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CHAPTER 4

FAILURE MODE AND EFFECTS ANALYSIS (FMEA) – CASE STUDY

FMEA is a proactive analysis tool, allowing engineers to anticipate failure modes even before they happen, or even before a new product or process is released. It also helps the engineer to prevent the negative effects of these failure modes from reaching the customer, primarily by eliminating their causes and increasing the chances of detecting them before they can do any damage. The actions generated by a good FMEA cycle will also translate to better yield, quality, reliability and of course greater customer satisfaction.

FMEA was being used around for a very long time. Before any documented format was developed, most of the inventors and process experts would try to anticipate what could go wrong with a design or process before it was developed. The trial and error alternative was both costly and time consuming. FMEA was formally introduced in the late 1940's with the introduction of the military standard 1629. Being used for aerospace/rocket development, the FMEA was helpful in avoiding errors on small sample sizes of costly rocket technology.

FMEA was encouraged in the 1960's for space product development and served well on getting a man on the moon. Ford Motor Company reintroduced FMEA in the late 1970's for safety and regulatory consideration. Ford Motor Company has used FMEA effectively for production improvement as well as design improvement.

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Reliability of the Supply Chain: Method of Self-Assessment as a First Step to Building Resilient Systems

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Abstract. Measure the reliability of a supply chain is an important step to promote the construction of more resilient chains. The resilience is necessary to guaranty the efficient and secure global movement of goods. This paper proposes an instrument to analysis and evaluates the reliability of a system. Also compare scenarios of reliability between a basic supply chains versus complex systems. Finally present useful conclusion to the construction of resilient and robust supply chain.

Keywords: Resilient supply chain, reliability evaluation, risk analysis.

1. Introduction

Currently, the most important economies in the world are looking for promoting the timely, efficient flow of legitimate commerce while protecting and securing the supply chain from exploitation, and reducing its vulnerability to disruption [1, 2, 3].

In this regard, The White House recently released The National Strategy for Global Supply Chain Security (NSGSCS). This document recognizes that, the development of nations depend upon the efficient and secure transit of goods through the global system of supply chains. In addition, it exposes the need to assess and understand the effects of disruptions mainly generated for three factors: i) natural disasters; ii) criminal acts, and iii) terrorist acts [4]. However, despite the clear current interest in understanding the effects of the disruptions, some authors have identified that there is actually no clear consensus regarding the elements that should be analyzed to contribute to an effective management of the risk of disruptions in supply chains [2, 3, 5, 6]. In fact references as ([1, 3, 5, 6, 8]), demonstrate that the research area in the field of risk propagation in supply chains remains relatively unexplored. Under the challenge of linking security and efficiency as a single goal, the aim of this article is to present a methodology to measure the reliability of a supply chain system to a step to develop more resilient systems. Resilience refers to the ability of an organization to quickly go back to a functioning initial state after disturbance. [6]

The rest of the document is organized as follows. Section 2 presents a review of risk factors that currently threaten the supply chain, making a brief analysis of the different proposed methodologies to assess risks propagation in supply chains. Section 3 describes the model developed. In section 4, the results obtained through the evaluation of different decision scenarios will be discussed. Finally, section 5 presents the conclusions obtained and analyses regarding the proposed method.

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Assessing the reliability of an online behavioural laterality battery: a pre-registered study

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ANÁLISE PROBABILÍSTICA DE CONFIABILIDADE: PORQUE e COMO?

A.1. INTRODUÇÃO

Nos últimos anos, a expansão do setor elétrico nacional vem se realizando sob o impacto de severas restrições de naturezas diversas. Particularmente grave foi a postergação de diversos comissionamentos, o que submeteu o sistema elétrico brasileiro a um risco crescente de instabilidade. Essa situação gerou sérios e graves problemas para o sistema de transmissão, que já apresentava sérias carências sob os pontos de vista energético e da malha de transmissão. Sendo assim, embora a capacidade instalada no sistema seja américa compatível com as demandas atuais, o risco de instabilidade permaneceu elevado, especialmente na transmissão, gerando cenários de riscos acentuados para o mercado consumidor.

Esse fato situou o planejador na delicada missão de ter que superar prioridades de ampliações do sistema elétrico, adequando da melhor forma as necessidades do mercado e os recursos disponíveis. Essa tarefa é hoje muito mais difícil dado que o planejamento tem que levar em consideração a demanda residencial e industrial. O foco do problema foi nitidamente deslocado do aspecto puramente técnico, para um enfoque híbrido, com influências jurídico-econômicas. Assim, enquanto no passado vigiou o espírito condonário cooperativo, hoje vigora um ambiente não-competitivo de competição.

Nessa conjuntura, o processo decisório ou momento indicativo, relativo ao plano de expansão, deve ser feito de maneira que case sempre com o resultado obtido de todas as alternativas de expansão passíveis de consideração. Esse conjunto de alternativas deveria cobrir toda a gama de possibilidades, indo desde o pleno atendimento das demandas existentes até a eventual suspensão da expansão, até o atendimento parcial, sob situação de contingências. A avaliação dos diferentes níveis de robustez das possíveis alternativas de expansão do sistema é passível de obtenção mediante a denominada análise probabilística de confiabilidade.

Em suas palavras, a análise probabilística de confiabilidade é um mero tratamento adequado de um contexto econometrico, tanto de demanda quanto de oferta, com chances de probabilidade reduzidas e diferenciadas, cujas análises individualizadas não seriam factíveis, pelo próprio caráter essencialmente combinatorial do problema.

Cabe ainda notar que, caso seja de interesse um planejamento integrado do sistema de energia elétrica do País, torna-se importante a avaliação da confiabilidade global, considerando-se também a influência dos sistemas de subtransmissão e distribuição. Assim, a estratégia de planejamento deve levar em conta a possibilidade de se gastar um valor monetário incremental ou no desenvolvimento do parque gerador, ou no desenvolvimento do sistema de transmissão ou ainda na expansão do sistema de distribuição. Essa necessidade ocorre para que a distribuição do risco ao longo de todo o sistema se faça da forma mais justa e equitativa possível.

Da mesma forma, é necessário ter em conta os custos probabilísticos incorporados aos procedimentos de planejamento da expansão da geração e redes de transmissão, subtransmissão e distribuição, consiste em avaliar, em bases quantitativas, os níveis de risco compatíveis com um parâmetro aceitável de atendimento aos consumidores e que, para fins simétricos, resultem correspondentes e controladas nos investimentos de expansão em relação aqueles que seriam estabelecidos quando do emprego de metodologias puramente determinísticas.

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1. TOSINI G. Locomotor activity in rodents. *Mother* © All mol Biol. 2007; 362: 95 € "101. [PubMed] [Google Scholar] 2. Gray you, Hughes rn. Dependent effects of drugs, dose and sex of chronic fluoxetine, reboxetine and venlafaxine in open field behavior and spatial memories in rats. *Behav Brain Res.* 2015; 281: 43 € "54. [PubMed] [Google Scholar] 3. Roybal K, Thebold D, Graham A, Dinieri Ja, Russian SJ, Krishnam V, et al. Behavioral similarity to clock rupture induced. *PROC NATL ACAD SCI U S A.* 2007; 104: 6406 € "11. [PMC free article] [PubMed] [Google Scholar] 4. Machado DG, Cunha MP, Neis VB, Balen Go, Colla A, Grando J, et al. Fluoxetine reverses depressive behaviors and increases the activity of acetylcholinesterase hippocampal induced by olfactory bulbectomy. *Pharmacol Biochem Behav.* 2012; 103: 220€ € "9. [PubMed] [Google Scholar] 5. Bondar NP, Lepsho AA, RESHETNIKOV VV. Effects of stress on early life on social and similar behaviors in adult rats: spectroscopic effects of sex. *Behav Neurosci.* 2018; 102: 1538931. [PMC free article] [PubMed] [Google Scholar] 6. Niikura K, Ho a, Kreek MJ, Zhang Y. Oxycodone-induced place of preference and sensitization of locomotor activity in adolescent and adult rats. *Pharmacol Biochem Behav.* 2013; 110: 112 € "6. [PMC free article] [PubMed] [Google Scholar] 7. WALSH RN, Cummins RA. The open field testing: a crisi review. *Psychol Bull.* 1976; 83: 482 € "504. [PubMed] [Google Scholar] 8. DC Machado, Bettio Le, Cunha MP, Capra JC, Dalmarco JB, Pizzolatti MG, et al. Antidepressant effect of Rosmarinus officinalis extract in rats: involvement of the monoaminergic system. *Prog Neuropsychopharmacol Biol Psychiatry.* 2009; 33: 642 € "50. [PubMed] [Google Scholar] 9. Jung Sh, Park Jm, Moon E, Chung Yi, Lee BD, Lee YM, et al. Delay in the recovery of the normal cycle of sleep after the interruption of the dark light cycle in rats: a bipolar model of the animal of JCMP od ervil ogitral. 196784:11:4102..gitsevn1 aratiquisP ed amargorp od edadilibaifnoC. FM 1A, HW deaysA-IE, HS ynadrawIE. 81[rolahcS elgoogI jdeMbuP].5A1662:92:5102..seR dncC ecroF J. setnecceloda me ofAÁirter ed edadilibaifxel a ralivaa rap ervil e ecaf a ecaf erawtfs ed oedMbuP] ICMP od ervil ogitral. 83:35:23:5102..trrops loif.. sadiroc e sadahimiac etnarud acit;Amenic esil;Ana arap RuiWkraM od edadilaV.F otalozziP..D ongab.A ihcauohC.K iramahC.S odnaV.J oludaP. 71[rolahcS elgoogI jdeMbuP].5A1662:92:5102..seR dncC ecroF J. setnecceloda me ofAÁirter ed edadilibaifxel a ralivaa rap ervil e ecaf a ecaf erawtfs ed oedMbuP] ICMP od ervil ogitral. 83:35:23:5102..trrops loif.. sadiroc e sadahimiac etnarud acit;Amenic esil;Ana arap RuiWkraM od edadilaV.F otalozziP..D ongab.A ihcauohC.K iramahC.S odnaV.J oludaP. 71[rolahcS elgoogI jdeMbuP].5A1662:92:5102..seR dncC ecroF J. setnecceloda me ofAÁirter ed edadilibaifxel a ralivaa rap ervil e ecaf a ecaf erawtfs ed oedMbuP] ICMP od ervil ogitral. 83:35:23:5102..trrops loif.. sadiroc e sadahimiac etnarud acit;Amenic esil;Ana arap 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