```
/*Main loop of simulation model representing one model tick*/
LOOP WHILE (number of partners on platform > 0):
            /*Update features of agents and update the environment*/
           Decrease opportunities' remaining lifespan by 1
           Remove opportunities with a remaining lifespan of 0
           Create new opportunities according to their inter-arrival time
           LOOP FOR each partner:
                      IF partner has an opportunity:
                              /*Loop for Partners' reuse of existing services*/
                              IF (partner has matching existing services) AND (service is profitable
                              (payoff > cost)):
                                        Execute transaction
                             ELSE:
                              /*Loop for Partners' internal configuration of resources*/
                                         IF (partner owns the required resources to generate the service) AND
                                          (service is profitable):
                                                   Execute transaction
                                         ELSE:
                                         /*Loop for partners' local search*/
                                                    /*Partners share one of their resources with all of their linked
                                                    partners; the shared resource can then be used by linked partners
                                                    for mixing-and-matching*/
                                                    IF (partner can rebundle its existing resources to generate a new
                                                    service that matches the opportunity) AND (service is
                                                    profitable):
                                                               Partner generates the new service
                                                               Execute transaction
                                                               IF (partner is on-platform) AND (has linked partners off-
                                                               platform):
                                                                          Send signal to those partners for joining the platform % \left( 1\right) =\left( 1\right) +\left( 
                                                               IF (partner is off-platform) AND (has linked partners on-
                                                               platform):
                                                                          Send signal to those partners for leaving the platform
                                                    ELSE:
                                                    /*Loop for partners' distant search*/
                                                                /*Partners share one of their resources with the entire
                                                               ecosystem of partners; the shared resource can then be used
                                                               by all other partners for mixing-and-matching*/
                                                               IF (the partner finds a resource of partners in the ecosystem
                                                               that in combination with three of its own resources meet the
                                                               requirement) AND (the resulting service is profitable):
                                                                          The partners collaborate to generate the new service
                                                                          Execute transaction
                                                                          IF (partner is on-platform) AND (has linked partners off-
                                                                          platform):
                                                                                     Send signal to those partners for joining the
                                                                                     platform
                                                                          IF (partner is off-platform) AND (has linked partners on-
                                                                          platform):
                                                                                     Send a signal to those partners for leaving the
                                                                                     platform
                      IF (number of signals of joining/leaving the platform) - (successful
                      transaction off/on platform) > threshold:
                             Partner joins/leaves the platform
           Increase timestep by one
           /*Update costs, profits, and the environment*/
           Costs and profits incurred per resource are assigned to partners
```

Lifespan of utilized links between agents is increased, non-utilized links'

lifespan is decreased

Lifespan of used services is increased, non-used services' lifespan is decreased Outcome variables are updated