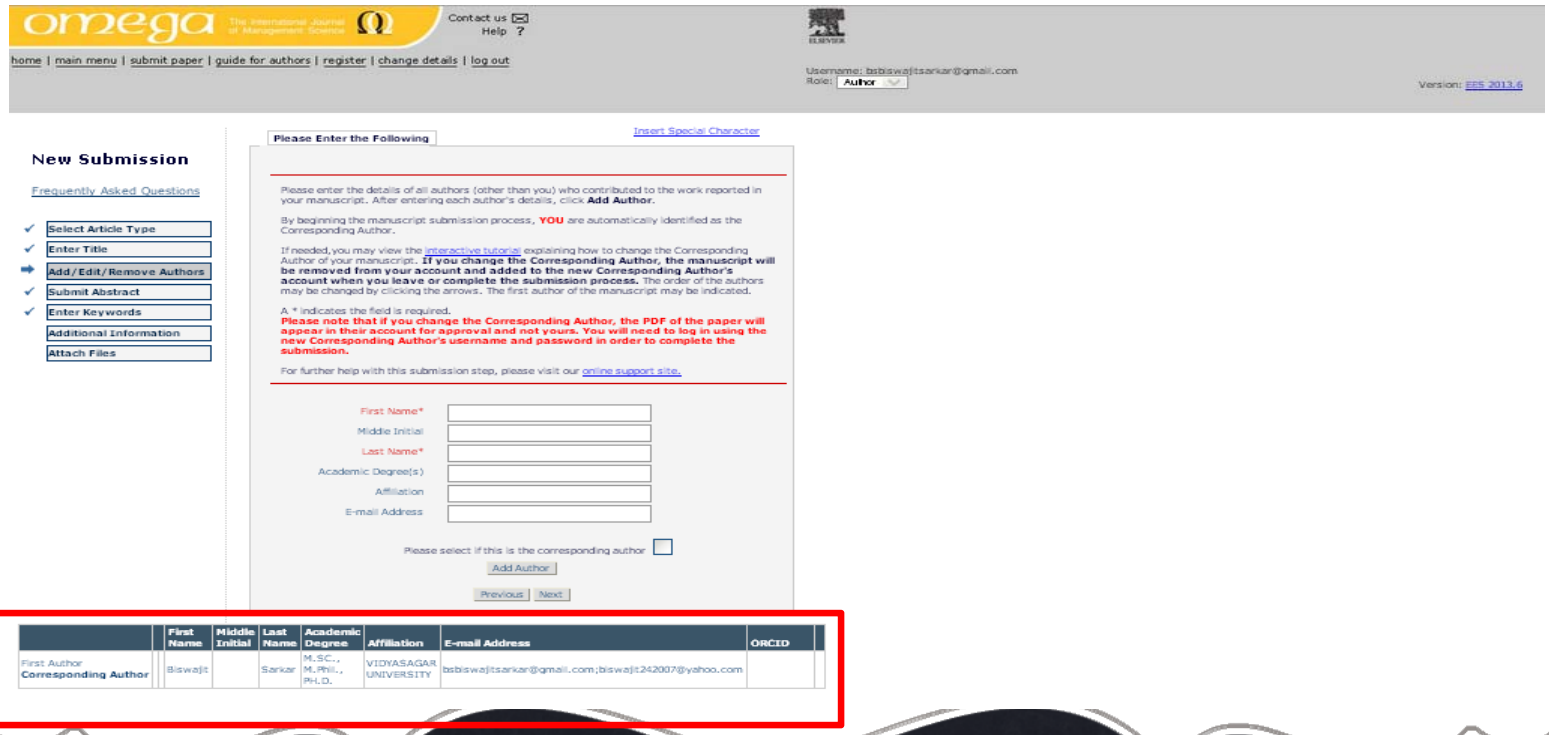
Step 2

- **Write the title of the research article.**



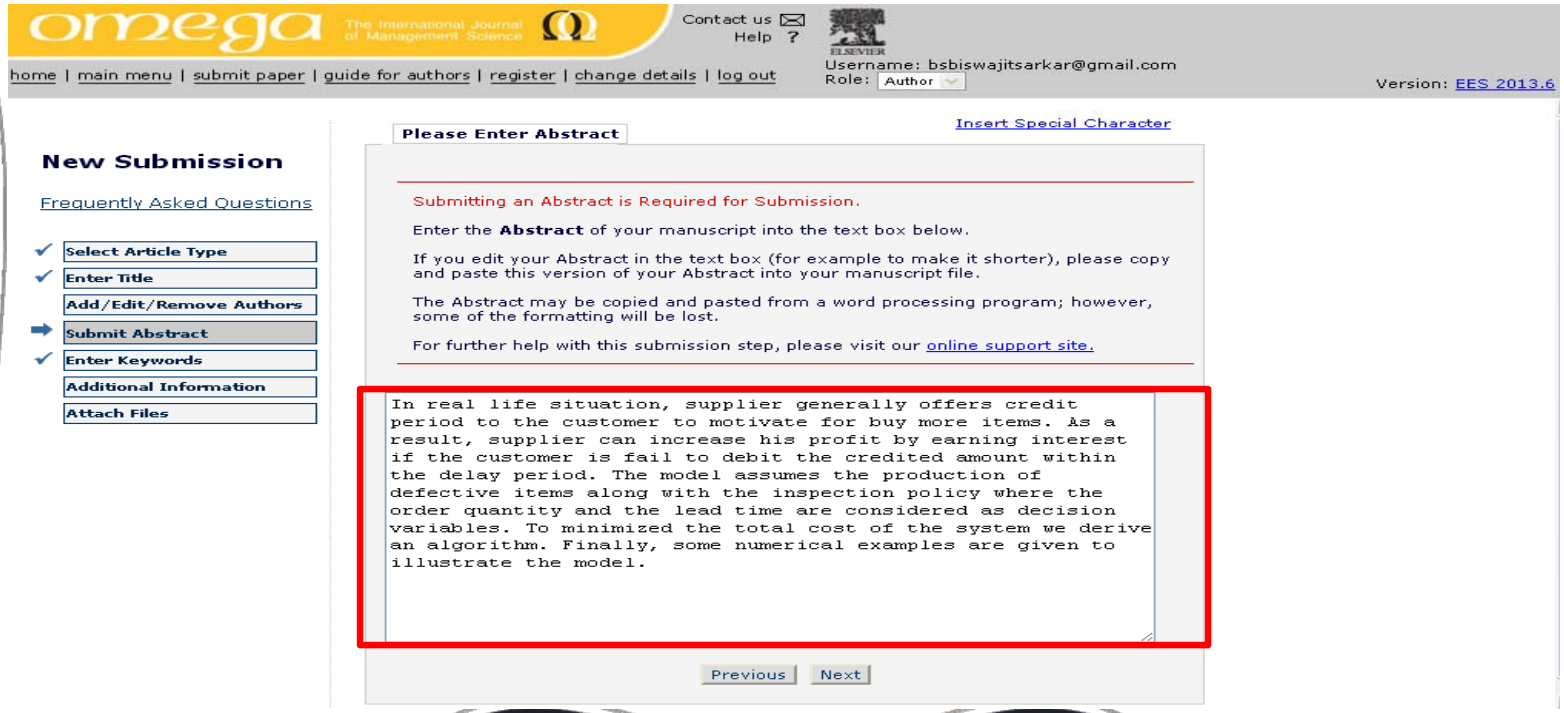
Step 3

- **Write the name of the author/s.**



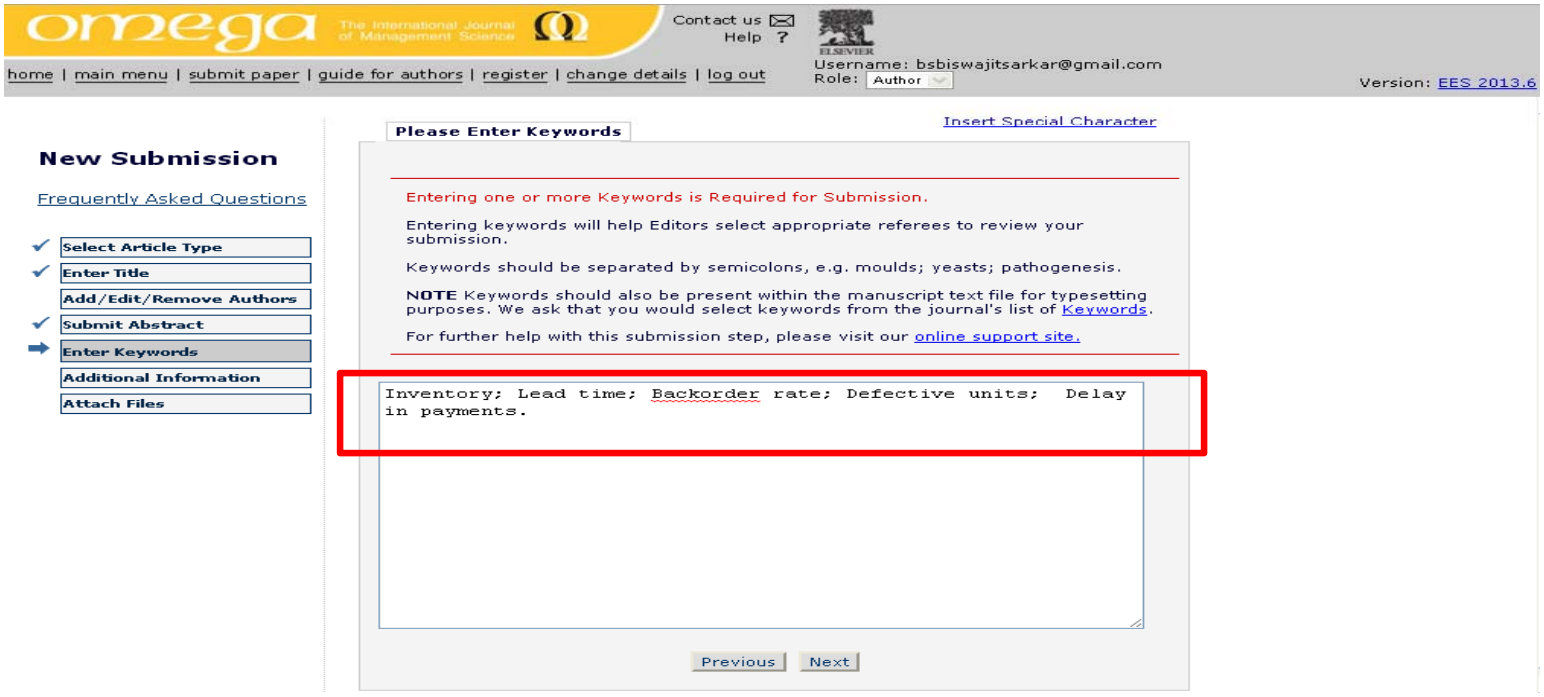
Step 4

- **Write the abstract of the research article.**



Step 5

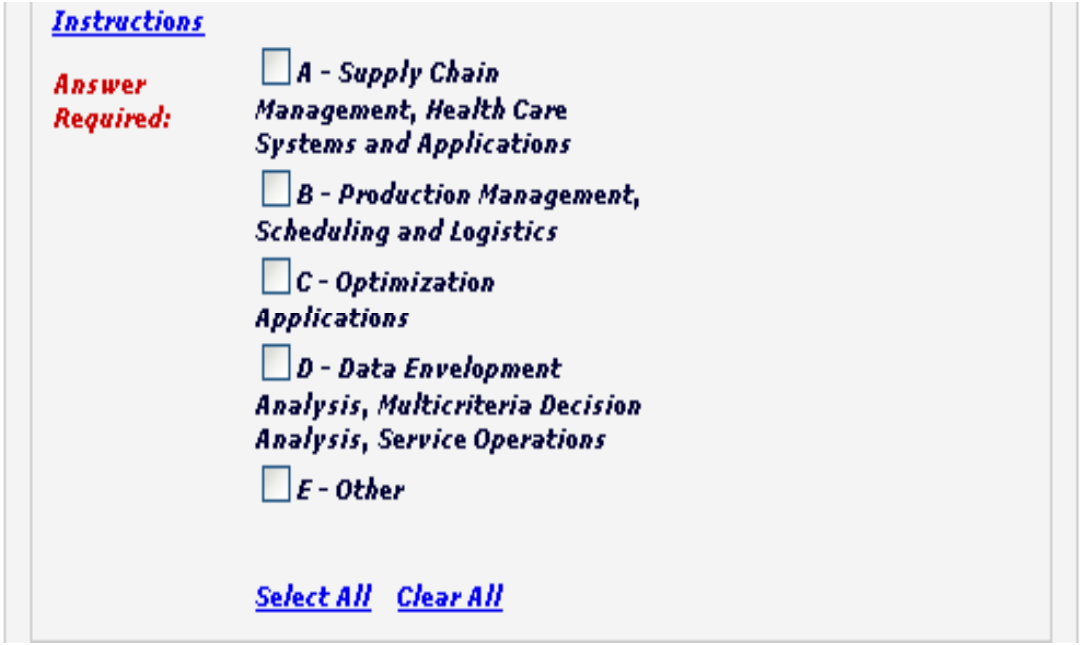
- **Write the keywords of the research article.**



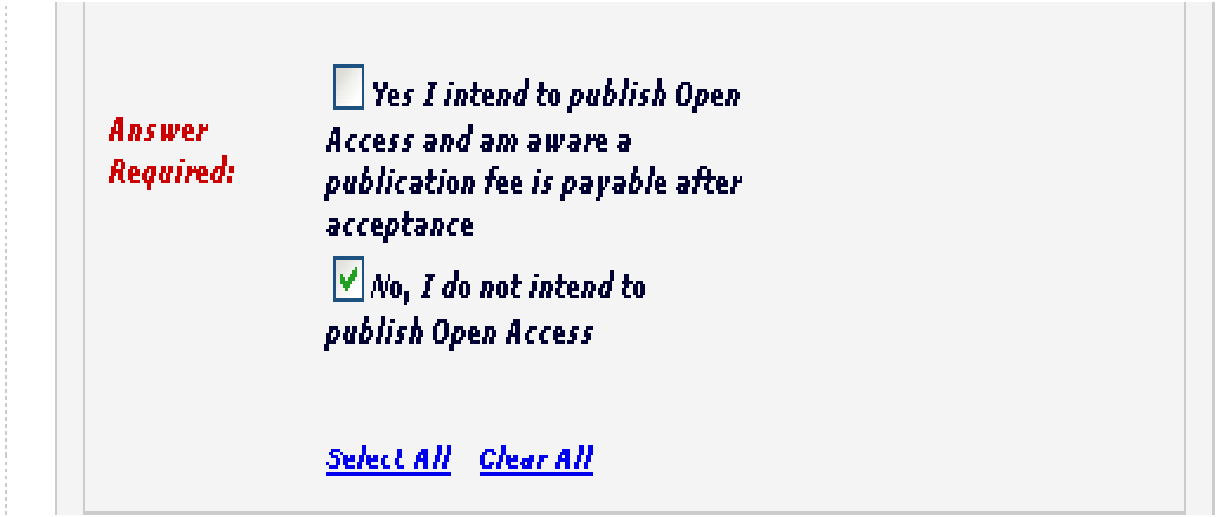
Step 6

- **Mention whether the article is considered for publication on any other journal or not.**

- **Mention the class of the topic the article belongs to.**

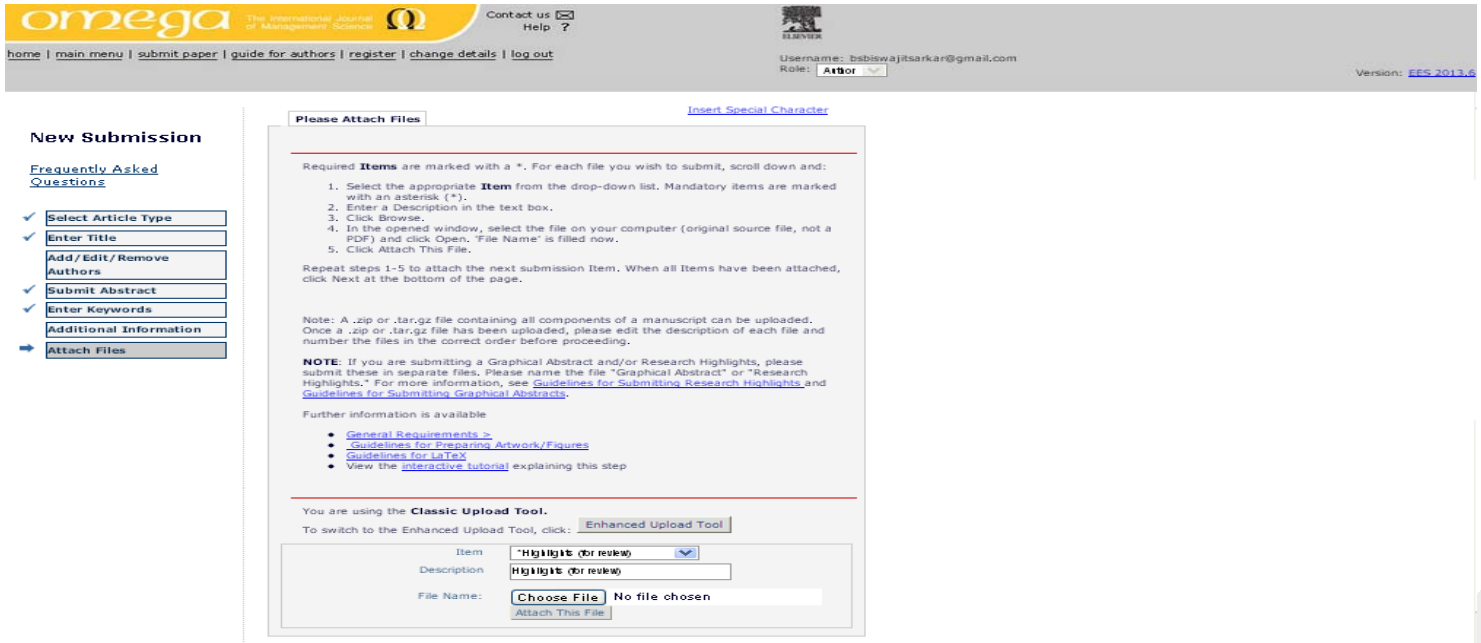


- **Mention whether you intend to publish open access or not.**



Step 5

- **Attach the file/s regarding to the research article.**



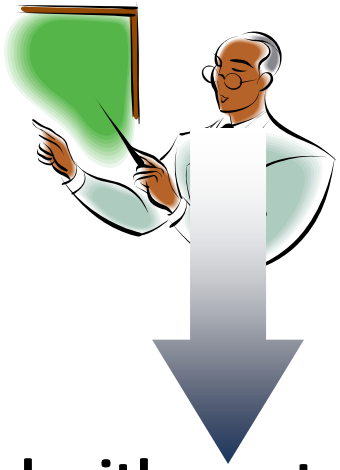
\esponse to the reviewer's

. o's

- ✓ Read each and every comments of the reviewer/s minutely.
- ✓ Answer each and every comment of the reviewer/s.
- ✓ Properly correct all the mistakes as suggested by the reviewer/s.
- ✓ If needed justify your answer as per the demand of the reviewer/s.

\esponse to the reviewer's

on'ts



- Do not get involved with any type of argument to the reviewer/s.
- Do not write any contradictory statement.
- Do not miss or abstain to answer to any comment of the reviewer/s .

An appeal to the higher education system


Professor
6 years experience + Publication
in SCI/SCIE/SSCI journal
Associate
Professor
4 years experience + Publication
in SCI/SCIE/SSCI journal
Assistant
Professor
2 years experience + Publication
in SCI/SCIE/SSCI journal
Teaching
Assistant

BEST OF LUCK

Invited Talk at Trunojoyo University, Madura (UTM), Indonesia

THANK YOU

Dr. Biswajit Sarkar
bsbiswajitsarkar@gmail.com

Vidyasagar University
Department of Applied Mathematics with Oceanology and Computer Programming

ARTICLE INFO

Keywords:
Quadratic demand
Product reliability
Inflation

ABSTRACT

The paper deals with an *economic manufacturing quantity* (EMQ) model for time-dependent (quadratic) demand pattern. Every manufacturing sector wants to produce perfect quality items. But in long run process, there may arise different types of difficulties like labor problem, machinery capabilities problems, etc., due to that the machinery systems shift from *in-control* state to *out-of-control* state as a result the manufacturing systems produce imperfect quality items. The imperfect items are reworked at a cost to become the perfect one. The rework cost may be reduced by improvements in product reliability i.e., the production process depend on time and also the reliability parameter. We want to determine the optimal product reliability and production rate that achieves the biggest total integrated profit for an imperfect manufacturing process using Euler–Lagrange theory to build up the necessary and sufficient conditions for optimality of the dynamic variables. Finally, a numerical example is discussed to test the model which is illustrated graphically also.

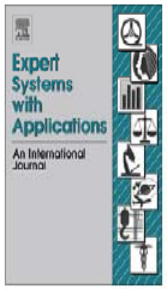
Keywords

Expert Systems with Applications 38 (2011) 13543–13548

Contents lists available at ScienceDirect

Expert Systems with Applications

journal homepage: www.elsevier.com/locate/eswa



An imperfect production process for time varying demand with inflation and time value of money – An EMQ model

Biswajit Sarkar [a,*], Shib Sankar Sana [b], Kripasindhu Chaudhuri [c]

[a] Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West Midnapore 721102, West Bengal, India
[b] Department of Mathematics, Bhangar Mahavidyalaya, University of Calcutta, Bhangar, 24 Pgs (South), West Bengal, India
[c] Department of Mathematics, Jadavpur University, Kolkata 700032, India

Title of the article

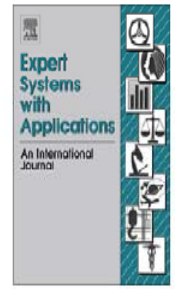
click.

Expert Systems with Applications 38 (2011) 13543–13548

Contents lists available at ScienceDirect

Expert Systems with Applications

journal homepage: www.elsevier.com/locate/eswa



Author's name

An imperfect production process for time varying demand with inflation and time value of money – An EMQ model

Biswajit Sarkar [a,*], Shib Sankar Sana [b], Kripasindhu Chaudhuri [c]

[a] *Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West Midnapore 721102, West Bengal, India*
[b] *Department of Mathematics, Bhangar Mahavidyalaya, University of Calcutta, Bhangar, 24 Pgs (South), West Bengal, India*
[c] *Department of Mathematics, Jadavpur University, Kolkata 700032, India*

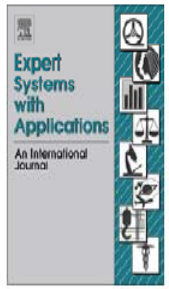
The symbol * represents the corresponding author

Expert Systems with Applications 38 (2011) 13543–13548

Contents lists available at ScienceDirect

Expert Systems with Applications

journal homepage: www.elsevier.com/locate/eswa



An imperfect production process for time varying demand with inflation and time value of money – An EMQ model

Affiliations of the authors

Biswajit Sarkar [a,*], Shib Sankar Sana [b], Kripasindhu Chaudhuri [c]

[a] *Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West Midnapore 721102, West Bengal, India*
[b] *Department of Mathematics, Bhangar Mahavidyalaya, University of Calcutta, Bhangar, 24 Pgs (South), West Bengal, India*
[c] *Department of Mathematics, Jadavpur University, Kolkata 700032, India*

- **For mathematical model, write and define all notation that are used to define the model.**
- **Clearly describe all the assumptions to formulate the model.**

Notation

Parameters

C	production cost ($/unit)
C_R	rework cost ($/unit)
C_S	disposal cost per scrap product ($/unit)
C_T	delivery cost per product shipped to customers ($/unit)
K	setup cost per cycle ($/cycle; $/lot;$/run)
K_1	fixed delivery cost per shipment ($/shipment)
h	holding cost ($/unit/time unit)
h_1	holding cost for each reworked product ($/unit/time unit)
λ	demand rate (units/time unit)
P	production rate (units/time unit)
P_1	reworking rate (units/time unit)
x	a proportion of defectives; it is assumed to be a random variable with a known probability density.
$E(x)$	expected value of x
θ_1	a proportion of scrap; it is assumed to be known and constant.

Variables

Q	the replenishment lot size (units)
n	the number of shipments

The following notation is used to develop the model

S setup cost of the vendor per setup ($/setup) (decision variable)

Q quantity ordered by the buyer (units) (decision variable)

R reorder point of the buyer (units) (decision variable)

L length of the lead time for the buyer (days) (decision variable)

m number of lots delivered from the vendor to the buyer in one production cycle, a positive integer (units) (decision variable)

D average demand per unit time of the buyer (units/year)

A ordering cost of the buyer per order ($/order)

P production rate per unit time (units/year)

S_0 initial setup cost of the vendor per setup ($/setup)

C_v unit production cost paid by the vendor ($/unit)

Assumptions

1 The deterioration function $\phi(t)$ depends on time as $\phi(t) = \gamma t$, where γ is a constant $(0 < \gamma \leq 1, t \geq 0)$.
2 Within the time interval $[0,t_d]$, the product has no deterioration. Deterioration occurs within the time interval $[t_d,t_1]$ at a variable deterioration rate $\phi(t)$.
3 $I_1(t)$ denotes the inventory level at any time $t \in [0,t_d]$ without the deterioration of product. $I_2(t)$ stands for the inventory level at any time $t \in [t_d,t_1]$ with the product deterioration. $I_3(t)$ signifies the inventory level at any time $t \in [t_1,T]$ with the product shortage.
4 The demand rate $D(I(t))$ is known as a function of instantaneous stock level $I(t)$; $D(I(t))$ is taken as following form:

$$D(I(t)) = \begin{cases} \alpha + \beta I(t) & \text{if } i(t) > 0, \\ \alpha & \text{if } i(t) \leq 0. \end{cases}$$

5 Shortages as well as backlogging are allowed. It is considered that only a fraction of demand is backlogged, we denote it $B(t) = \frac{1}{1+\varepsilon t}$, where t is the waiting time and $\varepsilon > 0$ is a constant backlogging parameter.
6 Replenishment rate is infinite and lead time is negligible.
7 A single type of item is considered in this model.

Active and passive voice

- **A verb is in the *active voice* when the subject of the verb performs the action.**

Example: He performed the task.

- **A verb is in the *passive voice* when the subject receives the action rather than performs it**

Example: The task was performed by him.

ARTICLE INFO

Keywords:
Quadratic demand
Product reliability
Inflation

ABSTRACT

The paper deals with an *economic manufacturing quantity* (EMQ) model for time-dependent (quadratic) demand pattern. Every manufacturing sector wants to produce perfect quality items. But in long run process, there may arise different types of difficulties like labor problem, machinery capabilities problems, etc., due to that the machinery systems shift from *in-control* state to *out-of-control* state as a result the manufacturing systems produce imperfect quality items. The imperfect items are reworked at a cost to become the perfect one. The rework cost may be reduced by improvements in product reliability i.e., the production process depend on time and also the reliability parameter. We want to determine the optimal product reliability and production rate that achieves the biggest total integrated profit for an imperfect manufacturing process using Euler–Lagrange theory to build up the necessary and sufficient conditions for optimality of the dynamic variables. Finally, a numerical example is discussed to test the model which is illustrated graphically also.

Abstract

Mathematical expressions

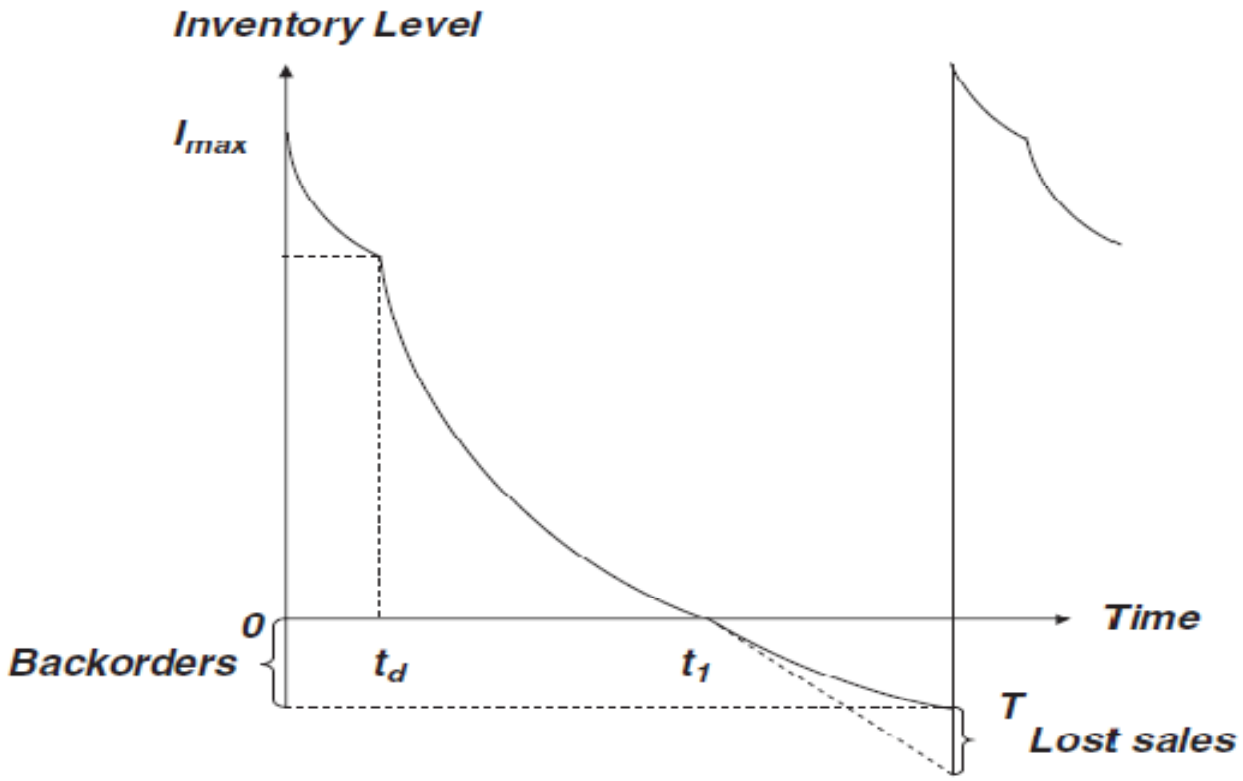
$$\Omega = \int_0^T e^{-\tau t}\{(p - C_P(\eta, S(t)))S(t) - C_h Q - C_d \beta e^{\eta t} S(t)\}dt$$

$$= \int_0^T e^{-\tau t}\{(p - C_0 - C_d \beta e^{\eta t})(\dot{Q} + D(t)) - \alpha(\dot{Q} + D(t))^2$$

$$- C_h Q - C_1(\eta)\}dt$$

$$= \int_0^T \lambda(\dot{Q}, Q, t)dt,$$

Figure



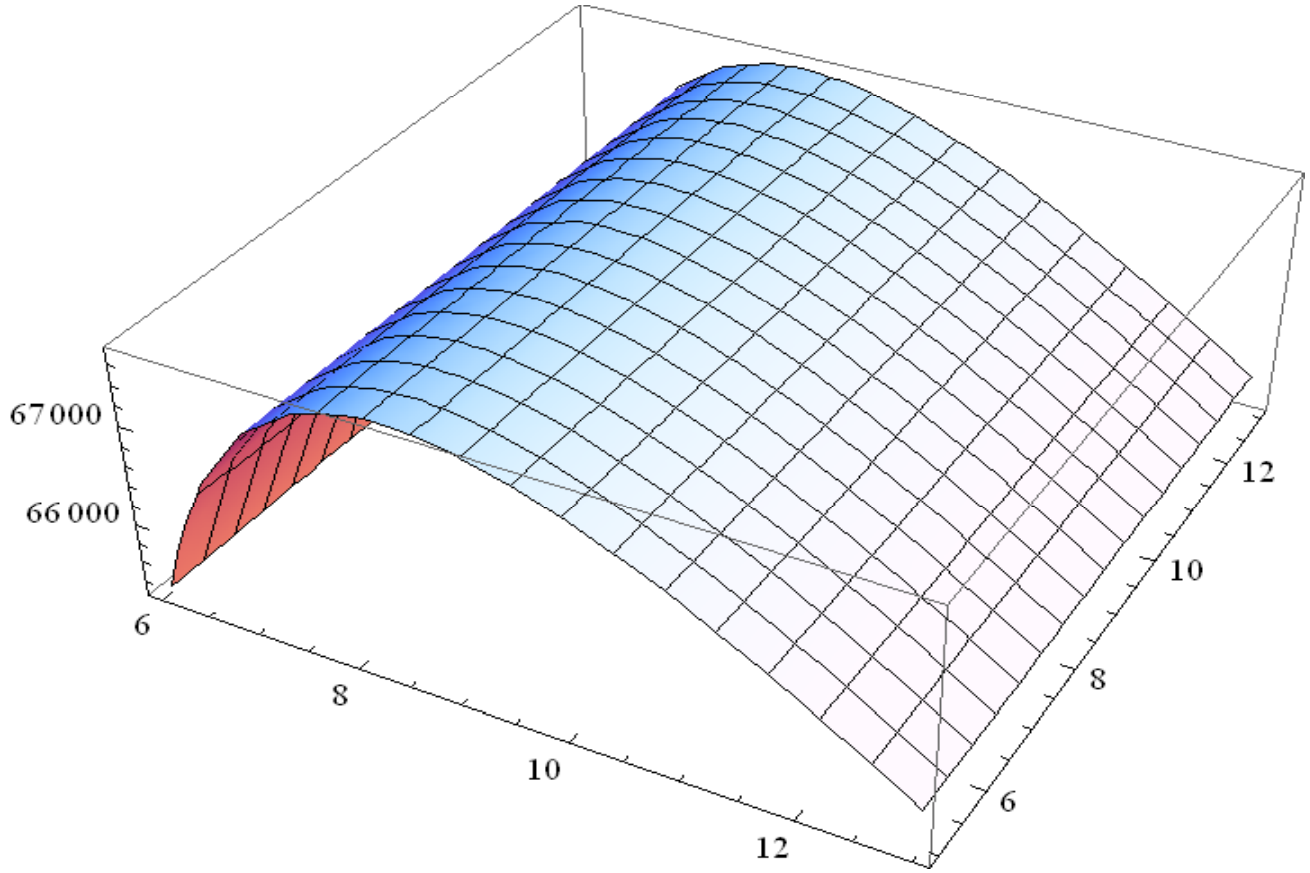
Numerical data

Lead time component i	Normal duration b_i (days)	Minimum duration a_i (days)	Unit crashing cost c_i ($/day)
1	20	6	0.4
2	20	6	1.2
3	16	9	5.0

Numerical results

m	L_m^{*a}	$R_m^*(k_m^*)$	Q_m^*	$\mathrm{JTEC_N}(Q_m^*, R_m^*, L_m^*, m)$
1	28	58 (0.84)	299	\$7466.7
2	28	62 (1.14)	189	\$6760.0
3	28	64 (1.31)	144	\$6660.4 ← [b]
4	28	66 (1.41)	118	\$6722.5

Graphical representation



Comparison table

Comparison table (for $m > 1$)

	Goyal [7]	Ouyang *et al.* [25]	This model
Number of lots delivered (m)	2	3	3
Reorder point (R) (units)	–	64	65
Buyer's ordering quantity (Q) (units)	164	144	134
Vendor's lot size (mQ) (units)	328	432	402
$JATC$ (\$)	7875.1	6660.4	6627.4

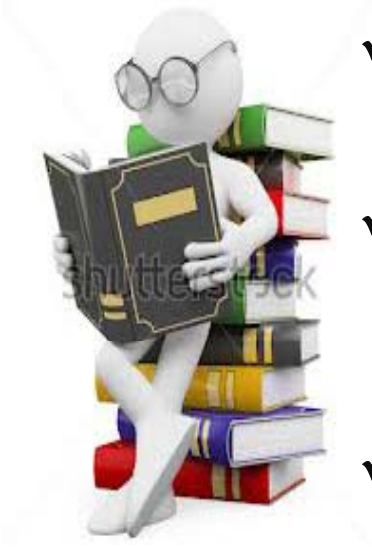
– indicates the reorder point was not considered as a decision variable in Goyal [7].

Correction/Extension of a research paper

- **If the correction/extension of a paper is submitted in an international journal and if in abstract the author mentioned reference of that paper, it should be with the full reference of the paper.**

Abstract

This paper presents the correct solutions to the two numerical examples presented by Jamal et al. [Jamal, A. A. M., Sarker, B. R., & Mondal, S. (2004). *Computers & Industrial Engineering, 47*(1) 77–89].



- ✓ Read books and papers on the topic of the research to gather knowledge.
- ✓ Cite the significant research articles which have been needed to formulate the model.
- ✓ Explain the significant contributions of cited authors related to the study.

- **Based on keywords, the literature survey of the model should consider separate paragraph for each keyword.**

- **If the paragraph is too large, split the paragraph into separate paragraphs.**

- **That paragraphs should contain 10-12 lines approximately.**

Comparison among the contributions

Table 1. Comparison between the author's contributions.

Author(s) Name	Lot size	Number of Deliveries	Reliability	Deterioration	SSMD
Goyal [1]	√	√			
Banerjee [2]	√	√			
Goyal [3]	√	√		√	√
Yang & Wee [4]	√	√			√
Kim & Ha [5]	√	√			√
Yan, Banerjee, and Yang [6]	√	√		√	√
C´ardenas-Barr´on [7]	√	√			
Sarkar&Sarkar [8]			√	√	
Sarkar [9]	√	√		√	√
This paper	√	√	√	√	√

Research paper consists of a Supply Chain Model.

- **The introduction should start with the concept of supply chain.**
- **Discuss the keywords sequentially (if possible).**
- **Practical implications of the research concept along with the existing literature.**

- **If possible a figure should be added to define the practical implications of the research topic.**

This figure clearly defines a supply chain

click.

Keywords

- **The number of keywords should be restricted based on the recent published paper of the journal.**

- **The keywords are related to Editor-in-Chief, Associate Editor, and, Editorial Board.**

ELSEVIER

Type here to search on Elsevier.com

Advanced search

Follow us

Journals & books | Online tools | Authors, editors & reviewers | About Elsevier | Store

Browse journals > European Journal of Operational Research > Guide for authors

Guide for Authors

Author information pack

BEFORE YOU BEGIN

- Ethics in publishing
- Conflict of interest

- Submit your article
- Editorial Policy

PREPARATION

- Database linking
- Artwork
- References

List of keywords

- (I) Applied probability
- (S) Artificial intelligence
- (S) Assignment
- (D) Auctions/bidding

- (B) Bioinformatics
- (S) Branch and bound
- (D) Business analytics
- (P) Business reengineering

European Journal of Operational Research

Guide for Authors | Submit Your Paper | Track Your Paper | Order Journal | View Articles | Open Access Options | News | Policies and Guidelines | Thank you Reviewers

European Journal of Operational Research Editorial Board

Co-ordinating Editor

R. Slowinski
Inst. of Computing Science, Poznan University of Technology, Piotrowo 2, PL-60-965 Poznan, Poland, Fax: 48 61 8771525
Phone 48 61 8790790 Email R. Slowinski

Editors

I. Bomze
Department of Statistics and Operations Research, Faculty of Business, Economics and Statistics, University of Vienna, 1010 Wien, Austria, Tel: +43-1-4277.38652, Fax: +43-1-4277.38699
Phone +43-1-4277.38652 Email I. Bomze

J.-C. Billaut
Lab. of Computer Science, Université Francois Rabelais de Tours, 64 avenue Jean Portalis, 37200 Tours, France, Fax: +33-2-47-36-14-22
Phone +33-2-47-36-14-14 Email J.-C. Billaut

R. Dyson
Warwick Business School, University of Warwick, Gibbet Hill Road, Coventry, CV4 7AL, UK
Phone +44 24 7652 3775 Email R. Dyson

L. Peccati
Dept. of Decision Sciences, Università Bocconi, Via Roentgen 1, 20139 Milano, Italy

Attached file format

- The cover letter should be in .pdf format.
- The cover letter should be addressed to the Editor-in-Chief or Associate Editor based on the topic of the research.
- The highlight of research should contain 3-5 bullet points with maximum word count 85 including spaces.
- Manuscript should be in .pdf format. If the paper is written in Microsoft Word, it can be transferred to pdf file and then it should be incorporated into ***EES system.***
- The figures should be incorporated into .pdf format.
- The tables should be incorporated into .pdf format.

ARTICLE INFO

Keywords:
Quadratic demand
Product reliability
Inflation

No Indentation →

ABSTRACT

The paper deals with an *economic manufacturing quantity* (EMQ) model for time-dependent (quadratic) demand pattern. Every manufacturing sector wants to produce perfect quality items. But in long run process, there may arise different types of difficulties like labor problem, machinery capabilities problems, etc., due to that the machinery systems shift from *in-control* state to *out-of-control* state as a result the manufacturing systems produce imperfect quality items. The imperfect items are reworked at a cost to become the perfect one. The rework cost may be reduced by improvements in product reliability i.e., the production process depend on time and also the reliability parameter. We want to determine the optimal product reliability and production rate that achieves the biggest total integrated profit for an imperfect manufacturing process using Euler–Lagrange theory to build up the necessary and sufficient conditions for optimality of the dynamic variables. Finally, a numerical example is discussed to test the model which is illustrated graphically also.

1. Introduction

Supply chain management (SCM) is a collaboration among suppliers, manufacturers, retailers, and customers. The supply chain model is used to minimize the total cost or to maximize the total profit throughout the network under the condition that demands of each facilities have to be met. Thus, the integrated inventory control policy is a matter of concern (for instances Villa [1], Yang and Wee [2], Viswanathan [3], and Bylka [4]). Goyal [5] developed the first research work on the integrated vendor-buyer problem. Banerjee [6] extended Goyal's [5] model with an assumption on the number of lot size. Goyal [7] extended Banerjee's [6] model by assuming the manufacturing quantity of the vendor as an integer multiple of the buyer's ordering quantity. Huang [8] developed an integrated vendor-buyer model in an imperfect production process. Cárdenas-Barrón [9] made a correction on an inventory model based on concurrent pricing and lot sizing for make-to-order contract production. Cárdenas-Barrón *et al.* [10] used the arithmetic-geometric inequality to solve a vendor-buyer integrated inventory model with a closed form solution.

Indentation

6. Numerical example

Now, we show the numerical examples of the above problems in different dimensions using LINGO 13.0 optimization software. We first show this example for two dimensions. Then, we proceed to the next higher dimensions. We consider that there are two plants, two warehouses and two retailers. Moreover we consider one outside supplier who supplies commodities to the retailers. For the sake of simplicity, we assume the set of retailers, warehouses and plants as $I=\{A,B\}$, $J=\{A,B\}$ and $K=\{A,B\}$, where A and B are name of the locations of different facilities and retailers so that goods are shifted between A to A, A to B, B to A and B to B. The transportation of products between A to A and B to B imply that products are shifted between any two locations of same region. If we suppose A as a particular country then, the shipment of goods may be considered as between any two states of the same country.

Section

6.1. Numerical discussion

In the above tables, we allow the non-zero decision variables along with their values and the rest of the decision variables are all zero. We first consider a test case: 1 of the above tables i.e., Tables 1, 3 and 5. From the above numerical experiments, the cost \$ 45844 is

Subsection

click.