



مدخل متكامل لإدارة التكاليف في ظل بيئة التصنيع الحديثة
- دراسة حالة مؤسسة ALZINC -

2016-2015:

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيْمِ

لَا إِلَهَ إِلَّا هُوَ
لَا شَرِيكَ لَهُ

إِلَيْ وَالدِّي الْكَرِيمِينَ
إِلَيْ كُلِّ أَفْرَادِ عَائِلَتِي
إِلَيْ صَدِيقَاتِي الْعَزِيزَاتِ

اللهم سل لرسولك ع ما حَمَدَ بِهِ سَرَّهُ

الحمد لله الذي هدانا هذا وما كنا ننهديه نولا أن
هدانا الله، وإن أي توفيق فهو من الله عز وجل وأي
تضليل فمني وحسبني أني اجتهدت ولا حول ولا قوّة إلا بالله.
وأصلى وأسلم على نبي الرحمة ومعلم البشرية سيدنا محمد
وعلى آله وصحبه أجمعين.

أتقدم بالشكر الجزييل إلى:

- الأستاذ الدكتور بلمقدم مصطفى الذي أشرف على هذه الرسالة وأفادنا بنصائحه وتوجيهاته.
- إلى عمال مكتبة العلوم الاقتصادية الذين قدموا لنا التسهيلات الضرورية.
- إلى عمال مؤسسة ALZINC الذين لم يخلوا علينا بمعلوماتهم.
- إلى كل من ساهم من قريب أو من بعيد في إتمام هذا العمل المتواضع وإخراجه إلى النور.

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فَلَمْ يَكُنْ لِّلشَّجَاعَةِ
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² The institut of company secretaries of india, **cost and management accounting**, 2013, p 02

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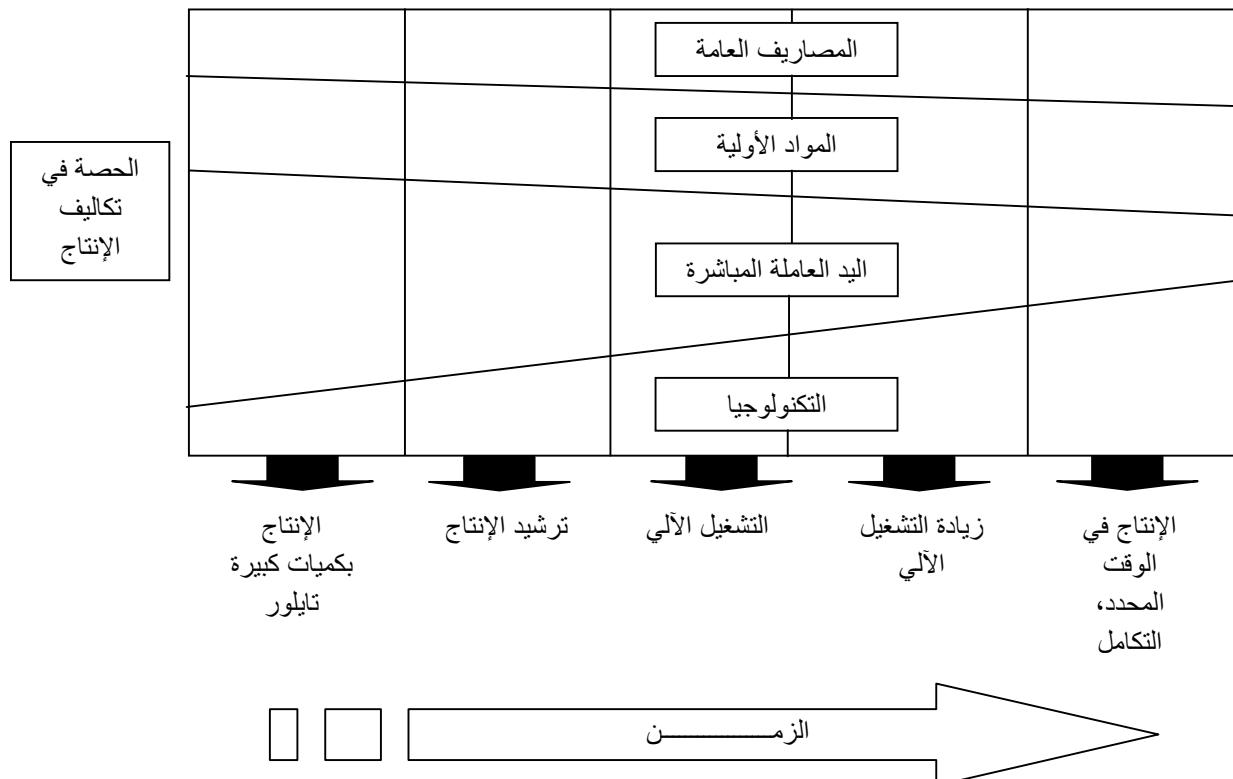
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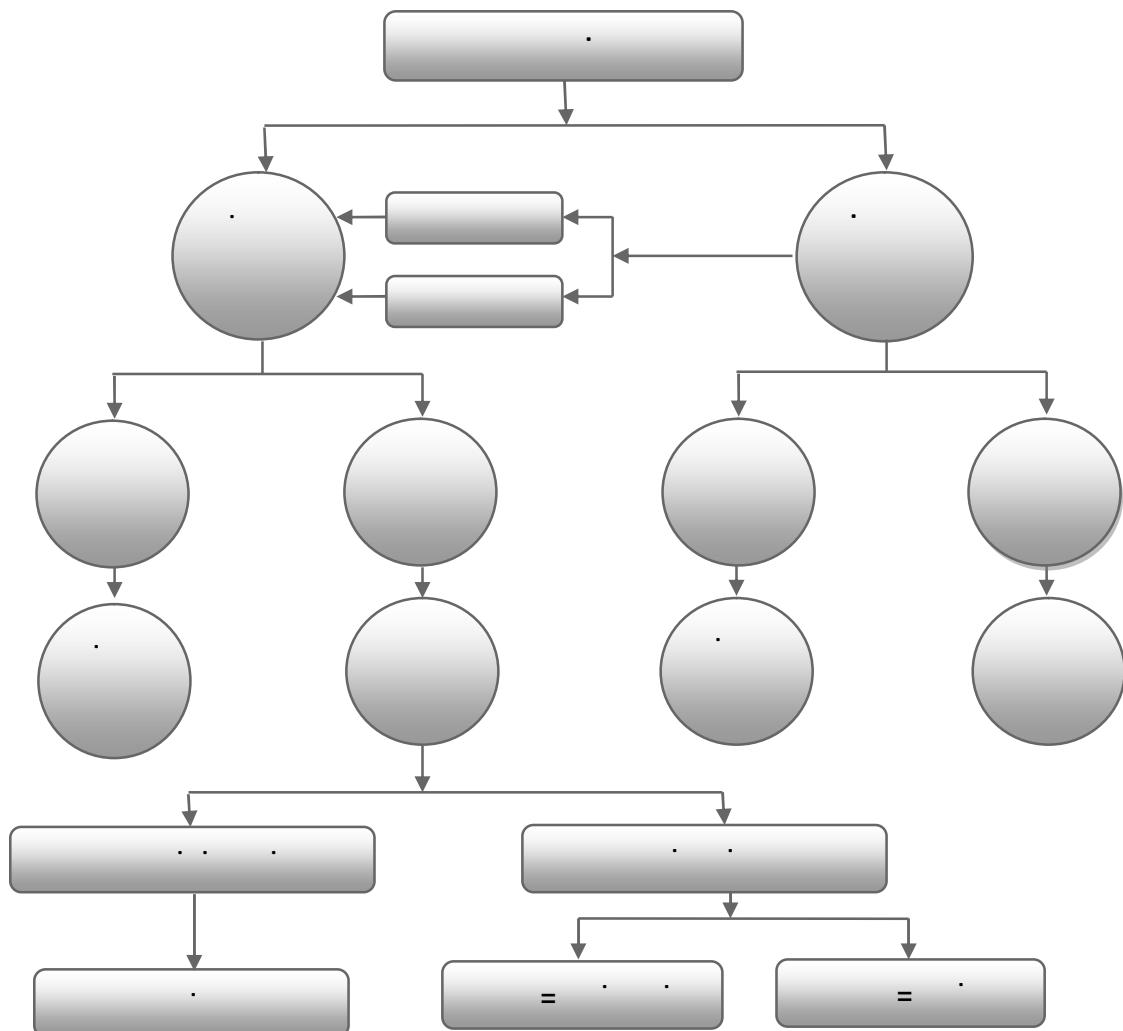
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Source : Lardy. P, Pigé. B, **la gestion stratégique des couts, consommation de ressources et creation de valeur**, édition ems, 2001, p25

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² Horngren et al, op cit, p 42

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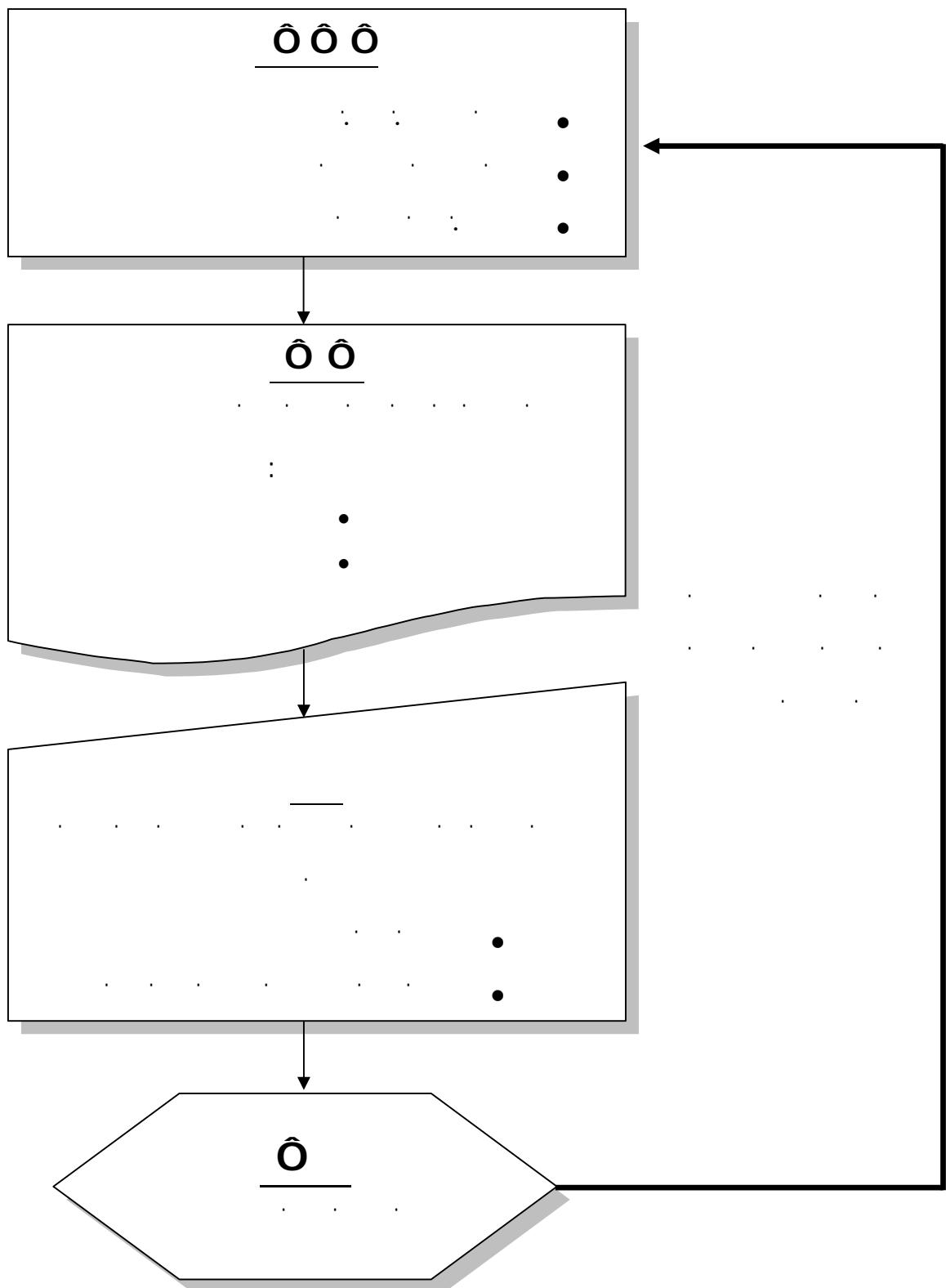
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Source : Barfield. J.T. et al, op cit, p 45

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Source : Barfield. J.T et al, op cit, p 49

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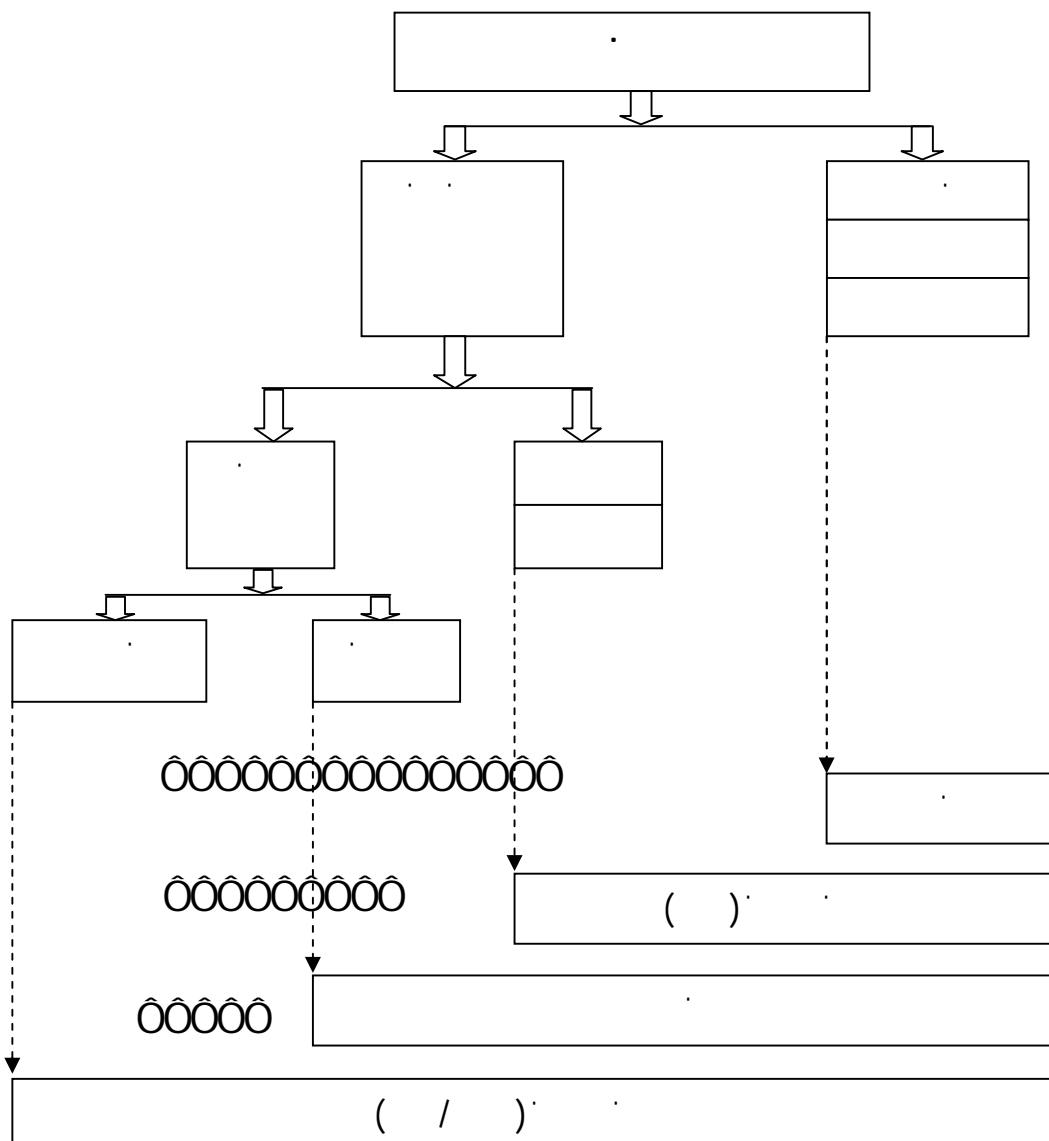
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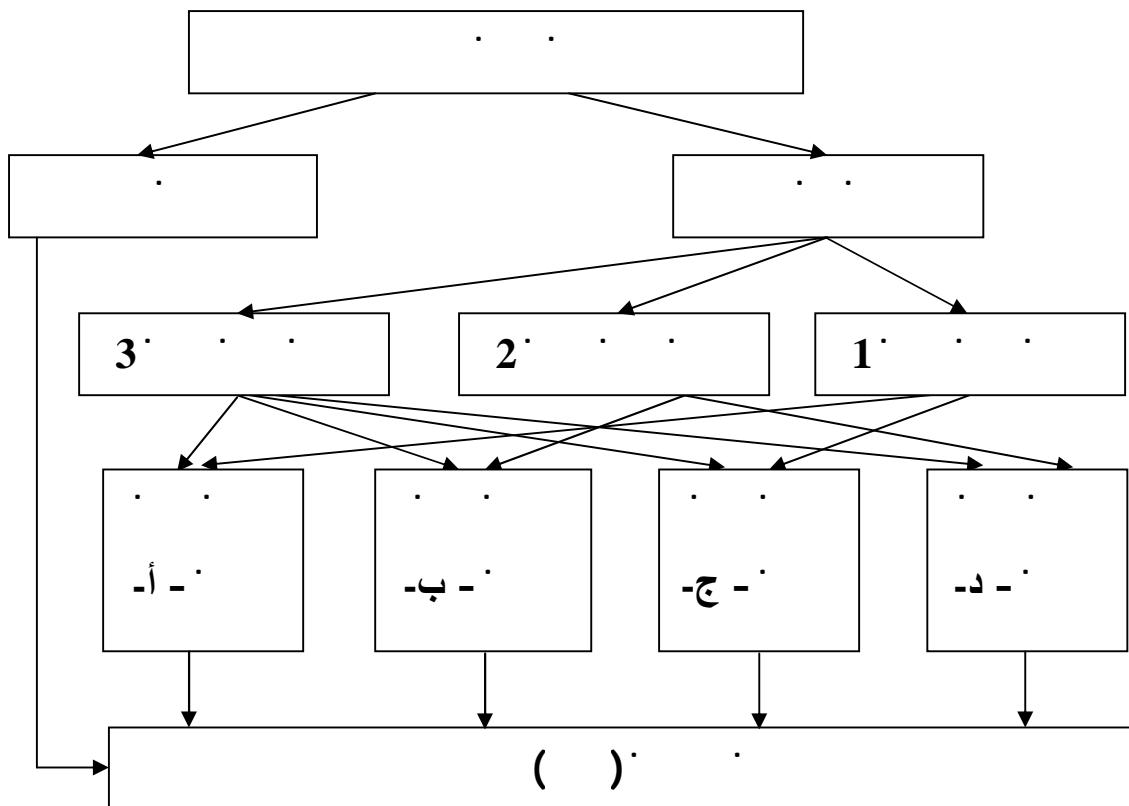
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Source : Ronge.Y.D, Cerrada.K, op cit, p 49

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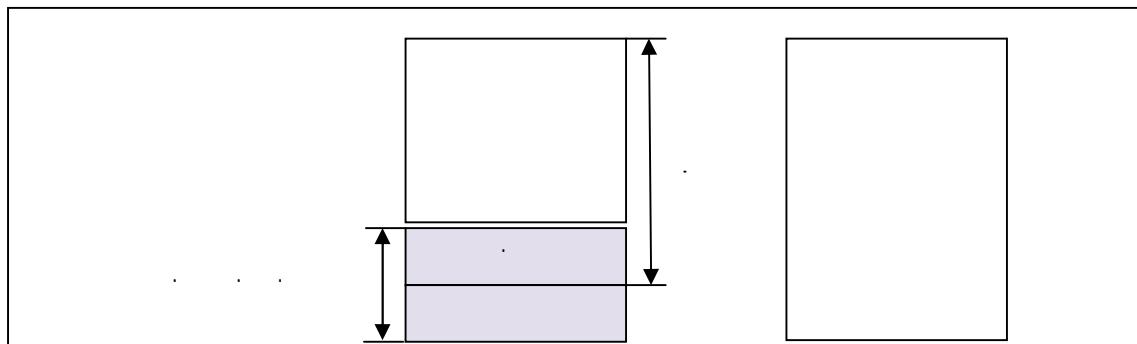
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Source : Burlaud.A et al, op cit, p 207

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¹ Burlaud.A et al, op cit, p 219

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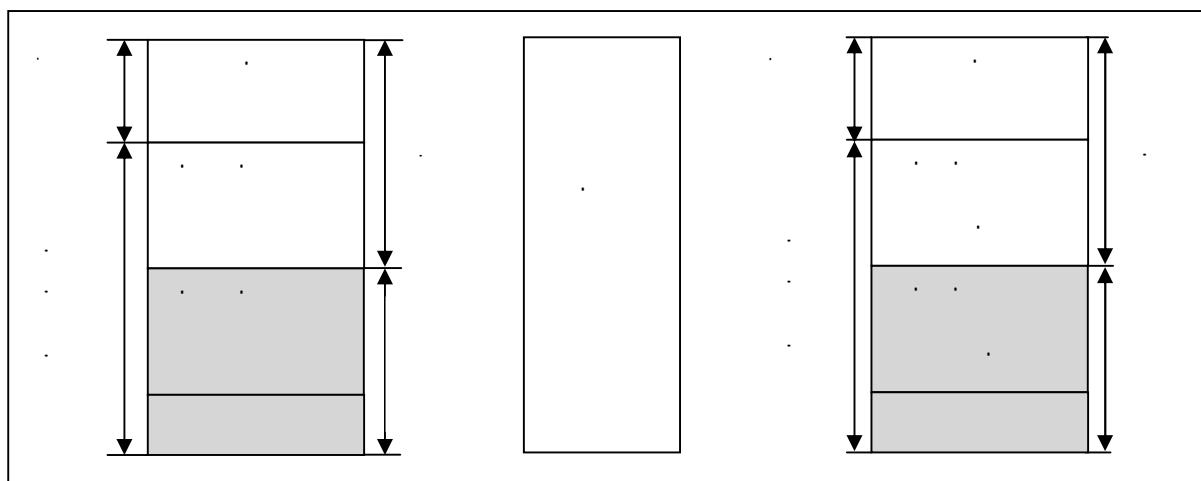
¹ Burlaud.A et al, op cit, p224

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Source : Burlaud.A et al, op cit, p 232

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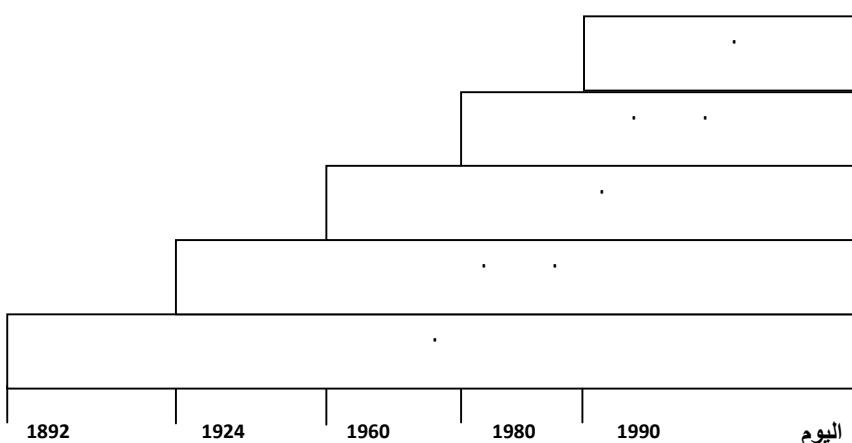
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Source : Juran.J, Godfrey.A, **Juran's quality handbook**, McGraw-Hill, United States, fifth edition, 1999, p 401

Crosby (1979) Feigenbaum (1991) Juran (1989) Deming (1986)

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¹ Juran. J, Godfrey.A, op cit, p 388

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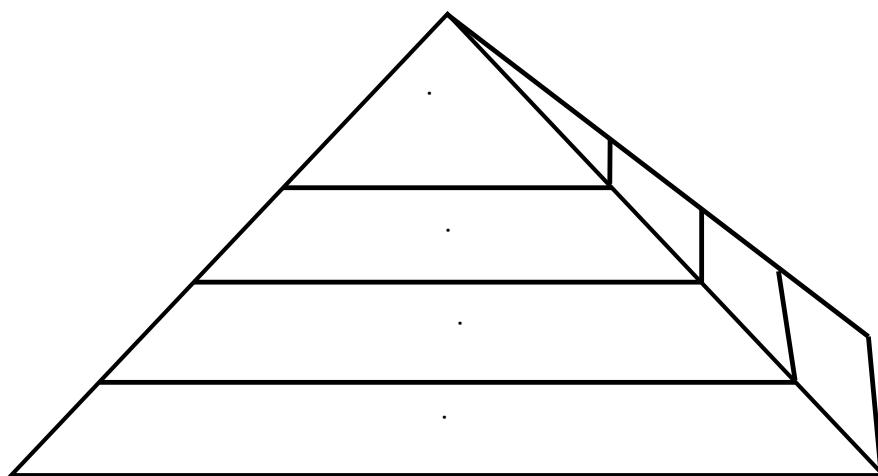
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Source : Juran.J, Godfrey.A, op cit, p 390

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Toyota Motor

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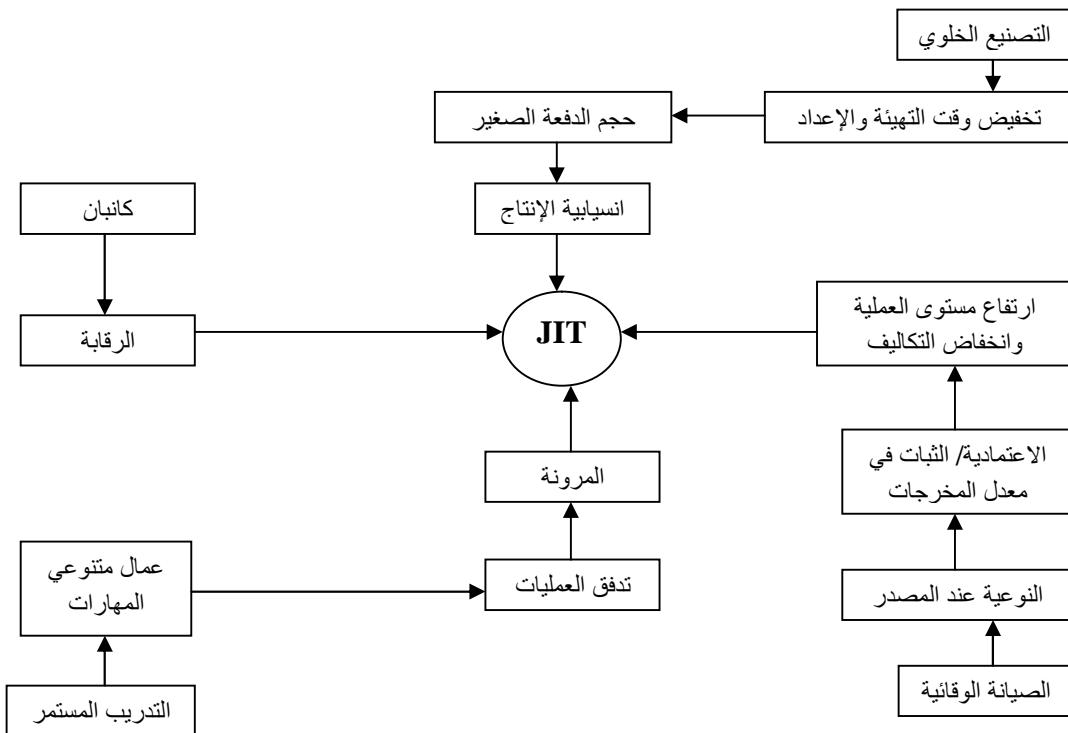
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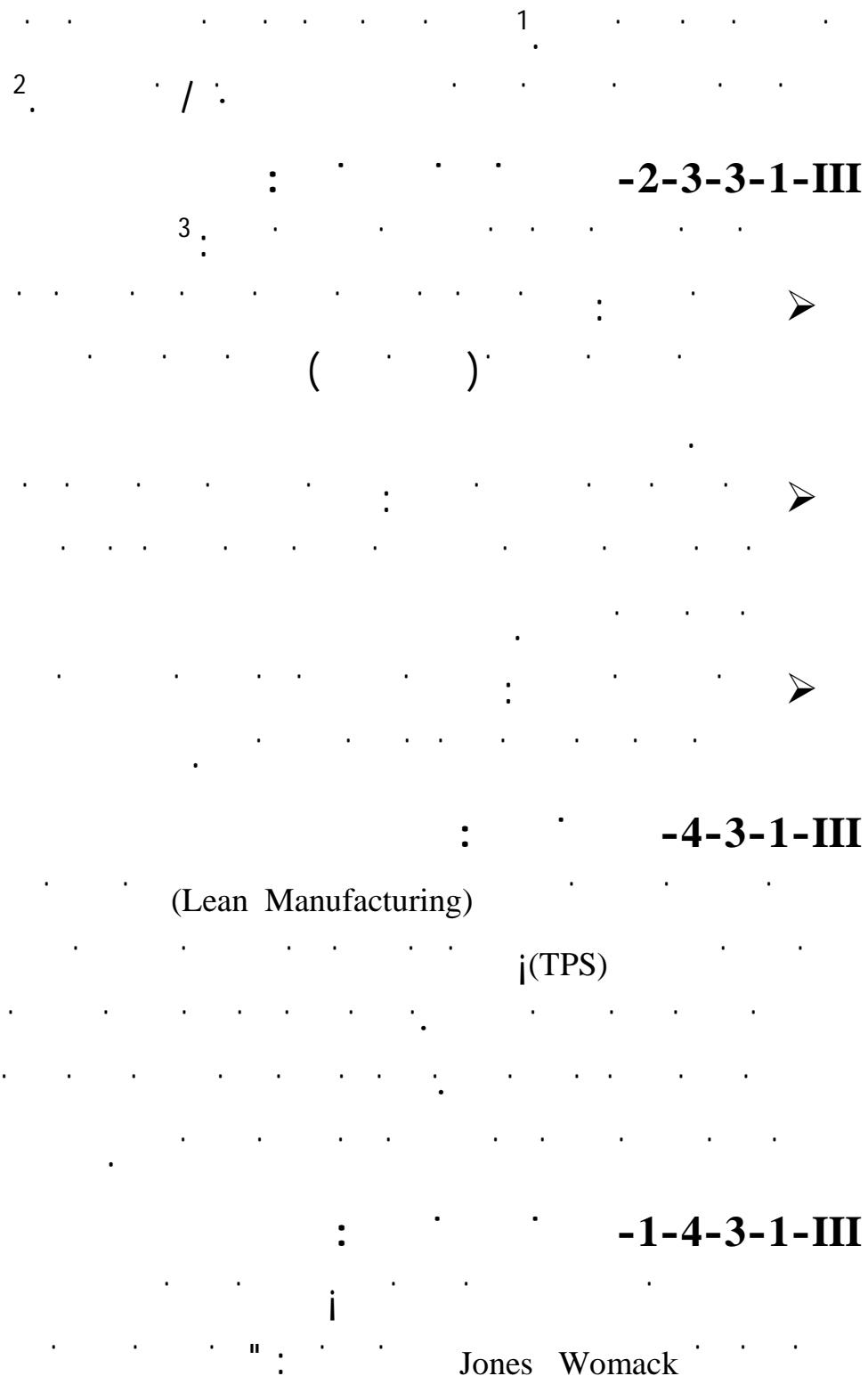
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(Flexible Manufacturing Systems)

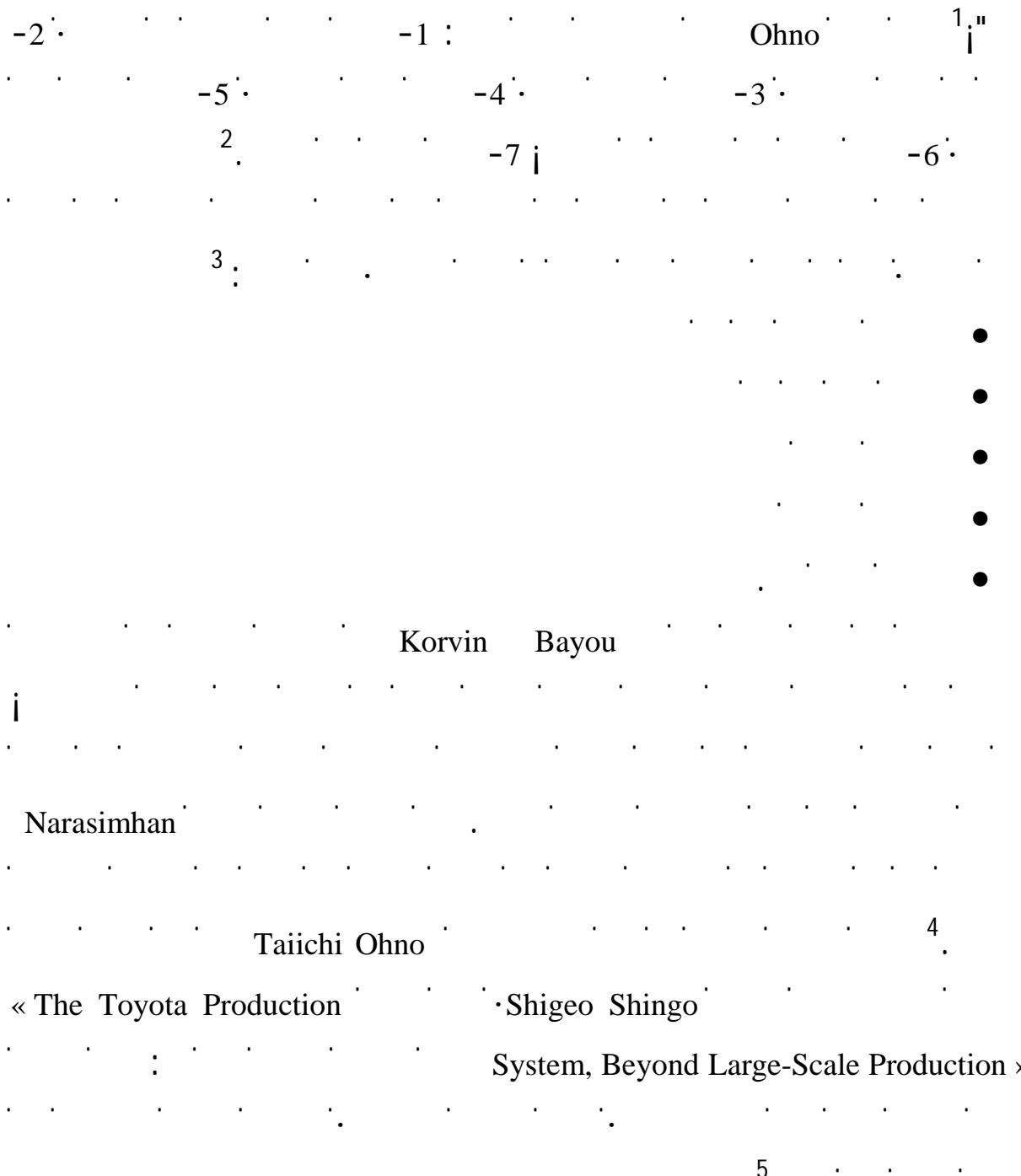
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Dileep.G et al, **Product Costing in Flexible Manufacturing Systems**, Journal of Management Accounting Research, 1989, p 72

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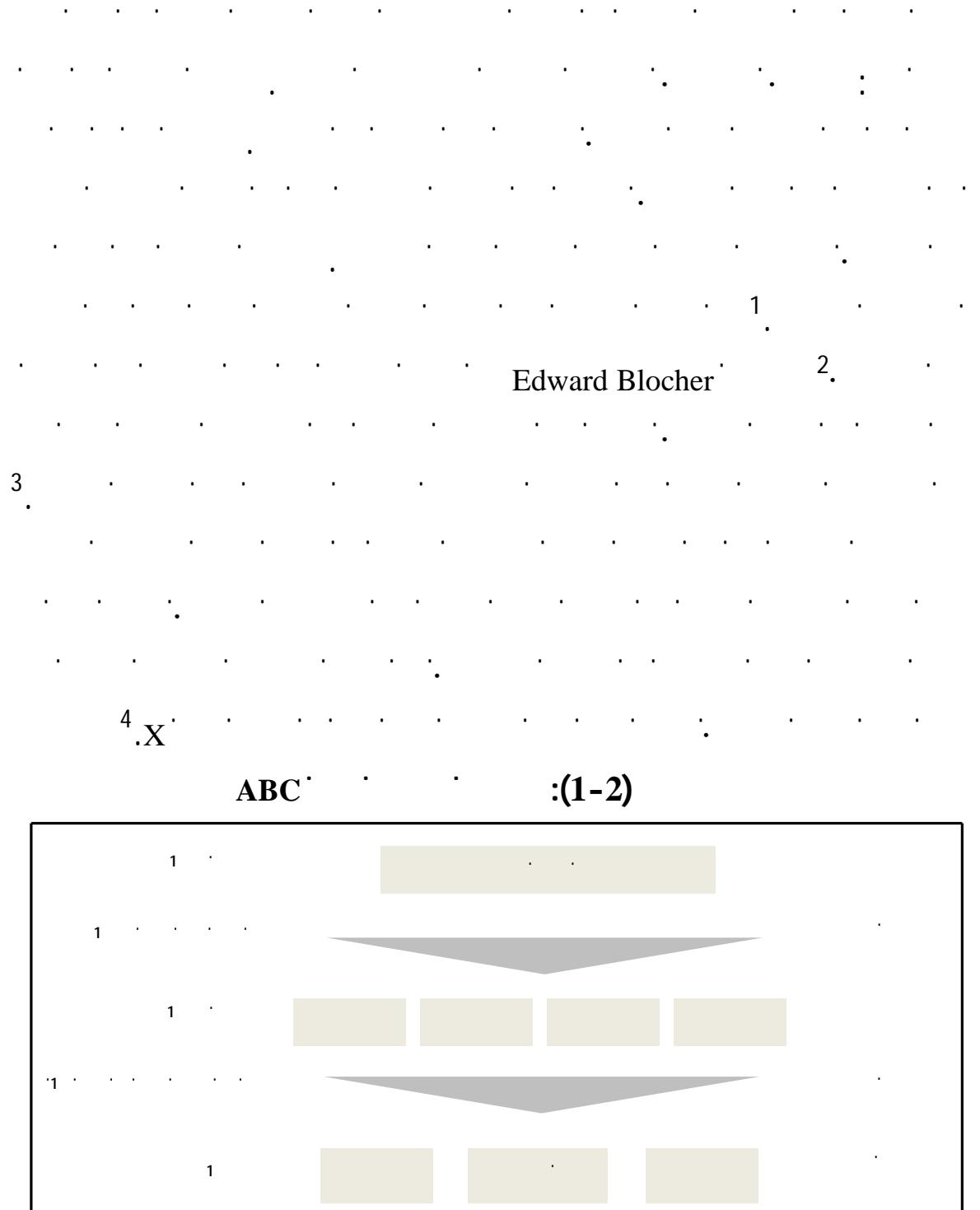
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* The Chartered Institute of Management Accountants

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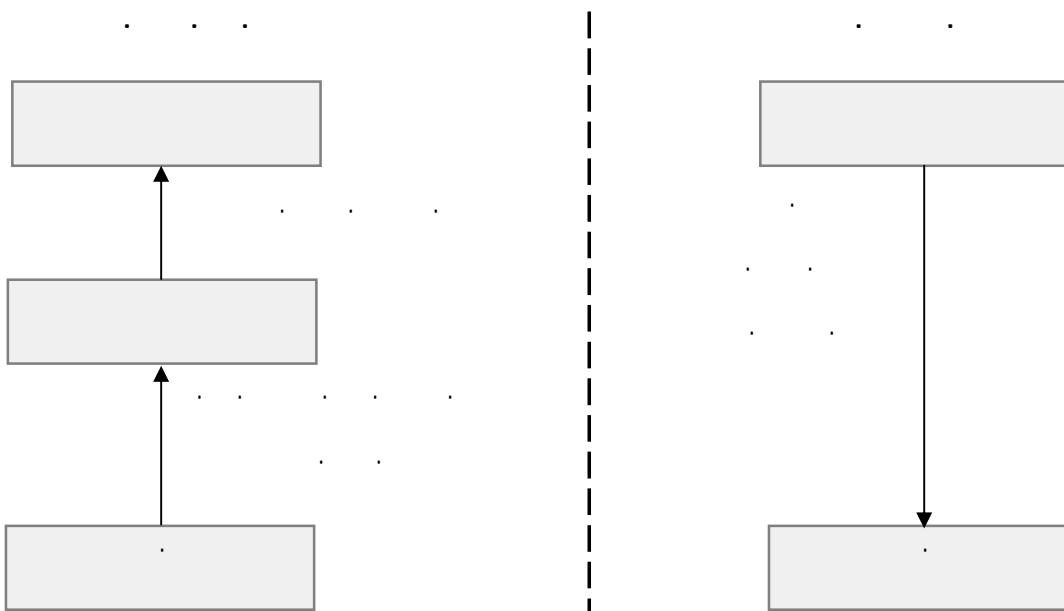
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Source : Emblemsvag.J, op cit, p 101

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¹ Roztacki.N, **Activity-Based Costing for E-Business**, Portland International Conference on Management of Engineering and Technology (PICMET '01), Portland, Oregon -USA, July 29 - August 2, 2001, p 05

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² Blocher.E.J et al, op cit, p 131

³ Drury.C, **cost and management accounting**, thomson, sixth edition, 2006, p 360

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¹ Drury.C, **cost and management accounting**, op cit, p 362

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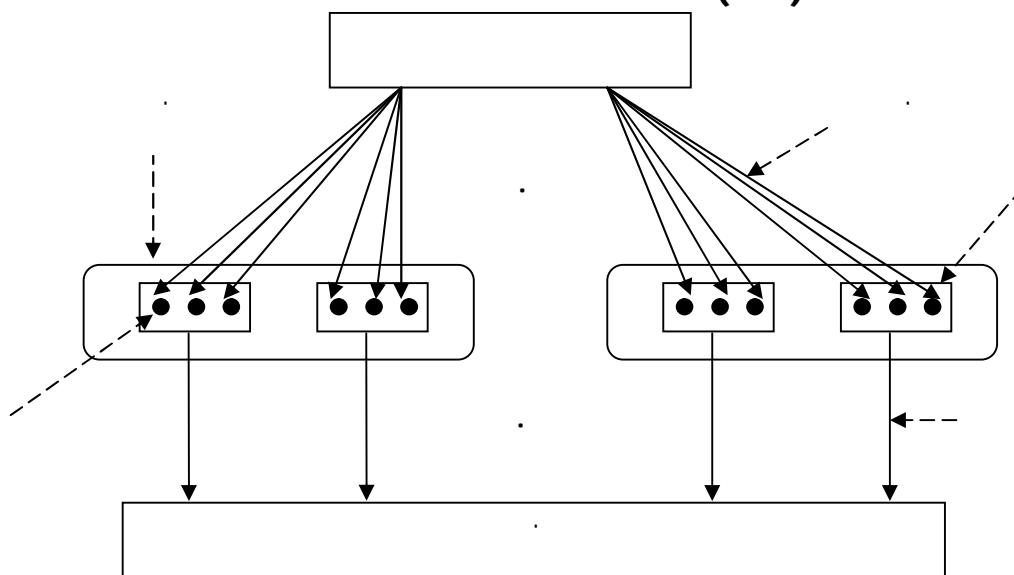
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¹ Blocher.E.J et al, op cit, p 132

² Miller.J.A, **Implementing Activity Based Management in Daily Operations**, The CAM-I glossary of activity-based management, John Wiley & Sons, Inc, Canada, 1996, p 218

³ Blocher.E.J et al, op cit, p 132

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Source : Tsai.W.H, Kuo.L, **Operating costs and capacity in the airline industry**, Journal of Air Transport Management, elsevier, 2004, p 272

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¹ Weil.R.L, Maher.M.W, **Handbook of cost management**, John Wiley & Sons, Inc, Canada, second edition, 2005, p 232

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:(Activity Based Management)

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¹ The Institute of Cost Accountants of India, op cit, p 411

Edward Blocher¹

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*CAM-I³

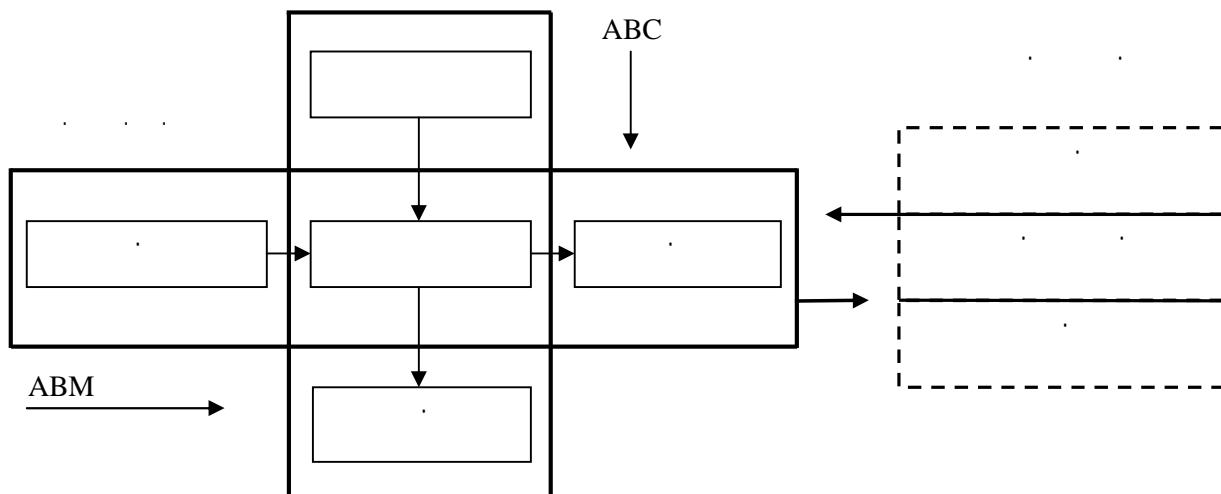
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⁴ ABC

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CAM- I \hat{O} : (4-2)



Source : Miller.J.A, op cit, p 236

¹ Kaplan.R.S, Cooper.R, **Cost & Effect : Using Integrated Cost Systems to Drive Profitability and Performance**, harvard business school press, united states, 1998, p 137

² Blocher.E.J et al, op cit, p 138

³ Bahnbub.B, op cit, p 07

* The Consortium of Advanced Management—International

⁴ Miller.J.A, op cit, p 218

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Barfield

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¹ Blocher.E.J et al, op cit, p 139

² Barfield J.T et al, op cit, p 132

³ Gunasekaran.A et al, **Activity-based management in a small company: a case study**, Production planning & control, Taylor & Francis Ltd, 2000, p 392

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(Benchmarking)

Colin Drury²

Benchmarking

¹ Barfield J.T et al, op cit, p 132

² Blocher.E.J et al, op cit, p 13

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Benchmarking

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¹ Drury.C, **management accounting for business decisions**, thomson learning, italy, second edition, 2001, p 470

² Institute of Management Accountants, **Implementing Activity-Based Management: Avoiding the Pitfalls**, 1998, p 04

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2. (2)

: (Target Costing) -III

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¹ The Chartered Institute of Management Accountants, **Activity based Management-An Overview**, developing and promoting strategy, april 2001, p 01

² Atkinson.A.A et al, **Management accounting Information for Decision-Making and Strategy Execution**, PEARSON, sixth edition, USA, 2012, pp 305-306

³ Drury.C, **Management accounting for business decisions**, op cit, p 457

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¹ Ibusuki.U, Kaminski.P.C, **Product development process with focus on value engineering and target costing : A case study in an automotive company**, international journal of production economics105, elsevier, 2007, p 460

² Blocher.E.J et al, op cit, p 553

: (kaizen costing)

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kaizen : (5-2)



Source: Medinilla.A, op cit, p 05

¹ Drury.C, Management accounting for business decisions, op cit, pp 461-462

² Delgado.C, Castelo.B.M, **Encyclopedia of Corporate Social Responsibility**, Springer-Verlag Berlin Heidelberg, 2013, p 1531

³ Medinilla.A, **Agile Kaizen**, Springer-Verlag Berlin Heidelberg, 2014, p 04

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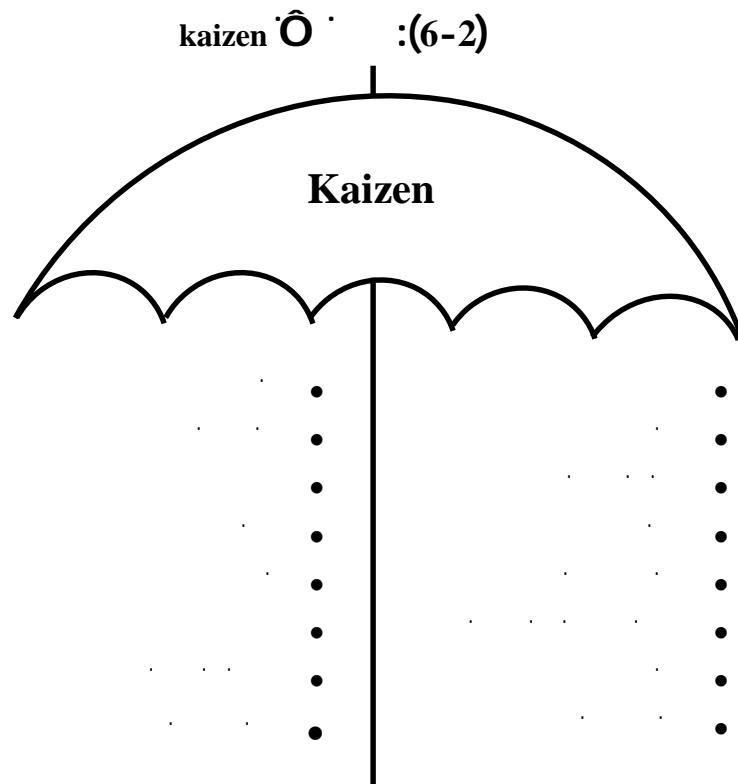
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kaizen Ô

¹ Atkinson.A.A et al, op cit, p 273

² Kumar.P, Pandey.V, **KAIZEN: A Case study in small scale organizations**, International Journal of Scientific Research Engineering & Technology (IJSRET), Volume 2 Issue2, pp 133-136 May 2013, 2013, p 133

³ Imai.M, **KAIZEN (ky'zen), the key to japan's competitive success**, McGraw-Hill, USA, first edition, 1986, p 03



Source: Imai.M, op cit, p 04

-2 -IV

1961 Genkakaizen

kaizen costing

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kaizen costing Ô Widener Kennedy

¹ Kaur.M, kaizen costing: a catalyst for change and continuous cost improvement, GE - International Journal of Management Research, volume 2, issue1, 2014, p 02

² Okano.H, Suzuki.T, **A History of Japanese Management Accounting**, Handbook of Management Accounting Research, Elsevier, 2007, p 1129

kaizen costing · Ô · Mowen Hansen

kaizen costing Ô · · · Cooper

kaizen costing Ô Ellram

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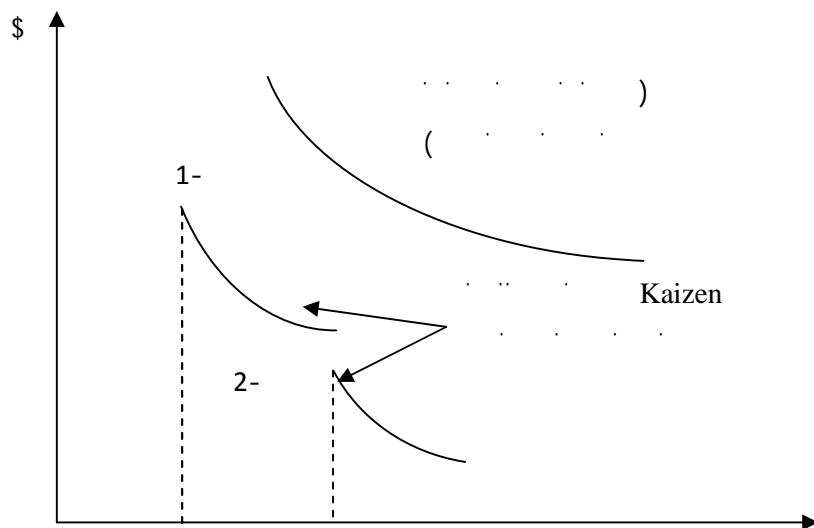
¹ Kaur.M, op cit, p 03

² Drury.C, **Management accounting for business decisions**, op cit, p 462

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Source: Blocher.E.J et al, op cit, p 551

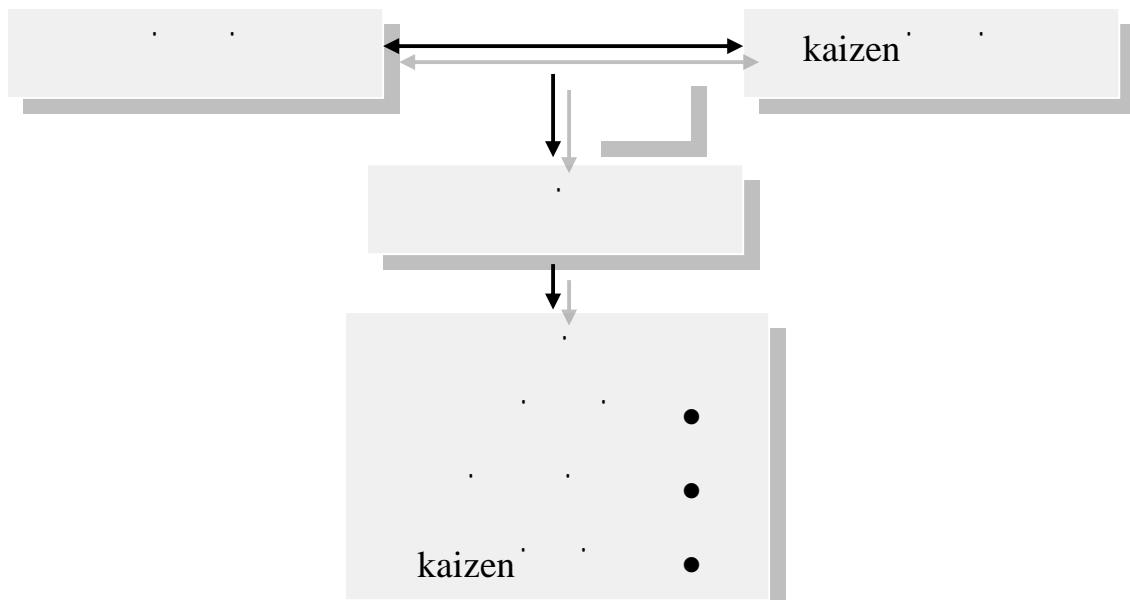
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¹ Blocher.E.J et al, op cit, p 550

² Kaur.M, op cit, pp 7-11

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Source: Kaur.M, op cit, p 11

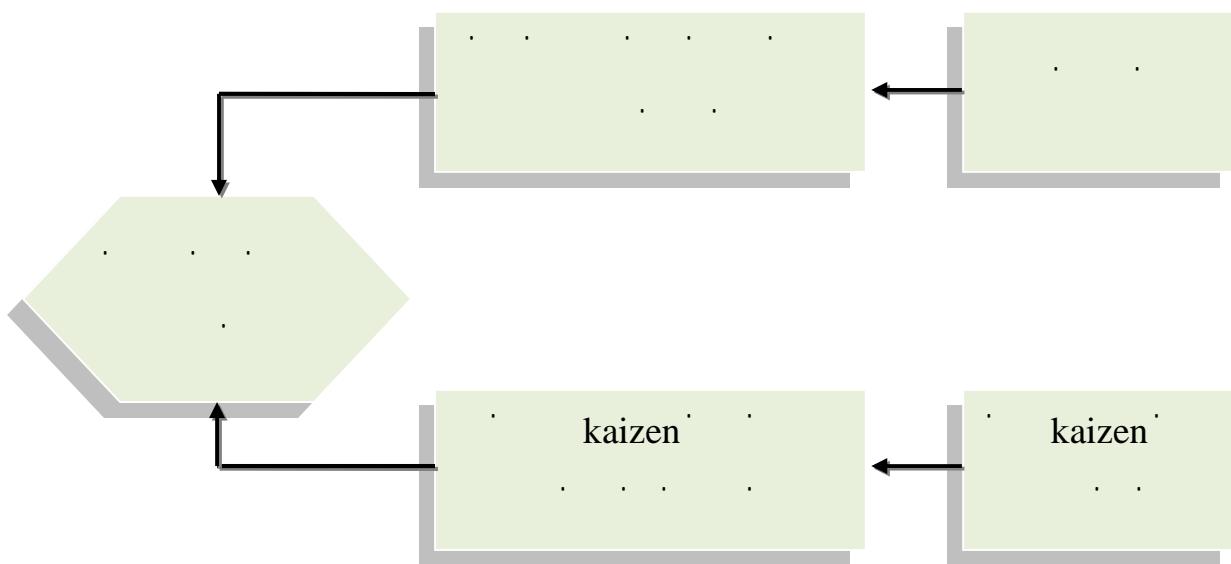
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Source: Kaur.M, op cit, p 09

-2-4 -IV

:**(Life cycle costing)** -V

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-1-V

Woodward

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Reynolds

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Sherif

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Rudolph, Brown

7"

¹ Gluch.P, Baumann.H, **The life cycle costing (LCC) approach: a conceptual discussion of its usefulness for environmental decision-making**, Building and Environment 39, elsevier, 2004, p 571

² Mceachron.N.B et al, **Life cycle costing as a method of procurement : a framework and example**, energy vol. 3, pp 461-478, Pergamon Press Ltd., 1978, p 461

³ Galera.A.N, Maturana.R.O, **Innovating in defence policy through spending efficiency: The Life Cycle Costing model**, Journal of Policy Modeling 33, elsevier, 2011, p 409

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⁷ Okano.K, op cit, p 318

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Source: Blocher.E.J et al, op cit, p 562

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¹ Drury.C, **Management accounting for business decisions**, op cit, p 456

² Atkinson.A.Aet al, op cit, p 303

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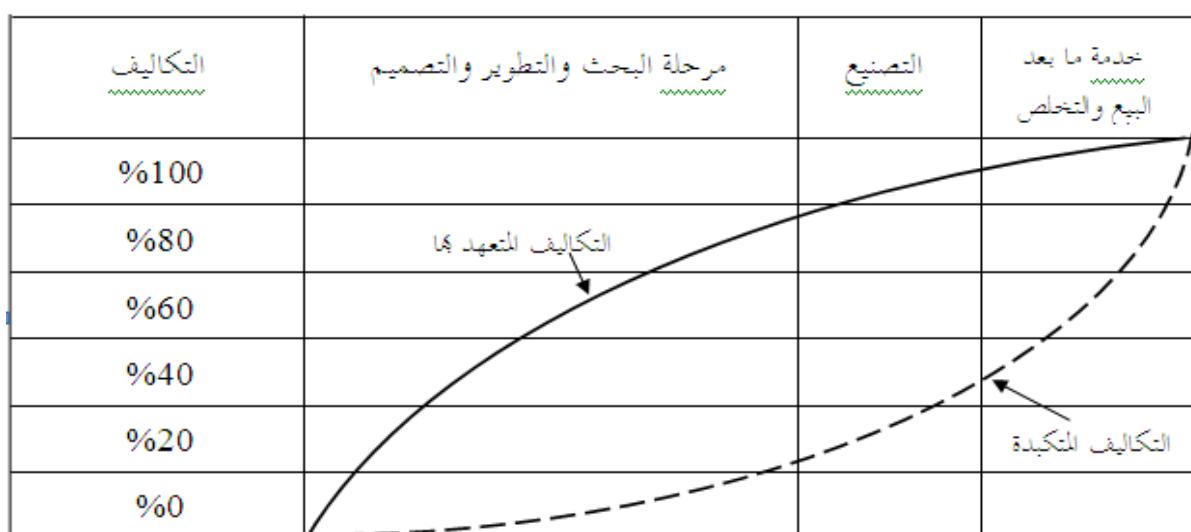
¹ Atkinson.A.A et al, op cit, pp 303-304

² Ibid, p 304

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Source: Atkinson.A.Aet al, op cit, p 304

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¹ Woodward.D, op cit, p 337

الفصل الثالث

لتحقيق التكلفة المستهورة كأداة إستراتيجية لتخفيض التكاليف، يتطلب ذلك اتباع الخطوات التالية:

1. تحديد الأهداف: قبل البدء، يجب تحديد الأهداف المنشودة من التكلفة المستهورة، مثل تحسين الكفاءة، أو خفض التكاليف التشغيلية.
2. تقييم التكلفة: تقييم جميع التكاليف الحالية في الشركة، بما في ذلك التكاليف غير المفيدة أو المترتبة على عمليات غير ضرورية.
3. تحديد الأسباب: تحديد الأسباب التي تؤدي إلى انتشار التكلفة المستهورة، مثل ارتفاع التكاليف الخامسة، أو عدم الكفاءة في إنتاجية العمال.
4. وضع خطة العمل: إعداد خطة عمل محددة لتنفيذ التغييرات المقترنة بخطة التكلفة المستهورة.
5. تنفيذ التغييرات: تطبيق التغييرات المقترنة بخطة التكلفة المستهورة، بما في ذلك تحسين العمليات، أو إعادة ترتيب الموارد.
6. مراقبة وتحديث: مراقبة التكلفة المستهورة وتقييم النتائج، وإعادة تقييم الخطة إذا لزم الأمر.

: (Target Costing)

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Volkswagen beetle

.¹(value engineering)

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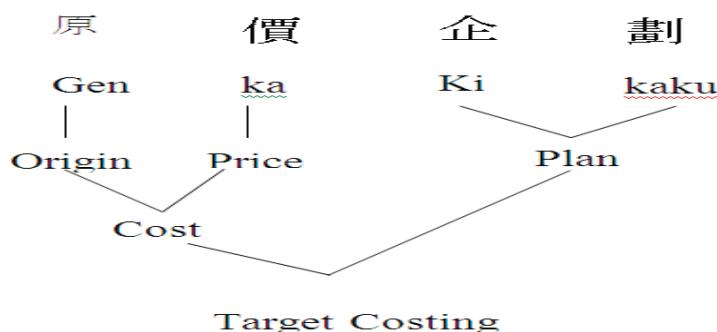
1960

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genkakikaku

target costing

:(1-3)



Source : Sarokolaee.M.A et al, op cit, p 76

¹ Sarokolaee.M.A et al, the relationship between target costing and value-based pricing and presenting an aggregate model based on customers expectations, international conference on leadership, technology and innovation management, procedia , social and behavioral sciences, elsevier, 2012, p 75

² Rains.J, target cost management, the ladder to global survival and success, CRC Press, Taylor & Francis Group, united states, 2011, p 64

|1961 Toyota Corolla
1963 Toyota
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Masayasu Tanaka 3rd
Jeffrey K. Liker
Honda Toyota

Slagmulder Cooper

¹ Rains.J, op cit, p 65

² Yazdifar.H et al, A comparative study of the adoption and implementation of target costing in the UK, Australia and New Zealand, Int. J. Production Economics, elsevier, 2012, p 383

³ Ellram.L.M, Supply management's involvement in the target costing process, European Journal of Purchasing & Supply Management, Pergamon, 2002, p 235

⁴ Cooper, Slagmulder.R, **Target costing and value engineering**, Productivity Press, Portland, Oregon. 1997, p 71

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Slagmulder Cooper

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Michael و Roman

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(CAM-I)

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:(price-led costing)

¹ Cooper, Slagmulder.R, op cit, p 72

² Filomene.T.P et al, **Target costing operationalization during product development: Model and application**, Int. J. Production Economics, elsevier, 2009, p 398

³ Weil.R.L, M.W.Maher, op cit, p 243

⁴ Ellram.L.M, **The role of supply management in target costing**, Center for Advanced Purchasing Studies, p 08

⁵ Afonso.P et al, **The influence of time-to-market and target costing in the new product development success**, Int. J. Production Economics, elsevier, 2008, p 561

⁶ Ansari.S et al, **A template for implemenyng target costing**, Cost Management; Sep/Oct 2006; 20, 5; ABI/INFORM Global, p 20, 21

: (focus on customers)

: (focus on design)

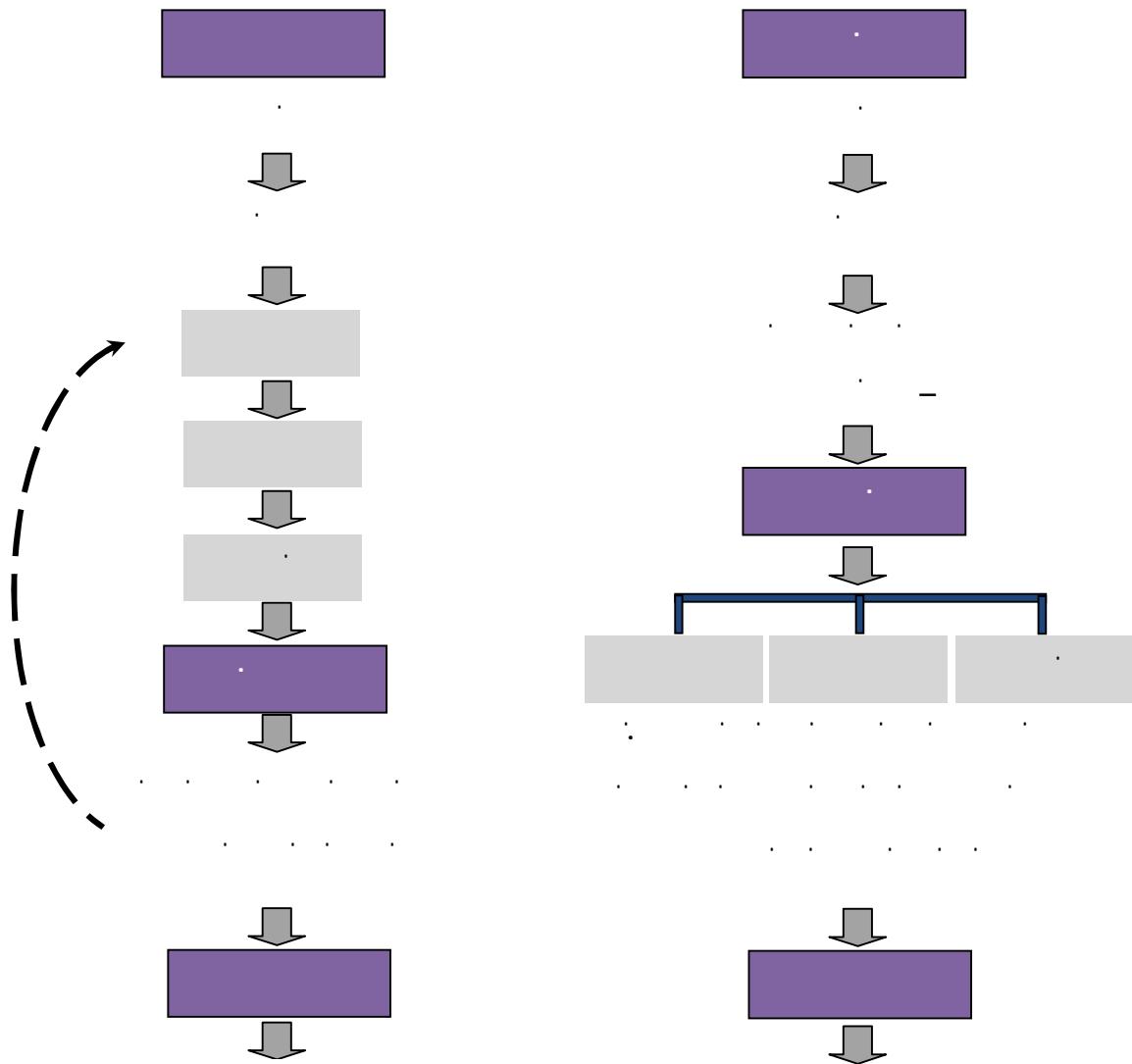
: *(cross-functional teams)

: (value chain involvement)

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: (lifecycle cost reduction)

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Source : Feil.P et al, **Japanese Target Costing: A Historical Perspective**, International Journal of Strategic Cost Management/Spring 2004, p 14

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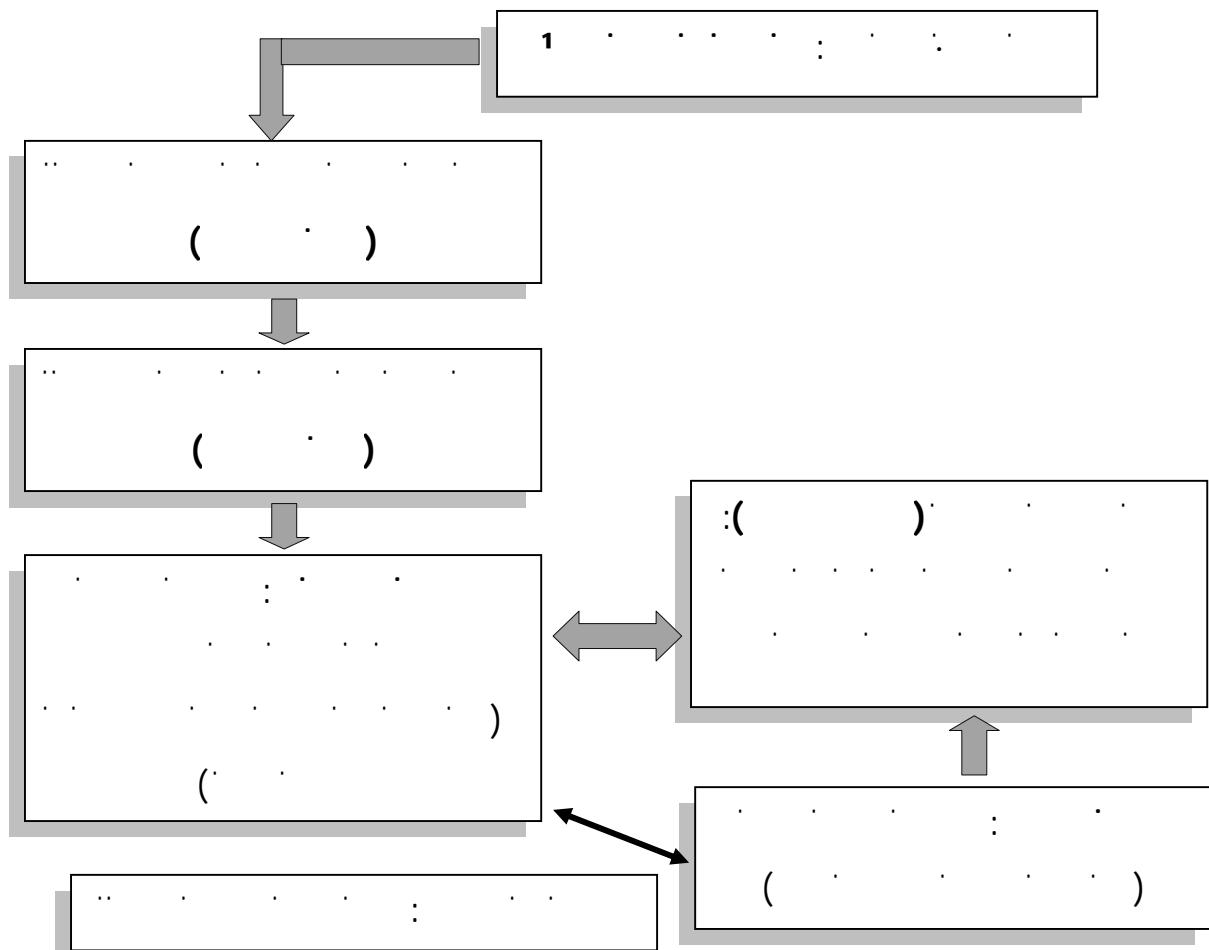
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Source : Feil.P et al, op cit, p 16

¹ Cooper, Slagmulder.R, op cit, p 79

² Feil.P et al, op cit, p 16

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¹ Feil.P et al, op cit, p 17

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¹ Cooper, Slagmulder.R, op cit, p 88

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¹ Cooper, Slagmulder.R, op cit, pp 89-92

² Ibid, pp 92-94

³ Ibid, pp 94-99

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¹ Cooper, Slagmulder.R, op cit, pp 100-104

² Ibid, pp 104-105

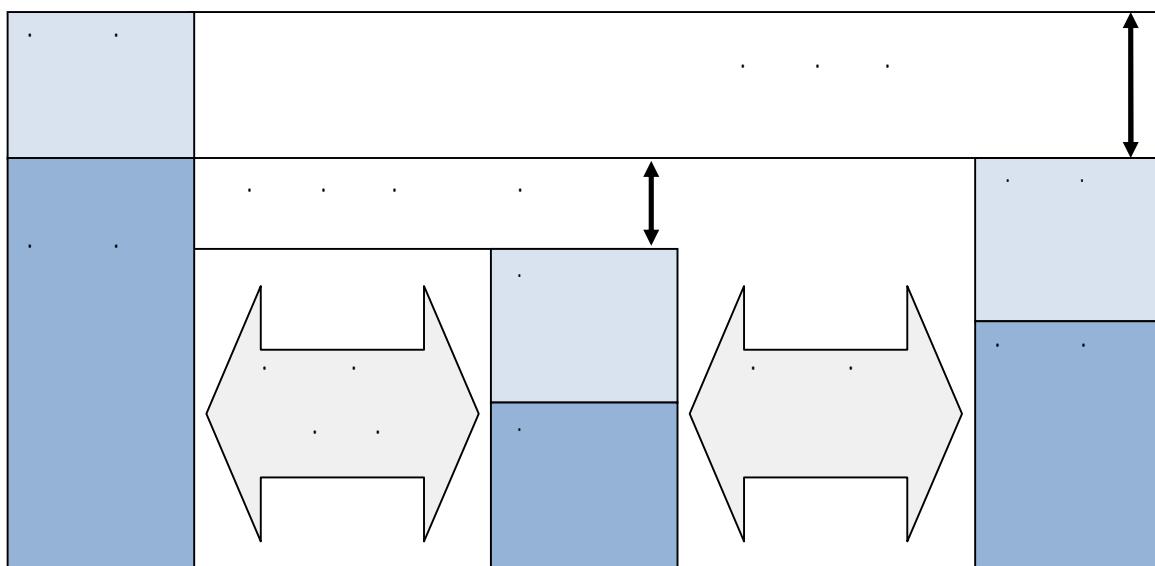
³ Cooper, Slagmulder.R, op cit, pp 107-108





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Source : Cooper, Slagmulder.R, op cit, p 112

¹ Cooper, Slagmulder.R, op cit, pp 108-112

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¹ Cooper, Slagmulder.R, op cit, pp119-125

² Ibid, p 139

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¹ Cooper, Slagmulder.R, op cit, pp 140-142

² Ibid, p 150

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:(Reverse Engineering) - 1-1-1- IV

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¹ Raja.V, Fernandes.K.J, **Reverse Engineering, An Industrial Perspective**, Springer Series in Advanced Manufacturing, 2008, p 02

² RainsJ.A., Sato.Y, **The Integration of the Japanese Tear-down Method with Design for Assembly and Value Engineering**, http://www.value-eng.org/knowledge_bank/attachments/Rains and Sato - Japanese Tear-down Method in USA.pdf, p 01

³ Tonella.P, Potrich.A, **Reverse Engineering of Object Oriented Code**, Springer, 2005, p 02

⁴ Rains.J.A, Sato.Y, op cit, p 03

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:(value Engineering) -2-1- IV

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Lawrence D. Miles 1940

¹ Khalili.H.A et al, Using Combination of Reverse Engineering and Value Engineering for Improvement in Designs, Construction Projects and Manufacturing Industries, Proceedings of the 41st International Conference on Computers & Industrial Engineering, p 520

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¹ Wilson.D.C, **Value Engineering Applications in Transportation, A Synthesis of Highway Practice**, NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM, 2005, p 08

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² Dell'isolla.A, **value engineering : practical applications...for design, construction, maintenance & operations**, RSMeans, 1997, p XVII

³ Behncke.F et al, **Extended Model for Integrated Value Engineering**, Conference on Systems Engineering Research, Procedia Computer Science, Elsevier, 2014, p 783

⁴ Cooper, Slagmulder.R, op cit, p 81

⁵ Ibid, p 80

⁶ Whittle.N, **Value Analysis, Functional Analysis, Value Engineering and Target Costing (P2)**, CIMA, <http://www.cimaglobal.com/valueforP2>

Liping Shao Lei Yu

Slagmulder Cooper

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¹ Yu.L, Shao.L, **Research of Value Engineering Model in Confidential Economics**, LISS 2014, Proceedings of 4th International Conference on Logistics, Informatics and Service Science, Springer, 2015, p 1150

² Cooper, Slagmulder.R, op cit, pp 131-132

³ Mandelbaum.J, D.L.Reed, **Value Engineering Handbook**, Institute for defense analyses, IDA Paper P-4114, 2006, p 09

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:((Quality Function Deployment))

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Shigeru Yoji Akao

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¹ Cardoso.J.F et al, **Application of Quality Function Deployment for the development of an organic product**, Food Quality and Preference, elsevier, 2015, p 180

² Chen.N.H, Kuo.H.Y, **Using Gray Relation and Quality Function Deployment in Service Quality of the Cable TV Industry**, World Congress on Computer Science and Information Engineering, IEEE, 2009, p 268

³ He.Y, Mi.Z, **Quality Function Deployment Method and Its Application in Engineering Project Performance Evaluation**, International Conference on Electronic Commerce and Business Intelligence, IEEE, 2009, p 184

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¹ Luo.X.G et al, **Determining optimal levels of engineering characteristics in quality function deployment under multi-segment market**, Computers & Industrial Engineering, elsevier, 2010, p 126

² Jaiswal.E.S, **A Case Study on Quality Function Deployment (QFD)**, IOSR Journal of Mechanical and Civil Engineering, 2012, p 27

³ Akao.Y, **Quality function deployment: Integrating customer requirements into product design**. Productivity Press,USA, 1990,p 05

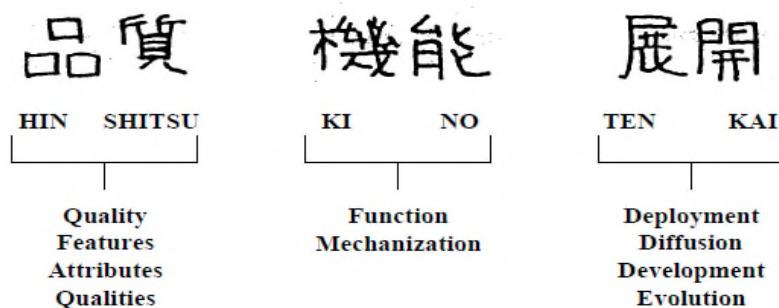
⁴ Juran.J, Godfrey.A, op cit, p 546

⁵ Chan.L.K, Wu.M.L, **Quality function deployment: A literature review**, European Journal of Operational Research, elsevier, 2002, p 463

* American Supplier Institute

⁶ Franceschini.F, **Advanced Quality Function Deployment**, ST. LUCIE PRESS, USA, 2002, p 22

:(5-3)



Source:http://www.ibrarian.net/navon/paper/Quality_Function_Deployment__A_Comprehensive_Review.pdf?paperid=7829253

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• (Whats) ✓

(Hows) ✓

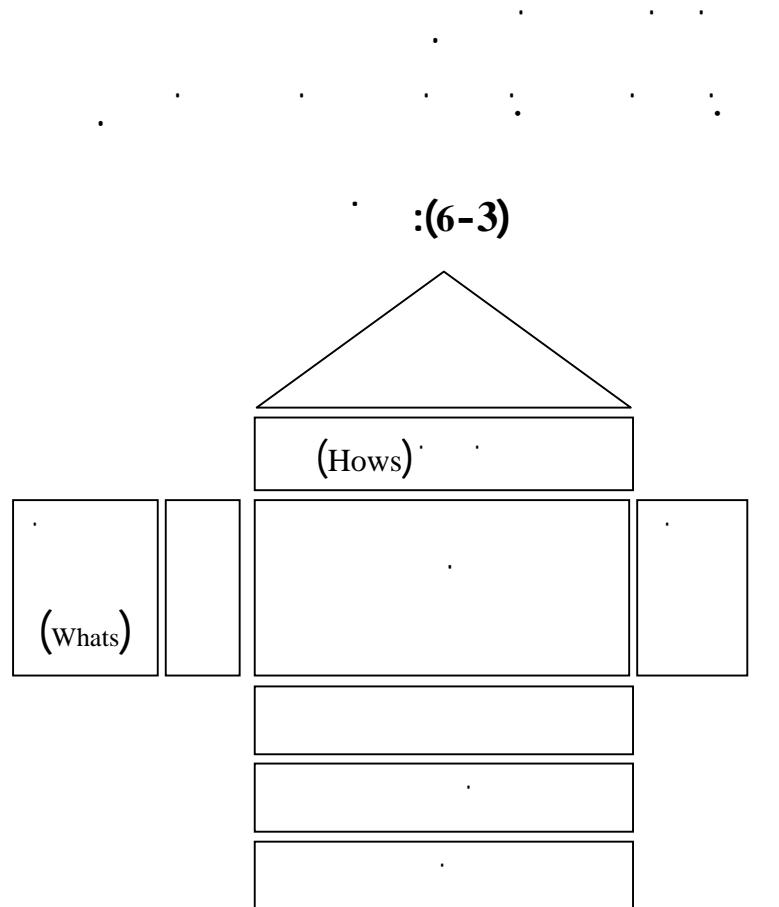
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¹ http://www.ibrarian.net/navon/paper/Quality_Function_Deployment__A_Comprehensive_Rev1.pdf?paperid=7829253

² Luo.X.G et al, op cit, p 126

• House Of Quality

³ Na.T, Ada.C, Goal Programming in Quality Function Deployment Using Genetic Algorithm, International Conference on Management Science & Engineering (14th) August 20-22, Harbin, P.R.China, 2007, p 483



Source: Yang.Q et al, **Application of House of Quality in evaluation of low rank coal pyrolysis polygeneration technologies**, Energy Conversion and Management, elsevier, 2005, p 232

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¹ Jaiswal.E.S, op cit, p 31

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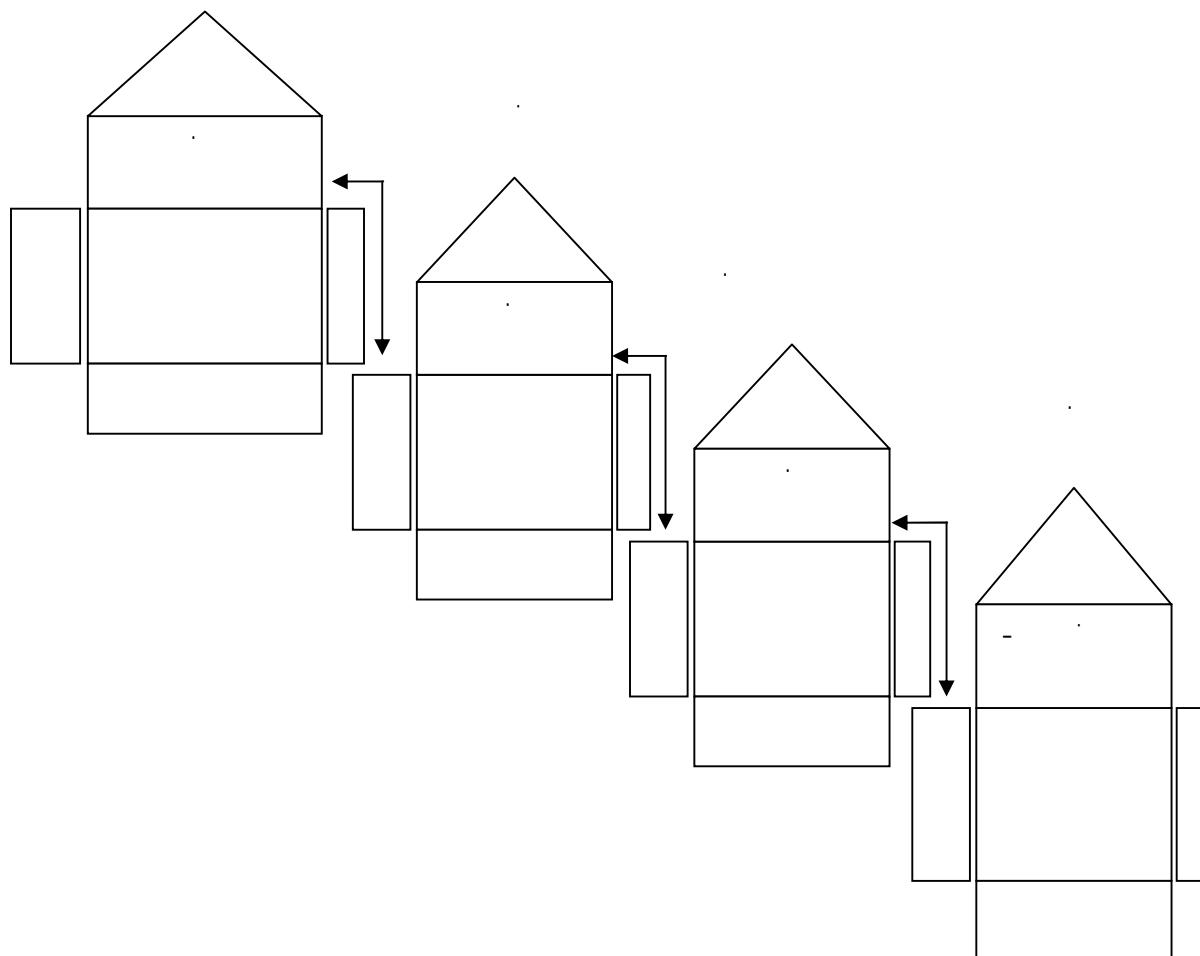
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¹ Bouchereau.V, Rowlands.H, **Methods and techniques to help quality function deployment (QFD)**, Benchmarking: An International Journal, Vol. 7 No. 1, 2000, pp. 8-19, MCB University Press, 1463-5771, pp 09-10

² Jaiswal.E.S, op cit, p 30

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Source: Temponi.C et al, **House of quality: A fuzzy logic-based requirements analysis**, European Journal of Operational Research, elsevier, 1999, p 342

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Haines Chankong 1983

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¹ Caramia.M, Dell'Olmo.P, **Multi-objective Management in Freight Logistics: increasing capacity, service level and safety with optimization algorithms**, Springer-Verlag London Limited, 2008, p 18

(weighted metric)

(weighted-sum)

Optimize [minimize/maximize]

$$F(X) = \{f_1(X), f_2(X), \dots, f_n(X)\}$$

Subject to

$$H(X) = 0$$

$$G(X) \geq 0$$

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Optimize [minimize/maximize]

$$F_i(X)$$

Subject to

$$F_k(X) \leq \varepsilon_k \quad k = 1, \dots, n \quad \text{and } k \neq i$$

$$H(X) = 0$$

$$G(X) \geq 0$$

F_i(X)

¹ Bui.L.T, Alam.S, **Multi-Objective Optimization in Computational Intelligence: Theory and Practice**, Information Science Reference, Hershey. New York, 2008, p 05

² Donoso.Y, Fabregat.R, **Multi-objective optimization in computer networks using metaheuristics**, Auerbach Publications Taylor & Francis Group, Boca Raton New York, 2007, p 17

لتحقيق الربحية من خلال تحسين الأداء، يتطلب ذلك تحسين التكلفة. وتحقيق التكلفة المستهورة كأداة إستراتيجية لتخفيض التكاليف يتطلب تحسين الأداء.

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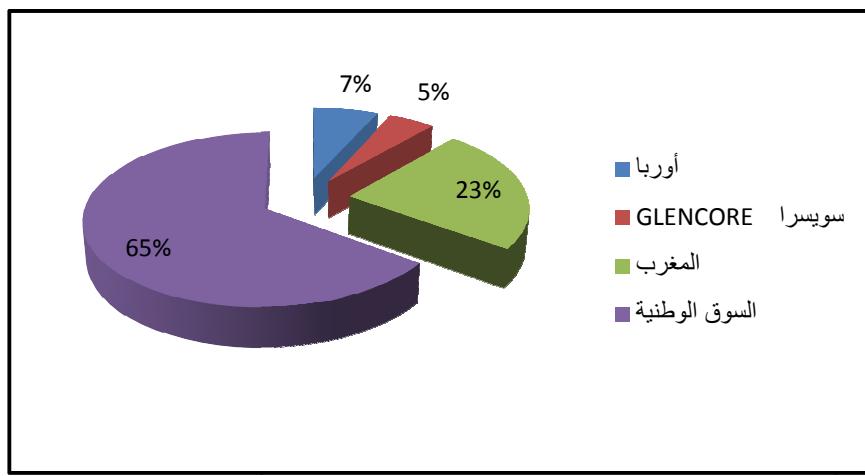
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ALZINC

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2004 14001

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1990 : .2

3 2000 1994 : .3

2001 : .4

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2002-02-24

:(1-4)

| () | |
|-------------|--|
| 32 | |
| 129 | |
| 47 | |
| 188 | |
| 70 | |
| 651 | |
| 1117 | |

-II

-1-II

ALZINC

ALZINC

-1-1-II

ALZINC

ALZINC

:(2-4)

| 2013 | 2012 | 2011 | 2010 | () |
|------|------|------|------|-----|
| 2049 | 2504 | 3626 | 4287 | |
| 214 | 263 | 323 | 339 | |
| 459 | 210 | 276 | 204 | |
| 2722 | 2977 | 4225 | 4830 | |

|(SHG)Zinc ALZINC
|(Acide Sulfurique) (Zamac) |(zinc spécifique)

ALZINC : (3-4)

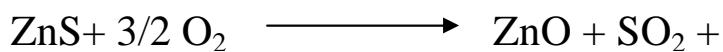
| 2013 | 2012 | 2011 | 2010 | () |
|-------|-------|-------|-------|-----|
| 6984 | 8124 | 15611 | 21128 | |
| 5453 | 5700 | 7282 | 8727 | |
| 610 | 801 | 686 | 389 | |
| 13047 | 14625 | 23579 | 30244 | |
| 20724 | 27143 | 41419 | 49611 | |

-2-II

%32 . . . %60 . % 54 (la blonde)

.%0.15

° 950

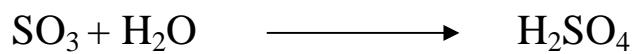
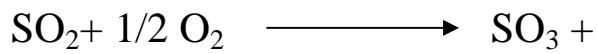


%6

(Four de catalyse)

$\cdot(\text{SO}_3)$ (V_2O_5)

$$\text{SO}_3 \cdot \text{SO}_2$$



(Lixivation)



(Purification)

(...)



()

288

()

(Spécial High Grade ou SHG) %99.995

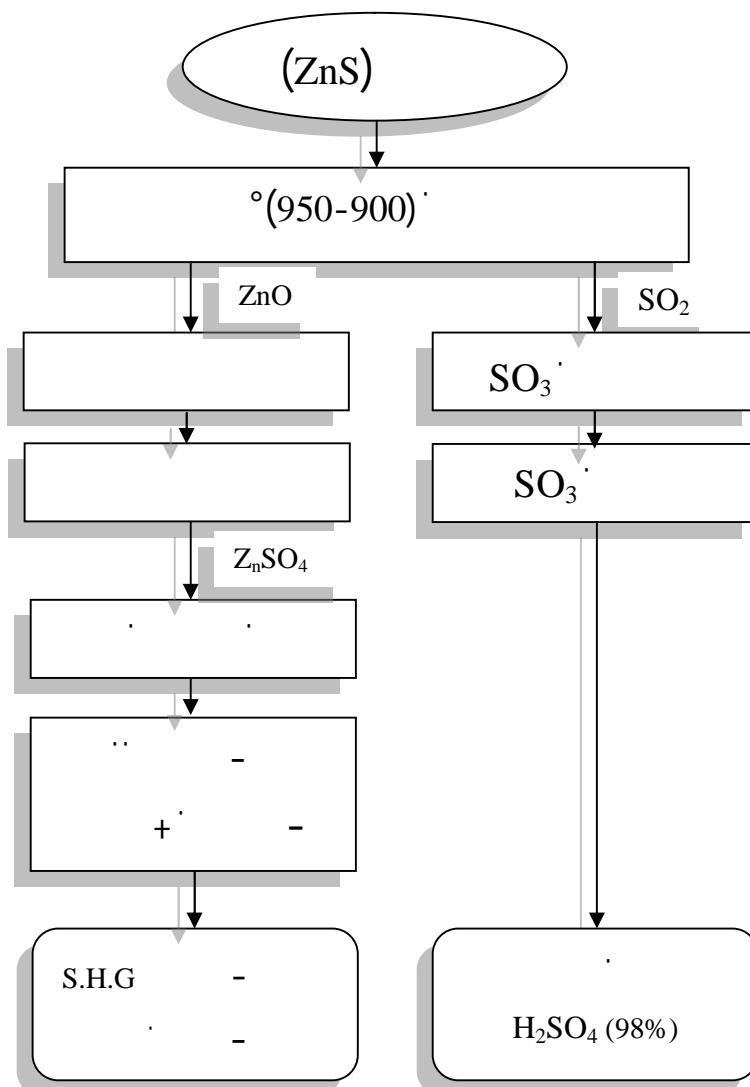
LME

()

°550- °450

(SHG)

ALZINC : (2-4)



-3-II

-1-3-II

ALZINC

ALZINC

(Spécial High Grade ou SHG)

% 99.995

:(4-4)

| % | % | | | % | | | % | | |
|----------|---|-------------|----|-------------|----|--|-------------|-----|--|
| % 96 min | 5 | 3.9 à 4.3 | Al | 3.9 à 4.3 | Al | | 99.995 | Zn* | |
| | | 0.03 à 0.06 | Mg | 0.03 à 0.06 | Pd | | 0.003 (max) | Cd | |
| | | 0.75 à 1.25 | Cu | | Zn | | 0.002 (max) | Fe | |
| | | | Zn | | | | 0.001 (max) | Cu | |
| | | | | | | | 0.003 (max) | Pb | |
| | | | | | | | | | |

<http://metanof.com/alzinc/produits.htm>

:Mg :Al :Pb :Cu :Fe :Cd :Zn *

:(5-4)

| | | | | | |
|------|--|---|-----|--|--|
| () | | | () | | |
| 55.5 | | | 48 | | |
| 13 | | | 24 | | |
| 4 | | ٦ | 4 | | |

<http://metanof.com/alzinc/produits.htm>

-2-3- II

ALZINC

|2004| 14001

%0.02 (SO₂)

%0.25

/

2014

:(6-4)

| | | | |
|--|------|---|-----------------|
| | | | |
| | 0.25 | % | SO ₂ |
| | 10 | Ô | |
| | 80 | | |
| | 0.5 | / | Pb |
| | 3 | | |

| | | | |
|--|---------|-----------------|--------------|
| | 8.5-6.5 | | Zn • pH • |
| | 89 | % | ➤ |
| | 4500 | / | - |
| | 190000 | 3 | - |
| | 1250 | 3 | • |
| | 8850 | $10^3 \times 3$ | • |
| | 15000 | | • |
| | 1200 | | • |
| | 180 | | - |
| | 1000 | 3 | - |
| | 15 | Ô | - |

-III

-1-III

ALZINC

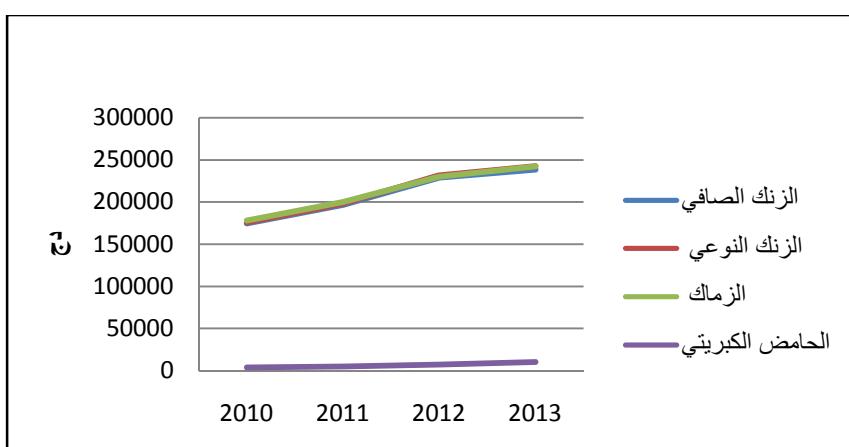
ALZINC

:(7-4)

/ :

| 2013 | 2012 | 2011 | 2010 | |
|-----------|-----------|-----------|-----------|--|
| 238527.11 | 229177.52 | 196681.96 | 174754.94 | |
| 242432.21 | 231279.25 | 198109.82 | 175827.43 | |
| 242247.80 | 230199.53 | 200114.31 | 177881.23 | |
| 9969.62 | 7091.52 | 4834.09 | 3574.46 | |

:(3-4)



la blende

ALZINC

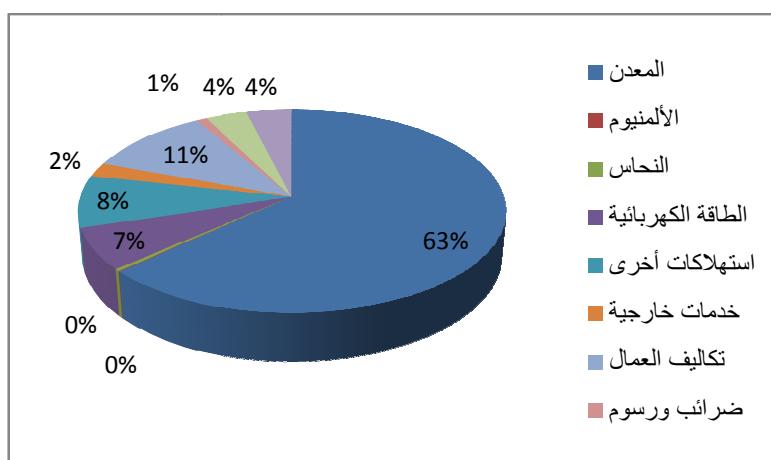
2013

:(8-4)

| (%) | | (/) | | | | |
|------------|------------------|----------------|-----------------|------------------|------------------|--|
| | | | | | | |
| 63.14 | 462900.99 | - | 149228.27 | 156523.02 | 157149.7 | |
| 10.81 | 79226.2 | 3732.38 | 27476.1 | 24516.63 | 23501.09 | |
| 6.57 | 48201.27 | 235.64 | 15912.9 | 16018.26 | 16034.47 | |
| 3.91 | 28652.7 | 1649.88 | 10056.74 | 8666.46 | 8279.62 | |
| 3.60 | 26362.01 | 843.12 | 9504.07 | 8190.23 | 7824.59 | |
| 2.29 | 16833.96 | 685.83 | 5625.32 | 5354.74 | 5168.07 | |
| 0.95 | 6964.96 | 139.63 | 2629.9 | 2597.44 | 1597.99 | |
| 0.10 | 674.26 | - | 32.27 | 641.99 | - | |
| 0.35 | 2599.86 | - | 2599.86 | - | - | |
| 8.28 | 60760.53 | 2683.14 | 19182.37 | 19923.44 | 18971.58 | |
| 100 | 733176.74 | 9969.62 | 242247.8 | 242432.21 | 238527.11 | |

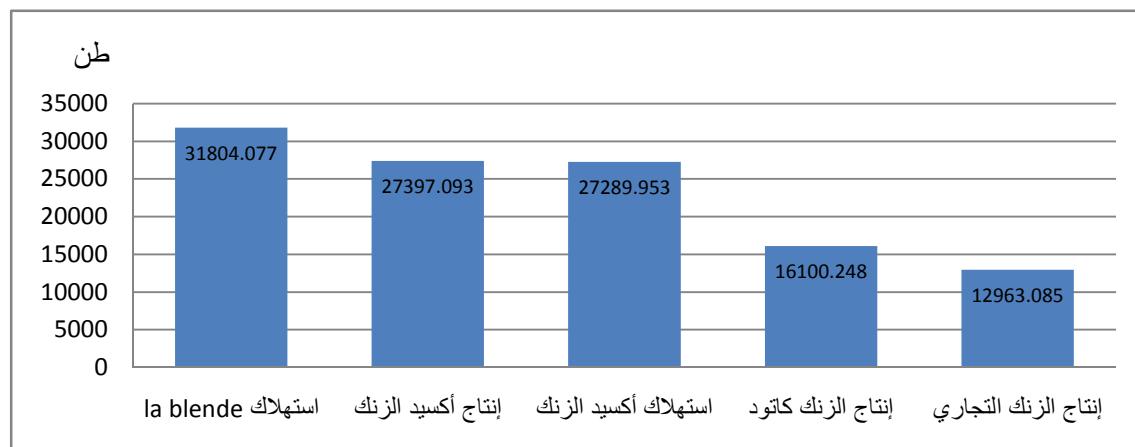
2013

:(4-4)



la blende

:(5-4)



12963.085

%53.56

31804.077

%84.43

17034.27

4071.185

:(9-4)

| 2013 | 2012 | 2011 | 2010 | |
|------|------|------|------|--|
| 1 | 1 | 1 | 1 | |
| 39 | 40 | 36 | 33 | |
| 119 | 116 | 98 | 100 | |
| 337 | 311 | 322 | 322 | |
| 496 | 468 | 457 | 456 | |

(10-4)

:(10-4)

| 2013 | 2012 | 2011 | 2010 | |
|------|------|------|------|-----|
| 392 | 340 | 326 | 317 | () |

-3-III

ALZINC

-1

LME

-2

:(11-4)

():

| | |
|-----------|--|
| | |
| 184299.44 | |
| 169680.95 | |
| 203984.37 | |
| 8843.95 | |

ALZINC

-3

(12-4)

():

| | |
|-----------|--|
| | |
| 73719.776 | |
| 64840.475 | |
| 61195.311 | |
| 1768.79 | |

=

(13-4)

():

| | | | |
|------------|-----------|-----------|--|
| | | | |
| 110579.664 | 73719.776 | 184299.44 | |
| 104840.475 | 64840.475 | 169680.95 | |
| 142789.059 | 61195.311 | 203984.37 | |
| 7075.16 | 1768.79 | 8843.95 | |

:

()

-1-3-III

¹ Asturiana de Zinc SA

Zinc Co Ltd

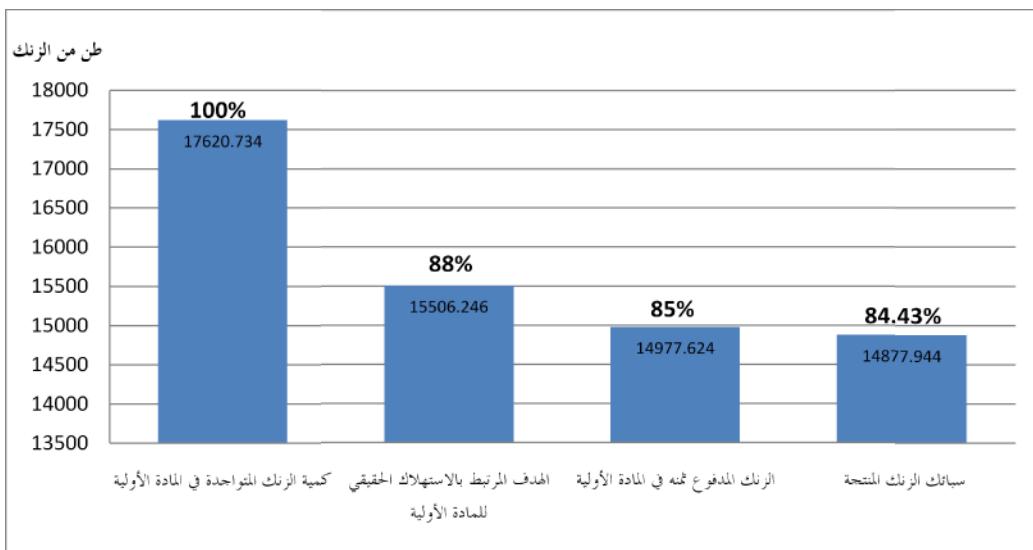
ALZINC

:()

%63

2013

:(6-4)



99.68 °

4257

1

¹ <http://www.alu.com.hk>

370 4627

817.7

% 11

496 456

392

317

| 2013 | 13047 | 2010 | 30244

1

2013

95

48.059

1

143.059

-2-3-III

ALZINC



ε

-3-3-III

ALZINC

-1-3-3-III

ALZINC

-1

$$\text{Min } Z_1 = 110579.664 X_1 + 104840.475X_2 + 142789.059 X_3 + 7075.16 X_4$$

: X_1

: X_2

: X_3

: X_4

-2

%99.995

S.H.G

0.99995

1

$$\text{Max } Z_2 = 0.99995 X_1$$

-3

1

%89

2.08

1

0.54

1

1.99

1

1.76

0.54

1

%89

%100

0.48

1

| | | |
|--------|--------|---------|
| 0.9564 | 2.08 | 0.99995 |
| 1.76 | 0.8442 | 1.99 |

$$\text{Max } Z_3 = 2.08 X_1 + 1.99X_2 + 1.76 X_3$$

| | |
|-------|----|
| 36850 | -1 |
|-------|----|

$$X_1 + X_2 + X_3 \leq 36850$$

| | | | |
|---|-----------|---|------|
| 1 | 4257 | 1 | -2 |
| | 160000000 | | 2.21 |

$$9407.97X_1 + 9407.97X_2 + 9407.97X_3 + 235.64X_4 \leq 353600000$$

| | | | |
|-------|------|---|----|
| 0.095 | 95 | 1 | -3 |
| | 2582 | | |

$$0.095X_1 + 0.095X_2 + 0.095X_3 \leq 2582$$

-4

$$0.9564X_2 \geq 5000$$

$$0.9442X_3 \geq 5000$$

$$0.96X_4 \geq 20000$$

$$\text{Min } Z_1 = 110579.664 X_1 + 104840.475X_2 + 142789.059 X_3 + 7075.16 X_4$$

$$\text{Max } Z_2 = 0.99995 X_1$$

$$\text{Max } Z_3 = 2.08 X_1 + 1.99X_2 + 1.76 X_3$$

$$X_1 + X_2 + X_3 \leq 36850$$

$$9407.97X_1 + 9407.97X_2 + 9407.97X_3 + 235.64X_4 \leq 353600000$$

$$0.095X_1 + 0.095X_2 + 0.095X_3 \leq 2582$$

$$0.9564X_2 \geq 5000$$

$$0.9442X_3 \geq 5000$$

$$0.96X_4 \geq 20000$$

$$X_1, X_2, X_3, X_4 \geq 0$$

$$0.99995 X_1 \geq 15000$$

$$2.08 X_1 + 1.99X_2 + 1.76 X_3 \geq 32000$$

$$\text{Min } Z_1 = 110579.664 X_1 + 104840.475X_2 + 142789.059 X_3 + 7075.16 X_4$$

St

$$0.99995 X_1 \geq 15000$$

$$2.08 X_1 + 1.99X_2 + 1.76 X_3 \geq 32000$$

$$X_1 + X_2 + X_3 \leq 36850$$

$$9407.97X_1 + 9407.97X_2 + 9407.97X_3 + 235.64X_4 \leq 353600000$$

$$0.095X_1 + 0.095X_2 + 0.095X_3 \leq 2582$$

$$0.9564X_2 \geq 5000$$

$$0.9442X_3 \geq 5000$$

$$0.96X_4 \geq 20000$$

$$X_1, X_2, X_3, X_4 \geq 0$$

Lindo

: (14-4)

| () | () | | | |
|---------------|-------|------|------|-------|
| 3.110.414.000 | | | | |
| | 20833 | 5295 | 5227 | 15000 |

Lindo

ALZINC

(14-4)

5227

15000

20833

5295

3.110.414.000

(15-4)

| | | |
|---------------|---------------|-----|
| | | |
| 15000 | 6984 | () |
| 5227 | 5453 | () |
| 5295 | 610 | () |
| 20833 | 20724 | () |
| 3.110.414.000 | 3.342.237.740 | () |

(15-4)

جَلَانِيْمَهْ

خاتمة عامة

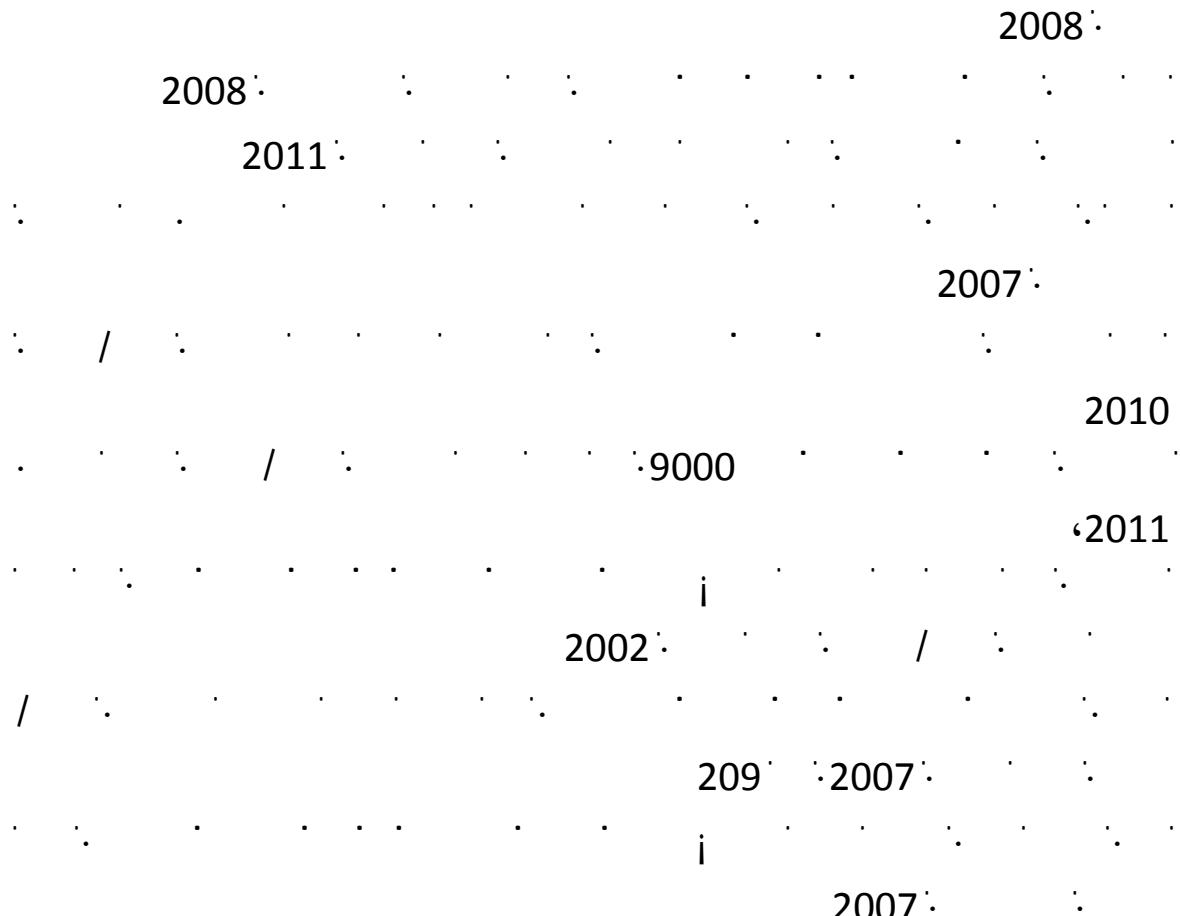
خاتمة عامة

٣

خاتمة عامة

الله
المربي

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Résumé

La gestion stratégique des coûts est devenue une nécessité dans un environnement caractérisé par la forte concurrence internationale, l'amélioration des technologies et des systèmes d'information. Le coût cible est considéré parmi les approches les plus importants pour la gestion stratégique des coûts. Il prend en considération les exigences des clients, il améliore la qualité et la performance du produit tout en maîtrisant les coûts. Dans cette étude, nous avons utilisé la méthode du ε -contrainte comme un outil quantitatif pour aider à atteindre le coût cible au sein de la société algérienne de zinc (ALZINC). Les résultats de l'étude de cas ont montré l'importance de la méthode du coût cible et la méthode du ε -contrainte dans la réduction des coûts et l'augmentation de la production, en tenant compte de la qualité et de la performance.

Mots clés: coût, gestion des coûts, environnement de fabrication moderne, coût cible, méthode du ε -contrainte.

Abstract

The era of severe international competition, improved technologies and information systems have directed companies to use strategic cost management, particularly target costing, it is designed to develop products with specified functionality and quality to generate the desired level of profitability. Target costing uses a variety of techniques and methodologies to manage product design and cost such as reverse engineering, value engineering and quality function deployment. In this study, we have used the ε -constraint method as a quantitative tool to help achieve the target cost in Algerian zinc company (ALZINC). The results of case study showed the importance of target costing and ε -constraint method in reducing of costs and increase production, taking into account quality and performance.

Keywords : cost, cost management, modern manufacturing environment, target costing, ε -constraint method.