





RFID tags and monitoring services: *Pros & cons through technological advances*

On Apr 25 th, we went to visit the International IoT Fair in Suzhou, which wasreally inspiring. One of the new RFID implementation that attracted us most is the performance analysis for the soccer players. The players put the specific sensors, with RFID tags inside, on their bellies, and the data of how the players are performing are transmitted real-time to the computer end the coach holds. The coach can see the routine each player has made, their speed and accelerant, the performance report, etc. This technology we saw is really bringing the sport to the next level. With RFID tags and sensors, the coach can even see if the player is injured or when to change him with someone on the bench during the game, real-time; and with the performance analysis, the players can improve themselves more efficiently. What also inspired us a lot with the RFID implementation during the study trips was our visit to the warehouse of Trojan Arts. They provide solutions and services for international art shipment, including the packing, shipping, exhibition, storage, etc. Since arts can be in different forms, Trojan Arts customizes RFID tags for each art piece they receive. With the tags, you can not only track where the piece is, but also check if the temperature, the humidity and other parameters are suitable for the piece. And the RFID tags are even reusable for the same art piece, if it's been shipped by Trojan Arts before. The biggest advantage of RFID technology for Trojan Arts so far, is the decreased need for human labor. With the RFID tags and scanning gun, the job of checking the whole inventory can be done with only one staff in less than one hour. And the position of each art piece can be found very easily, which improves the efficiency of management. As you can see, the development and implementation of RFID technology has brought about a lot of benefits to various industries, especially lowering the cost. However, there're also issues being brought up. For example, how to make sure the security of confidentiality, integrity and availability of the RFID tags and the data they carry with them? Besides that, the RFID system still has a lot to improve, regarding to the source codes, the protocols, the back-end data base, etc. And one of the creepiest part of the technology is that, once you're wearing the tag and your data is in the database of a certain scene, you'll always be watched, which means you won't have your effective privacy there anymore. Thus, the problem that needs to be solved in this case will be how to find a balance between the power of control (a.k.a. tracking the objects you want) and preserving the privacy.

My card from China Maurizio BELLO MiM programme - IoT specialization

