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| Liverpool F.C.  Relational Databases CA Assignment 1 | Abstract  This document will outline what the business is about, its business functions, business rules as well as the business processes. It will also contain the EER (Enhanced entity relationship model) for the business.  Jack Duggan  Applied Computing | WD001 |

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# **What is the club about?**

## History

Liverpool F.C. is a professional football club operating at the top level of English and European football. They are a club steeped in history ever since their foundation in 1892 and are one of the most successful football clubs in the world. They traditionally play in red or red and white.

## Liverpool as a Club

Football is a results business, so it’s vital that the club employs the right people. Everyone from the players to the coaches to the backroom staff must share the passion and determination that the club is recognized for.

## Liverpool as a Business

In 2021, Liverpool is more than just a football club; they are a global brand, a franchise. They make hundreds of millions each year not only through match ticket sales and competition money, but through merchandising, sponsorship, hospitality and subscription services.

# **Business Functions**

## Sales

A very large portion of the club’s income comes through sales. The types of sales come in many forms from merchandising, to match day revenue, to multi-million-pound player sales. The club also generates a vast amount of revenue through sponsorship. For example, the club’s jersey sponsor is financial services giant Standard Chartered, whereas insurance company AXA have the naming rights to the training facilities.

## Services

The club offers services to its fans and beyond through hospitality and subscription-based services. It offers corporate and personal hospitality services, where the client/fan gets a full afternoon of activities and food during the match day. The club has also recently branched out into the subscription service model, offering exclusive access to club-related media in return for a monthly fee.

## Purchasing

The club’s purchases usually come in the form of player transfers and club facility improvements. Players have been purchased for upwards of £50 million, and recent improvements to the stadium and training facilities have cost multiple hundreds of millions of pounds.

## Finance

Due to the vast amounts of money required for club infrastructure upgrades, it’s not uncommon for football clubs to borrow money from financial institutions. These loans are paid back over years or sometimes, decades.

# **Business Rules**

## Structural Rules

The supertype *Employee* has 4 subtypes: *Player, Coach, Medical Staff*, and *Other*.

Many employees may receive a wage.

Many players may be selected for a matchday squad.

Many players may attend a team training session.

Many coaches may coach during a team training session.

Many coaches may attend a match.

A way may be paid out to many employees.

Employee wages are non-transferrable.

A matchday squad must contain many players.

A matchday squad must attend a football match.

A match must be played by a matchday squad.

A match must be attended by many coaches.

A match must require one or many tickets.

A team training session must be attended by many players.

A team training session must be coached by many coaches.

Many tickets will grant access to a match.

Tickets must be purchased by a member.

Tickets are non-transferrable between members.

Tickets are non-transferrable between matches.

A member may purchase many tickets.

## Procedural Rules

A player must be passed fit by the medical staff prior to being selected for the matchday squad.

A long-time member who has purchased many tickets previously will have a better chance of acquiring a ticket than a newer member with less previous tickets.

If a player leaves the club, another player can take their shirt number.

If a player is late for training, they will be fined, which will be deducted from their wage.

If a member wants to buy multiple tickets, the other people must also be members.

# **Business Processes**

## Production

The club doesn’t produce goods internally. Instead, other manufacturers produce Liverpool branded goods and sell them on behalf of the club, netting a portion of the profit. The main example of this is Nike, who currently produce the kits, training gear and other clothing items for the club.

## Contact

The club employs customer service representatives who handle customer queries and problems. They representatives deal with issues and questions related to the club store, match day, travel, hospitality and much more.

# **Entity Relationship Modelling**

## Entities

I’ve narrowed the business down to a couple of main entities. They are as follows: **Employee (Player, Coach, Medical Staff, Other), Wage, Match, Training, Squad, Ticket** and **Member.**

## Diagram

Diagram

Description automatically generated