# ABSTRAK

PT XYZ adalah perusahaan yang bergerak dibidang manufaktur yang khususnya memproduksi mainan anak-anak terbesar di Sulawesi Selatan. Proses manufaktur PT XYZ terdiri dari *Ride-On Cars*, mobil mainan,alat masak, bola mainan, donat mainan, dan celengan. Pada penelitian ini yang akan dibahas adalah produk *Ride-On Cars*. Produktivitas perusahaan PT. XYZ kurang optimal disebabkan terdapat berbagai hambatan, salah satu hambatan yang sering terjadi di area produksi yaitu *waste*. Sehingga untuk mengurangi *waste* tersebut diperkenalkanlah metode *Value Stream Mapping* yang merupakan salah satu metode *lean manufacturing*. Keunggulan *VSM* yaitu dapat mengvisualisasikan aliran proses *value added, necessary but non value added* dan *non value added*. Pemahaman kondisi aktual perusahaan digambarkan dalam *Current Value Stream Mapping*. Pemborosan diidentifikasikan dengan tujuh *waste*, kemudian dilakukan pembobotan secara detail dengan dengan *waste relationship matrix* (WRM) dan *waste assessment questionnaire* (WAQ). Setelah didapatkan hasil, dilakukan pemilihan tools dengan bantuan VALSAT dan dianalisa akar penyebab permasalahannya. Berdasarkan pengolahan data didapatkan 2 skor rata-rata *waste* tertinggi yaitu *defect* (22,43%), dan *motion* (17,85%). Skor rata-rata pemborosan tersebut dikalikan dengan faktor pengali *detail mapping*, sehingga didapatkan *detail mapping tools* yang dominan adalah *Process Activity Mapping* (40,88%). Sesuai hasil identifikasi dan analisa dengan menggunakan *Process Activity Mapping* (PAM) ditunjukkan bahwa aktivitas *value added* (VA) sebesar 50,1%, aktivitas *non value added* (NVA) sebesar 44% dan aktivitas *necessary non value added* (NNVA) sebesar 5,9% dari total seluruh aktivitas. *Output* dari penelitian ini adalah identifikasi *waste* dan melakukan perbaikan dalam proses produksi dengan meminimalkan *waste* yang terjadi dengan pendekatan *lean manufacturing*.

**Kata kunci**: *lean manufacturing, ride-on cars, value stream analysis tools, waste, process activity mapping*

# ABSTRACT

*PT XYZ is a manufacturing company that specializes in producing the largest children's toys in South Sulawesi. The manufacturing process of PT XYZ consists of Ride-On Cars, toy cars, cooking tools, toy balls, toy donuts, and piggy banks. In this research, the Ride-On Cars product will be discussed. PT. XYZ is not optimal due to various obstacles, one of the obstacles that often occurs in the production area is waste. So to reduce the waste introduced Value Stream Mapping method which is one of the lean manufacturing methods. The advantage of VSM is that it can visualize the process flow of value added, necessary but non value added and non value added. An understanding of the company's actual conditions is illustrated in Current Value Stream Mapping. Waste is identified by seven waste, then weighted in detail with the waste relationship matrix (WRM) and waste assessment questionnaire (WAQ). After obtaining the results, the selection of tools with the help of VALSAT is analyzed and the root cause of the problem is analyzed. Based on data processing, it was found that the two highest average waste scores were defect (22.43%) and motion (17.85%). The average score of waste is multiplied by the multiplier factor of detailed mapping, so that the dominant detail mapping tool is Process Activity Mapping (40.88%). According to the results of identification and analysis using Process Activity Mapping (PAM) it was shown that the value added (VA) activity was 50,1%, non value added (NVA) activity was 44%, and the necessary non value added (NNVA) activity was 5,9% from all total activities. The output of this research is identifying waste and making improvements in the production process by minimizing waste that occurs with lean manufacturing approaches.*

***Keywords****: lean manufacturing, ride-on cars, value stream analysis tools, waste, process activity mapping*